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00:00:00,000 --> 00:00:09,440

On tonight's hair-raising episode of Mythbusters,

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00:00:09,440 --> 00:00:17,560

Adam and Jamie put Sinema's most famous chop fest to the test.

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00:00:17,560 --> 00:00:23,120

We find out, could a real shark be as strong as Spielberg's Leviathan?

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00:00:23,120 --> 00:00:25,560

Will punching a shark save your skin?

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00:00:25,560 --> 00:00:26,960

Come on, let's go!

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00:00:26,960 --> 00:00:30,360

And will a bullet blow a scuba tank sky high?

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00:00:45,640 --> 00:00:51,360

Who can forget Jaws, the movie that made a generation think twice about taking a bath?

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00:00:56,520 --> 00:01:03,640

In Steven Spielberg's classic, a big fish with a big dorsal turns swimmers into tasty morsels,

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00:01:03,640 --> 00:01:08,320

before finally being blown out of the water by an exploding scuba tank.

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00:01:08,320 --> 00:01:09,560

Smile, you son of a...

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00:01:14,440 --> 00:01:18,320

We're going to see if punching a shark will actually stop it from attacking you.

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00:01:19,880 --> 00:01:21,800

We're going to test how strong sharks are.

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00:01:21,800 --> 00:01:30,800

And then, my personal favorite, we're going to see if shooting a scuba tank with a bullet will actually make it explode.

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00:01:41,200 --> 00:01:47,200

The massive great white shark in Jaws exhibits almost supernatural strength and stamina.

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00:01:47,960 --> 00:01:51,800

It keeps three flotation barrels submerged for hours on end.

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00:01:56,600 --> 00:02:01,200

It yanks Quinn's boat, the orca, backwards while the engine's running.

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00:02:01,200 --> 00:02:03,800

It's impossible! It's impossible!

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00:02:06,400 --> 00:02:11,600

It demolishes a shark cage, and it rams a hole in the orca's hull.

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00:02:11,600 --> 00:02:14,000

But is any of it feasible?

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00:02:14,400 --> 00:02:20,400

Adam and Jamie will put each of those scenarios to the test in true Mythbusters style.

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00:02:25,200 --> 00:02:29,000

The movie shark displays two different kinds of strength.

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00:02:29,000 --> 00:02:35,200

Pulling down the barrels and towing the boat backwards are examples of continuous force.

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00:02:35,200 --> 00:02:38,800

Ramming the cage and the boat, that's shock force.

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00:02:39,600 --> 00:02:41,200

Adam, what are you doing?

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00:02:43,000 --> 00:02:51,400

I'm trying to apply some biomechanical force to this rope to see if there's some kind of proportion to my body weight

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00:02:51,400 --> 00:02:57,400

and how much force I can apply on this rope horizontally and what a shark's body weight is underwater

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00:02:57,400 --> 00:03:01,200

and what it can apply to a fishing line, for instance.

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00:03:01,200 --> 00:03:06,600

By using shock force, Adam and Jamie can exert almost 10 times their body weight.

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00:03:06,600 --> 00:03:09,400

You made a thousand pounds of lunch.

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00:03:09,400 --> 00:03:13,400

But on a constant pull, they muster barely half.

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00:03:13,400 --> 00:03:18,000

Is it the same for a shark? Time to collect some hard data.

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00:03:18,000 --> 00:03:27,600

And so we find them making pre-dawn preparations for a little jaunt, armed with sealed decoys and a 20,000 pound force gauge.

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00:03:27,600 --> 00:03:33,200

The next stage basically involves, we'll have our decoys out in the water and we're hoping that a shark will actually grab one.

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00:03:33,200 --> 00:03:39,400

And if he does, we're going to have our big scale on the end of it so we can maybe go right to the source

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00:03:39,400 --> 00:03:43,400

and find out how much pulling strength a shark might actually have.

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00:03:43,400 --> 00:03:47,400

It's not guaranteed by any means, but this is the best place to find out.

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00:03:48,400 --> 00:03:51,400

But it doesn't look like Adam will find out anything.

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00:03:51,400 --> 00:03:53,400

So much for the old sea dog.

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00:03:53,400 --> 00:03:55,400

Sick as a dog, more like it.

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00:03:55,400 --> 00:04:00,400

The Farallon Islands lie 27 miles off the coast of San Francisco.

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00:04:00,600 --> 00:04:04,600

There is jagged as the teeth of the great whites that prowl these waters.

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00:04:06,600 --> 00:04:10,600

With Adam still out of action, Jamie deploys the decoys.

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00:04:12,600 --> 00:04:16,600

Then there's nothing to do but wait and talk big fish.

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00:04:17,600 --> 00:04:20,600

Sean Vansomeren is an expert on great whites.

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00:04:20,600 --> 00:04:23,600

He's seen their incredible power and speed.

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00:04:23,800 --> 00:04:30,800

I've seen two and a half ton white sharks come flying out of the water and bite big.

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00:04:30,800 --> 00:04:34,800

50-60 pound bites out of elephant seals and things like that.

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00:04:34,800 --> 00:04:37,800

Things that impress me as a hugely powerful animal.

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00:04:37,800 --> 00:04:40,800

A great white speed has never been caught.

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00:04:40,800 --> 00:04:47,800

However, during aerial maneuvers like this, it's estimated they travel between 20 and 25 miles per hour.

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00:04:53,800 --> 00:05:00,800

Unfortunately for the mythbusters, the Farallon sharks are keeping a much lower profile.

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00:05:02,800 --> 00:05:05,800

Maybe the decoys aren't to their taste.

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

Looks like it's on to plan B.

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00:05:08,800 --> 00:05:10,800

When Adam recovers, that is.

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00:05:10,800 --> 00:05:14,800

Well Adam, we're just back from the Farallons and we have a fundamental problem

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00:05:14,800 --> 00:05:17,800

testing the strength of a great white.

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00:05:17,800 --> 00:05:21,800

We just can't practically or politically control the amount of white sharks.

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00:05:22,000 --> 00:05:25,000

Practically or politically or ethically do it.

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00:05:25,000 --> 00:05:29,000

There's only a few hundred of them along the entire west coast of the United States.

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00:05:29,000 --> 00:05:34,000

Well, I still think it's important to use a real animal to get some shark strength data.

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00:05:34,000 --> 00:05:39,000

So perhaps when we go to the Bahamas and we're dealing with some other species of sharks,

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00:05:39,000 --> 00:05:44,000

we can do some of these tests with another species, but real sharks nonetheless

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00:05:44,000 --> 00:05:46,000

and try and get some good results out of that.

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00:05:46,000 --> 00:05:48,000

The Bahamas.

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00:05:48,000 --> 00:05:51,000

Looks like the gags offer a little vacation.

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00:05:51,200 --> 00:05:53,200

Hello.

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00:05:55,200 --> 00:05:59,200

The Bahamas are a chain of islands that lie off the southeast of Florida.

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00:05:59,200 --> 00:06:02,200

The waters team with Caribbean reef sharks.

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00:06:02,200 --> 00:06:07,200

At a maximum length of around six feet, they don't bear much relation to the movie monster,

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00:06:07,200 --> 00:06:11,200

but they might still provide some good shark strength data.

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00:06:13,200 --> 00:06:17,200

The guys from the Bimini Biological Research Station have agreed to help.

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00:06:21,000 --> 00:06:34,000

This time, Adam's managing to keep his lunch down.

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00:06:34,000 --> 00:06:41,000

The mythbusters know this brief trip won't yield definitive answers.

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00:06:41,000 --> 00:06:44,000

Still, some figures are better than none.

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00:06:44,000 --> 00:06:48,000

The line is attached to a 150-pound force gauge.

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

When a shark takes the bait, they can measure the amount of force.

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00:06:52,000 --> 00:06:55,000

Oh, nope, nope, nope. There we go. Come on, come on.

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00:06:55,000 --> 00:06:57,000

Fight, fight, fight.

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00:06:57,000 --> 00:07:00,000

There we go. That's it. Fight, we're fighting.

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

I got a shock load of about 30 pounds on him, but only a steady pressure of maybe 15.

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

Each shark is brought in and weighed.

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00:07:13,000 --> 00:07:15,000

Okay, what does it say, Jamie?

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00:07:15,000 --> 00:07:17,000

We had 45 pounds.

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00:07:17,000 --> 00:07:24,000

Minus 15 pounds for the rig, which means this little guy exerts a shock force of about his own weight.

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

Yeah, he's got it, he's got it.

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00:07:31,000 --> 00:07:36,000

Shack load of 70. Steady pull, steady pull.

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00:07:36,000 --> 00:07:39,000

30, 30.

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00:07:39,000 --> 00:07:44,000

Okay, don't let him give it. Don't let him get under there.

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00:07:45,000 --> 00:07:47,000

There we go. Good.

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00:07:47,000 --> 00:07:49,000

Alright, he's coming in.

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00:07:49,000 --> 00:07:51,000

He's in place.

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00:07:51,000 --> 00:07:53,000

Are we ready?

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00:07:53,000 --> 00:07:55,000

Okay, back is cinched.

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00:07:57,000 --> 00:07:59,000

Let it go.

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00:07:59,000 --> 00:08:02,000

Okay, now, now's good for the rigging.

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

There you go. That's 70 pounds right there.

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

Okay, so minus 15.

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

Alright.

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

So again, he's about pulling his own weight, which is what one would expect.

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00:08:14,000 --> 00:08:20,000

The rule of thumb seems to be that sharks can pull no more than their own weight on a shock load,

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00:08:20,000 --> 00:08:24,000

and about 30% of their weight on a continuous pull.

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00:08:24,000 --> 00:08:26,000

So you're ready to go after that big hammerhead now?

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00:08:26,000 --> 00:08:27,000

Yeah.

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

The guys will use those two figures as the basis of their shark strength experiments,

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

which they'll carry out back in San Francisco.

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00:08:34,000 --> 00:08:38,000

But first, they have a jab at another jaw's myth.

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00:08:43,000 --> 00:08:47,000

In the film's climax, the marauding great white backs off briefly

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00:08:47,000 --> 00:08:50,000

after being whacked on the nose with a scuba tank.

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00:08:50,000 --> 00:08:55,000

But would that really deter a 25-foot fish intent on eating you?

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00:08:56,000 --> 00:08:58,000

What do you got behind your back?

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00:08:58,000 --> 00:09:02,000

Well, the myth is that if you're attacked by a shark and you punch it in the nose,

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00:09:02,000 --> 00:09:06,000

or you jab it in the gills, then you'll frighten it away.

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00:09:07,000 --> 00:09:13,000

You know, I can't really come up with a way I'd like to test this one.

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

Well, actually I have an idea, and that would be to take Buster, our crash test dummy,

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00:09:18,000 --> 00:09:24,000

out into shark-infested waters, cover him with fish offal, like guts and stuff,

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00:09:24,000 --> 00:09:28,000

and have him fend off the sharks with some kind of punching mechanism.

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00:09:28,000 --> 00:09:31,000

That actually seems like a pretty good plan, Jamie.

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00:09:31,000 --> 00:09:34,000

But you know, a lot's changed since Jaws came out.

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00:09:34,000 --> 00:09:38,000

A lot of species of sharks are endangered, and I don't think we should just go

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00:09:38,000 --> 00:09:42,000

mechanically smacking away at them willy-nilly.

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00:09:42,000 --> 00:09:46,000

I think we really need to perhaps do some tests using our high-speed camera

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

to see how hard a human can punch and not really exceed that amount.

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

We don't want to hurt any sharks during the making of this show.

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

It's a very real concern.

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00:09:57,000 --> 00:10:03,000

A shark snout contains a finely tuned bioelectrical system to help them hunt.

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

Tiny receptors on the nose detect electrical signals from potential prey.

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00:10:09,000 --> 00:10:11,000

So could Jaws be right?

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00:10:11,000 --> 00:10:14,000

Is a shark's nose its glass jaw?

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00:10:16,000 --> 00:10:20,000

What we're about to do is to test the force of a human punch.

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00:10:20,000 --> 00:10:23,000

Adam's going to try and punch me, and before he does that,

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00:10:23,000 --> 00:10:28,000

I'm going to put on this protective suit we call the Redman suit, because it's red.

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00:10:30,000 --> 00:10:31,000

Oh, okay.

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00:10:34,000 --> 00:10:38,000

Of course, Jamie doesn't need to wear the whole outfit for the test,

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00:10:38,000 --> 00:10:43,000

but if there's one thing the Mythbusters love, it's a good dress-up.

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00:10:44,000 --> 00:10:46,000

Are you ready?

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00:10:54,000 --> 00:10:57,000

Uh, guys, when you've quite finished...

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00:10:58,000 --> 00:10:59,000

Oh!

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00:11:02,000 --> 00:11:05,000

Okay, it's time for Adam to live his dream.

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00:11:05,000 --> 00:11:07,000

Give me your breast rock! Come on!

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00:11:07,000 --> 00:11:12,000

He gets to punch Jamie for the high-speed camera, all in the name of science.

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00:11:12,000 --> 00:11:13,000

All right.

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00:11:15,000 --> 00:11:17,000

Three, two, one.

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00:11:18,000 --> 00:11:20,000

That was okay, wasn't it?

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

Yeah, it wasn't bad.

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

Okay, ready?

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00:11:24,000 --> 00:11:26,000

That was a hard one.

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00:11:27,000 --> 00:11:29,000

Three, two, one.

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00:11:30,000 --> 00:11:34,000

Adam's fastest punch is clocked at 20 miles per hour.

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

Now we're going to do force. How much force is behind those punches?

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00:11:37,000 --> 00:11:39,000

How are we going to do that?

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00:11:39,000 --> 00:11:43,000

I was thinking if we took something like a sandbag, a large bag of sand,

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00:11:43,000 --> 00:11:48,000

and we hit it and saw how far it swung, and we were able to replicate that swing,

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00:11:48,000 --> 00:11:49,000

we'd have something pretty accurate.

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00:11:49,000 --> 00:11:52,000

One of Buster's thighs makes a good punching bag.

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

Off the end of the scale.

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00:11:54,000 --> 00:11:56,000

At the scale there, Rocky.

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00:11:56,000 --> 00:12:01,000

Force is mass times acceleration. Buster's thigh weighs 10 pounds.

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00:12:01,000 --> 00:12:06,000

Jamie's punch moves that 10 pounds, 37 inches, in a third of a second.

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

All right, Jamie. So when I threw my punch, my best speed was about 20 miles an hour.

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00:12:12,000 --> 00:12:18,000

And when you actually punched the leg meat here, you made it move about three feet with your punch.

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00:12:18,000 --> 00:12:23,000

Yeah, as long as we recorded all of the exact placements of everything, the camera,

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00:12:23,000 --> 00:12:27,000

the distance traveled and everything, we should be able to replicate it or try to.

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00:12:27,000 --> 00:12:31,000

Coming up, how great was the great white in Jaws?

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

Could a real shark be as strong?

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00:12:34,000 --> 00:12:40,000

And Buster gets set to go a few rounds with some denizens of the deep.

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00:12:40,000 --> 00:12:44,000

We've got a robot in the water. He's stuffed with tuna.

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00:12:44,000 --> 00:12:47,000

And it's just another day here with Buster's.

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00:12:54,000 --> 00:12:59,000

It's Jaws' night. The Mythbusters are putting some scenes from the movie to the test.

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00:12:59,000 --> 00:13:02,000

Get me out!

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00:13:02,000 --> 00:13:10,000

Jamie's turning Buster into a punching machine to test the myth that a sharp biff on a shark's nose will send it packing.

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00:13:12,000 --> 00:13:20,000

The plan is to build a pair of aluminium arms with specially molded fists that will be powered by compressed air from a scuba tank.

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00:13:21,000 --> 00:13:26,000

Then Buster will be chummed to the eyeballs and dropped in the ocean.

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00:13:27,000 --> 00:13:32,000

When a curious shark approaches, he'll come out swinging.

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00:13:32,000 --> 00:13:39,000

So that'll be the most upward pose.

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00:13:53,000 --> 00:13:59,000

Here that little chuckle. You always get that when things are going to plan.

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00:13:59,000 --> 00:14:02,000

And there you go.

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00:14:02,000 --> 00:14:07,000

Well, that's a punch. It works.

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00:14:07,000 --> 00:14:16,000

And according to specs, it has plenty of power. It'll be mounted on the shoulder like so.

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00:14:18,000 --> 00:14:23,000

Just one thing. Those shoulder pads are so 1985.

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00:14:23,000 --> 00:14:25,000

He looks like a super hero.

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00:14:26,000 --> 00:14:31,000

Let's see if his air powered fists can exert the same force as Jamie.

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

Get ready.

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00:14:35,000 --> 00:14:37,000

That's pretty fast.

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00:14:37,000 --> 00:14:40,000

He made a little to your right, now the other way.

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00:14:42,000 --> 00:14:43,000

There you go.

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00:14:43,000 --> 00:14:46,000

I'd say we may well be in the ballpark of...

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00:14:46,000 --> 00:14:52,000

It looks like we are in the ballpark. At ADPSI, it went about three quarters of the way up the

scale.

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

And you went all the way to the end of that scale.

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00:14:55,000 --> 00:15:00,000

So more pressure. We probably get it to go a little faster. We just need to solve the valve problem.

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00:15:00,000 --> 00:15:03,000

The problem currently is with the valve.

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00:15:03,000 --> 00:15:08,000

And while it's a perfect valve that's nothing wrong with the valve for some reason,

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

it's not designed to exhaust the air that needs to come out the far side of these actuators

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

whenever we work them back and forth.

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00:15:18,000 --> 00:15:22,000

In other words, air isn't being bled out of the system fast enough.

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00:15:22,000 --> 00:15:27,000

Now, Jamie wanted to keep the rig simple. One lever, one pull, one punch.

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00:15:27,000 --> 00:15:30,000

But it doesn't look like that will be an option.

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00:15:30,000 --> 00:15:36,000

You actually have to do it as a two-stage process to be able to open and bleed things in the right way

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00:15:36,000 --> 00:15:38,000

to get the air to flow quickly.

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00:15:38,000 --> 00:15:41,000

The problem with doing it this way is that it's a little bit like patting your head

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00:15:41,000 --> 00:15:43,000

and rubbing your stomach at the same time.

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00:15:43,000 --> 00:15:50,000

There's, you know, an additional thing going on and we're going to be focusing on punching the shark on a cue.

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00:15:50,000 --> 00:15:52,000

So I was trying to avoid it.

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00:15:52,000 --> 00:15:59,000

While Jamie sorts out his rig, Adam tackles some more jaws' myths.

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00:15:59,000 --> 00:16:05,000

Like could a real shark possess the same strength as the great white in jaws?

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00:16:05,000 --> 00:16:08,000

There's four separate tests to try out.

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

Each one taken from a scene in the movie.

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00:16:14,000 --> 00:16:22,000

I've been given responsibility to build a shark cage that exactly matches the one from the film

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00:16:22,000 --> 00:16:26,000

in every detail, height, weight, size, thickness, everything.

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00:16:26,000 --> 00:16:30,000

What we want to do is actually ram this with a fake shark.

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00:16:30,000 --> 00:16:35,000

We want to see if a real shark could actually destroy the cage like Jaws did in the movie.

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00:16:38,000 --> 00:16:41,000

I know there are seven of these bars.

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00:16:41,000 --> 00:16:43,000

I know they're an inch wide each.

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00:16:43,000 --> 00:16:49,000

I've actually done a fair amount of this in movies where they often ask you to rebuild a prop from a previous scene

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00:16:49,000 --> 00:16:51,000

but they don't have the prop.

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00:16:51,000 --> 00:16:54,000

You've got to look at the scene and sort of figure out exactly how big everything is.

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00:16:54,000 --> 00:16:56,000

So I'm doing that looking at a bunch of stuff from Jaws.

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00:16:56,000 --> 00:17:01,000

The other thing they're going to need for the strength tests is a shark-shaped battering ram.

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00:17:01,000 --> 00:17:04,000

Question is, how big should it be?

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00:17:04,000 --> 00:17:09,000

The great white in jaws is said to be 25 feet long and 6,000 pounds.

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00:17:09,000 --> 00:17:12,000

But science has no record of a shark that big.

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

One of the most important facts for us to get right for the shark strength experiment is how big do great whites actually get.

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00:17:19,000 --> 00:17:22,000

And, you know, the size estimates are all over the map.

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00:17:22,000 --> 00:17:27,000

We've got one from 1945 in Cuba, 21 feet long, 7,000 pounds.

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00:17:27,000 --> 00:17:32,000

Further analysis of the photograph shows that it was more like 16 feet long and they never actually weighed it.

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00:17:32,000 --> 00:17:37,000

And then there was Ralph Collier who wrote a book called Shark Attacks of the 20...

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00:17:37,000 --> 00:17:41,000

17 and 19 feet long, about 3,000 pounds.

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00:17:41,000 --> 00:17:46,000

That's a really good average for a mature female great white shark.

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00:17:46,000 --> 00:17:49,000

There's no time for anatomical accuracy.

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00:17:49,000 --> 00:17:56,000

Instead, they'll cast a shark head and the body will be a length of pipe weighing 3,000 pounds.

230

00:17:56,000 --> 00:18:02,000

Step one, Carrie carves a great white head from a great white block of foam,

231

00:18:02,000 --> 00:18:06,000

which the build team then uses to make a fiberglass mold.

232

00:18:07,000 --> 00:18:16,000

Meanwhile, Adams finding out that building a shark cage from scratch is no walk in the park.

233

00:18:16,000 --> 00:18:19,000

I'm a little zoned out.

234

00:18:19,000 --> 00:18:24,000

I'm more than halfway there in the machining of these things.

235

00:18:24,000 --> 00:18:42,000

There we have a 100% accurate prop reproduction of the jaws shark cage.

236

00:18:43,000 --> 00:18:45,000

Oh, she goes!

237

00:18:49,000 --> 00:18:56,000

So I guess now the question is, what kind of shark abuse will this puppy withstand?

238

00:18:56,000 --> 00:19:01,000

And we won't find the answer to that until the build team finishes the shark ramp.

239

00:19:01,000 --> 00:19:04,000

Next stop, an art supply shop.

240

00:19:04,000 --> 00:19:09,000

It sounds like Jamie has picked a certain rubber that he thinks would most match the shark skin.

241

00:19:09,000 --> 00:19:11,000

So we're probably going to go with that.

242

00:19:11,000 --> 00:19:17,000

We actually are looking for a fast curing polyurethane that can be brushed on.

243

00:19:17,000 --> 00:19:22,000

It can be applied really thick so that we can work really quickly and get the shark head knocked out

244

00:19:22,000 --> 00:19:25,000

because we've been working on it for days and we thought it would take all day.

245

00:19:25,000 --> 00:19:29,000

What we've got here is a Goldilocks situation.

246

00:19:29,000 --> 00:19:33,000

If the rubber's too hard, the ram will easily penetrate the targets.

247

00:19:33,000 --> 00:19:36,000

Too soft and it'll bounce right off.

248

00:19:36,000 --> 00:19:39,000

So it has to be just right.

249

00:19:42,000 --> 00:19:45,000

Mmm, yummy!

250

00:19:47,000 --> 00:19:53,000

It's a sticky situation and some test tugging has Tori worry.

251

00:19:53,000 --> 00:19:57,000

This is like my worst nightmare coming true.

252

00:19:57,000 --> 00:20:01,000

Not being able to pull a piece out of a mold.

253

00:20:04,000 --> 00:20:07,000

I hear it's separating. That's a good thing.

254

00:20:07,000 --> 00:20:09,000

Come on, baby.

255

00:20:12,000 --> 00:20:14,000

Oh, my God.

256

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

It's really good.

257

00:20:25,000 --> 00:20:27,000

Yeah.

258

00:20:42,000 --> 00:20:47,000

The result, one rubber and fiberglass shark head.

259

00:20:47,000 --> 00:20:51,000

That was a lot easier than I thought it was going to be.

260

00:20:51,000 --> 00:20:57,000

Now just paint and attach to a big pipe.

261

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

It's a rammer.

262

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

Next are myth busters. I can eat them.

263

00:21:04,000 --> 00:21:08,000

It's out of the workshop and into shark-infested waters.

264

00:21:12,000 --> 00:21:18,000

The Myth Busters want to find out, will punching a shark stop it attacking you?

265

00:21:18,000 --> 00:21:23,000

Jamie's trying to turn Buster into an air-powered shark-punching machine.

266

00:21:23,000 --> 00:21:29,000

In Jaws, Brody buys himself some time by hitting the shark with a scuba tank.

267

00:21:29,000 --> 00:21:34,000

In the real world, it's a commonly held belief that when a shark attacks,

268

00:21:34,000 --> 00:21:36,000

it's going to attack you.

269

00:21:36,000 --> 00:21:41,000

In 1963, Rodney Fox was spear-fishing off the South Australian coast

270

00:21:41,000 --> 00:21:45,000

when he suddenly found himself in the jaws of a great white.

271

00:21:45,000 --> 00:21:49,000

All I remember is this big thing pushing me through the water.

272

00:21:49,000 --> 00:21:52,000

When I was a kid, I was a little boy.

273

00:21:52,000 --> 00:21:54,000

I was a little boy.

274

00:21:54,000 --> 00:21:56,000

I was a little boy.

275

00:21:56,000 --> 00:21:58,000

I was a little boy.

276

00:21:58,000 --> 00:22:00,000

I was a little boy.

277

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

I was a little boy.

278

00:22:02,000 --> 00:22:04,000

I was a little boy.

279

00:22:05,000 --> 00:22:09,000

When I was attacked, I knew I was being attacked

280

00:22:09,000 --> 00:22:13,000

and I just thought I should fight it off and do my best to get out of it.

281

00:22:13,000 --> 00:22:19,000

And because I actually fought and grabbed a hold of the shark around the belly

282

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

because it wouldn't bite me and then I ticked at it and I pushed it off,

283

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

I believe that helped a lot.

284

00:22:24,000 --> 00:22:29,000

Whatever the reason, Rodney Fox was released and lived to tell the tale.

285

00:22:29,000 --> 00:22:33,000

His wounds needed more than 500 stitches.

286

00:22:35,000 --> 00:22:37,000

Well, there you go.

287

00:22:37,000 --> 00:22:40,000

Looks like Buster's ready to come out swinging.

288

00:22:43,000 --> 00:22:46,000

Jamie's overcome the airflow restriction,

289

00:22:46,000 --> 00:22:51,000

although operating the rig now takes a degree of coordination and timing.

290

00:22:51,000 --> 00:22:54,000

Just kind of balance it. It won't hit you if you're down here.

291

00:22:54,000 --> 00:22:58,000

I will steer it, Adam, since you're going to be operating that thing,

292

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

you might as well operate it.

293

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

Is it powered up?

294

00:23:01,000 --> 00:23:06,000

It's powered up and I will have to hold on to this to aim it.

295

00:23:06,000 --> 00:23:08,000

All right, are you ready? Here we go.

296

00:23:08,000 --> 00:23:10,000

Three, two, one.

297

00:23:13,000 --> 00:23:14,000

That was pretty close.

298

00:23:14,000 --> 00:23:19,000

There's only two inches difference between Jamie's test punch and Buster's effort.

299

00:23:19,000 --> 00:23:20,000

That's close enough.

300

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

I mean, the other thing that you were doing when you hit it

301

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

is you were putting your whole shoulder behind it.

302

00:23:26,000 --> 00:23:28,000

You weren't doing this like that.

303

00:23:28,000 --> 00:23:33,000

And the fact that it came within two inches of your mark, I think that's just perfect.

304

00:23:33,000 --> 00:23:35,000

I think this thing could hurt you.

305

00:23:36,000 --> 00:23:39,000

I think we're about to find out whether it'll hurt you.

306

00:23:40,000 --> 00:23:42,000

All right, I'll go put on the suit.

307

00:23:43,000 --> 00:23:45,000

What did I say about dressing up?

308

00:23:53,000 --> 00:23:55,000

Yeah, I can shake a booty in this.

309

00:23:58,000 --> 00:23:59,000

Oh.

310

00:24:04,000 --> 00:24:06,000

Looks like Buster's got his measure.

311

00:24:06,000 --> 00:24:07,000

Come on, let's go.

312

00:24:09,000 --> 00:24:12,000

So Buster's finally punching. He's doing well.

313

00:24:12,000 --> 00:24:14,000

He's got the right speed.

314

00:24:14,000 --> 00:24:19,000

Yeah, the last thing we have to do is hang him over the shark cage or in front of it.

315

00:24:19,000 --> 00:24:21,000

Because I'll be inside it, steering him.

316

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

You'll be on the surface operating the valve so he punches.

317

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

Making him punch, right?

318

00:24:25,000 --> 00:24:27,000

Yeah, and that's about it.

319

00:24:28,000 --> 00:24:34,000

As we know, the waters off Northern California are home to some giant great white sharks.

320

00:24:34,000 --> 00:24:39,000

But even the myth Buster's would think twice before shaping up to these monsters.

321

00:24:39,000 --> 00:24:44,000

Buster will have to pick on something his own size, like say a Caribbean reef shark.

322

00:24:44,000 --> 00:24:48,000

All right, looks like it's time to pack Buster's bags for the Bahamas.

323

00:24:48,000 --> 00:24:51,000

What do you think he'd wear? Shorts or a little thong?

324

00:24:51,000 --> 00:24:55,000

I don't know if Buster has enough actual flesh down there for a thong, but...

325

00:24:55,000 --> 00:24:58,000

He's got no butt at all. In fact, he doesn't even have any legs.

326

00:24:58,000 --> 00:25:00,000

Here we go again.

327

00:25:06,000 --> 00:25:11,000

We've put Buster through a lot on the show. We've burnt him, blown him up, dropped him off of buildings.

328

00:25:11,000 --> 00:25:17,000

But I think this is his shining moment. We've finally given him the gift of movement.

329

00:25:17,000 --> 00:25:20,000

We're going to put him in with some sharks.

330

00:25:25,000 --> 00:25:34,000

Two sharks right below us.

331

00:25:34,000 --> 00:25:43,000

We really want these sharks to come right in to Buster. We need to have them think of Buster as dinner.

332

00:25:43,000 --> 00:25:47,000

And so we've got to really motivate him and get them all worked up.

333

00:25:47,000 --> 00:25:55,000

That means probably baiting the area and in particular baiting Buster, having him exuding fish essence.

334

00:25:55,000 --> 00:25:58,000

Yaaaaaah!

335

00:25:58,000 --> 00:26:05,000

I'm looking at all these sharks in the water. If Buster was a real boy, he'd be absolutely terrified right now.

336

00:26:05,000 --> 00:26:08,000

Buster's being turned into a smorgasbord.

337

00:26:08,000 --> 00:26:14,000

Step one, put on his wetsuit. No mean feet when he has no feet.

338

00:26:14,000 --> 00:26:19,000

And pack the wetsuit with juicy morsels sure to have the sharks licking their chops.

339

00:26:19,000 --> 00:26:23,000

Metaphorically, of course, sharks don't have tongues.

340

00:26:23,000 --> 00:26:30,000

I still think that shark fighting Buster might end up punching this way while sharks are eating his ass.

341

00:26:30,000 --> 00:26:34,000

But I think if he actually gets contact, the shark's going to go right away.

342

00:26:34,000 --> 00:26:39,000

Buster's got more hose than a lingerie store. What if a shark gnaws through it?

343

00:26:39,000 --> 00:26:42,000

Will he be sent down to Davy Jones Locker?

344

00:26:42,000 --> 00:26:48,000

If Buster's umbilical does get cut and he goes to the bottom, I mean, hell or high water, we're going to get him back out.

345

00:26:48,000 --> 00:26:52,000

We leave no man behind on Myth Buster's man.

346

00:26:55,000 --> 00:27:02,000

Jamie will be holding on to Buster through the bars of the shark cage, so he'll be modeling the latest chain mail.

347

00:27:02,000 --> 00:27:06,000

But he won't be going alone. Stuart Cove's agreed to join him in the cage.

348

00:27:06,000 --> 00:27:08,000

Jamie, you look really hot in that chain mail.

349

00:27:08,000 --> 00:27:12,000

Stuart, is there any kind of possibility for stuff getting out of control with this thing?

350

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

I mean, we're going to chum the heck out of the water here, right?

351

00:27:15,000 --> 00:27:18,000

Yeah, it's definitely going to get out of control, but we're in the cage.

352

00:27:18,000 --> 00:27:23,000

So the only problem we may have is if one of the sharks, the little ones, gets inside the cage.

353

00:27:23,000 --> 00:27:24,000

Okay.

354

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

Buster goes overboard.

355

00:27:33,000 --> 00:27:41,000

We've got a robot in the water. He's stuffed with tuna, and it's just another day here with Buster's.

356

00:27:47,000 --> 00:27:48,000

Ask him how that went.

357

00:27:48,000 --> 00:27:51,000

How are those two deafening blows over?

358

00:27:53,000 --> 00:27:57,000

It just looked like they were in the show. They're very aggressive. Over.

359

00:27:57,000 --> 00:28:00,000

I guess we're ready for some sharks. Over.

360

00:28:00,000 --> 00:28:02,000

Is Andy blowing over?

361

00:28:08,000 --> 00:28:09,000

They're coming.

362

00:28:13,000 --> 00:28:14,000

Earing up.

363

00:28:14,000 --> 00:28:16,000

Earing up over.

364

00:28:19,000 --> 00:28:20,000

Go ahead.

365

00:28:20,000 --> 00:28:21,000

Punch!

366

00:28:23,000 --> 00:28:26,000

Initially, Buster's a little slow to react.

367

00:28:31,000 --> 00:28:32,000

Oh, okay.

368

00:28:36,000 --> 00:28:42,000

The sharks seem cautious, but soon the fishy waft from his wetsuit has them fired up.

369

00:28:43,000 --> 00:28:46,000

Buster has a real fight on his hands.

370

00:28:47,000 --> 00:28:48,000

Oh!

371

00:28:48,000 --> 00:28:49,000

Punch!

372

00:28:51,000 --> 00:28:52,000

Punch!

373

00:28:52,000 --> 00:29:05,000

Oh my God. This is more fun than it should be allowed.

374

00:29:06,000 --> 00:29:11,000

The reef sharks do shy away when punched or poked, but they don't stay away for long.

375

00:29:16,000 --> 00:29:19,000

A shark shoots up from below and grabs Buster's arm.

376

00:29:22,000 --> 00:29:23,000

Punch!

377

00:29:29,000 --> 00:29:34,000

Okay, that was pretty intense. We just had a punch delivered,

378

00:29:34,000 --> 00:29:40,000

hit onto a shark and a reefed Buster hit him like this while he was wrestling with the shark. Over.

379

00:29:40,000 --> 00:29:45,000

While boxing Buster is working well, he's still a little hit and miss.

380

00:29:45,000 --> 00:29:51,000

Remember, the myth says that punching a shark in the nose, eyes, or gills will stop it attacking.

381

00:29:51,000 --> 00:29:54,000

Not sure how often Buster's finding the mark.

382

00:29:57,000 --> 00:29:58,000

Punch!

383

00:29:59,000 --> 00:30:00,000

Buster!

384

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

Woo!

385

00:30:01,000 --> 00:30:03,000

And I hear the spear on him.

386

00:30:03,000 --> 00:30:06,000

I'm killing me not being able to see down there.

387

00:30:06,000 --> 00:30:07,000

And totally it's killing me.

388

00:30:08,000 --> 00:30:09,000

Punch!

389

00:30:10,000 --> 00:30:13,000

The smell of the bait is making them bolder.

390

00:30:16,000 --> 00:30:20,000

They're giggling, I can't even hear them.

391

00:30:21,000 --> 00:30:23,000

Oh, Buster's playing like, whoa!

392

00:30:31,000 --> 00:30:36,000

I didn't get one of those, what the hell am I doing, Moments? Over.

393

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

That was amazing!

394

00:30:40,000 --> 00:30:46,000

Sometimes the sharks would just come in and get a hold of him.

395

00:30:46,000 --> 00:30:51,000

They were like, completely swallowing his hands while I'm going, punch, punch, punch.

396

00:30:51,000 --> 00:30:57,000

I just let him go and he's out there swimming around by himself, punching and...

397

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

The conquering hero returns, bearing the scars of battle.

398

00:31:05,000 --> 00:31:10,000

Look at this, look at all these bites around the wrist, it means he swallowed the hand.

399

00:31:10,000 --> 00:31:12,000

He's just ripped the shreds.

400

00:31:12,000 --> 00:31:15,000

And so is his fish-filled wetsuit.

401

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

It's quite obvious that they're very skittish, they don't like to be challenged,

402

00:31:19,000 --> 00:31:26,000

and if you give them a good wrap, they're likely to go away, so I think it's actually impressively possible.

403

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

But the mythbusters haven't traveled all the way to the Bahamas to leave it at that.

404

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

Now they've seen the sharks in action, they're already planning their next bout.

405

00:31:35,000 --> 00:31:43,000

Clearly I think we might be slipping on mythbusters, I mean the robotic shark-punching buster worked perfectly the first time out.

406

00:31:43,000 --> 00:31:50,000

Yeah, you know, it showed if the sharks were really motivated to go for you, you know, like really attack you,

407

00:31:50,000 --> 00:31:53,000

that was their focus, because he was all chummed up and they wanted him.

408

00:31:53,000 --> 00:31:58,000

That you might as well go after him, you might as well punch him, what else are you going to do?

409

00:31:58,000 --> 00:32:00,000

Because it really actually did something.

410

00:32:00,000 --> 00:32:01,000

Yeah, it fended him off.

411

00:32:01,000 --> 00:32:04,000

Yeah, but I still think that we need to do a little more testing with this myth.

412

00:32:04,000 --> 00:32:10,000

I mean, clearly after what Stuart said, it sounds like if you punch the shark, they're going to come at you more aggressively.

413

00:32:10,000 --> 00:32:16,000

I think that we might have to take this a step further and get into the chainmail and have one of us, not me.

414

00:32:16,000 --> 00:32:17,000

Not me.

415

00:32:17,000 --> 00:32:18,000

Clearly Jamie.

416

00:32:18,000 --> 00:32:19,000

That would be me.

417

00:32:19,000 --> 00:32:22,000

Get down there in the chainmail and punch them personally.

418

00:32:22,000 --> 00:32:29,000

And see if they get more riled up by punching, and if punching is actually worse, then not punching.

419

00:32:29,000 --> 00:32:30,000

Are you willing to do it?

420

00:32:30,000 --> 00:32:34,000

You know what they say, when you're swimming with sharks, you're going to get bit.

421

00:32:34,000 --> 00:32:36,000

Coming up on Mythbusters.

422

00:32:36,000 --> 00:32:40,000

Can a bullet turn a scuba tank into a bomb?

423

00:32:43,000 --> 00:32:47,000

And how can this tank help solve the riddle of shark strength?

424

00:32:54,000 --> 00:32:56,000

How strong is a shark?

425

00:32:56,000 --> 00:33:02,000

According to Adam and Jamie's figures, a shark can exert no more than its own weight on a shock load,

426

00:33:02,000 --> 00:33:06,000

and about 30% of its weight on a continuous pull.

427

00:33:06,000 --> 00:33:12,000

If that's right, then is it possible for a real shark to wreak the same sort of havoc as the one in Jaws?

428

00:33:18,000 --> 00:33:24,000

The Mythbusters are in the perfect place to find out, a dry dock at an abandoned naval yard.

429

00:33:26,000 --> 00:33:31,000

This 38-foot cruiser will play the role of Quinn's doomed boat, the Orca.

430

00:33:31,000 --> 00:33:35,000

It's similar in size, weight, and construction.

431

00:33:35,000 --> 00:33:40,000

This feels exactly like Quinn's boat in the movie.

432

00:33:43,000 --> 00:33:45,000

What's out of the engine?

433

00:33:45,000 --> 00:33:53,000

I mean, the space in the cabin and all of that stuff, I know they're probably shooting on a set half the time, but it feels exactly right.

434

00:33:57,000 --> 00:34:00,000

We're calling it the Orca 5.

435

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

I think the 1, 2, 3, and 4 they used in various movies, all the Jaws movies.

436

00:34:06,000 --> 00:34:10,000

They even had one with a balsa wood stern so the shark could get up on it easier.

437

00:34:10,000 --> 00:34:12,000

Always wanted to do this.

438

00:34:12,000 --> 00:34:14,000

I christened the Orca 5.

439

00:34:21,000 --> 00:34:22,000

Ew.

440

00:34:23,000 --> 00:34:25,000

How the hell do they do this?

441

00:34:25,000 --> 00:34:27,000

It's made of stern stuff, Carrie.

442

00:34:27,000 --> 00:34:30,000

Okay, I'm going to go for it for the seventh time.

443

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

Cristen the Orca 5.

444

00:34:36,000 --> 00:34:37,000

This break!

445

00:34:41,000 --> 00:34:42,000

Okay, stop.

446

00:34:42,000 --> 00:34:46,000

The 3,000-pound Sharama is ready for action.

447

00:34:46,000 --> 00:34:47,000

Whitsing up.

448

00:34:47,000 --> 00:34:50,000

And they found the perfect way to tow it through the water.

449

00:34:56,000 --> 00:34:58,000

That is foxy.

450

00:34:59,000 --> 00:35:02,000

That is a foxy machine.

451

00:35:02,000 --> 00:35:12,000

This is an MTVL, Mobile Tactical Vehicle Light, on loan from United Defense, one of the US military's biggest contractors.

452

00:35:12,000 --> 00:35:20,000

28,000 pounds, 400 horsepower, 0-20 miles per hour in 7 seconds.

453

00:35:21,000 --> 00:35:25,000

Well, this is going to be our main drag vehicle for all of our shark experiments.

454

00:35:25,000 --> 00:35:35,000

This is heavy enough and fast enough to provide us with the speed and traction we need to pull boats, to pull sharks, to wreck shark cages and all the stuff we need to do.

455

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

But Adam, will they let you drive it?

456

00:35:38,000 --> 00:35:40,000

I don't know if that's in the cards.

457

00:35:42,000 --> 00:35:46,000

Right, down to business. Time to roll out the barrels.

458

00:35:51,000 --> 00:35:57,000

Here's the plan. The barrels are tethered to a concrete block sitting on the bottom of the channel.

459

00:35:57,000 --> 00:36:04,000

A length of rope goes from the barrels, through a system of pulleys, to the force gauge, which is connected to the tank.

460

00:36:04,000 --> 00:36:11,000

The tank takes off, the barrels get jerked under, and the gauge registers the amount of force needed to submerge them.

461

00:36:13,000 --> 00:36:17,000

These are the actual barrels Spielberg used in the making of jaws.

462

00:36:17,000 --> 00:36:18,000

Okay, okay.

463

00:36:18,000 --> 00:36:24,000

If any harm comes to these babies, the owner will have Adam over a, you know what.

464

00:36:24,000 --> 00:36:29,000

The only thing we're told we can't do is burn them, blow them up or lose them.

465

00:36:29,000 --> 00:36:30,000

Has he watched the show?

466

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

The barrel line is fed through the pulleys and tied to the force gauge on the rear of the tank.

467

00:36:35,000 --> 00:36:37,000

Alright, so I think we're ready.

468

00:36:39,000 --> 00:36:43,000

Adam monitors a feed from a camera mounted above the force gauge.

469

00:36:48,000 --> 00:36:50,000

Ready, set, sink.

470

00:36:57,000 --> 00:36:58,000

1500.

471

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

1500 right there.

472

00:37:02,000 --> 00:37:03,000

Are they under, Carrie?

473

00:37:03,000 --> 00:37:05,000

They are just under.

474

00:37:05,000 --> 00:37:07,000

Just about 1200 pounds.

475

00:37:10,000 --> 00:37:12,000

We have 1200 pounds!

476

00:37:12,000 --> 00:37:13,000

Alright.

477

00:37:14,000 --> 00:37:16,000

I think we can back up. That's a good test.

478

00:37:16,000 --> 00:37:18,000

You ready to back on the slack?

479

00:37:18,000 --> 00:37:20,000

Hold on, I want to take a look.

480

00:37:20,000 --> 00:37:21,000

What?

481

00:37:22,000 --> 00:37:24,000

Ah, look at that, they're all the way under.

482

00:37:26,000 --> 00:37:27,000

Woo!

483

00:37:28,000 --> 00:37:29,000

Yay!

484

00:37:30,000 --> 00:37:31,000

One down!

485

00:37:34,000 --> 00:37:42,000

The barrel test, how much force would it take to sink three of the barrels from the movie Jaws below the surface of the water worked perfectly.

486

00:37:42,000 --> 00:37:45,000

My estimation of about 1300 pounds was very close.

487

00:37:45,000 --> 00:37:49,000

It turned out to be just over 1200 pounds to keep it under the surface.

488

00:37:49,000 --> 00:38:00,000

The test showed that your average real size shark between 17 and 19 feet between 3 and 4,000 pounds just would not have the strength to hold these barrels under the water.

489

00:38:00,000 --> 00:38:04,000

It might be able to pull them under briefly, but it would not be able to keep them there.

490

00:38:04,000 --> 00:38:07,000

That's shark strength round one to the Mythbusters.

491

00:38:07,000 --> 00:38:08,000

Oh, yeah!

492

00:38:13,000 --> 00:38:22,000

Alright guys, you know we have to have one explosion per episode and this one is a classic.

493

00:38:22,000 --> 00:38:26,000

The question is, is the end of the movie Jaws actually feasible?

494

00:38:26,000 --> 00:38:35,000

When Brody stuffs the scuba tank in the shark's mouth and fires a rifle right in its end, will it explode with enough force to blow the shark to smithereens?

495

00:38:35,000 --> 00:38:37,000

Smile, you son of a...

496

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

In the book version of Jaws, the great white meets a different fate, dying after being harpooned by Quint.

497

00:38:47,000 --> 00:38:53,000

And author Peter Benchley wasn't happy about Spielberg's explosive climates.

498

00:38:53,000 --> 00:38:55,000

The director was adamant.

499

00:38:55,000 --> 00:39:01,000

When Brody squeezed that trigger, the villain of the piece was going to go up like an oil refinery.

500

00:39:01,000 --> 00:39:06,000

But Benchley thought that having the scuba tank explode when shot was unbelievable.

501

00:39:06,000 --> 00:39:08,000

He said, I don't care.

502

00:39:08,000 --> 00:39:19,000

He said, if I have got them for two hours, they will believe whatever I do for the next three minutes because I've got them in my hands and I want the audience on their feet screaming.

503

00:39:19,000 --> 00:39:22,000

At the end, yes, yes, yes.

504

00:39:24,000 --> 00:39:28,000

What audience has got was one of cinema's most memorable finales.

505

00:39:29,000 --> 00:39:33,000

Okay, clearly this is going to be extraordinarily dangerous.

506

00:39:33,000 --> 00:39:37,000

I mean, we've got to figure out a way to protect ourselves. Do you have any plans?

507

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

Well, actually I do.

508

00:39:39,000 --> 00:39:44,000

My thought was to get a hold of one of those shipping containers, the big steel things.

509

00:39:44,000 --> 00:39:53,000

And if we put the scuba tank inside that and we take our gun and mount it also inside that but make it able to fire remotely.

510

00:39:53,000 --> 00:39:57,000

So we'll hook a motor or something up to it and run a wire way far away.

511

00:39:57,000 --> 00:39:59,000

We should be able to operate this safely.

512

00:39:59,000 --> 00:40:03,000

There's no question that a scuba tank carries a lot of energy.

513

00:40:03,000 --> 00:40:06,000

Inside each cylinder is enough air to fill a phone booth.

514

00:40:06,000 --> 00:40:08,000

About 80 cubic feet.

515

00:40:08,000 --> 00:40:09,000

The air is a mix.

516

00:40:09,000 --> 00:40:13,000

78% nitrogen and 21% oxygen.

517

00:40:13,000 --> 00:40:16,000

The air is stored under enormous pressure.

518

00:40:16,000 --> 00:40:21,000

3,000 psi or 204 atmospheres.

519

00:40:21,000 --> 00:40:27,000

It's estimated that a single tank carries 1.3 million pounds of explosive force.

520

00:40:27,000 --> 00:40:31,000

And that's what Adam and Jamie want to unleash.

521

00:40:31,000 --> 00:40:41,000

You know, I've got some prop geek buddies out there and I managed to obtain one of the actual tanks used in the shooting of Jaws.

522

00:40:41,000 --> 00:40:45,000

It's actually been signed by Richard Dreyfus.

523

00:40:45,000 --> 00:40:47,000

Jamie, you want to tell me what kind of tank this is?

524

00:40:48,000 --> 00:40:51,000

Well, this is the most common type of tank that we would use these days.

525

00:40:51,000 --> 00:40:53,000

This is an aluminum 80.

526

00:40:53,000 --> 00:40:59,000

This is actually pretty good because part of this myth is about showing what would happen if you blew up a tank this way.

527

00:40:59,000 --> 00:41:05,000

And I understand these things have about a million or actually it's 1.3 million pounds of explosive force.

528

00:41:05,000 --> 00:41:08,000

I'm not sure what that means but it sounds like a lot.

529

00:41:08,000 --> 00:41:12,000

So this is going to be fun.

530

00:41:12,000 --> 00:41:16,000

Our scuba tank will have to be clenched in the jaws of a great white shark.

531

00:41:16,000 --> 00:41:21,000

As well connected as he is, Adam can't get hold of the one used in the movie.

532

00:41:21,000 --> 00:41:23,000

So he's going to make his very own.

533

00:41:23,000 --> 00:41:30,000

We're working on making a basically a mock-up shark's head to put this tank into when we explode it.

534

00:41:30,000 --> 00:41:40,000

I'm just still framing through the movie jaws to take a look at some of the basic measurements of the shark's mouth to try and duplicate the dimensions correctly.

535

00:41:40,000 --> 00:41:52,000

I'm using a technique called additive foam build-up which involves using a upholstery foam like this which is just a one inch urethane foam and some contact cement

536

00:41:52,000 --> 00:41:58,000

which is exactly how they make muppets in fact to make the shark's head.

537

00:41:58,000 --> 00:42:01,000

I've got a sample over here that I prepared earlier.

538

00:42:01,000 --> 00:42:03,000

It's a pretty good technique for making sharks.

539

00:42:03,000 --> 00:42:07,000

The other question is what are they going to shoot the tank with?

540

00:42:07,000 --> 00:42:16,000

We've chosen the 30-odd 6 because as near as we can tell by looking very carefully at the movie it's the same type of weapon that was used to shoot the scuba tank.

541

00:42:16,000 --> 00:42:18,000

The guys at the gun shop agree.

542

00:42:18,000 --> 00:42:29,000

This war vintage M1 Garand uses a 30-odd 6 rifle cartridge and it's starting to dawn on Jamie that he's staring down the barrel of one dangerous challenge.

543

00:42:29,000 --> 00:42:37,000

It may be a one in a million chance but the fact is if that weapon goes off when it's in the right position I'm dead.

544

00:42:37,000 --> 00:42:44,000

Later the FBI's on standby as the mythbusters trigger the scuba tank firing squad.

545

00:42:44,000 --> 00:42:48,000

In three, two, one.

546

00:42:48,000 --> 00:42:52,000

And after the break they put shark strength to the test.

547

00:42:59,000 --> 00:43:04,000

I got it!

548

00:43:04,000 --> 00:43:08,000

Whoa, dude you really ate your weedies this morning.

549

00:43:08,000 --> 00:43:11,000

The mythbusters have already sunk one jawsmith.

550

00:43:11,000 --> 00:43:15,000

Now it's time for the second shark strength test.

551

00:43:15,000 --> 00:43:21,000

For this experiment the Orca 5 will be connected to the tank and yanked backwards.

552

00:43:21,000 --> 00:43:28,000

To replicate the scene successfully the boat will have to be pulled back so fast that waves break over the stern.

553

00:43:28,000 --> 00:43:29,000

I can't hold it!

554

00:43:29,000 --> 00:43:32,000

Okay we're about to fire up the engine, stand by.

555

00:43:32,000 --> 00:43:35,000

Okay go ahead, we're going ahead.

556

00:43:35,000 --> 00:43:40,000

The force gauge will be monitored by Carrie.

557

00:43:40,000 --> 00:43:45,000

And the Orca 5 sets sail.

558

00:43:45,000 --> 00:43:48,000

Full steam, eh, behind.

559

00:43:48,000 --> 00:43:51,000

Holy.

560

00:43:51,000 --> 00:43:54,000

One down.

561

00:43:54,000 --> 00:43:56,000

Two down.

562

00:43:56,000 --> 00:44:00,000

You're good, you're good.

563

00:44:00,000 --> 00:44:06,000

The tank hits 25 miles per hour.

564

00:44:06,000 --> 00:44:11,000

The estimated top speed of a great white shark.

565

00:44:11,000 --> 00:44:15,000

The force gauge will be monitored by Carrie.

566

00:44:15,000 --> 00:44:20,000

The force gauge trembles between 4 and 8 thousand pounds.

567

00:44:20,000 --> 00:44:25,000

And Orca 5's maiden voyage comes to a sudden end.

568

00:44:25,000 --> 00:44:35,000

Stop, stop, stop, stop.

569

00:44:35,000 --> 00:44:40,000

It was an action replay of the first shark.

570

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

It was an action replay of the movie.

571

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

A cleat was wrenched out.

572

00:44:47,000 --> 00:44:53,000

But that's where reality ends and fiction begins.

573

00:44:53,000 --> 00:45:04,000

That actually proves beyond a shadow of a doubt that the jaw shark could not have dragged the Orca backwards until water splashed over the stern.

574

00:45:05,000 --> 00:45:09,000

Because it would require it to exert more than double its own weight.

575

00:45:09,000 --> 00:45:11,000

And we didn't find a single shark that could do that.

576

00:45:11,000 --> 00:45:15,000

So that's Mythbusters 2, Jaw's Zip.

577

00:45:17,000 --> 00:45:25,000

Later, the Shoramers dead on target when the Mythbusters tackle the movie's remaining strength scenes.

578

00:45:26,000 --> 00:45:35,000

Back at base, work on the exploding scuba tank myth continues.

579

00:45:35,000 --> 00:45:40,000

So it's got some structure, but it's going to need some more.

580

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

Adam's Muppet Man-Eater is nearing completion.

581

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

It's just like the real thing, only cuddly.

582

00:45:56,000 --> 00:46:01,000

Ta-da! Doesn't that look good?

583

00:46:01,000 --> 00:46:02,000

It's awesome.

584

00:46:04,000 --> 00:46:06,000

There you go.

585

00:46:07,000 --> 00:46:14,000

Everything is set, so they de-camp to a disused Air Force Base miles from any innocent bystanders.

586

00:46:16,000 --> 00:46:20,000

Here's what they're going to do. Fred the Foam Sharks at 1M.

587

00:46:20,000 --> 00:46:21,000

That looks awesome.

588

00:46:21,000 --> 00:46:28,000

Jamie's remote firing gun rig is set up with the rifle position to fire at point blank range.

589

00:46:31,000 --> 00:46:34,000

Yeah, so they tell up here. There you go, that's it.

590

00:46:34,000 --> 00:46:39,000

First at test, they give Fred an empty scuba tank to chew on.

591

00:46:39,000 --> 00:46:42,000

Just to see if a bullet can pierce the thick aluminum bottom.

592

00:46:43,000 --> 00:46:44,000

Adam's tip?

593

00:46:44,000 --> 00:46:49,000

We were able to put one of those bullets through two layers of bulletproof Lexan.

594

00:46:50,000 --> 00:46:54,000

But it's two inches of aluminum. I mean, it's a lot stronger stuff.

595

00:46:54,000 --> 00:46:56,000

I don't think it's going to make it through the bottom.

596

00:46:56,000 --> 00:47:00,000

I think we're going to end up firing it, seeing that it doesn't work and going straight to the side.

597

00:47:00,000 --> 00:47:03,000

If he's right, that'll be myth-busted right there.

598

00:47:03,000 --> 00:47:06,000

Jamie loads around into the rifle.

599

00:47:07,000 --> 00:47:08,000

Guns loaded.

600

00:47:09,000 --> 00:47:10,000

Say when.

601

00:47:10,000 --> 00:47:11,000

Go for it.

602

00:47:11,000 --> 00:47:15,000

And three, two, one.

603

00:47:20,000 --> 00:47:21,000

I think it went off.

604

00:47:22,000 --> 00:47:23,000

That's fun.

605

00:47:26,000 --> 00:47:29,000

Lucky Adam didn't have any money riding on that result.

606

00:47:31,000 --> 00:47:32,000

Gonna pull it out.

607

00:47:32,000 --> 00:47:33,000

That went right through.

608

00:47:35,000 --> 00:47:36,000

Oh, look at that.

609

00:47:37,000 --> 00:47:38,000

Wow.

610

00:47:40,000 --> 00:47:44,000

So amazingly, that part of the myth is totally plausible.

611

00:47:45,000 --> 00:47:48,000

Yes, indeed. Now we get to see what will happen with it under pressure.

612

00:47:48,000 --> 00:47:54,000

On the other side of the break, put up your ducs, Jamie. It's time to fight off some fish.

613

00:47:54,000 --> 00:47:57,000

If I was in charge, I wouldn't put them down there.

614

00:48:06,000 --> 00:48:11,000

Jamie's agreed to take the plunge and put the shark punching myth to the ultimate test.

615

00:48:12,000 --> 00:48:16,000

We're out here in a new location. It's much farther out and these sharks are wild.

616

00:48:16,000 --> 00:48:21,000

They're much more aggressive. They're swirling around the boat right away when we landed

617

00:48:21,000 --> 00:48:27,000

or when we dropped anchor here. And it's got me a little concerned.

618

00:48:27,000 --> 00:48:32,000

Buster was punching some pretty well-fed, well-trained sharks out there at the two mile mark.

619

00:48:32,000 --> 00:48:36,000

We're way farther out here and these sharks are, from what we've seen this morning,

620

00:48:36,000 --> 00:48:41,000

a lot more aggressive, a lot quicker to go right for the food that they're interested in.

621

00:48:42,000 --> 00:48:48,000

And there could be some confusion and some danger involved. I don't know how I feel about it.

622

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

I mean, I would completely support Jamie if he said no way.

623

00:48:52,000 --> 00:48:55,000

I'm a little worried. I don't really want Jamie to go down there and do that.

624

00:48:55,000 --> 00:49:00,000

I'm watching those sharks. They're way more aggressive and I'm actually really nervous.

625

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

If I was in charge, I wouldn't put them down there.

626

00:49:03,000 --> 00:49:05,000

But, Carrie, wasn't it your idea?

627

00:49:05,000 --> 00:49:08,000

Have one of us, not me.

628

00:49:08,000 --> 00:49:09,000

Not me.

629

00:49:09,000 --> 00:49:13,000

Clearly Jamie. Come on. Would you want to hurt that guy? Look at him.

630

00:49:14,000 --> 00:49:20,000

The worst-case scenario with this would be, say, if one of the animals got a hold of my arm

631

00:49:20,000 --> 00:49:23,000

and started to thrash, I could potentially break it.

632

00:49:23,000 --> 00:49:26,000

If I see a shark coming up with a beret, I'm going to be mad at you.

633

00:49:27,000 --> 00:49:32,000

Here's the plan. Jamie and Stuart will dive to the seabed with a full bait box.

634

00:49:32,000 --> 00:49:38,000

Jamie, wearing chain mail, will then try and guard the bait against an army of hungry sharks

635

00:49:38,000 --> 00:49:40,000

using only his fists.

636

00:49:40,000 --> 00:49:42,000

Hurt me. Go ahead.

637

00:49:42,000 --> 00:49:45,000

Now Adam can't dive because of an ear problem.

638

00:49:45,000 --> 00:49:50,000

Lucky then that the crew have brought along a bubble sub, a personal submersible

639

00:49:50,000 --> 00:49:54,000

that can be potted by someone who doesn't have a dive ticket.

640

00:49:56,000 --> 00:49:59,000

Air from a regular tank is pumped into the bubble.

641

00:50:08,000 --> 00:50:22,000

Jamie and Stuart take the bait to the bottom.

642

00:50:27,000 --> 00:50:29,000

Microphone text.

643

00:50:29,000 --> 00:50:32,000

Respond back to me if you can hear me. Over.

644

00:50:34,000 --> 00:50:36,000

You can hear me calling. This is Jamie. Over.

645

00:50:37,000 --> 00:50:39,000

Roger that. Over.

646

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

Are the sharks coming at you?

647

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

All around us.

648

00:50:52,000 --> 00:50:54,000

Right. Let the battle commence.

649

00:50:54,000 --> 00:50:56,000

The sharks are all around them.

650

00:50:57,000 --> 00:51:08,000

Where busters strikes were random, Jamie's are precise, sticking to the areas specified in the myth.

651

00:51:08,000 --> 00:51:11,000

He's also using very little force.

652

00:51:16,000 --> 00:51:21,000

It's soon obvious that Jamie's punches aren't making the sharks more aggressive.

653

00:51:26,000 --> 00:51:30,000

Adam has a ringside seat just out of the danger zone.

654

00:51:33,000 --> 00:51:37,000

Jamie have you done enough punching to come up with a result? Over.

655

00:51:37,000 --> 00:51:41,000

Let me think about it a little bit. I'm a little busy right now.

656

00:51:41,000 --> 00:51:44,000

Just hitting the mess like hitting the road.

657

00:51:44,000 --> 00:51:53,000

And there's more aggressive on the ground. More than a little bit. Over.

658

00:51:56,000 --> 00:51:58,000

I'm going to go get the water.

659

00:52:07,000 --> 00:52:10,000

Could you call a plausible at this point? Over.

660

00:52:12,000 --> 00:52:18,000

I definitely don't see that punching them is making them angry.

661

00:52:19,000 --> 00:52:26,000

I mean, I'm defending this and they seem to be responding.

662

00:52:26,000 --> 00:52:30,000

They know I'm guarding the bait box and they're not coming in as tight as they were.

663

00:52:30,000 --> 00:52:48,000

They're just swimming around. It's obvious they don't like even being poked.

664

00:52:48,000 --> 00:52:51,000

You could really pretty much do this and get the same result.

665

00:53:01,000 --> 00:53:08,000

The front of the shark, the nose is like bone. I'm sure it's cartilage instead.

666

00:53:08,000 --> 00:53:11,000

It's just, you know, knock knock. They don't respond to it too much either.

667

00:53:11,000 --> 00:53:17,000

Punching in the soft sides along the gills or whatever, you can do it.

668

00:53:17,000 --> 00:53:19,000

And they seem to actually respond to it.

669

00:53:19,000 --> 00:53:24,000

I felt like I was actually defending the bait box by punching at them.

670

00:53:24,000 --> 00:53:28,000

I did not feel them like getting angry at me or...

671

00:53:28,000 --> 00:53:32,000

So, shark punching, busted, plausible or confirmed?

672

00:53:32,000 --> 00:53:40,000

I would have to say plausible. I don't think it's a 100% way to defend yourself depending on the

circumstances.

673

00:53:40,000 --> 00:53:46,000

But I tell you what, if you get bit by a shark and they're going for it, I'd be punching at them.

674

00:53:46,000 --> 00:53:49,000

I think I'd be punching at anything that was biting me.

675

00:53:49,000 --> 00:53:51,000

Ha ha ha.

676

00:53:55,000 --> 00:53:58,000

Up next, a shark ram showdown.

677

00:53:58,000 --> 00:54:03,000

And later, they've got a loaded scuba tank and a loaded gun.

678

00:54:03,000 --> 00:54:06,000

Will the result look like this?

679

00:54:07,000 --> 00:54:11,000

The Shark Force

680

00:54:15,000 --> 00:54:20,000

There's no record of a great white ever attacking and smashing a shark cage.

681

00:54:20,000 --> 00:54:25,000

But when you look at the size of some of them, it's easy to imagine.

682

00:54:25,000 --> 00:54:30,000

Down at the dock, it's time to move on to the Shark Force tests.

683

00:54:30,000 --> 00:54:33,000

I'd say that's as pretty as you please.

684

00:54:33,000 --> 00:54:36,000

The Charamers going into action.

685

00:54:41,000 --> 00:54:44,000

The Charammer will be hooked up to the personnel carrier,

686

00:54:44,000 --> 00:54:49,000

which will then deliver its payload head on at a speed of 25 miles per hour.

687

00:54:49,000 --> 00:54:53,000

The result should look something like this.

688

00:54:57,000 --> 00:55:02,000

Even with a steel dorsal fin, the Charammer doesn't look as scary as Bruce,

689

00:55:02,000 --> 00:55:04,000

the fake shark in Jaws.

690

00:55:04,000 --> 00:55:09,000

But it is more like a real shark when it comes to weight and buoyancy.

691

00:55:12,000 --> 00:55:18,000

I measure the shark to be about 513 feet away from the target.

692

00:55:18,000 --> 00:55:20,000

Alright, here we go.

693

00:55:24,000 --> 00:55:27,000

We're standing by to start the track vehicle ever.

694

00:55:27,000 --> 00:55:31,000

The Ram is the same length and weight as a mature great white.

695

00:55:31,000 --> 00:55:35,000

It's about to become a Jau Pido.

696

00:55:37,000 --> 00:55:40,000

I mean we're waiting on your signal to cow.

697

00:55:40,000 --> 00:55:42,000

Okay, we're go.

698

00:55:42,000 --> 00:55:49,000

The MTVL will stop at a preset distance, so the rope goes slack before the collision.

699

00:55:49,000 --> 00:55:55,000

That means the Charammer is not being towed, but traveling under its own momentum

700

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

when it strikes the cage at 25 miles per hour.

701

00:55:58,000 --> 00:56:01,000

An estimated top speed of a great white shark.

702

00:56:10,000 --> 00:56:12,000

Yeah!

703

00:56:16,000 --> 00:56:19,000

Man, was that close to going in the drink.

704

00:56:19,000 --> 00:56:21,000

Well, that was cool.

705

00:56:21,000 --> 00:56:25,000

It flipped around a little bit, but it did what it would do.

706

00:56:25,000 --> 00:56:27,000

I mean, we had an impact.

707

00:56:27,000 --> 00:56:29,000

I saw the cage on the Charammer. I didn't see it before.

708

00:56:29,000 --> 00:56:31,000

The shark took part of the cage out.

709

00:56:31,000 --> 00:56:33,000

Look at that.

710

00:56:33,000 --> 00:56:35,000

So, look what's on the shark.

711

00:56:35,000 --> 00:56:37,000

Is that a piece of the cage?

712

00:56:37,000 --> 00:56:39,000

It's like it went right through it.

713

00:56:39,000 --> 00:56:41,000

Bullseye!

714

00:56:41,000 --> 00:56:43,000

The Ram is undamaged.

715

00:56:43,000 --> 00:56:45,000

Adam's cage, on the other hand...

716

00:56:45,000 --> 00:56:49,000

I mean, obviously it's such a massive amount of force, but really we've not seen any evidence.

717

00:56:49,000 --> 00:56:52,000

It's all based on estimation, the 25 mile an hour mark.

718

00:56:52,000 --> 00:56:55,000

There's no data that shows the shark swimming that fast.

719

00:56:55,000 --> 00:57:00,000

Nor is there any information that shows that a shark actually made it into a cage.

720

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

Like, you know, that they actually penetrated a cage.

721

00:57:03,000 --> 00:57:07,000

Nonetheless, that's Mythbusters 2, Jaws 1.

722

00:57:17,000 --> 00:57:19,000

Time for the final test.

723

00:57:20,000 --> 00:57:24,000

In Jaws, the ferocious fish springs a surprise,

724

00:57:24,000 --> 00:57:28,000

not to mention several leaks, when it rams the orca.

725

00:57:28,000 --> 00:57:33,000

Outside of Hollywood, there's no record of a shark ever attacking a boat this big.

726

00:57:33,000 --> 00:57:38,000

Nevertheless, this grand old lady's going to get a grand old pummeling.

727

00:57:38,000 --> 00:57:44,000

To maximize the damage, the Orca 5 is positioned so that the Charammer will hit the flattest part of the hull.

728

00:57:44,000 --> 00:57:46,000

Okay, go!

729

00:57:46,000 --> 00:57:50,000

The military hardware launches a final assault.

730

00:58:08,000 --> 00:58:12,000

3,000 pounds connects at 25 miles per hour.

731

00:58:12,000 --> 00:58:15,000

Oh, Cameron the water!

732

00:58:15,000 --> 00:58:18,000

That's the perfect hit.

733

00:58:18,000 --> 00:58:23,000

Now, I mean, I'm a little disappointed that we didn't, like, go all the way through it, but...

734

00:58:23,000 --> 00:58:27,000

My shark went belly up, but it definitely pierced the side.

735

00:58:27,000 --> 00:58:29,000

It's a Mythbusters first.

736

00:58:29,000 --> 00:58:34,000

The experiment is to see if it's a good idea to get a fish out of the water.

737

00:58:34,000 --> 00:58:38,000

I'm not sure if it's a good idea to get a fish out of the water.

738

00:58:39,000 --> 00:58:41,000

It's a Mythbusters first.

739

00:58:41,000 --> 00:58:45,000

The experiment's finished and the boat still floats.

740

00:58:58,000 --> 00:59:04,000

This, I think, is definitively plausible that 3,000 pounds of shark could make some damage to your boat,

741

00:59:04,000 --> 00:59:08,000

even though no Great White has ever been caught sinking a boat of this size.

742

00:59:08,000 --> 00:59:11,000

Yeah, you get a big fish going real fast.

743

00:59:11,000 --> 00:59:13,000

What do you expect?

744

00:59:24,000 --> 00:59:28,000

After all this shark-strength testing, what are our final results?

745

00:59:28,000 --> 00:59:32,000

Well, clearly an average-sized Great White could not pull a boat backwards.

746

00:59:32,000 --> 00:59:36,000

And, I mean, even though a Great White could probably pull those barrels down,

747

00:59:36,000 --> 00:59:38,000

it couldn't keep them down there as it was in the movie.

748

00:59:38,000 --> 00:59:39,000

Not continuously?

749

00:59:39,000 --> 00:59:40,000

Not continuously, no.

750

00:59:40,000 --> 00:59:41,000

So those two are busted?

751

00:59:41,000 --> 00:59:43,000

Those two are definitely busted.

752

00:59:43,000 --> 00:59:47,000

But on the other hand, we showed that a Great White could work its way through a shark cage,

753

00:59:47,000 --> 00:59:51,000

probably depending on how it was built, but it went right through ours.

754

00:59:51,000 --> 00:59:56,000

And it would also be conceivable that a shark could, given the right circumstances,

755

00:59:56,000 --> 01:00:00,000

plow through a wooden boat hull.

756

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

Well, then I would call that Myth Busters 2, Jaws Shark Myths 2.

757

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

That's two all, yeah?

758

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

Yeah.

759

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

After the break, the explosive climax to our shark-weak Jaws Tackler.

760

01:00:24,000 --> 01:00:28,000

Time to put the exploding Scuba Tank Myth under the gun.

761

01:00:28,000 --> 01:00:32,000

We know a bullet can penetrate a tank's thick aluminum base.

762

01:00:34,000 --> 01:00:37,000

But that tank was empty.

763

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

Next, we got one charged tank.

764

01:00:40,000 --> 01:00:43,000

This one should be somewhat exciting.

765

01:00:43,000 --> 01:00:50,000

This tank contains 80 cubic feet of compressed air stored at 3,000 psi.

766

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

Now, there's a slim chance the bullet might damage the tank, but not actually rupture it.

767

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

If that happens, the FBI will have to blow it up.

768

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

A strip of C4 is taped to the tank.

769

01:01:04,000 --> 01:01:08,000

C4 explosive is a nerd, and so won't be set off by the bullet.

770

01:01:08,000 --> 01:01:11,000

Right, we're locked and loaded.

771

01:01:11,000 --> 01:01:12,000

I'm ready.

772

01:01:12,000 --> 01:01:15,000

Any more bold predictions before we pull the trigger?

773

01:01:15,000 --> 01:01:17,000

I'm ready!

774

01:01:17,000 --> 01:01:19,000

I think we're going to poke a hole in it.

775

01:01:19,000 --> 01:01:23,000

I think there'll be a really loud noise or maybe even a little bit of a rupture,

776

01:01:23,000 --> 01:01:26,000

but I don't believe this is going to be like a bomb going off.

777

01:01:26,000 --> 01:01:30,000

What I'm hoping for is to come around the corner and find the container

778

01:01:30,000 --> 01:01:35,000

bowed out in every possible way from the force of the blast.

779

01:01:35,000 --> 01:01:39,000

Now, if everyone could just cower behind the nearest masonry.

780

01:01:39,000 --> 01:01:41,000

Starting the trigger now.

781

01:01:50,000 --> 01:01:53,000

The tank took off like the proverbial rocket.

782

01:01:54,000 --> 01:01:58,000

Propelled around the container by a jet of compressed air.

783

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

It looks like it collected a little paint from the red primer.

784

01:02:05,000 --> 01:02:08,000

Hey, Sharky's still alive!

785

01:02:08,000 --> 01:02:11,000

We got a beautiful shot right dead center of the bottom of the tank.

786

01:02:11,000 --> 01:02:14,000

The tank did not actually split all the way open.

787

01:02:14,000 --> 01:02:17,000

In fact, it shot like a rocket and bounced around in here

788

01:02:17,000 --> 01:02:22,000

and tore up some of the back of our Sharky, but didn't explode.

789

01:02:23,000 --> 01:02:27,000

So is this myth, like the Shark and Jaws, dead in the water?

790

01:02:27,000 --> 01:02:28,000

Not quite.

791

01:02:28,000 --> 01:02:33,000

Given the vagaries of movie editing, one could posit that the bullet

792

01:02:33,000 --> 01:02:37,000

entered the side of the tank at the end of Jaws, and I'm sure if we didn't do it,

793

01:02:37,000 --> 01:02:40,000

our fans would take us to task for not trying that.

794

01:02:40,000 --> 01:02:44,000

So we're going to do that before we call this myth totally busted.

795

01:02:44,000 --> 01:02:49,000

Will a bullet blasting right through the sides of a tank cause a more explosive reaction?

796

01:02:49,000 --> 01:02:51,000

And then you aim right for there.

797

01:02:51,000 --> 01:02:54,000

And our old Fred is force fed a fresh tank.

798

01:02:54,000 --> 01:02:58,000

In three, two, one!

799

01:03:05,000 --> 01:03:07,000

I don't know, it sounds like it might have been the same thing.

800

01:03:07,000 --> 01:03:10,000

That's not an explosion, that's a hole.

801

01:03:10,000 --> 01:03:13,000

I don't know that we've ever completed one so fast before.

802

01:03:13,000 --> 01:03:15,000

I don't know what to do with the rest of the day.

803

01:03:15,000 --> 01:03:21,000

It's the same result as before.

804

01:03:21,000 --> 01:03:23,000

The tank ricocheted around.

805

01:03:23,000 --> 01:03:25,000

The bullet didn't make it all the way through.

806

01:03:25,000 --> 01:03:31,000

There's the first hole, and there's the dent for the other hole.

807

01:03:31,000 --> 01:03:33,000

The hole is just too small.

808

01:03:33,000 --> 01:03:39,000

The metal in this case is strong enough to hold itself together to withstand an impact,

809

01:03:39,000 --> 01:03:42,000

even with all that pressure behind it, without rupturing the tank.

810

01:03:42,000 --> 01:03:45,000

This is myth buster, so next we have to make an explosion.

811

01:03:45,000 --> 01:03:47,000

We're just going to blow up the tank.

812

01:03:47,000 --> 01:03:50,000

It's the FBI's moment of glory.

813

01:03:50,000 --> 01:03:52,000

Another full tank is placed in position.

814

01:03:52,000 --> 01:03:56,000

This time the C4 will be remote detonated.

815

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

Fire in the hole!

816

01:04:03,000 --> 01:04:05,000

I didn't know they really said that.

817

01:04:13,000 --> 01:04:15,000

Now that's more like it.

818

01:04:15,000 --> 01:04:20,000

The shockwave knocked over light stands, and there's a nice dent in the container.

819

01:04:20,000 --> 01:04:22,000

Whoa!

820

01:04:26,000 --> 01:04:28,000

That's amazing.

821

01:04:28,000 --> 01:04:30,000

And as for Fred...

822

01:04:30,000 --> 01:04:32,000

Anybody up for sushi?

823

01:04:32,000 --> 01:04:36,000

So do you guys think that any circumstances a bullet would do this?

824

01:04:36,000 --> 01:04:38,000

No.

825

01:04:38,000 --> 01:04:43,000

It ain't happening with a gun, and worsty would have gotten that shock,

826

01:04:43,000 --> 01:04:46,000

would have slammed backwards pretty quick for a few seconds.

827

01:04:46,000 --> 01:04:49,000

This is actually a lot like our explosive decompression story,

828

01:04:49,000 --> 01:04:54,000

in that a small hole does not a catastrophic failure of the structure make.

829

01:04:54,000 --> 01:04:58,000

Just like on an airplane that can manage the pressure, even with a bullet hole in it,

830

01:04:58,000 --> 01:05:02,000

these tanks don't turn into bombs when you fire bullets into them.

831

01:05:02,000 --> 01:05:04,000

They turn into rockets.

832

01:05:04,000 --> 01:05:08,000

The final sequence of jars, I'm sorry to say, is totally busted.