

1

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

Please, don't try anything you're about to see us do at home. Ever.

2

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

A low-whip and some rapid fire. Then in a probing investigation,

3

00:00:38,000 --> 00:00:43,000

Artreo finds out if there's any idea dumber than licking a frozen pole.

4

00:00:43,000 --> 00:00:45,000

Look, it's starting to rip the flash.

5

00:00:45,000 --> 00:00:52,000

And test if it's safer to drive on icy roads backwards.

6

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

Are you trying to do how many cones you can knock over?

7

00:00:58,000 --> 00:01:03,000

Who are the Mythbusters? Adam Savage.

8

00:01:03,000 --> 00:01:06,000

And Jamie Heineman.

9

00:01:06,000 --> 00:01:08,000

It's almost too exciting.

10

00:01:08,000 --> 00:01:13,000

Between them more than 30 years of special effects experience.

11

00:01:13,000 --> 00:01:15,000

Cue dramatic music.

12

00:01:15,000 --> 00:01:18,000

Joining them, Carrie Byron.

13

00:01:18,000 --> 00:01:20,000

Grant Imahara.

14

00:01:20,000 --> 00:01:22,000

This is that baby fur.

15

00:01:22,000 --> 00:01:23,000

And Tori Bellaci.

16

00:01:23,000 --> 00:01:25,000

Paramedics are nowhere to be found.

17

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

They don't just tell the Myths.

18

00:01:27,000 --> 00:01:30,000

They put them to the test.

19

00:01:38,000 --> 00:01:42,000

Gather around the hot tub, folks. It's going to be glacial.

20

00:01:43,000 --> 00:01:45,000

So what's the Myth?

21

00:01:45,000 --> 00:01:51,000

Well, we are dressed for cold weather and that's good because we're going to test whether or not you can start an avalanche by yodeling.

22

00:01:51,000 --> 00:01:53,000

So it's time to get those vocal cords ready.

23

00:01:53,000 --> 00:01:54,000

You think I can yodel?

24

00:01:54,000 --> 00:01:55,000

I know you can.

25

00:01:55,000 --> 00:01:56,000

You think I'm gunning yodel?

26

00:01:56,000 --> 00:01:58,000

No, I don't.

27

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

This alpine myth is as old as the hills.

28

00:02:03,000 --> 00:02:09,000

Can this beloved form of melodious mountain song set off a mighty avalanche?

29

00:02:11,000 --> 00:02:14,000

The idea isn't as nonsensical as it sounds.

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00:02:14,000 --> 00:02:22,000

In previous audio experiments, the guys proved that sound waves from the human voice are powerful enough to shatter glass.

31

00:02:23,000 --> 00:02:25,000

And even extinguish a flame.

32

00:02:29,000 --> 00:02:36,000

Now, using the same notion in this ultimate auditory myth, we're going to try to bring a mountain to its knees.

33

00:02:38,000 --> 00:02:42,000

You know, if we're doing Myths on avalanches, we need to go to the mountains.

34

00:02:42,000 --> 00:02:44,000

I think you're right. I think we will.

35

00:02:44,000 --> 00:02:48,000

But first, why don't we try some scale experiments here in the shop, see what we can learn about them before we go?

36

00:02:48,000 --> 00:02:49,000

Sure, why not?

37

00:02:49,000 --> 00:02:56,000

Before heading out, Adam makes a mountain by building a fiberboard tray and attaches it to a tiltable stand.

38

00:02:57,000 --> 00:03:04,000

Instead of making a mountain shape, we've gone with a flat plane to eliminate the variables of the topography of the mountain.

39

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

They've got their mountain, now they need some winter weather.

40

00:03:07,000 --> 00:03:13,000

The guys secure a wooden frame to the scissor lift and staple a sheet of fly screen to the base.

41

00:03:14,000 --> 00:03:20,000

A couple of small pancake motors mounted on the corners will really get things shaking.

42

00:03:20,000 --> 00:03:22,000

Oh, that's great.

43

00:03:22,000 --> 00:03:26,000

Next, they spread a thick layer of flour over the mesh.

44

00:03:26,000 --> 00:03:31,000

The screen is hopefully going to snow down our flour in a really nice, even fashion.

45

00:03:31,000 --> 00:03:35,000

And then, let's see if we can't start an avalanche here in the shop in scale.

46

00:03:35,000 --> 00:03:36,000

Okay, here we go.

47

00:03:36,000 --> 00:03:39,000

They raise their giant sifter to the sky.

48

00:03:39,000 --> 00:03:41,000

We're going to have flour everywhere.

49

00:03:42,000 --> 00:03:46,000

And let it snow, let it snow, let it snow.

50

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

You could use this for rolling out dough and stuff, you know.

51

00:03:49,000 --> 00:03:50,000

Yeah.

52

00:03:51,000 --> 00:03:57,000

In mountainous regions, the most common and destructive kind of avalanche is called a slab avalanche,

53

00:03:57,000 --> 00:04:02,000

when a strong, cohesive layer of snow forms on top of weak snow.

54

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

All it needs is a trigger to break loose.

55

00:04:06,000 --> 00:04:14,000

So it's crucial for Adam and Jamie to get their scale test poised at the most precarious point possible.

56

00:04:14,000 --> 00:04:17,000

135, 36.

57

00:04:17,000 --> 00:04:24,000

As the flour slowly builds up, they wait and watch for the exact point it all comes tumbling down.

58

00:04:24,000 --> 00:04:26,000

316, 320.

59

00:04:26,000 --> 00:04:28,000

So I'm going to kill it at 330.

60

00:04:28,000 --> 00:04:29,000

Oh.

61

00:04:29,000 --> 00:04:32,000

It went at exactly 320.

62

00:04:32,000 --> 00:04:40,000

Now that they've got the trigger point timed right on the verge, Jamie grooms the run, they recote the slope.

63

00:04:40,000 --> 00:04:42,000

316, 320.

64

00:04:42,000 --> 00:04:43,000

Kill it.

65

00:04:44,000 --> 00:04:45,000

Okay.

66

00:04:45,000 --> 00:04:47,000

And are ready to make some noise.

67

00:04:47,000 --> 00:04:49,000

I think it's really hair trigger.

68

00:04:49,000 --> 00:04:50,000

Okay.

69

00:04:50,000 --> 00:04:52,000

Okay, let me give you the decibel meter.

70

00:04:52,000 --> 00:04:57,000

So start out at 60, and if I go higher than that, just start dialing it up.

71

00:04:57,000 --> 00:04:59,000

Adam may not be a professional yodeler.

72

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

I'm going to yodel at a soft volume and slowly build up.

73

00:05:02,000 --> 00:05:08,000

But who doesn't know and love such movie classics as Heidi and the sound of music?

74

00:05:08,000 --> 00:05:12,000

Yoli, yoli, yoli, yoli, yoli.

75

00:05:12,000 --> 00:05:16,000

His strange warble wouldn't have startled a mountain goat.

76

00:05:16,000 --> 00:05:17,000

That was 90.

77

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

YODEL!

78

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

That's giving me a headache.

79

00:05:23,000 --> 00:05:24,000

Okay.

80

00:05:24,000 --> 00:05:25,000

I can't imagine what it's doing to you.

81

00:05:25,000 --> 00:05:28,000

Well, it definitely did nothing to the snow.

82

00:05:28,000 --> 00:05:30,000

Yoli!

83

00:05:30,000 --> 00:05:33,000

All right, well, that's about as loud as I can get.

84

00:05:33,000 --> 00:05:34,000

I think it's time to go to the megaphone.

85

00:05:34,000 --> 00:05:35,000

Okay.

86

00:05:35,000 --> 00:05:38,000

A megaphone should take this scale test to the max.

87

00:05:38,000 --> 00:05:47,000

YODEL!

88

00:05:48,000 --> 00:05:49,000

Is it off the charts?

89

00:05:49,000 --> 00:05:51,000

Yeah, that was maxing it out at 120.

90

00:05:51,000 --> 00:05:54,000

120, that's like as loud as a jet engine, right?

91

00:05:54,000 --> 00:05:56,000

Not quite.

92

00:05:56,000 --> 00:05:57,000

Not quite.

93

00:05:57,000 --> 00:05:59,000

All right, let's try this again.

94

00:05:59,000 --> 00:06:04,000

Aiming the megaphone toward a different part of the mountain might hit the right note.

95

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

YODEL!

96

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

YODEL!

97

00:06:10,000 --> 00:06:14,000

That is a result.

98

00:06:14,000 --> 00:06:16,000

That was a hair trigger and it went.

99

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

It went with sound from your voice.

100

00:06:19,000 --> 00:06:21,000

YODEL!

101

00:06:21,000 --> 00:06:25,000

This alpine tail may just be true.

102

00:06:25,000 --> 00:06:32,000

So grab your polarized designer shades because the mythbusters are headed into Avalanche Country.

103

00:06:32,000 --> 00:06:47,000

So we can't do the snow special without at least drawing the I double dog dare you to stick your tongue to that frozen flagpole myth.

104

00:06:47,000 --> 00:06:48,000

I know that one.

105

00:06:48,000 --> 00:06:52,000

That's the one where you stick your tongue to the pole and it gets frozen in place.

106

00:06:52,000 --> 00:06:54,000

Who's going to do that?

107

00:06:54,000 --> 00:07:04,000

If you've ever heard of this human predilection for frosty flagpoles, once your tongue makes contact with a metal mast, you're stuck.

108

00:07:04,000 --> 00:07:09,000

First they have to fill this mythbusters spit tube with real saliva.

109

00:07:09,000 --> 00:07:11,000

Oh, I got it on the outside.

110

00:07:11,000 --> 00:07:14,000

Collecting enough is going to be a team effort.

111

00:07:14,000 --> 00:07:17,000

So Carrie lays down some spit netiquette.

112

00:07:17,000 --> 00:07:22,000

Okay guys, I'm going to set a few ground rules because this is a disgusting experiment as it is.

113

00:07:22,000 --> 00:07:26,000

Please don't add your flim known as the Lugie.

114

00:07:26,000 --> 00:07:29,000

I'm serious.

115

00:07:29,000 --> 00:07:36,000

Meanwhile, Grant is boiling up an idea to warm up their human tongue analog, a pigs.

116

00:07:36,000 --> 00:07:46,000

My job is to reanimate the tongue and make it warm just like our tongues would be, hopefully to body temperature.

117

00:07:47,000 --> 00:07:55,000

He connects a thin plastic tube to a small electric motor and places it inside a bucket that's filled with hot water.

118

00:07:55,000 --> 00:07:58,000

Oh yeah, that's good.

119

00:07:58,000 --> 00:08:02,000

Now for some poor sign surgery.

120

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

After cutting the tongue in half, Grant carefully cuts a U-shaped incision around it, fits the tubing into the groove, then sews it back up again.

121

00:08:12,000 --> 00:08:14,000

No, I'm 11 now.

122

00:08:14,000 --> 00:08:17,000

It's a good thing he never went into plastics.

123

00:08:17,000 --> 00:08:23,000

Just like sewing on a button, except this button's tongue shaped and made out of meat.

124

00:08:23,000 --> 00:08:27,000

Next, he takes a reading of his own tongue's temperature.

125

00:08:27,000 --> 00:08:32,000

Okay, 90 on the nose. So that's my target.

126

00:08:32,000 --> 00:08:34,000

And turns on the pump.

127

00:08:34,000 --> 00:08:37,000

Okay, hot water flowing.

128

00:08:37,000 --> 00:08:40,000

After 30 minutes, Frankentongue is awakened.

129

00:08:40,000 --> 00:08:45,000

It's perfect, 8-8.5. That's close enough for our purposes.

130

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

I think the tongue is ready for some pole-licking action.

131

00:08:56,000 --> 00:09:02,000

And in a mythbusters first, the guys head deep into snow country to coax a mountain to crumble.

132

00:09:10,000 --> 00:09:15,000

The quirky trill of yodeling has been known to trigger headaches.

133

00:09:15,000 --> 00:09:20,000

But how about avalanches?

134

00:09:20,000 --> 00:09:30,000

In a small-scale test, Jamie and Adam found that sound waves from the human voice could trigger flower to fall down a chipboard slope.

135

00:09:30,000 --> 00:09:34,000

But that was just kid stuff.

136

00:09:34,000 --> 00:09:42,000

Now the guys are headed into the territory of what flies without wings, hits without hands, and sees without eyes.

137

00:09:42,000 --> 00:09:47,000

The fearsome white dragon, also known as the avalanche.

138

00:09:53,000 --> 00:10:02,000

We have come to Colorado to the Telluride Ski Resort, where we're going to work with their avalanche team to start real avalanches and see what actually happens.

139

00:10:04,000 --> 00:10:09,000

Here in this breathtaking yet harsh terrain, Jamie feels right at home.

140

00:10:09,000 --> 00:10:13,000

I've spent weeks at a time out here in this kind of terrain by myself.

141

00:10:13,000 --> 00:10:20,000

Living off the land up here, trudging around in snow, living in snow caves, digging food out of the ground.

142

00:10:20,000 --> 00:10:27,000

I gotta say though, it's good to be back. It's quite lovely.

143

00:10:28,000 --> 00:10:35,000

We're very lucky out here in the wild. We've seen a hinderman in his natural habitat.

144

00:10:35,000 --> 00:10:38,000

Let's be quiet and they scare very easily.

145

00:10:38,000 --> 00:10:47,000

To conduct our tests, the safety division of the Telluride Ski Patrol has determined a specific mountain site that's a real-life avalanche risk.

146

00:10:47,000 --> 00:10:50,000

How do you know when these conditions are ripe for an avalanche?

147

00:10:50,000 --> 00:10:52,000

Well, we go out and we dig snow pits.

148

00:10:52,000 --> 00:10:55,000

And we actually stick our head in the snow and look at the structure of the snowpack.

149

00:10:55,000 --> 00:11:00,000

And then we also calculate out how much new stress has been added to the snowpack.

150

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

Because Craig knows all the signs of a mountain on the brink, we're shooting a safe distance from public ski areas.

151

00:11:07,000 --> 00:11:13,000

Now to put the yodel myth to the test, Adam's amateur vocal acrobatics won't cut it.

152

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

So...

153

00:11:14,000 --> 00:11:18,000

To help us, we've brought in a professional yodelist. Come on in.

154

00:11:18,000 --> 00:11:19,000

Yodel lady!

155

00:11:19,000 --> 00:11:20,000

Howdy!

156

00:11:20,000 --> 00:11:21,000

How are you?

157

00:11:21,000 --> 00:11:22,000

Great!

158

00:11:22,000 --> 00:11:25,000

Have you ever heard of yodeling being dangerous, like in an avalanche situation?

159

00:11:25,000 --> 00:11:32,000

Well, sure. I used to ski in Vail and backcountry skiing. We were cautioned not to go yodeling in the mountains.

160

00:11:32,000 --> 00:11:33,000

Really?

161

00:11:33,000 --> 00:11:34,000

Sure!

162

00:11:34,000 --> 00:11:37,000

And what is it about yodeling that you think will set off an avalanche?

163

00:11:37,000 --> 00:11:44,000

It's a certain frequency. And if you can hit it just right and the conditions are perfect, you could start an avalanche.

164

00:11:44,000 --> 00:11:47,000

Liz has been known to shake things up before.

165

00:11:47,000 --> 00:11:54,000

When I get a certain pitch and a certain volume, I can feel my crown in my tooth sort of rattle.

166

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

It's quite a sensation.

167

00:11:59,000 --> 00:12:04,000

If anything does start to happen, we're all going to bolt in this direction.

168

00:12:04,000 --> 00:12:05,000

Can we?

169

00:12:05,000 --> 00:12:07,000

Yeah, we've been advised that the avalanche would come down in this way, so we can...

170

00:12:07,000 --> 00:12:09,000

A couple hundred yards or so should make us safe.

171

00:12:09,000 --> 00:12:10,000

All right.

172

00:12:11,000 --> 00:12:24,000

Yodeling is a rapid undulation of vocal tones that moves from low chest tones to high falsetto.

173

00:12:27,000 --> 00:12:33,000

But as Liz's song reverberates around the mountain, delightful as it is, it remains unmoved.

174

00:12:33,000 --> 00:12:36,000

Well, that was lovely. And I don't see any avalanche.

175

00:12:36,000 --> 00:12:38,000

Well, not yet.

176

00:12:38,000 --> 00:12:40,000

What do you think, Jamie?

177

00:12:40,000 --> 00:12:41,000

No avalanche.

178

00:12:41,000 --> 00:12:46,000

A bullhorn might magnify her vocal exertions enough to cause a reaction.

179

00:12:46,000 --> 00:12:49,000

We've got a police bullhorn here, Liz, to help you out.

180

00:12:49,000 --> 00:12:50,000

Oh, wow!

181

00:12:50,000 --> 00:12:54,000

I'm going to set it on eleven. Hold onto the trigger when you're ready to go.

182

00:12:54,000 --> 00:12:55,000

Mmm.

183

00:12:55,000 --> 00:12:57,000

And give it all you've got.

184

00:12:57,000 --> 00:12:58,000

Let's go.

185

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

Yodeling!

186

00:13:16,000 --> 00:13:20,000

But her startling call of the wild stirs up nothing.

187

00:13:20,000 --> 00:13:23,000

Something tells me some animal might want to come out of the woods and mate with us.

188

00:13:23,000 --> 00:13:26,000

I'm not sure that we're starting an avalanche.

189

00:13:26,000 --> 00:13:32,300

It was a tough crowd to play to, so it's not surprising.

190

00:13:32,300 --> 00:13:33,800

I think that one's busted.

191

00:13:33,800 --> 00:13:36,800

Thank you so much for helping us out.

192

00:13:36,800 --> 00:13:38,200

I gave it my best.

193

00:13:38,200 --> 00:13:39,200

Absolutely.

194

00:13:39,200 --> 00:13:43,800

With the mountains still officially deemed to be in the Adeland zone, Adam ruses up

195

00:13:43,800 --> 00:13:45,400

another idea.

196

00:13:45,400 --> 00:13:48,160

I brought out my 11 foot bull whip.

197

00:13:48,160 --> 00:13:50,960

This thing breaks the sound barrier.

198

00:13:50,960 --> 00:13:56,800

When cracked, the thin flexible tips of whips move faster than the speed of sound, creating

199

00:13:56,800 --> 00:13:57,800

a sonic boom.

200

00:13:57,800 --> 00:13:58,800

There we go.

201

00:13:58,800 --> 00:14:01,840

That's the mountain I'm trying to bring down.

202

00:14:01,840 --> 00:14:07,920

Sonic booms generate enormous amounts of sound energy, a lot like an explosion.

203

00:14:07,920 --> 00:14:08,920

See anything?

204

00:14:08,920 --> 00:14:09,920

No avalanche.

205

00:14:09,920 --> 00:14:15,600

Adam whips it good, but the mountain doesn't flinch.

206

00:14:15,600 --> 00:14:17,840

I don't think I'm going to start an avalanche with this dude.

207

00:14:17,840 --> 00:14:18,840

Nope.

208

00:14:18,840 --> 00:14:19,840

Let's move on to the next thing.

209

00:14:19,840 --> 00:14:20,840

Okay.

210

00:14:20,840 --> 00:14:24,340

But strap on your rescue beacons.

211

00:14:24,340 --> 00:14:32,160

This mountain is ready to roll and we're going to have a blast.

212

00:14:32,160 --> 00:14:38,120

Is it true that the best way to bond with a frozen pole is to lick it?

213

00:14:38,120 --> 00:14:44,360

To find out, Carrie's been in charge of collecting copious amounts of real saliva, but the job

214

00:14:44,360 --> 00:14:49,560

is literally giving her the dry heat.

215

00:14:49,560 --> 00:14:52,720

Before she loses her lunch, let's move on.

216

00:14:52,720 --> 00:14:53,720

We stop here.

217

00:14:53,720 --> 00:14:56,080

It's probably good there.

218

00:14:56,080 --> 00:15:01,200

In this giant refrigeration truck, driver Ron has delivered us one metal pole, nicely

219

00:15:01,200 --> 00:15:05,000

chilled to 32 degrees Fahrenheit, the freezing point of water.

220

00:15:05,000 --> 00:15:08,480

Are you guys just dying to stick your tongue to it right now?

221

00:15:08,480 --> 00:15:09,480

Absolutely not.

222

00:15:09,480 --> 00:15:10,480

It's freezing.

223

00:15:10,480 --> 00:15:13,800

Time to set up Grant's pig tongue warming device.

224

00:15:13,800 --> 00:15:14,800

Sloppy tongue.

225

00:15:14,800 --> 00:15:15,800

Sloppy tongue.

226

00:15:15,800 --> 00:15:16,800

My favorite.

227

00:15:17,400 --> 00:15:20,240

First they secure the organ to a stand next to the pole.

228

00:15:20,240 --> 00:15:21,840

Don't squeeze it too hard.

229

00:15:21,840 --> 00:15:22,840

I know.

230

00:15:22,840 --> 00:15:24,840

Man, that does look appetizing.

231

00:15:24,840 --> 00:15:25,840

All right.

232

00:15:25,840 --> 00:15:28,080

It's at 85.

233

00:15:28,080 --> 00:15:32,520

They slather the tongue with the drool.

234

00:15:32,520 --> 00:15:35,000

And it's time to lick that pole.

235

00:15:35,000 --> 00:15:37,000

Do it.

236

00:15:37,000 --> 00:15:39,000

It's sticking.

237

00:15:39,000 --> 00:15:42,000

Stop, stop, stop.

238

00:15:42,000 --> 00:15:43,000

Okay, okay.

239

00:15:43,000 --> 00:15:44,000

That's good.

240

00:15:44,000 --> 00:15:46,400

So at 32 degrees, your tongue will stick to a frozen pole.

241

00:15:46,400 --> 00:15:48,200

You look at starting to rip the flesh.

242

00:15:48,200 --> 00:15:49,840

Oh, man.

243

00:15:49,840 --> 00:15:51,880

Chunks of the tongue are staying on the pole.

244

00:15:51,880 --> 00:15:52,880

Ouch.

245

00:15:52,880 --> 00:15:56,280

The instant the tongue hit the pole, it fixed to it like glue.

246

00:15:56,280 --> 00:15:57,280

That was cool.

247

00:15:57,280 --> 00:16:00,000

It was like, fuck.

248

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

But the team hasn't got this myth licked yet.

249

00:16:03,000 --> 00:16:08,480

After the break, our sloppy tongue trio gets up close and personal with a metal mask.

250

00:16:08,480 --> 00:16:09,480

Go for it.

251

00:16:09,480 --> 00:16:11,400

And coming up on Mythbusters.

252

00:16:11,400 --> 00:16:14,000

Is this enough firepower to start an avalanche?

253

00:16:16,400 --> 00:16:27,440

Released into the wilds of Colorado, Jamie and Adam tried to extract an avalanche out

254

00:16:27,440 --> 00:16:34,040

of a mountain with an alpine song and a sound lashing.

255

00:16:34,040 --> 00:16:38,880

But to no avail.

256

00:16:38,880 --> 00:16:39,880

So where do we go from here?

257

00:16:39,880 --> 00:16:41,200

What do we do now?

258

00:16:41,200 --> 00:16:42,200

Machine guns.

259

00:16:42,200 --> 00:16:44,200

Come on, really?

260

00:16:44,200 --> 00:16:48,320

Well, there are tons of reported cases of avalanches being set off by combat.

261

00:16:48,320 --> 00:16:53,360

Now, to be honest, we don't really know whether it was due to machine guns or mortar fire.

262

00:16:53,360 --> 00:16:54,680

But we can find out.

263

00:16:54,680 --> 00:16:55,960

Yeah, we need to check it out.

264

00:16:55,960 --> 00:16:56,960

Excellent.

265

00:16:56,960 --> 00:16:57,960

I love this.

266

00:16:57,960 --> 00:17:00,960

Let's get out there with a machine gun and try this out.

267

00:17:00,960 --> 00:17:02,240

OK.

268

00:17:02,240 --> 00:17:06,080

This combat concept isn't hit or miss.

269

00:17:06,080 --> 00:17:11,000

During World War I, avalanches were used as highly effective weapons.

270

00:17:11,000 --> 00:17:16,920

In the Italian Alps, tens of thousands of soldiers were killed by avalanches, often deliberately

271

00:17:16,920 --> 00:17:19,440

triggered by artillery.

272

00:17:19,440 --> 00:17:27,240

The question is, could a machine gun alone mobilize such a massive mass of snow?

273

00:17:27,240 --> 00:17:31,560

The theory is the sound waves created from the machine gun's firing, combined with the

274

00:17:31,560 --> 00:17:36,960

physical impact of the bullets, is a double whammy of force that can break the snowpack

275

00:17:36,960 --> 00:17:40,720

apart.

276

00:17:40,720 --> 00:17:45,440

The Mythbusters target is a mountain that's been ascertained by a team of experts to be

277

00:17:45,440 --> 00:17:49,360

poised on the threshold of an avalanche.

278

00:17:49,360 --> 00:17:54,160

It's not every day you get to witness one of these devastating natural occurrences first

279

00:17:54,160 --> 00:17:55,160

hand.

280

00:17:55,160 --> 00:17:56,160

We'll see you under the mountain, buddy.

281

00:17:56,160 --> 00:18:01,480

So, say hello and bye-bye to our buster stand-in.

282

00:18:01,480 --> 00:18:06,880

His role is to help the guys uncover what would happen to a human swept up in an avalanche.

283

00:18:06,880 --> 00:18:12,040

So they haul him high up on the hill, smack in the middle of the predicted snow path.

284

00:18:12,040 --> 00:18:16,200

This tiny speck of dust up there is our buster stand-in.

285

00:18:16,200 --> 00:18:20,000

He's hopefully going to help us figure out what happens to a person in an avalanche.

286

00:18:20,000 --> 00:18:24,480

Officer Dan Kovalt has brought MP5 submachine guns.

287

00:18:24,480 --> 00:18:31,440

Operating at a high velocity and rate of fire, triggering these might just trigger an avalanche.

288

00:18:31,440 --> 00:18:32,840

That's pretty clear to me.

289

00:18:32,840 --> 00:18:35,800

When you're comfortable, drop your charging handle, okay?

290

00:18:35,800 --> 00:18:39,520

Both the guys are licensed and trained to use firearms.

291

00:18:39,520 --> 00:18:40,960

Putting it on full auto.

292

00:18:40,960 --> 00:18:46,760

Adam takes aim.

293

00:18:46,760 --> 00:18:49,040

But the mountain doesn't fall.

294

00:18:49,040 --> 00:18:50,040

No avalanche.

295

00:18:50,040 --> 00:18:51,600

Nope, no avalanche.

296

00:18:51,600 --> 00:18:54,400

So they double the firepower.

297

00:18:54,400 --> 00:19:03,720

Barring in three, two, one.

298

00:19:03,720 --> 00:19:07,800

But even though the sound was louder than the yodeling and the whip, and there were

299

00:19:07,800 --> 00:19:10,080

projectiles striking the snow.

300

00:19:10,080 --> 00:19:11,080

No avalanche.

301

00:19:11,080 --> 00:19:12,480

No avalanche, man.

302

00:19:12,480 --> 00:19:13,480

No avalanche.

303

00:19:13,480 --> 00:19:15,880

Not even a hint of an avalanche.

304

00:19:15,880 --> 00:19:22,120

We fired off a whole bunch of rounds at this hillside.

305

00:19:22,120 --> 00:19:26,480

What exactly the state of an avalanche is at any given moment, whether it's on a hair

306

00:19:26,480 --> 00:19:32,840

trigger itself and about ready to go and whether one of these guns would set it off, it's hard

307

00:19:32,840 --> 00:19:33,840

to say.

308

00:19:33,840 --> 00:19:38,960

Hey, want to see us fire an air cannon into a snow bank to cause an avalanche?

309

00:19:38,960 --> 00:19:41,880

Log on to [discovery.com](http://discovery.com) slash MythBusters.

310

00:19:41,880 --> 00:19:48,040

It's cool.

311

00:19:48,040 --> 00:19:53,640

Carri-Torian Grant discovered that there aren't many ideas as dumb or dumber than licking

312

00:19:53,640 --> 00:19:55,400

a frozen steel pole.

313

00:19:55,400 --> 00:19:58,920

Chunks of the tongue are staying on the pole.

314

00:19:58,920 --> 00:20:04,360

But to truly substantiate this sticky myth, someone in the team has to do it for real.

315

00:20:04,360 --> 00:20:07,720

Dude, who's going to be crazy enough to stick their tongue in one of these frozen poles?

316

00:20:07,720 --> 00:20:09,120

Obviously, it's Rochambeau.

317

00:20:09,120 --> 00:20:10,120

All right.

318

00:20:10,120 --> 00:20:11,120

Ro, sham, foe.

319

00:20:11,120 --> 00:20:12,120

Have fun, buddy.

320

00:20:12,120 --> 00:20:20,000

Rochambeau, it's off to Tahoe we go.

321

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

It's slippery.

322

00:20:21,000 --> 00:20:25,800

With pristine snow covering the ground and a brisk wind blowing, the setting for this

323

00:20:25,800 --> 00:20:28,320

showdown is ideal.

324

00:20:28,440 --> 00:20:36,840

Cory's adversary, the flagpole, looks like one cool contender.

325

00:20:36,840 --> 00:20:40,680

He mentally prepares himself for his potentially painful task.

326

00:20:40,680 --> 00:20:43,320

You know, I'm about to stick my tongue to a frozen pole.

327

00:20:43,320 --> 00:20:48,560

The thing I need to remember is just to stay calm and not pull away.

328

00:20:48,560 --> 00:20:51,560

I actually heard one of the ways that you can't get your tongue off if you're stuck

329

00:20:51,560 --> 00:20:55,440

and you're all alone and say you're out in the wild where there's a flagpole is that

330

00:20:55,440 --> 00:20:56,760

you can pee on it.

331

00:20:56,760 --> 00:20:57,760

Cool.

332

00:20:57,800 --> 00:20:58,800

I'm going to do that.

333

00:20:58,800 --> 00:20:59,800

I know you have to do it yourself.

334

00:20:59,800 --> 00:21:00,800

Oh, great.

335

00:21:00,800 --> 00:21:06,520

Okay, go for it.

336

00:21:06,520 --> 00:21:10,640

The pole grabs Tori's tongue straight away and holds on tight.

337

00:21:10,640 --> 00:21:11,640

Hey.

338

00:21:11,640 --> 00:21:12,640

Hey.

339

00:21:12,640 --> 00:21:13,640

Hey.

340

00:21:13,640 --> 00:21:14,640

Hey.

341

00:21:14,640 --> 00:21:15,640

Hey.

342

00:21:15,640 --> 00:21:16,640

Hey.

343

00:21:16,640 --> 00:21:17,640

Hey.

344

00:21:17,640 --> 00:21:18,640

Hey.

345

00:21:18,640 --> 00:21:19,640

Hey.

346

00:21:19,640 --> 00:21:20,640

Hey.

347

00:21:20,640 --> 00:21:21,640

Hey.

348

00:21:21,640 --> 00:21:22,640

Hey.

349

00:21:22,640 --> 00:21:23,640

Hey.

350

00:21:23,640 --> 00:21:24,640

Hey.

351

00:21:24,640 --> 00:21:25,640

Hey.

352

00:21:25,640 --> 00:21:26,640

Hey.

353

00:21:26,640 --> 00:21:27,640

Hey.

354

00:21:27,740 --> 00:21:29,140

Hey.

355

00:21:29,140 --> 00:21:30,620

Hey.

356

00:21:30,620 --> 00:21:31,820

Hey.

357

00:21:31,820 --> 00:21:32,740

Hey.

358

00:21:32,740 --> 00:21:33,740

Hey.

359

00:21:33,740 --> 00:21:34,740

Hey.

360

00:21:34,740 --> 00:21:35,740

Hey.

361

00:21:35,740 --> 00:21:36,740

Hey.

362

00:21:36,740 --> 00:21:37,740

Hey.

363

00:21:37,740 --> 00:21:38,740

Okay.

364

00:21:38,740 --> 00:21:39,740

Hey.

365

00:21:39,740 --> 00:21:40,740

Okay.

366

00:21:40,740 --> 00:21:41,740

Hey.

367

00:21:41,740 --> 00:21:42,740

Hey.

368

00:21:42,740 --> 00:21:43,740

Hey.

369

00:21:43,740 --> 00:21:44,740

Hey.

370

00:21:44,740 --> 00:21:45,740

Hey.

371

00:21:47,740 --> 00:21:48,740

How are you doing?

372

00:21:48,740 --> 00:21:51,020

Pain associated with hopes of breathing and■!

373

00:21:51,020 --> 00:21:53,020

Pe Augir to speed!

374

00:21:53,060 --> 00:21:54,100

And we can update Yannette.

375

00:21:54,100 --> 00:21:55,420

Nothing like this can happen.

376

00:21:55,420 --> 00:21:57,420

upload the proof online.

377

00:21:57,420 --> 00:21:59,420

at home. Ever.

378

00:22:27,420 --> 00:22:35,260

People have been going backwards and forwards about this wintry myth on the Mythbusters

379

00:22:35,260 --> 00:22:43,860

fan site. The debate is when traveling on slippery icy roads you'll get better grip

380

00:22:43,860 --> 00:22:49,820

driving in reverse. How are we going to test this? Well I think the whole idea behind this

381

00:22:49,820 --> 00:22:53,820

myth is that reverse gives you more traction so maybe what we should do is a scale test

382

00:22:53,820 --> 00:22:57,980

and we'll see which is better reverse or forward. Yeah we actually have a front wheel drive

383

00:22:57,980 --> 00:23:03,980

car here in the shop that we can use in our experiment. Cool. Tori puts the scale testing

384

00:23:03,980 --> 00:23:09,820

gear by welding together two troughs made of steel. The troughs will represent the wheel

385

00:23:09,820 --> 00:23:18,420

tracks of an icy road. Next he fills the containers with crushed ice. M7 is becoming a winter

386

00:23:18,420 --> 00:23:36,500

wonderland. They pack down the ice into solid blocks. Then Tori makes the surface extra

387

00:23:36,500 --> 00:23:41,380

smooth and hazardous. Now what I'm doing is getting it wet and then I'm going to put the

388

00:23:41,380 --> 00:23:47,140

dry ice on top of that and that'll freeze it making just a solid block of ice. A car

389

00:23:47,180 --> 00:23:52,740

can only move if it can grip the ground and that grip is called traction. If it has more

390

00:23:52,740 --> 00:23:58,500

traction it can pull with more force. By chaining the car to a weight and attaching a force

391

00:23:58,500 --> 00:24:04,260

gauge the team is going to measure which direction forwards or backwards the car has the most

392

00:24:04,260 --> 00:24:11,180

grip on the ice. Mechanically all of the factors are the same. The same weight distribution,

393

00:24:11,180 --> 00:24:16,780

the wheels are the same. All you're doing is isolating the gear so the transmission.

394

00:24:16,780 --> 00:24:23,180

Exactly. Time to go for a spin. The car they're using is a front wheel drive the most popular

395

00:24:23,180 --> 00:24:28,340

choice in passenger vehicles. You know we're probably going to rip off the bumper. Oh well

396

00:24:28,340 --> 00:24:37,700

it's a company car. Take it away. Alright. Okay stop. That's interesting. What did we

397

00:24:37,740 --> 00:24:47,220

get? 2300 pounds. Okay. Alright. Great. Let's reset for driving in reverse. For the driving

398

00:24:47,220 --> 00:24:53,100

in reverse test the front of the car is chained to a forklift. And if this works if there's

399

00:24:53,100 --> 00:24:59,300

a difference in transmission we should see more than 2300 pounds before you start slipping.

400

00:24:59,900 --> 00:25:03,900

Ready? Okay. Alright let's see if this car is made.

401

00:25:09,900 --> 00:25:18,220

Okay good. What do we get? Oh. 3200 pounds almost 900 pounds more. Dude that's a great result so driving

402

00:25:18,220 --> 00:25:22,860

in reverse actually does give you more traction than driving forward. In reverse the car was

403

00:25:22,900 --> 00:25:29,860

pulling with nearly 40% more force than going forward. So the driving on ice backwards myth

404

00:25:29,860 --> 00:25:41,420

is rolling along nicely. Trying to set off an Adelant with a yodel, a whip crack and a machine gun

405

00:25:41,420 --> 00:25:49,380

Adam and Jamie couldn't shift a snowflake. What they need is a sure fire method. 5 pound

406

00:25:49,420 --> 00:25:56,340

cast booster and has a very high detonation velocity. So the Telluride snow safety team is

407

00:25:56,340 --> 00:26:01,780

going to give the mountain a gentle nudge. We've pre-placed a bunch of explosives up there this

408

00:26:01,780 --> 00:26:07,620

morning. There's over 100 pounds of explosives placed up there. 100 pounds. Over 100 pounds. And

409

00:26:07,620 --> 00:26:13,860

they're all set to go off at the same time. Hopefully with a little luck we can force it

410

00:26:13,860 --> 00:26:21,140

out of there with them. So much for yodeling. Yes so much for yodeling. Still waiting patiently

411

00:26:21,140 --> 00:26:28,940

on the windy peak our buster stand-in is getting mighty chilly. Time to warm him up. Three, two,

412

00:26:28,940 --> 00:26:42,820

one. Whoa! There it went. Wow! Yeah. Buster's moving. Get movement. He's right ahead of the

413

00:26:43,460 --> 00:26:48,740

snow. Yeah, yeah, yeah. I see him. I can still see him. Oh, he's just gotten swallowed. He's still

414

00:26:48,740 --> 00:26:56,180

moving. He's still with it. Awesome. He's going to bake it over the cliff. Oh, look at that. Oh, poor

415

00:26:56,180 --> 00:27:03,620

buster. Wherever he is, he got trash going through that rock chute. Oh man. The guys finally got some

416

00:27:03,620 --> 00:27:09,700

Adelant's action. Wow. Yeah. The monster tidal wave of snow took out one of our mountain cams

417

00:27:09,780 --> 00:27:15,460

and our hapless dummy. We came for an avalanche and we got a really nice avalanche. We wanted to get

418

00:27:15,460 --> 00:27:20,100

buster caught up in that thing and we did. We watched him tumble halfway down the mountain. It was

419

00:27:20,100 --> 00:27:25,620

perfect. Jamie makes the trek all the way up the mountain to retrieve his broken buddy.

420

00:27:30,260 --> 00:27:36,420

Oh man. It looks like he went down ass first. I think he's got like avalanche up his butt.

421

00:27:37,140 --> 00:27:42,900

Studying buster and the terrain up close, he can see just how immense the impact of an avalanche

422

00:27:42,900 --> 00:27:50,580

would be. These pieces are like, you know, they're like rocks. They're like boulders and they're all

423

00:27:50,580 --> 00:27:56,340

more or less stuck together like a sea of concrete. You don't really get the feel for it until you're

424

00:27:56,980 --> 00:28:03,300

right up here in it. Wow. Yeah. Setting the slide in motion took some explosive power,

425

00:28:03,860 --> 00:28:12,340

but the guys have an even more dynamite idea to try. Go buster. Well, that saved me a lot of work,

426

00:28:12,340 --> 00:28:19,860

I think. Get ready for takeoff. Soon Adam and Jamie are taking their avalanche myths to whole new heights.

427

00:28:20,100 --> 00:28:36,260

An icy road can quickly turn a pleasant drive into a bumper car nightmare.

428

00:28:39,140 --> 00:28:43,540

Conducting a scale test in the workshop for the driving on ice backwards myth,

429

00:28:43,540 --> 00:28:49,780

team traction got some unexpected results. Okay, so it turns out a front wheel drive car

430

00:28:49,780 --> 00:28:54,660

does have more traction on ice when going in reverse. I know that was cool. What we need to do

431

00:28:54,660 --> 00:28:59,060

now though is take it up to full scale, but we're going to need a ton of ice and snow. You know,

432

00:28:59,060 --> 00:29:04,020

I heard of this place where the California Highway Patrol teaches their officers how to drive on

433

00:29:04,020 --> 00:29:11,540

ice. Bet the lettuce, use it. Perfect. All right, let's pack our bags and go. Sure enough, we were

434

00:29:11,540 --> 00:29:17,060

kindly granted permission to use the California Highway Patrol's driver training site. The team

435

00:29:17,060 --> 00:29:24,340

lays out traffic cones around the entire perimeter and they're set to put the driving on ice backwards

436

00:29:24,340 --> 00:29:29,940

myth to the real life test. Tracks all set up. We have all our cones down. This is a very real life

437

00:29:29,940 --> 00:29:34,980

situation. We have snow. We have slush. We have ice. I think we're ready to test it. So let's go over

438

00:29:34,980 --> 00:29:39,220

how we're going to do it. Well, you know, we did find out that we had more traction going in reverse

439

00:29:39,220 --> 00:29:43,060

with the front wheel drive car. So maybe what we should do is test that one first. We've got 15 miles

440

00:29:43,060 --> 00:29:47,780

an hour forward and then going backwards and see which one performs better overall. We've got a

441

00:29:47,780 --> 00:29:53,700

couple other types of cars, a rear wheel drive and a four wheel drive. So let's do the same set of

442

00:29:53,700 --> 00:29:57,620

tests forward and reverse. See if that makes a difference. I'll take front wheel drive. All right,

443

00:29:57,620 --> 00:30:04,340

I get the convertible. All right, I'll take the four wheel drive. Cool. 15 miles per hour is the set

444

00:30:04,340 --> 00:30:09,540

speed limit. Slow enough to be safe, but fast enough to give the wheels of the cars enough

445

00:30:09,540 --> 00:30:14,820

momentum to move through the slush. How many times have you driven on the snow? This is actually the

446

00:30:14,820 --> 00:30:24,020

first time I've ever driven on snow. Here we go. This is forward 15 miles an hour front wheel drive.

447

00:30:26,820 --> 00:30:36,500

Carrie hits the gas. You can start off slow. Okay, I'm at 15. But even driving at such a low speed

448

00:30:36,500 --> 00:30:44,740

quickly loses her grip. Keeping 15. I'm sliding a little bit here. 15 feels a little faster on

449

00:30:44,740 --> 00:30:50,500

this slush. It's not long before she takes out her first victims. Number two.

450

00:30:53,860 --> 00:30:59,540

And then she just can't seem to get back on track. You went off the track. Get back on the check.

451

00:30:59,540 --> 00:31:06,100

Go between the cones, Carrie. Oh my God. The turns are where things really get tricky.

452

00:31:06,820 --> 00:31:08,740

The last U-turn still at 15.

453

00:31:10,020 --> 00:31:14,260

How is she? Because I'm with a new 15 to the end and stop.

454

00:31:14,260 --> 00:31:18,260

Thankfully, she comes to a safe stop. Have you been drinking, Carrie?

455

00:31:20,260 --> 00:31:25,380

Now, to see if the front wheel drive has better traction in reverse, like it did in the scale

456

00:31:25,380 --> 00:31:31,380

test. You ready? Yeah. No. Yeah. Wear your seat belt. Yeah. Absolutely wear your seat belt.

457

00:31:31,380 --> 00:31:35,620

Grant bravely volunteers to monitor the speedometer for Carrie.

458

00:31:35,620 --> 00:31:40,020

You're already coming off the track. She hasn't even gone two feet. She's already coming off the

459

00:31:40,020 --> 00:31:45,460

track. This is not looking good. Here we go. Front wheel drive going in reverse. Hopefully staying

460

00:31:45,460 --> 00:31:49,780

at 15. I'm taking cues from you. So let me know if I need to go faster or slower. Okay.

461

00:31:51,620 --> 00:31:57,540

And she's off. Five miles an hour. Grant counts up her speed and she's looking surprisingly steady.

462

00:31:57,540 --> 00:32:03,140

Holding 15. Looking good, Carrie. This myth may have some traction.

463

00:32:03,860 --> 00:32:06,980

She's actually doing better in reverse. That's amazing.

464

00:32:09,620 --> 00:32:11,540

But as soon as she hits the tight curves,

465

00:32:13,780 --> 00:32:19,540

things spin out of control. Okay. You know what? Before you destroy the entire course,

466

00:32:19,540 --> 00:32:25,860

why don't we just take a breather? I think we've got a cone underneath us or something.

467

00:32:25,860 --> 00:32:31,460

Grant, can you hear me? Pull the key out of the ignition. Oblivious to Tori's pleas,

468

00:32:31,540 --> 00:32:36,180

Carrie's trip takes on all the twists and turns of Mr. Toad's wild ride.

469

00:32:46,820 --> 00:32:50,900

Why didn't you take control of the situation? She destroyed the whole course.

470

00:32:54,500 --> 00:33:00,340

You're crazy. So even though the scale test indicated you might have more grip,

471

00:33:01,700 --> 00:33:06,980

driving backwards in the front wheel drive was way more dangerous than going forwards.

472

00:33:06,980 --> 00:33:14,580

I think that the main factor here is that driving backwards at 15 miles an hour is very difficult

473

00:33:14,580 --> 00:33:21,380

as is. And the amount of traction that you might possibly gain from going in reverse

474

00:33:22,020 --> 00:33:26,660

will not compensate for the fact that it's just too wildly going backwards.

475

00:33:27,380 --> 00:33:33,300

On the cone count scoreboard, driving in reverse, Carrie wiped out a wildly total of 14.

476

00:33:44,340 --> 00:33:48,820

Testing the fan side requested myth, it's safer to drive on ice backwards

477

00:33:48,820 --> 00:33:55,620

in a front wheel drive. Carrie lost all control. Now to see if Tori can keep it together.

478

00:33:56,660 --> 00:34:01,940

So this will be rear wheel drive going forward. The power's off.

479

00:34:04,900 --> 00:34:11,540

Little squirrely. The sports car is squirrely for sure, but Tori relaxes and enjoys the slide.

480

00:34:13,700 --> 00:34:19,060

It's done pretty good. I don't see any down yet. Tori completes the circuit with no knock downs.

481

00:34:20,660 --> 00:34:26,500

All right, this is rad. It's just like drifting. We're gonna have fun, Carrie. Don't you worry.

482

00:34:27,220 --> 00:34:32,340

Now to see how rad reverse is. For this run, Carrie will be Tori's co-pilot.

483

00:34:36,660 --> 00:34:41,060

As soon as he gets to the first turn, the cone carnage begins.

484

00:34:42,020 --> 00:34:44,020

Oh, one.

485

00:34:53,620 --> 00:34:58,820

It's lucky one of our courageous camera operators shooting on the course is light on his feet.

486

00:35:00,020 --> 00:35:03,460

And Tori squeals, squeals, squeals all the way home.

487

00:35:11,220 --> 00:35:13,220

Wow.

488

00:35:14,980 --> 00:35:20,020

I would have to say it's pretty obvious going in reverse. Even though you might have more traction,

489

00:35:20,580 --> 00:35:22,420

you don't have any control of the vehicle.

490

00:35:24,260 --> 00:35:30,180

On the leaderboard now, Tori's reverse cone count is 12, just too less than Carrie.

491

00:35:31,060 --> 00:35:36,340

Now it's Grant's turn to take the wheel. His vehicle is a mighty four-wheel drive.

492

00:35:36,980 --> 00:35:42,180

This is four-wheel drive, 15 miles an hour, forward, around track. Here we go.

493

00:35:45,380 --> 00:35:49,220

And to turn one, little sliding, but not bad.

494

00:35:51,540 --> 00:35:57,060

I'm feeling in total control. Grant's drive around the course is like a walk in the park.

495

00:35:58,660 --> 00:36:01,220

Little sliding right there. Last turn.

496

00:36:02,180 --> 00:36:06,660

Whoa, little slide. That's still looking very good, very good.

497

00:36:07,860 --> 00:36:12,980

Grant didn't hit a single cone. Not bad. Look good. Flip it around.

498

00:36:14,180 --> 00:36:18,100

For his driving in reverse attempt, Tori will be Grant's speed monitor.

499

00:36:18,820 --> 00:36:24,340

I have full confidence in your driving capabilities. Good. That makes one of us. Hit it.

500

00:36:25,300 --> 00:36:31,380

You're at 10 miles an hour. Grant cruises up the straight and rounds the first bend riding high.

501

00:36:31,380 --> 00:36:38,100

Looking good, you're looking good. He's doing well. Wow. Suddenly the wow turns into...

502

00:36:38,260 --> 00:36:41,060

Oh, oh, oh, oh.

503

00:36:52,420 --> 00:36:57,620

It seems like Grant's teenage years spent playing Pac-Man have finally paid off.

504

00:36:58,180 --> 00:37:00,340

Are you trying to see how many cones you can knock over?

505

00:37:01,620 --> 00:37:03,380

You knocked over more than any of us.

506

00:37:04,340 --> 00:37:08,740

Sure enough, in reverse, the final cone count standings are

507

00:37:08,740 --> 00:37:12,900

Carrie 14, Tori 12, and Grant 20.

508

00:37:15,140 --> 00:37:20,260

You're the winner, bro. Nice work. Shut up. How many times did you go off the course?

509

00:37:20,260 --> 00:37:21,060

Was he on the course?

510

00:37:21,860 --> 00:37:27,300

So no matter what kind of car you drive, what have we learned in Mythbusters' drivers' ed today?

511

00:37:28,260 --> 00:37:34,180

Going in reverse is nuts. It is not going to give you more traction or more control,

512

00:37:34,180 --> 00:37:37,060

and I don't want to see people driving on the roads backwards.

513

00:37:37,060 --> 00:37:41,220

Rear wheel drive, front wheel drive, and four-wheel drive. Totally busted.

514

00:37:48,260 --> 00:37:53,220

Coming up, we see why you should never learn to drive with family or friends.

515

00:37:53,780 --> 00:38:00,420

Coming up on Mythbusters, we try and start at Lent just from a helicopter with explosives.

516

00:38:00,420 --> 00:38:01,220

How cool is that?

517

00:38:10,420 --> 00:38:15,860

Jamie and Adam learned that summoning up a mighty avalanche by happenstance isn't easy.

518

00:38:16,260 --> 00:38:23,220

Now that they're done testing the myths, it's time to hit the slopes just for fun.

519

00:38:30,500 --> 00:38:31,380

That's cool.

520

00:38:31,380 --> 00:38:36,500

Adam is going to take flight with an airborne snow safety team who leave nothing to chance.

521

00:38:39,060 --> 00:38:42,740

Avalanches are very deadly, and these guys go out with the explosives,

522

00:38:42,740 --> 00:38:47,620

and they cause avalanches on purpose so that they don't happen to people by accident.

523

00:38:48,260 --> 00:38:55,140

Adam's task is to assist Operations Director Aaron inside the helicopter, dropping live dynamite.

524

00:38:55,140 --> 00:39:00,100

And then I'm going to throw it out the window, okay, and I'm going to do that when the spotter,

525

00:39:00,100 --> 00:39:03,780

who is in the front seat, tells me to do it. That seems pretty straightforward.

526

00:39:03,780 --> 00:39:05,940

It's, yeah, considering you're throwing dynamite out the window.

527

00:39:06,500 --> 00:39:11,780

Now that we're all clear on that, we're ready for lift off.

528

00:39:25,860 --> 00:39:27,780

The view from up here is awesome.

529

00:39:28,180 --> 00:39:30,100

It's got to turn out to be a perfect morning, isn't it?

530

00:39:34,500 --> 00:39:35,780

Then let's get one happening.

531

00:39:38,340 --> 00:39:41,060

First, the team determines an avalanche prone area.

532

00:39:46,500 --> 00:39:47,780

Then go into action.

533

00:39:57,940 --> 00:39:58,740

Bye.

534

00:40:04,100 --> 00:40:07,860

Adam's role as Explosives Assistant is getting him all fired up.

535

00:40:11,220 --> 00:40:15,460

Tiny little cabin. My feet are underneath this duffel bag that weighs a couple of

536

00:40:15,460 --> 00:40:19,700

hundred pounds worth of explosives, and I'm grabbing them out. I'm cutting the fuse,

537

00:40:19,700 --> 00:40:23,860

popping on the igniter, handing them to Aaron. He's pulling them and igniting them

538

00:40:23,860 --> 00:40:27,460

inside the helicopter and then chucking them out the window.

539

00:40:29,620 --> 00:40:32,660

When the explosive hits the snow, that's ready to go.

540

00:40:44,660 --> 00:40:47,060

Adam loves the smell of dynamite in the morning.

541

00:40:47,700 --> 00:40:50,900

It's like water moving down, and it really seemed to move really slowly,

542

00:40:50,900 --> 00:40:54,180

also you can keep on your mind yourself at the scale that this thing is like

543

00:40:54,180 --> 00:40:57,300

10, 20 football fields long as it's moving down the mountain.

544

00:40:58,500 --> 00:41:00,660

Next, a cornice catches their eye.

545

00:41:05,300 --> 00:41:08,820

And sure enough, collapsing it causes their second slide.

546

00:41:10,820 --> 00:41:11,940

And for the finale...

547

00:41:11,940 --> 00:41:18,900

Oh, look at that. Oh, perfect.

548

00:41:20,580 --> 00:41:24,420

Their third and final avalanche of the day is a monster.

549

00:41:25,380 --> 00:41:29,140

We were out for well over an hour and a half. We got three avalanches.

550

00:41:30,260 --> 00:41:31,780

I'm super pleased with what we got.

551

00:41:35,940 --> 00:41:37,540

How are we going to call this one?

552

00:41:37,540 --> 00:41:40,660

Well, you know, all of our field tests said the same thing.

553

00:41:40,660 --> 00:41:44,900

As far as I'm concerned, that no yodeler in the world is truly in danger

554

00:41:44,900 --> 00:41:46,740

from an avalanche merely by yodeling.

555

00:41:46,740 --> 00:41:49,620

You know, I agree with you, but I have to put in a caveat.

556

00:41:49,620 --> 00:41:55,940

I mean, the variety of snow fields that are out there that would precipitate an avalanche

557

00:41:55,940 --> 00:42:00,500

is infinite almost, and I can't help but think that some of them are going to be

558

00:42:00,500 --> 00:42:02,660

more sensitive than the ones that we saw.

559

00:42:02,660 --> 00:42:06,420

Right. I appreciate your point, but the fact is that we're going to be scientific about it.

560

00:42:06,420 --> 00:42:10,500

We can only call a conclusion based on the data that we've set out to gather and gather.

561

00:42:10,740 --> 00:42:15,620

Yeah, we have to do that, but I have to make the point that there are cases like

562

00:42:15,620 --> 00:42:21,860

skiers, which are not hundreds of pounds of high explosives that have set off avalanches.

563

00:42:22,420 --> 00:42:24,340

In some cases, it doesn't take very much.

564

00:42:24,980 --> 00:42:26,820

Your editorial comment is so noted.

565

00:42:30,820 --> 00:42:32,980

Well, driving on ice sure was fun.

566

00:42:32,980 --> 00:42:34,580

Yeah, and Carrie, you're really good at it.

567

00:42:35,540 --> 00:42:40,420

Well, I thought the avalanche myth was awesome, and who knew Jamie lived in a snow cave for two weeks?

568

00:42:40,660 --> 00:42:42,740

Yeah, those were both really good stories.

569

00:42:42,740 --> 00:42:47,380

And if you have any ideas at home that you want us to test, log on to [discovery.com](http://discovery.com)

570

00:42:47,380 --> 00:42:48,980

[slash mythbusters.](http://mythbusters.com)

571

00:42:48,980 --> 00:42:54,820

This time, preferably stories that involve, I don't know, hot sandy beaches and drinks with umbrellas in them.