

1

00:00:00,000 --> 00:00:15,680

on this episode of myth musters adam and jay me dial in on a fabulous fable

2

00:00:15,680 --> 00:00:20,840

about two phone books interleaving their pages apparently makes them

3

00:00:20,840 --> 00:00:32,080

impossible to pull apart we would need to bring some more power and then Carrie

4

00:00:32,080 --> 00:00:40,520

Grant and Tori test a Hollywood Big Bang theory can you blow up a shark with

5

00:00:40,520 --> 00:00:55,760

black powder a harpoon gun and a boat battery Adam Savage and Jamie

6

00:00:55,760 --> 00:01:01,760

Heineman that beautiful or what between them more than 30 years of special effects

7

00:01:01,760 --> 00:01:07,960

experience huge dramatic music joining them Carrie Byron criminals beware the

8

00:01:08,840 --> 00:01:15,920

Grant immahara let's eat and Tori go lechi come eat the cougar they don't just

9

00:01:15,920 --> 00:01:22,960

tell the myths mr. Heineman you are go for launch they put them to the test

10

00:01:22,960 --> 00:01:41,440

what's this new suggestion yeah these guys have really outdone themselves man

11

00:01:41,440 --> 00:01:46,440

they have filmed an entire myth busters segment themselves in order to give us a

12

00:01:46,440 --> 00:01:50,240

story idea what's the myth well they're claiming that if you take two phone

13

00:01:50,240 --> 00:01:54,960

books and interleave their pages one by one by one that those two phone books

14

00:01:54,960 --> 00:01:59,660

absolutely cannot be separated that's right down our alley I think we should

15

00:01:59,660 --> 00:02:07,600

take that on I totally agree yep not only did our intrepid Dutch duo Tim and

16

00:02:07,600 --> 00:02:15,280

Steve create this crazy spoof they put forward the intriguing sounding myth that

17

00:02:15,280 --> 00:02:19,960

two phone books with their pages interleaved are impossible to rent a

18

00:02:19,960 --> 00:02:27,760

thunder but could the alternating pages of a phone book that haven't been glued

19

00:02:27,760 --> 00:02:33,880

tape your bound really stick together under any circumstances it's pretty

20

00:02:33,880 --> 00:02:38,640

clear where we have to start I agree you know in their testing the clamp with

21

00:02:38,640 --> 00:02:41,880

which they held their phone books eventually failed and they stopped

22

00:02:41,920 --> 00:02:45,680

testing there well that's a problem we'll have to solve them I agree but first

23

00:02:45,680 --> 00:02:53,080

let's get into leaving in true myth buster style the phone book fable is

24

00:02:53,080 --> 00:03:03,160

going to get ramped and revved up until the boys get answers but before the

25

00:03:03,160 --> 00:03:08,200

envelope pushing begins let's take you back to the beginning very first thing

26

00:03:08,200 --> 00:03:14,760

we have to do is interlace these things like this I think it's gonna be a

27

00:03:14,760 --> 00:03:20,000

little harder than that long and tedious task ahead of editor's favorite

28

00:03:20,000 --> 00:03:23,640

solution the time lapse you ready to interleave some of these phone books

29

00:03:23,640 --> 00:03:30,240

yep all right with the two phone books secured Adam and Jamie we've just passed

30

00:03:30,240 --> 00:03:35,720

500 pages total we'll cruise it simply take turns flipping pages pausing only

31

00:03:35,760 --> 00:03:39,920

when they get to aim for a mafia does this remind you when you used to count

32

00:03:39,920 --> 00:03:48,920

money for the mob I was a hit man I wasn't a money count and with all 800

33

00:03:48,920 --> 00:03:53,600

pages of each book interleaved the guys begin to get a grip on the science of

34

00:03:53,600 --> 00:03:57,440

this myth I can't believe there's nothing holding those two things together

35

00:03:57,440 --> 00:04:03,320

but friction it's really quite amazing I mean when you tug on these it's like

36

00:04:03,360 --> 00:04:08,160

they're glued together but they're not it can only be the friction of each page

37

00:04:08,160 --> 00:04:13,960

where it contacts the next one and times a thousand or so it adds up to a lot what

38

00:04:13,960 --> 00:04:17,680

I've got here is a lesson in friction while this might look like two 800 page

39

00:04:17,680 --> 00:04:22,320

phone books Jamie and I have interleaved them or for you magic

40

00:04:22,320 --> 00:04:29,880

aficionados we've done a pharaoh shuffle and apparently almost nothing will rent

41

00:04:29,920 --> 00:04:34,980

these two things a sunder and we're gonna see if that's true in an attempt to

42

00:04:34,980 --> 00:04:41,680

handle the truth Adam and Jamie are focusing on friction friction can be

43

00:04:41,680 --> 00:04:46,160

defined as the force resisting the relative motion of two surfaces for

44

00:04:46,160 --> 00:04:51,760

example the pages of a phone book static friction is the force keeping two

45

00:04:51,760 --> 00:04:57,600

stationary objects from moving and kinetic friction occurs when two objects

46

00:04:57,640 --> 00:05:02,880

that are already moving rub up against each other that's the theory on what's

47

00:05:02,880 --> 00:05:07,320

holding the books together to help pull them apart the guys rig two plywood

48

00:05:07,320 --> 00:05:12,480

handles along the book spines but neither these nor the tape you can see

49

00:05:12,480 --> 00:05:16,200

will interfere with the experiment all right you want to do some tug of war

50

00:05:16,200 --> 00:05:21,800

okay but not Jamie and I are about to have a tug of war and we are gonna try

51

00:05:21,800 --> 00:05:24,680

and pull the phone book apart but of course I think we're also gonna try and

52

00:05:24,720 --> 00:05:30,240

pull each other across the shop I think it's actually probably a pretty even

53

00:05:30,240 --> 00:05:34,560

game way about the same Jamie may be a little bit stronger than me but I fight

54

00:05:34,560 --> 00:05:42,880

dirty it's been a while since Adam check out my guns and Jamie have gone head to

55

00:05:42,880 --> 00:05:49,160

head but it's a grand old myth busters tradition that underhand tactics I

56

00:05:49,520 --> 00:05:57,080

still got a couple of tricks on my sleeve bending and then breaking the rules

57

00:05:57,080 --> 00:06:07,680

are all part of the fun until someone loses but there'll be no cheating here

58

00:06:07,680 --> 00:06:15,240

it's a straight tug of war a matching of muscle mano imano I'm gonna run out of

59

00:06:15,600 --> 00:06:20,840

real quick so maybe you won't run out of room so quick of course aside from

60

00:06:20,840 --> 00:06:25,960

pride and sensitive egos what's really on the line is the myth will the phone

61

00:06:25,960 --> 00:06:32,320

book pages stand up to our macho man you ready there we go first across the line

62

00:06:32,320 --> 00:06:34,800

loses

63

00:06:38,600 --> 00:06:44,120

oh I believe I'm winning equally matched in Wade traction was the ultimate

64

00:06:44,160 --> 00:06:48,840

decider in this test and with no time to substitute a hydraulically powered

65

00:06:48,840 --> 00:06:56,080

robot Jamie has to take his medicine but more importantly despite being fueled

66

00:06:56,080 --> 00:07:01,040

by the red hot fires of competition good job the phone book still together

67

00:07:01,040 --> 00:07:05,960

that Adam and Jamie failed to make an impression on the phone books although

68

00:07:05,960 --> 00:07:10,120

I may have had better traction on my shoes than Jamie I'd say it's Adam and

69

00:07:10,160 --> 00:07:15,920

Jamie zero fun book one this puppy didn't creak didn't move didn't bud we're

70

00:07:15,920 --> 00:07:19,840

gonna need some more help before the help arrives there's time for a little

71

00:07:19,840 --> 00:07:25,120

bloating this is like a professional wrestling trophy belt right I'm gonna

72

00:07:25,120 --> 00:07:31,960

wear this around like check it out Heinemann who's the boss now

73

00:07:32,960 --> 00:07:40,240

next up break out the popcorn because Carrie Grant and Tori catch a movie

74

00:07:40,240 --> 00:07:45,880

so we're doing another movie myth which one is it the cult classic deep blue sea

75

00:07:45,880 --> 00:07:50,640

yes genetically alter manning sharks tell me we're testing the scene when

76

00:07:50,640 --> 00:07:53,760

they blow the shark up we're testing the scene where they blow the shark up yes

77

00:07:53,760 --> 00:07:57,680

but there's a twist they don't have any weapons on hand so they MacGyver it check

78

00:07:57,680 --> 00:08:02,960

this out yep in this scene from the silver screen the survivors of some

79

00:08:02,960 --> 00:08:07,640

mutant shark mayhem are desperate to finish the fish so they turn to a

80

00:08:07,640 --> 00:08:11,840

harpoon gun flares and an electric charge we ought to get about two and a half

81

00:08:11,840 --> 00:08:16,000

sticks of dynamite out of these flares the question is could this MacGyver style

82

00:08:16,000 --> 00:08:21,680

combo really equal a big boo I'm up here you ought to be able to see me spirit

83

00:08:21,680 --> 00:08:26,320

when I do you take this end of this cable hook it up to the positive side of

84

00:08:27,280 --> 00:08:32,320

boom so they have two and a half sticks of dynamite's worth of black powder from

85

00:08:32,320 --> 00:08:35,600

the flares and it looks like he's gonna make a pipe on from the cylinder

86

00:08:35,600 --> 00:08:39,160

attached to the harpoon but how are they gonna ignite the black powder it

87

00:08:39,160 --> 00:08:43,120

looks like he's gonna just attach that metal cable to a battery and that's

88

00:08:43,120 --> 00:08:50,200

supposed to set it off no way way because that's exactly what happens after

89

00:08:50,200 --> 00:08:54,240

upping the jeopardy by pinning his friend to the shark now what's he gonna do

90

00:08:54,240 --> 00:08:57,360

if he kills the shark he can potentially kill his friend but if he doesn't

91

00:08:57,360 --> 00:09:00,840

kill the shark the shark can get away now he's a dilemma kill the shark, kill the friend

92

00:09:00,840 --> 00:09:04,800

let the shark get away what's he gonna do he opts for the heroic sacrifice of

93

00:09:04,800 --> 00:09:11,680

course but our harpoon toting hero hesitates perhaps fatally because the

94

00:09:11,680 --> 00:09:17,360

genetically enhanced super shark makes for the hole in the fence he'd prepared

95

00:09:17,360 --> 00:09:19,680

earlier

96

00:09:20,680 --> 00:09:29,680

wait they're here three there's a spark and boom wait a minute two and a half

97

00:09:29,680 --> 00:09:36,440

sticks of dynamite, a tower of water blood in fire awesome that is pretty

98

00:09:36,440 --> 00:09:39,960

crazy scene and there's a lot of elements to test okay let's break it down

99

00:09:39,960 --> 00:09:43,160

first of all we need to find out if you can ignite black powder with a car

100

00:09:43,160 --> 00:09:46,360

battery like they did the movie and we need to see if it improvised harpoon

101

00:09:46,400 --> 00:09:50,000

gun like that can go that distance and still be accurate then we need to find

102

00:09:50,000 --> 00:09:54,160

out more about these flares do they even contain black powder and if so do

103

00:09:54,160 --> 00:09:57,720

they have enough to make the mythical two and a half sticks of dynamite and can

104

00:09:57,720 --> 00:10:00,760

that amount of black powder make the massive explosion that we saw and the

105

00:10:00,760 --> 00:10:04,600

guy survives well we definitely need to test that okay that's five things to test

106

00:10:04,600 --> 00:10:10,520

from one scene that's got to be a record it's the deep blue sea quintet of myths

107

00:10:10,560 --> 00:10:17,400

with five separate testable elements it's something to get your teeth into but

108

00:10:17,400 --> 00:10:23,440

hold the foam because Tori's starting this myth by making a mark of a shark

109

00:10:23,440 --> 00:10:28,600

I started off with a big block of foam I put an outline on the profile and then a

110

00:10:28,600 --> 00:10:33,240

top view mark that out with spray paint cut that out with hot wires from there

111

00:10:33,560 --> 00:10:39,160

I went and took the foam cutting machine and shaped it down to more shark like

112

00:10:40,280 --> 00:10:45,800

nicknamed Hugo because he's a huge oh he's a little cutlier than his movie

113

00:10:45,800 --> 00:10:51,400

counterpart and talking of the movie now while Tori finishes up Hugo Grant and

114

00:10:51,400 --> 00:10:53,880

I are going to start testing the first part of this myth which is the ignition

115

00:10:53,880 --> 00:10:58,120

system can you ignite black powder with a battery and a wire we're going to start

116

00:10:58,120 --> 00:11:02,720

with a proof of concept and to explain the concept and method for proving it

117

00:11:03,080 --> 00:11:07,240

here's our resident electrical engineer okay so this is a setup for our proof

118

00:11:07,240 --> 00:11:11,960

concept now people would normally think that it's the spark from the battery

119

00:11:11,960 --> 00:11:16,040

that ignites a black powder but in their setup it's actually more likely to be

120

00:11:16,040 --> 00:11:21,720

the heat so do is hook up this battery to a pair of jumper cables there's a

121

00:11:21,720 --> 00:11:25,920

thin wire between the two and the heat should build up as a current flows

122

00:11:25,920 --> 00:11:30,760

through that conductor and that should ignite the black powder sounds simple

123

00:11:30,800 --> 00:11:34,440

enough you just touch the positive and that should ignite right that's right

124

00:11:34,440 --> 00:11:43,240

everybody ready here we go three two one yep as expected the heat emitted by the

125

00:11:43,240 --> 00:11:48,960

current being forced through the wire is enough to ignite the black powder that's

126

00:11:48,960 --> 00:11:53,280

proof of concept yeah for this part but now what we got to do is set it up like

127

00:11:53,280 --> 00:11:57,080

they had in the movie was we expected we generated enough heat to ignite the

128

00:11:57,120 --> 00:12:01,160

black powder but the question is will the setup in the movie do the same that's

129

00:12:01,160 --> 00:12:05,760

the burning question and some jump cuts later they're all set to put the movie

130

00:12:05,760 --> 00:12:12,080

scene to the test okay so here's a setup we have a tank filled with saltwater

131

00:12:12,080 --> 00:12:17,520

inside of the tank is an airtight metal canister inside of that is black powder

132

00:12:17,520 --> 00:12:22,520

now that's connected just like in the movie through a steel cable steel cable

133

00:12:22,560 --> 00:12:28,080

leads back to a 12 volt marine battery then the other half of the circuit by a

134

00:12:28,080 --> 00:12:33,760

jumper cable it's all the way back to the tank and hopefully completing the

135

00:12:33,760 --> 00:12:39,520

circuit and baboon so just like the movie the metal cable runs from the black

136

00:12:39,520 --> 00:12:44,200

powder canister back to the battery and the only feasible way of completing the

137

00:12:44,200 --> 00:12:50,760

circuit creating the all-important spark or heat is through the salty seawater

138

00:12:51,120 --> 00:12:56,440

but Grant isn't exactly convinced I don't think it's gonna go baboon because

139

00:12:56,440 --> 00:13:01,280

you have a conduction path through the saltwater and I just don't think the

140

00:13:01,280 --> 00:13:05,000

voltage is high enough to get that amount of heat to ignite the black powder

141

00:13:05,000 --> 00:13:09,640

I guess we're gonna find out even though Grant's got his doubts the team still

142

00:13:09,640 --> 00:13:16,520

follows the myth busters safety mantra when using explosives duck ready this is

143

00:13:16,560 --> 00:13:25,360

same ignition system is movie in three two one nothing a whole lot of nothing I

144

00:13:25,360 --> 00:13:28,800

think that by now our hero has been swallowed and digested I just don't

145

00:13:28,800 --> 00:13:31,520

think there's a good enough conduction path to generate the heat you need to

146

00:13:31,520 --> 00:13:36,800

set out the black powder not a very good start to the myth no yep film physics

147

00:13:36,800 --> 00:13:43,160

have once again proved false and part one of the test quintet has bond but

148

00:13:43,200 --> 00:13:48,680

with Tori's finished shark now foaming at the mouth there's still four more

149

00:13:48,680 --> 00:13:52,840

parts to reel in and down at the bomb range it's time to take a shot at myth

150

00:13:52,840 --> 00:14:00,760

part two the harpoon look at that what I have right here is the actual prop from

151

00:14:00,760 --> 00:14:03,800

the movie deep blue sea now I know it looks like a harpoon gun but it's

152

00:14:03,800 --> 00:14:06,960

actually a line thrower that they've modified they've added this tip and the

153

00:14:06,960 --> 00:14:10,240

cylinder now since they modified it we're not gonna be able to use this anymore

154

00:14:10,440 --> 00:14:15,840

but we have this a real working harpoon gun and this is what we're gonna use to

155

00:14:15,840 --> 00:14:19,960

test to fire our harpoons into our shark to see if a harpoon will even go

156

00:14:19,960 --> 00:14:27,120

that far and how far is far well the range in the movie looked about 200 feet

157

00:14:27,120 --> 00:14:35,880

yeah that's far but before Tori takes aim and fires here's some harpoon 101

158

00:14:35,880 --> 00:14:39,680

harpoon gun is very similar to a rifle but instead of a bullet we're using a

159

00:14:39,720 --> 00:14:44,120

38 special blank now the blank once fired will create enough pressure to launch

160

00:14:44,120 --> 00:14:48,040

our harpoon which is sleeved on the outside of the barrel unlike a rifle

161

00:14:48,040 --> 00:14:51,760

where the bullet is inside the barrel and this will hopefully launch our

162

00:14:51,760 --> 00:14:57,360

harpoon to our target all right we're ready to fire we're loaded in three two

163

00:14:57,360 --> 00:14:59,360

one

164

00:14:59,360 --> 00:15:01,360

yeah

165

00:15:04,360 --> 00:15:06,360

bulls-eye

166

00:15:06,360 --> 00:15:12,360

you hit him exactly where the guy hit him in the movie I think I might have pinned his arm to the shark

167

00:15:12,360 --> 00:15:16,480

looks like we've confirmed this part of the myth you can shoot a harpoon over a

168

00:15:16,480 --> 00:15:21,000

hundred feet and still hit your target and we pinned the dude to the shark it's

169

00:15:21,000 --> 00:15:26,600

like double confirmed I love this meaning part two of the myth gets the

170

00:15:26,640 --> 00:15:31,840

thumbs up making it all to play for at one apiece

171

00:15:34,080 --> 00:15:39,880

Adam and Jamie are muscling up to test the tall tale of interlaced phone books

172

00:15:39,880 --> 00:15:44,680

that are impossible to pull apart this experiment is one of those things that

173

00:15:44,680 --> 00:15:48,980

is totally counterintuitive because you know it's just a couple of phone books

174

00:15:48,980 --> 00:15:53,320

interleaved together there's no glue there's no tape there's no screws they're

175

00:15:53,360 --> 00:15:58,040

just sitting there those phone book pages and we should be able to pull them apart

176

00:15:58,040 --> 00:16:03,320

quite easily but somehow I don't think so if you don't believe Jamie here's a

177

00:16:03,320 --> 00:16:08,480

sentence you don't often hear on myth musters this is one you can try at home

178

00:16:08,480 --> 00:16:13,640

and while you're at it here's something else you can try at home with phone books

179

00:16:13,640 --> 00:16:20,200

the tall tale that it takes a strong man to tear a phone book in half as long as

180

00:16:20,240 --> 00:16:23,400

we've got all these phone books around I thought this is an opportunity to learn

181

00:16:23,400 --> 00:16:29,040

how to rip a phone book and Adam's tricky technique is this bend the book into a

182

00:16:29,040 --> 00:16:34,680

V separating the pages that means you tear one page at a time and not all

183

00:16:34,680 --> 00:16:43,960

800 simple this is like a sickness like an addiction I gotta rip up another one

184

00:16:43,960 --> 00:16:49,960

but the problem with addictive highs are the inevitable subsequent lows I know

185

00:16:50,000 --> 00:16:55,840

I'm a myth buster but I'm a little sad to find out that the trick is so easy at

186

00:16:55,840 --> 00:17:00,480

Adam knows the only way to cheer himself up is to beat or could that be cheat

187

00:17:00,480 --> 00:17:08,080

Jamie in a contest Jamie come here got a challenge for you ready okay

188

00:17:09,080 --> 00:17:19,440

I don't know I've never done this before after seeing Jamie struggle for a few

189

00:17:19,440 --> 00:17:24,120

minutes Adam adds the ultimate insult by offering to help here I'll make it easy

190

00:17:24,120 --> 00:17:29,960

for you okay start from the other side take it bend it all the way like this

191

00:17:29,960 --> 00:17:33,080

and you kind of spreading out all the pages and tearing them one at a time

192

00:17:33,080 --> 00:17:38,400

that's the trick and it should tear open you're stronger than me what you

193

00:17:38,400 --> 00:17:42,040

can let me show you up on television you want to get whacked in head with a phone

194

00:17:42,040 --> 00:17:50,800

book that's a fun trick to know I think we should practice you go right ahead

195

00:17:50,800 --> 00:17:57,000

okay after a trip to the recycling bin boys it's back to work which means it's

196

00:17:57,000 --> 00:18:00,920

time to dial in on some hard data we weren't able to pull the phone books

197

00:18:00,960 --> 00:18:05,960

apart that tells us something but not specifically how strong they are so we're

198

00:18:05,960 --> 00:18:10,100

gonna test them with this scale yep this scale will measure exactly how much

199

00:18:10,100 --> 00:18:17,960

tug ready when you're the phone books are being subjected to all right how

200

00:18:17,960 --> 00:18:26,160

much do we get to I'm bad 320 pounds 320 pounds sound significant but what we

201

00:18:26,160 --> 00:18:30,760

need is a little perspective to put that amount of force in perspective it's the

202

00:18:30,800 --> 00:18:35,920

weight of your average linebacker impressive what's next let's get

203

00:18:35,920 --> 00:18:40,360

everyone in the building on this okay yep it's time to number up ready to

204

00:18:40,360 --> 00:18:47,320

fight the Spartans with nine muscled mythbusters and Adam split into two teams

205

00:18:47,320 --> 00:18:57,000

of five we're about to see exactly what these phone books are made of

206

00:19:00,760 --> 00:19:12,600

so far it's phone books one everybody else zero five people on five people tug

207

00:19:12,600 --> 00:19:18,040

of war generating almost 2100 pounds of force the weight of a small car and the

208

00:19:18,040 --> 00:19:22,720

phone books are steadfast and refusing to be separated which leaves one final

209

00:19:22,720 --> 00:19:37,680

manpower option all ten mythbusters in one mighty team we got up to 4,000 pounds

210

00:19:37,680 --> 00:19:43,440

you guys called it up called up the beast and it didn't do anything come on

211

00:19:43,440 --> 00:19:47,960

guys do I have to keep asking for a thousand pounds is about the weight of a

212

00:19:47,960 --> 00:19:53,560

full-size pickup truck still we weren't able to separate the phone books we gave

213

00:19:53,560 --> 00:19:58,480

everything to this phone book it looked right back at our face and said is that

214

00:19:58,480 --> 00:20:04,040

all you've got we will need to bring some more power but before the bringing of

215

00:20:04,040 --> 00:20:09,440

more power what's up man in an attempt to unstick this sticky problem I have

216

00:20:09,440 --> 00:20:13,920

something fun for you guys to try Adam brings more mythbusters the goal is for

217

00:20:13,920 --> 00:20:17,560

you guys to separate these without ripping them tearing them just by pulling

218

00:20:17,600 --> 00:20:22,720

you've got one half hour and any tool or material you want to use in the shop this

219

00:20:22,720 --> 00:20:32,320

is gonna be easy one two three maybe not easy but it is intriguing this is one

220

00:20:32,320 --> 00:20:36,440

of those really really cool myths that anybody can try because everybody's got

221

00:20:36,440 --> 00:20:38,920

a phone book

222

00:20:38,920 --> 00:20:44,720

magic imagining how the phone books go together it's almost like one of those

223

00:20:44,760 --> 00:20:50,160

Chinese finger locks where the harder you pull the tighter the lock is on your

224

00:20:50,160 --> 00:20:52,520

fingers

225

00:20:52,520 --> 00:20:59,320

with time ticking they finally get serious and get a grip but like Adam and

226

00:20:59,320 --> 00:21:03,920

Jamie they realize pulling against each other isn't working so it can handle at

227

00:21:03,920 --> 00:21:11,280

least 250 pounds so Tori decides to tempt fate again last time I did this

228

00:21:11,320 --> 00:21:17,680

that's why I'm wincing and in case you don't remember here's that golden moment

229

00:21:17,680 --> 00:21:25,840

when Tori got blown away but this time Tori escapes headache free and he and

230

00:21:25,840 --> 00:21:29,760

Kerry put their heads together right Kerry go ahead and drive away and the

231

00:21:29,760 --> 00:21:35,920

shop's heavy machinery to try and bust the myth oh and Tori's teeth this is a

232

00:21:35,920 --> 00:21:41,040

little game I like to call break your teeth you'd have thought Tori gets paid

233

00:21:41,080 --> 00:21:46,960

per ambulance ride okay here we go so it's the humble phone books biggest test

234

00:21:46,960 --> 00:21:52,320

yet will their pages resist the scissor and forklift or will our m7 myth

235

00:21:52,320 --> 00:21:56,120

busters bust the myth

236

00:21:56,120 --> 00:22:03,400

oh it's not working yeah no it's just ripping out the spine of the book and with

237

00:22:03,400 --> 00:22:09,360

the 30 minutes long gone the guys are defeated but impressed I think this has

238

00:22:09,480 --> 00:22:13,760

a lot to do with surface area and friction I am completely amazed at how

239

00:22:13,760 --> 00:22:19,680

much force we put on that book and it's still gripped on we failed now the big

240

00:22:19,680 --> 00:22:24,360

question is pepperoni or sausage

241

00:22:27,440 --> 00:22:33,080

she may be the smartest animal in the world but she's still an animal

242

00:22:33,120 --> 00:22:44,400

Kerry Byron come to mama Tori Balachy and Grant Imahara they're shooting at

243

00:22:44,400 --> 00:22:52,160

myths from the deep green sea and so far in their quintet of chaos it's one

244

00:22:52,160 --> 00:22:57,240

part busted one confirmed so what's next for the next part of this myth we're

245

00:22:57,280 --> 00:23:02,920

gonna focus on the explosives and those are contained inside of the flares now

246

00:23:02,920 --> 00:23:07,800

we're gonna stay here on the bomb range because it turns out taking a flare

247

00:23:07,800 --> 00:23:13,920

apart is pretty dangerous remember in the movie they casually crack open a box

248

00:23:13,920 --> 00:23:18,600

of 10 flares to harness so much gunpowder that we ought to get about two

249

00:23:18,600 --> 00:23:23,680

anastasized I have these flares but how much black powder is there in a flair

250

00:23:23,680 --> 00:23:26,960

now we don't know how much black powder is in one of these flares what we need

251

00:23:27,000 --> 00:23:31,160

to do is find out how many of these flares we need in order to make two and

252

00:23:31,160 --> 00:23:37,320

a half sticks of dynamite to find out Grant and not Tori for obvious reasons is

253

00:23:37,320 --> 00:23:42,120

going to very carefully cut open some flares in order to protect myself I'll

254

00:23:42,120 --> 00:23:46,960

be wearing the fire suit that's in case the black powder ignites I've got a

255

00:23:46,960 --> 00:23:51,240

tubing cutter what I'll do is attach that to the flare and crack it open take

256

00:23:51,240 --> 00:23:56,640

out the flare part and then pour the black powder into a tray where I can

257

00:23:56,640 --> 00:24:00,680

measure how much black powder there actually is inside of the flare all

258

00:24:00,680 --> 00:24:05,160

right remember catch on fire stop drop and roll what's clear immediately is

259

00:24:05,160 --> 00:24:10,160

that opening a cartridge flare isn't quite as easy as the movie made out it

260

00:24:10,160 --> 00:24:14,840

looks as though the Martian has figured out the earth tools in fact it takes a

261

00:24:14,880 --> 00:24:21,960

full 12 minutes for Grant to crack it okay I think I'm through with the

262

00:24:21,960 --> 00:24:26,960

dangerous part over Grant measures the amount of black powder and it's pitiful

263

00:24:26,960 --> 00:24:31,920

these are exactly the same type of flares they used in the movie however the

264

00:24:31,920 --> 00:24:37,440

big difference is that there's only one and a half grams of black powder in here

265

00:24:37,440 --> 00:24:43,960

it's not like like the guy did yep the numbers just don't add up the mythical

266

00:24:44,000 --> 00:24:50,240

two and a half sticks of dynamite is about 450 flares worth not the 10 they

267

00:24:50,240 --> 00:24:57,800

harvest in the movie and that means number three hits the busted okay so

268

00:24:57,800 --> 00:25:01,240

where do we go from here well I think it's time we blow stuff up I think we're

269

00:25:01,240 --> 00:25:04,600

gonna need three booms the more the better one using the amount of black

270

00:25:04,600 --> 00:25:07,760

powder they could physically contain in the canister used in the movie then

271

00:25:07,760 --> 00:25:11,440

another one using the two and a half sticks of dynamite they mentioned in a

272

00:25:11,480 --> 00:25:14,800

dialogue and if that doesn't get us the same kind of explosion we see in the

273

00:25:14,800 --> 00:25:20,440

movie I say we do whatever it takes so with Hugo and toe the team hit the road

274

00:25:20,440 --> 00:25:27,320

their destination the secret backcountry quarry where they had their last TNT

275

00:25:27,320 --> 00:25:29,560

party

276

00:25:33,240 --> 00:25:38,240

you guys ready to blow up a mutant shark to save the world you're back we're back

277

00:25:38,280 --> 00:25:41,480

at the quarry lake this time we're gonna blow up a shark and we're gonna show a

278

00:25:41,480 --> 00:25:45,160

few different things we're gonna show one is the bomb he made in the movie

279

00:25:45,160 --> 00:25:50,800

gonna make that big of an explosion two is it enough to kill a shark there

280

00:25:50,800 --> 00:25:54,720

should be enough black powder in this flare to give us two and a half sticks

281

00:25:54,720 --> 00:25:58,440

dynamite and three if you're in the water and you're that close to the

282

00:25:58,440 --> 00:26:07,800

explosion are you gonna survive except we're gonna destroy Hugo

283

00:26:08,280 --> 00:26:15,680

yep Hugo will be going out with a bag but first it's this fishes last swim

284

00:26:15,680 --> 00:26:24,480

he's going for Kerry the girl that's a great idea how you getting back on the

285

00:26:24,480 --> 00:26:31,000

boat next Hugo gets that sinking feeling as the team weighs him down

286

00:26:31,000 --> 00:26:37,880

positioning him 10 feet under about the same depth as the shark in the movie

287

00:26:39,240 --> 00:26:44,960

in the water the shark looks even more menacing but the shockwave from the

288

00:26:44,960 --> 00:26:49,840

blast could be our heroes biggest concern now to find out if our hero is

289

00:26:49,840 --> 00:26:54,920

going to actually survive this crazy blast we have this now this rig was

290

00:26:54,920 --> 00:27:00,200

created by New Mexico tech they have installed Oseco pressure discs now at

291

00:27:00,200 --> 00:27:07,260

500 psi these things will burst 500 psi is certain death for the hero so we're

292

00:27:07,300 --> 00:27:11,300

gonna be able to find out from 15 foot increments how far away our hero has to

293

00:27:11,300 --> 00:27:16,580

be from the blasts to be able to survive New Mexico tech is a world leader in

294

00:27:16,580 --> 00:27:22,220

explosion technology and these custom-made rigs and Oseco rupture discs

295

00:27:22,220 --> 00:27:28,460

are the perfect addition to this test let's go in easy so 50 feet from Hugo

296

00:27:28,460 --> 00:27:34,020

the first rupture rig is delicately placed in the water

297

00:27:34,020 --> 00:27:41,140

50 feet represents the distance from the shark that the hero was at the time

298

00:27:41,140 --> 00:27:46,620

of the explosion but to cover all bases the team positions rupture rigs at 100

299

00:27:46,620 --> 00:27:54,220

150 and 200 feet away it's been a monumental effort and finally

300

00:27:54,220 --> 00:27:59,540

everything's ready for some shark obliteration sharks in position all the

301

00:27:59,540 --> 00:28:02,900

rupture discs are in position in 50 foot increments all we need to do now

302

00:28:02,940 --> 00:28:08,900

strap some explosives to that shark blow them up Frank

303

00:28:12,340 --> 00:28:18,180

Adam and Jamie are focusing on the phone book friction fable and the ramping

304

00:28:18,180 --> 00:28:26,620

up has already begun 10 people 4,000 pounds of pull and nothing

305

00:28:26,620 --> 00:28:30,940

phone books are tougher than we thought dude this thing is a behemoth what are

306

00:28:30,980 --> 00:28:37,500

we gonna pull it with now rental cars

307

00:28:39,540 --> 00:28:44,340

we said we were gonna ramp it up so we have we've got two sedans there are

308

00:28:44,340 --> 00:28:48,260

about a hundred and forty horsepower each we're gonna see if we can rip those

309

00:28:48,260 --> 00:28:54,500

phone books apart yep manpower didn't do it for him so it's on to horse power

310

00:28:54,620 --> 00:29:04,420

and a whole heap of horsing around I made the car so dirty couldn't find the trunk

311

00:29:04,420 --> 00:29:10,500

key it's a simple plan using the same two books that withstood the war of tugs

312

00:29:10,500 --> 00:29:17,140

I lawsuit myself Adam and Jamie are going to drive in opposite directions and the

313

00:29:17,140 --> 00:29:21,620

only thing that could prevent them from driving off into a dusty sunset is the

314

00:29:21,660 --> 00:29:26,900

interleaved pages of the directories remember there's no glue and the plywood

315

00:29:26,900 --> 00:29:31,980

clamps are simply providing a firm grip rigs ready I'm ready what do you think

316

00:29:31,980 --> 00:29:37,420

is gonna happen well I think the rigs gonna break before the books do

317

00:29:42,660 --> 00:29:51,020

this is it I'm ready are you ready can the drag created by the 800 pages of two

318

00:29:51,060 --> 00:29:55,660

phone books stop these two drag racers

319

00:29:58,660 --> 00:30:04,220

I'm starting to spin yeah I'm spinning too

320

00:30:04,220 --> 00:30:10,740

come on spin some more incredibly with the force gauge peaking at 4,800 pounds

321

00:30:10,740 --> 00:30:19,420

the phone books unlike the cars tires that's fun hold firm still intact I

322

00:30:19,460 --> 00:30:24,220

smell rubber burning but I don't see no broken rig or a phone book well at this

323

00:30:24,220 --> 00:30:29,260

point it's phone book three Jamie and Adam zilch I think the phone books feeling

324

00:30:29,260 --> 00:30:33,460

pretty self-satisfied but we're not done by a long shot

325

00:30:39,860 --> 00:30:46,420

Carrie Grant and Tori are mimicking a five-point movie myth with an explosive fishy finale

326

00:30:50,340 --> 00:30:55,580

and with three of the quintet accounted for duck because here come the big

327

00:30:55,580 --> 00:31:00,420

booms for a deep blue sea exploding shark myth here's the plan first we're gonna

328

00:31:00,420 --> 00:31:03,820

use the harpoon that they use the movie completely filled with black powder as

329

00:31:03,820 --> 00:31:07,540

much as we can stuff in there if that doesn't give us our movie explosion then

330

00:31:07,540 --> 00:31:10,140

we're moving on to what they said they have which is the equivalent of two and

331

00:31:10,140 --> 00:31:14,900

a half sticks of dynamite now that doesn't work then we move on to a special

332

00:31:14,900 --> 00:31:19,020

frank concoction which is going to give us the movie explosion that we're hoping

333

00:31:19,060 --> 00:31:21,060

for

334

00:31:21,060 --> 00:31:26,700

remember in the movie a small canister of black powder liquefies the shark and at

335

00:31:26,700 --> 00:31:34,060

50 feet away our hero survives but what about in real life this is the harpoon

336

00:31:34,060 --> 00:31:37,900

from the movie now Frank has made us a canister the same dimension your father

337

00:31:37,900 --> 00:31:40,820

wanted you to have this when you were old enough

338

00:31:40,820 --> 00:31:48,500

elegant weapon now to give this myth the best possible chance we're gonna fill

339

00:31:48,540 --> 00:31:52,740

this with black powder but this only holds 28 grams now to get an explosion

340

00:31:52,740 --> 00:31:57,860

two and a half sticks of dynamite worth you need 681 grams of black powder this

341

00:31:57,860 --> 00:32:02,140

is nowhere near 681 grams but we're gonna do this first because that's what the

342

00:32:02,140 --> 00:32:07,540

movie did and see what happens out on the water Frank carefully lays the charge

343

00:32:07,540 --> 00:32:14,180

but will 28 grams of black powder really shake the shark this is going to be

344

00:32:14,180 --> 00:32:22,660

shark explosion ready to fire in three two one fire

345

00:32:22,660 --> 00:32:28,060

Houston we have a problem I love it when they try to hit the button and the

346

00:32:28,060 --> 00:32:33,380

bomb doesn't go up that's the best part everything points to a misfire at least

347

00:32:33,380 --> 00:32:38,580

until Frank calls the team in for a closer look that's it that's it what you

348

00:32:38,580 --> 00:32:43,140

see is what we got so it went off and that's what we have left it was less than

349

00:32:43,180 --> 00:32:47,500

exciting it was so less than exciting we thought we had a malfunction but as you

350

00:32:47,500 --> 00:32:54,260

can see we didn't so sorry Houston we didn't have a problem the same size

351

00:32:54,260 --> 00:32:59,900

canister is used in the movie 28 grams didn't even cause a ripple it did no

352

00:32:59,900 --> 00:33:03,960

damage at all there are three things we're looking for to confirm our mutant

353

00:33:03,960 --> 00:33:08,820

shark explosion in the movie first of all a tower of water big explosion second

354

00:33:08,860 --> 00:33:12,620

of all we have to see completely obliterated shark and third our hero

355

00:33:12,620 --> 00:33:18,780

has to survive tower water a little bit of smoke obliterated shark just a

356

00:33:18,780 --> 00:33:22,140

little bit of flesh wound he's coming back to eat you finally did our hero

357

00:33:22,140 --> 00:33:28,340

survive absolutely so one out of three not so good for the mid so what now we're

358

00:33:28,340 --> 00:33:31,820

gonna up the stakes and this time we're gonna go with what the guy said in the

359

00:33:31,820 --> 00:33:36,700

movie which is two and a half sticks of dynamite worth of explosive Frank's

360

00:33:36,700 --> 00:33:41,420

preparing a vessel that will contain this amount of black powder set that

361

00:33:41,420 --> 00:33:47,740

off and see what happens to our shark our hero and also if we get the same kind

362

00:33:47,740 --> 00:33:53,300

of guys of course there's a problem here 680 grams of black powder the two and a

363

00:33:53,300 --> 00:33:58,100

half sticks of dynamite is now so big and weighty it could never have been

364

00:33:58,100 --> 00:34:03,380

fired by the harpoon but that's Hollywood for you this is mutant shark

365

00:34:03,380 --> 00:34:07,100

with the equivalent of two and a half sticks of dynamite on your go Frank

366

00:34:07,100 --> 00:34:12,580

fire in the hole three two one

367

00:34:12,580 --> 00:34:15,580

yeah

368

00:34:15,580 --> 00:34:17,100

did you see that

369

00:34:17,100 --> 00:34:19,100

the boobies off the shark

370

00:34:19,100 --> 00:34:21,100

awesome

371

00:34:21,100 --> 00:34:23,100

quite as big as the movie

372

00:34:23,100 --> 00:34:25,100

I think the shark is dead

373

00:34:25,100 --> 00:34:27,100

yeah

374

00:34:27,100 --> 00:34:32,100

as the team go in for a closer look it's clear that Hugo has gone belly up

375

00:34:32,820 --> 00:34:36,300

not looking good for Hugo that's his stomach right there

376

00:34:36,300 --> 00:34:38,300

oh my gosh

377

00:34:38,300 --> 00:34:42,900

but much like Mick Jagger carry can't get no satisfaction

378

00:34:42,900 --> 00:34:47,900

two and a half sticks of dynamite is definitely a better blast and we got to see a little bit of a boom

379

00:34:47,900 --> 00:34:52,900

it was still not the hundred foot in the air tower that we saw in the movie so

380

00:34:52,900 --> 00:34:57,140

though that shark is maybe in two pieces he's not completely decimated and

381

00:34:57,180 --> 00:35:00,180

liquefied in the air like it was in the movie

382

00:35:00,180 --> 00:35:05,180

in other words part four of the quintet also bites the dust

383

00:35:05,180 --> 00:35:09,180

and that means it's time to go large

384

00:35:09,180 --> 00:35:14,180

this is it this is the one we've all been waiting for this is where we're gonna get the huge explosion that we see in the movie

385

00:35:14,180 --> 00:35:19,180

now the first time we tested it gave us hardly anything then we did two and a half sticks of dynamite

386

00:35:19,180 --> 00:35:23,180

destroyed the shark but still we didn't get that giant tower of water splashing in the air

387

00:35:23,220 --> 00:35:28,220

now we're gonna get that and we're probably gonna kill the shark and kill the guy

388

00:35:28,220 --> 00:35:31,220

oh in the same moment this is gonna be awesome

389

00:35:31,220 --> 00:35:37,220

so for the grand finale Hugo like Humpty Dumpty is pieced back together

390

00:35:37,220 --> 00:35:42,220

but not for long because this next boom will be big

391

00:35:42,220 --> 00:35:44,220

he's kinda in one piece

392

00:35:44,220 --> 00:35:49,220

we were out here and we did surfing with explosives and we used 200 pounds of cast boosters

393

00:35:49,260 --> 00:35:57,260

well we're gonna crank it up a few notches today we're gonna use 400 pounds of cast boosters

394

00:35:57,260 --> 00:36:01,260

and we're going to decimate the shark

395

00:36:01,260 --> 00:36:03,260

it's gonna be magnificent

396

00:36:03,260 --> 00:36:08,260

you heard it folks stand by because this is gonna be magnificent

397

00:36:12,260 --> 00:36:18,260

ah dude I am proud of our little phone books they withstood a lot more than I thought they would

398

00:36:18,300 --> 00:36:20,300

this thing is impressive

399

00:36:20,300 --> 00:36:26,300

it is and you know I have a theory I think there's more going on here than just friction of page on page

400

00:36:26,300 --> 00:36:30,300

I think it has to do with the pages being stacked and the weight that they put on each other

401

00:36:30,300 --> 00:36:36,300

as well as there may be some sort of a finger puzzle thing where the harder you pull the more it grabs

402

00:36:36,300 --> 00:36:40,300

well it's clear if we're gonna get these things separated

403

00:36:40,300 --> 00:36:44,300

we're gonna need bigger vehicles and a lot more traction

404

00:36:44,300 --> 00:36:46,300

well you know what I've got both

405

00:36:46,340 --> 00:36:47,340

now really?

406

00:36:47,340 --> 00:36:48,340

oh yeah

407

00:36:48,340 --> 00:36:49,340

awesome

408

00:36:49,340 --> 00:36:54,340

yep Jamie has contacted the military vehicle technology foundation

409

00:36:54,340 --> 00:36:57,340

and head honcho Jacques Littlefield

410

00:36:57,340 --> 00:36:58,340

wow

411

00:36:58,340 --> 00:37:05,340

who can't wait to show off the largest private collection of armored fighting vehicles in the world

412

00:37:05,340 --> 00:37:08,340

the earliest tank I have which is a World War I tank built by the US

413

00:37:08,340 --> 00:37:10,340

it was actually the first tank the US built

414

00:37:10,340 --> 00:37:13,340

and for the next happy hour

415

00:37:13,340 --> 00:37:15,340

well let me show you some other stuff

416

00:37:15,380 --> 00:37:18,380

as Adam and Jamie get the full guided tour

417

00:37:18,380 --> 00:37:21,380

that's kinda cute it's almost cuddly

418

00:37:21,380 --> 00:37:26,380

you could say they resemble two toddlers let loose in a toy factory

419

00:37:29,380 --> 00:37:31,380

nobody moves nobody gets hurt

420

00:37:31,380 --> 00:37:33,380

yeah I know are you jealous

421

00:37:35,380 --> 00:37:37,380

I'm not gonna touch that

422

00:37:37,380 --> 00:37:39,380

there we go

423

00:37:39,380 --> 00:37:41,380

now I'm ready

424

00:37:41,380 --> 00:37:43,380

there's a lot of munitions down here

425

00:37:43,420 --> 00:37:46,420

with playtime reluctantly over

426

00:37:46,420 --> 00:37:50,420

Jacques introduces us to two potential phone book rippers

427

00:37:50,420 --> 00:37:52,420

an armored personnel carrier

428

00:37:52,420 --> 00:37:55,420

and an M5-51 Sheridan

429

00:37:55,420 --> 00:37:58,420

this is the famous death stalker

430

00:38:01,420 --> 00:38:03,420

and with the rides ready

431

00:38:03,420 --> 00:38:07,420

it's time to raise the curtain on the Mythbuster military ballet

432

00:38:13,420 --> 00:38:15,380

the

433

00:38:31,380 --> 00:38:33,380

this is awesome

434

00:38:33,380 --> 00:38:36,380

it's like some sort of a side show with me

435

00:38:43,420 --> 00:38:45,420

yep that's the tanks

436

00:38:45,420 --> 00:38:47,420

so what about the

437

00:38:47,420 --> 00:38:49,420

you got a phone book for me

438

00:38:49,420 --> 00:38:51,420

right here

439

00:38:51,420 --> 00:38:54,420

the toughest thing about ramping this test up

440

00:38:54,420 --> 00:38:56,420

is how to hold on to the books

441

00:38:56,420 --> 00:38:59,420

this is an opportunity to not mess around

442

00:38:59,420 --> 00:39:01,420

nice

443

00:39:01,420 --> 00:39:03,420

if these clamps give way

444

00:39:03,420 --> 00:39:05,420

I'll eat my beret

445

00:39:05,420 --> 00:39:08,420

that's ready aesthetically it matches the tanks

446

00:39:08,420 --> 00:39:10,420

yeah military steel

447

00:39:10,420 --> 00:39:12,420

it's the new black

448

00:39:12,460 --> 00:39:14,460

we're going from a car

449

00:39:14,460 --> 00:39:16,460

and some wood clamps

450

00:39:18,460 --> 00:39:20,460

to a tank

451

00:39:20,460 --> 00:39:22,460

that's something a little heavier

452

00:39:22,460 --> 00:39:26,460

and with phone books held snugly in their brand new bindings

453

00:39:26,460 --> 00:39:29,460

what are you the ghost of Christmas futures

454

00:39:29,460 --> 00:39:32,460

the gang chain on metal monsters together

455

00:39:34,460 --> 00:39:36,460

there you go

456

00:39:36,460 --> 00:39:40,460

and remember their interleave pages are the only things holding the two books together

457

00:39:40,500 --> 00:39:43,500

I don't know about you but I think we're ready to start stretching

458

00:39:47,500 --> 00:39:48,500

in three

459

00:39:48,500 --> 00:39:52,500

Carri-Torian Grant has made a shark called Hugo bubble and trouble

460

00:39:54,500 --> 00:39:57,500

and now they're going to turn him into rubble

461

00:39:57,500 --> 00:40:00,500

with 400 pounds of TNT

462

00:40:00,500 --> 00:40:02,500

set up for this is kind of cool

463

00:40:02,500 --> 00:40:04,500

we've got Frank out there on the boat with his crew

464

00:40:04,500 --> 00:40:08,500

strapping two body bags full of 400 pounds of explosives to our shark

465

00:40:08,540 --> 00:40:12,540

we're standing at the perimeter at a safe distance so we can watch this blast

466

00:40:12,540 --> 00:40:16,540

we have a feeling that the Tower of Water might hit the top of that hillside

467

00:40:16,540 --> 00:40:19,540

yep, Hugo is going to be Hugo

468

00:40:19,540 --> 00:40:21,540

this is exploding shark

469

00:40:21,540 --> 00:40:24,540

400 pounds of explosives on your go Frank

470

00:40:24,540 --> 00:40:26,540

where in the hole

471

00:40:26,540 --> 00:40:28,540

where in the hole

472

00:40:28,540 --> 00:40:30,540

yeah the secret

473

00:40:30,540 --> 00:40:32,540

two

474

00:40:32,540 --> 00:40:34,540

one

475

00:40:34,540 --> 00:40:36,540

fire

476

00:40:36,580 --> 00:40:38,580

Justin, me again

477

00:40:38,580 --> 00:40:40,580

this time we really do have a problem

478

00:40:40,580 --> 00:40:43,580

oh this is every bomb techs worst nightmare

479

00:40:43,580 --> 00:40:45,580

oh god

480

00:40:45,580 --> 00:40:47,580

oh

481

00:40:47,580 --> 00:40:50,580

400 pounds of explosives just sitting there

482

00:40:50,580 --> 00:40:53,580

misfire, this is really really stressful

483

00:40:53,580 --> 00:40:56,580

this is the part of explosions I really really hate

484

00:40:56,580 --> 00:40:58,580

this is a really really dangerous situation

485

00:40:58,580 --> 00:41:01,580

probably the most dangerous kind of situation for these guys

486

00:41:01,580 --> 00:41:05,580

because they don't really know what has gone wrong

487

00:41:05,620 --> 00:41:08,620

but something's gone wrong and the explosives are already rigged out there

488

00:41:08,620 --> 00:41:12,620

so they're going to check it out and maybe see if the blasting cap came out

489

00:41:12,620 --> 00:41:16,620

very carefully Frank and his team move in

490

00:41:16,620 --> 00:41:20,620

they have to remove and replace the faulty blasting cap

491

00:41:20,620 --> 00:41:23,620

one false move and they're dead

492

00:41:23,620 --> 00:41:25,620

are you kidding me

493

00:41:27,620 --> 00:41:30,620

this is like the worst experiment ever

494

00:41:30,660 --> 00:41:35,660

but after 40 breath holding white knuckled cold sweat minutes

495

00:41:35,660 --> 00:41:39,660

the team thankfully are good to go on take two

496

00:41:39,660 --> 00:41:42,660

yeah

497

00:41:42,660 --> 00:41:45,660

we're ready to go man's countdown

498

00:41:45,660 --> 00:41:47,660

go ahead Frank, it's dark

499

00:41:47,660 --> 00:41:49,660

where in the hole

500

00:41:49,660 --> 00:41:51,660

where in the hole

501

00:41:51,660 --> 00:41:53,660

three

502

00:41:53,660 --> 00:41:55,660

two

503

00:41:55,660 --> 00:41:57,660

one

504

00:41:57,660 --> 00:41:59,660

fire

505

00:42:00,660 --> 00:42:05,660

now that is what I call a Hollywood boom

506

00:42:05,660 --> 00:42:07,660

wow

507

00:42:07,660 --> 00:42:09,660

that's crazy

508

00:42:09,660 --> 00:42:12,660

that looks like what, what, 500 feet

509

00:42:12,660 --> 00:42:15,660

I don't think the shark made it

510

00:42:15,660 --> 00:42:18,660

I think the shark is liquefied

511

00:42:18,660 --> 00:42:22,660

explosion three delivered a near perfect match for the movie scene

512

00:42:22,660 --> 00:42:24,660

look there's a big chunk out there

513

00:42:24,660 --> 00:42:27,660

sending shark debris all over the lake

514

00:42:27,700 --> 00:42:30,700

wanna see it again

515

00:42:33,700 --> 00:42:37,700

that was exactly what I imagined it would look like

516

00:42:37,700 --> 00:42:39,700

I mean that explosion was huge

517

00:42:41,700 --> 00:42:43,700

I think that's my new favorite explosion

518

00:42:43,700 --> 00:42:47,700

the spray of water probably went like 500 feet in the air

519

00:42:47,700 --> 00:42:50,700

those boos went at least 600 feet in the air

520

00:42:50,700 --> 00:42:52,700

it was raining down shark

521

00:42:52,700 --> 00:42:55,700

and that was definitely more than two and a half sticks of dynamite

522

00:42:57,700 --> 00:42:59,700

you go is you gone

523

00:42:59,700 --> 00:43:01,700

Tori's gonna cry tonight

524

00:43:01,700 --> 00:43:03,700

oh you go

525

00:43:05,700 --> 00:43:09,700

so having at last recreated the Hollywood explosion

526

00:43:09,700 --> 00:43:12,700

they can finally answer the last part of the myth

527

00:43:12,700 --> 00:43:15,700

would the hero have survived

528

00:43:15,700 --> 00:43:20,700

remember in the movie the team estimated he was 50 feet away

529

00:43:20,700 --> 00:43:23,700

so the closest rupture rig is the crucial one

530

00:43:23,700 --> 00:43:25,700

that's totally ruptured

531

00:43:25,740 --> 00:43:27,740

all of them

532

00:43:27,740 --> 00:43:29,740

all four of them are ruptured

533

00:43:29,740 --> 00:43:31,740

50 feet

534

00:43:31,740 --> 00:43:33,740

that dude would be dead

535

00:43:33,740 --> 00:43:35,740

alright let's go check out the 100 footer

536

00:43:35,740 --> 00:43:38,740

a hundred feet is also in the death zone

537

00:43:38,740 --> 00:43:40,740

so that's a hundred feet all ruptured

538

00:43:40,740 --> 00:43:42,740

you'd be dead at a hundred feet

539

00:43:42,740 --> 00:43:47,740

it turns out that to have survived you'd have had to have been a hundred fifty feet away

540

00:43:47,740 --> 00:43:49,740

way further than the movie hero

541

00:43:49,740 --> 00:43:52,740

we checked the rupturedness at 50 feet

542

00:43:52,780 --> 00:43:55,780

every single disc was completely burst

543

00:43:55,780 --> 00:43:57,780

100 feet same thing

544

00:43:57,780 --> 00:43:59,780

150-200 still intact

545

00:43:59,780 --> 00:44:01,780

so that means for us

546

00:44:01,780 --> 00:44:04,780

there is certain death at 50 feet and at 100 feet

547

00:44:04,780 --> 00:44:07,780

so we think our hero is completely obliterated

548

00:44:07,780 --> 00:44:09,780

and you know what that means

549

00:44:09,780 --> 00:44:11,780

part five of the myth is busted

550

00:44:11,780 --> 00:44:13,780

and it's time to wrap things up

551

00:44:13,780 --> 00:44:15,780

that explosion was insane

552

00:44:15,780 --> 00:44:17,780

yeah I think that's my new favorite explosion

553

00:44:17,780 --> 00:44:20,780

okay so we started out this myth by breaking it down into five parts

554

00:44:20,820 --> 00:44:22,820

the ignition system

555

00:44:22,820 --> 00:44:24,820

the amount of black powder from the flares

556

00:44:24,820 --> 00:44:26,820

the size of the explosion and the hero surviving

557

00:44:26,820 --> 00:44:28,820

all busted

558

00:44:28,820 --> 00:44:30,820

the only thing that actually worked was the harpoon gun

559

00:44:30,820 --> 00:44:32,820

yeah but even the harpoon gun was problematic

560

00:44:32,820 --> 00:44:34,820

I mean the amount of explosives you would need

561

00:44:34,820 --> 00:44:36,820

to get that big of an explosion

562

00:44:36,820 --> 00:44:38,820

I mean the harpoon would never even fly

563

00:44:38,820 --> 00:44:40,820

it would be too heavy

564

00:44:40,820 --> 00:44:42,820

it would just be like

565

00:44:42,820 --> 00:44:44,820

so while this has been a totally cool myth to test

566

00:44:44,820 --> 00:44:46,820

and I love the way we broke it down

567

00:44:46,820 --> 00:44:48,820

this one is totally and completely busted

568

00:44:48,860 --> 00:44:50,860

can we see the explosion again?

569

00:44:50,860 --> 00:44:52,860

heck yeah

570

00:44:52,860 --> 00:44:54,860

oh

571

00:44:58,860 --> 00:45:00,860

that was crazy

572

00:45:00,860 --> 00:45:02,860

that was crazy

573

00:45:02,860 --> 00:45:04,860

that was crazy

574

00:45:04,860 --> 00:45:06,860

that was crazy

575

00:45:06,860 --> 00:45:08,860

welcome back

576

00:45:08,860 --> 00:45:10,860

here's where we stand so far

577

00:45:10,860 --> 00:45:12,860

Jamie and I got word that interleaving the pages of two folks

578

00:45:12,860 --> 00:45:14,860

yielded something incredibly strong

579

00:45:14,860 --> 00:45:16,860

does this remind you of when you used to count money for the mob?

580

00:45:16,900 --> 00:45:18,900

man I wasn't from money counting

581

00:45:18,900 --> 00:45:20,900

so we did it and we've tucked on them

582

00:45:20,900 --> 00:45:22,900

we couldn't separate them

583

00:45:22,900 --> 00:45:24,900

we got ten friends together

584

00:45:24,900 --> 00:45:26,900

they couldn't separate them

585

00:45:26,900 --> 00:45:28,900

we got two cars

586

00:45:28,900 --> 00:45:30,900

and still those phone books wouldn't be separated

587

00:45:34,900 --> 00:45:36,900

but we're not gonna leave it there

588

00:45:36,900 --> 00:45:38,900

we went out and found a couple of tanks

589

00:45:38,900 --> 00:45:40,900

behind me is 30 tons

590

00:45:40,900 --> 00:45:42,900

of military steel

591

00:45:42,900 --> 00:45:44,900

650 horsepower

592

00:45:44,940 --> 00:45:46,940

I don't know if you guys have read the phone books

593

00:45:46,940 --> 00:45:48,940

at this point I have no idea

594

00:45:48,940 --> 00:45:50,940

but I do know that something

595

00:45:50,940 --> 00:45:52,940

is gonna happen

596

00:45:52,940 --> 00:45:54,940

so it's the 14 ton

597

00:45:54,940 --> 00:45:56,940

300 horsepower

598

00:45:56,940 --> 00:45:58,940

M113A1 fire support vehicle

599

00:46:01,940 --> 00:46:03,940

and the M551 Sheridan

600

00:46:03,940 --> 00:46:05,940

also known as the Death Stalker

601

00:46:05,940 --> 00:46:07,940

which packs a healthy

602

00:46:07,940 --> 00:46:09,940

350 horsepower

603

00:46:09,940 --> 00:46:11,940

and weighs in at 15 tons

604

00:46:11,940 --> 00:46:13,940

versus

605

00:46:13,980 --> 00:46:15,980

two phone books

606

00:46:15,980 --> 00:46:17,980

I was trying to make a phone call

607

00:46:17,980 --> 00:46:19,980

that's all I wanted to do

608

00:46:21,980 --> 00:46:23,980

the question is

609

00:46:23,980 --> 00:46:25,980

can the pages take the pressure

610

00:46:25,980 --> 00:46:27,980

if this doesn't separate the phone books

611

00:46:27,980 --> 00:46:29,980

I'd call them effectively unseparable

612

00:46:29,980 --> 00:46:31,980

I think so

613

00:46:31,980 --> 00:46:33,980

alright let's see what happens

614

00:46:37,980 --> 00:46:40,980

ah I love the smell of diesel in the morning

615

00:46:40,980 --> 00:46:42,980

okay go ahead and pull a slack

616

00:46:43,980 --> 00:46:45,980

with the lightest of touches

617

00:46:45,980 --> 00:46:47,980

on the throttle the tanks ease

618

00:46:47,980 --> 00:46:49,980

delicately apart

619

00:46:49,980 --> 00:46:51,980

the careful positioning

620

00:46:51,980 --> 00:46:53,980

not reflected by the force gauge needle

621

00:46:53,980 --> 00:46:55,980

that's 1000 pounds of force

622

00:46:55,980 --> 00:46:57,980

so far

623

00:46:57,980 --> 00:46:59,980

with the slack taken up Jamie signals the start

624

00:47:01,980 --> 00:47:03,980

30 tons of mighty military

625

00:47:03,980 --> 00:47:05,980

machines slowly

626

00:47:05,980 --> 00:47:07,980

begin to move in opposite directions

627

00:47:07,980 --> 00:47:09,980

and the force gauge

628

00:47:09,980 --> 00:47:11,980

climbs quickly

629

00:47:12,020 --> 00:47:14,020

but the courageous phone books

630

00:47:14,020 --> 00:47:16,020

you couldn't call them yellow

631

00:47:16,020 --> 00:47:18,020

hang on for all their work

632

00:47:18,020 --> 00:47:20,020

it separated

633

00:47:20,020 --> 00:47:22,020

it worked

634

00:47:22,020 --> 00:47:24,020

but the Yankee tanks finally win the tug of war

635

00:47:24,020 --> 00:47:26,020

darn

636

00:47:26,020 --> 00:47:28,020

you wanted to see some metal breaking

637

00:47:28,020 --> 00:47:30,020

yeah well I wanted to see these things

638

00:47:30,020 --> 00:47:32,020

spin you know burn rubber

639

00:47:34,020 --> 00:47:36,020

no fun like the rental cars

640

00:47:36,020 --> 00:47:38,020

these puppies had traction

641

00:47:38,020 --> 00:47:40,020

and power to spare

642

00:47:40,060 --> 00:47:42,060

and talking of power

643

00:47:42,060 --> 00:47:44,060

let me see how many pounds it took

644

00:47:44,060 --> 00:47:46,060

8000 pounds of force is what it took

645

00:47:52,060 --> 00:47:54,060

while our military steel

646

00:47:54,060 --> 00:47:56,060

was up to the task of separating the phone books

647

00:47:56,060 --> 00:47:58,060

and lest you think that 8000

648

00:47:58,060 --> 00:48:00,060

pounds of force is not a lot

649

00:48:00,060 --> 00:48:02,060

let me put it in perspective

650

00:48:02,060 --> 00:48:04,060

we could hang

651

00:48:04,060 --> 00:48:06,060

both of those rental cars

652

00:48:06,060 --> 00:48:08,060

from those interleaved phone books

653

00:48:08,100 --> 00:48:10,100

and it wouldn't have broken them

654

00:48:10,100 --> 00:48:12,100

that's how much force we're talking about

655

00:48:12,100 --> 00:48:14,100

it's pretty amazing

656

00:48:14,100 --> 00:48:16,100

so it turns out that

657

00:48:16,100 --> 00:48:19,100

interleaved phone books are not in fact indestructible

658

00:48:19,100 --> 00:48:21,100

you just have to have a couple of tanks

659

00:48:21,100 --> 00:48:23,100

hanging around to do it

660

00:48:31,100 --> 00:48:33,100

I still just wanted to make a phone call

661

00:48:38,100 --> 00:48:40,100

music

662

00:48:40,100 --> 00:48:42,100

music

663

00:48:42,100 --> 00:48:44,100

music

664

00:48:44,100 --> 00:48:46,100

music

665

00:48:46,100 --> 00:48:48,100

music

666

00:48:48,100 --> 00:48:50,100

music

667

00:48:50,100 --> 00:48:52,100

music

668

00:48:52,100 --> 00:48:54,100

music

669

00:48:54,100 --> 00:48:56,100

music

670

00:48:56,100 --> 00:48:58,100

music

671

00:48:58,100 --> 00:49:00,100

music

672

00:49:00,100 --> 00:49:02,100

music

673

00:49:02,100 --> 00:49:05,100

music

674

00:49:05,100 --> 00:49:07,100

music

675

00:49:08,060 --> 00:49:10,100

music

