

[00:00:00] **Music:** “Oh No, Ross and Carrie! Theme Song” by Brian Keith Dalton. A jaunty, upbeat instrumental.

[00:00:08] **Ross Blocher:** Hello and welcome to *Oh No, Ross and Carrie!*, the show where we don't just report on fringe science, spirituality, claims of the paranormal. No, no, no. We take part ourselves. When they make the claims, we show up, so you don't have to.

Uh, that's right. You're waiting for Carrie Poppy right now. This is Ross Blocher. I'm here, not by myself though! Because today we have an interview with the one, the only Brian Dunning! Welcome, Brian Dunning.

[00:00:31] **Brian Dunning:** I was told he was looking for someone as pretty as Carrie, and I was the only one he could think of.

[00:00:36] **Ross Blocher:** (*Laughs.*) That's right. Yeah. You're the belle of the ball today. Welcome. Well, you've got a timely documentary that's just coming out right now.

[00:00:44] **Brian Dunning:** That is true! Do go on.

[00:00:45] **Ross Blocher:** I say timely, because we just had a UAP hearing—an unidentified anomalous phenomena hearing in Congress, and you were ready with a documentary about UFOs—unidentified flying objects. These are synonymous terms with slightly different imports, but yeah. Tell us about your film, *The UFO Movie THEY Don't Want You to See*.

[00:01:09] **Brian Dunning:** Yes, good emphasis on “they”.

[00:01:11] **Ross Blocher:** It's all caps, right?

[00:01:12] **Brian Dunning:** *The Movie THEY Don't Want You to See*. Yeah, you are correct. I am one of about 200,000 independent filmmakers with a documentary about UFOs right now. It was obviously a super-hot topic the last few years since they started having these Congressional hearings and everything. It's all everyone's talking about in some quarters of DC and on a lot of the TV networks and on a lot of podcasts. So, this is something I've reported on a lot. And I should say that I did not set out to make a movie about UFOs.

As you know, my podcast *Skeptoid*—it's a critical thinking podcast. It's the true science, the true history behind urban legends and lots of fun stuff. Any fun story people have heard, here, let's go dig into the real science, the real history behind what's going on. So, I'm basically a science writer, is what I call myself when people ask me what I do for a living. And the mission of—I mean, we're a nonprofit, and we have—our mission statement is to help people understand what's real from what's not by making fun, entertaining content, helping people learn what's fact from fiction, science from pseudoscience.

So, that's the perspective that I came about to make—we've always got a documentary film in production, and it was time for another one. And I said, “What should I make a movie about?” And I asked a bunch of friends, and everyone said UFOs. So, it's like, okay. Well,

what can I talk about that's gonna be actually beneficial for society that's on the topic of UFOs?

[00:02:41] **Ross Blocher:** You had just released a film last year, *Science Friction*, and that was all about how—

[00:02:45] **Brian Dunning:** In 2022.

[00:02:47] **Ross Blocher:** Oop, let me tell you what your movie is.

*(Brian thanks him.)*

It was all about how experts get brought in—scientists get brought in to talk about their area of specialty by TV producers, film producers, and are taken out of context, misquoted, clipified to the point where they're saying things that they never intended to say. And this is a problem in science communication.

[00:03:08] **Brian Dunning:** Sometimes it's quite deceptive. They will chop up what a scientist says on their TV show to make it sound like he said, “Why, yes, scientists do believe that aliens built the pyramids.” And then, these people get very upset about it, and they make noise on Twitter, and they have their universities complain to the TV networks. And they just say, “Hey, sorry. You signed a release, bub. You know, we can do whatever we wanna do with your footage.”

And so, yeah, that's a practice that I don't think enough people were aware of. And so, we felt it was important to make a film about. So, that film, *Science Friction*, that's available on all the streaming services now. Go see it!

*(Ross agrees.)*

So, we were done, and it was time to make the next one.

[00:03:48] **Ross Blocher:** Are you producing a film every year now? Is this the new Brian Dunning pace?

[00:03:51] **Brian Dunning:** That's the idea. I mean, covid kind of shook up our company. We've got almost all different employees post-covid than we had pre-covid. We didn't really get anything done during the years of covid. It's funny, because *Science Friction* was edited and ready to distribute in 2019, and then covid hit. And we're shopping it around town, and everyone says, “Oh, I can't wait to see what you guys have about covid in there.”

“Weeell, the movie was made before covid, so we don't have anything about it there.”

And the feedback was, “You guys have to have something about covid in that movie.”

[00:04:23] **Ross Blocher:** Oh no.

[00:04:24] **Brian Dunning:** “Because if you don't, it's gonna be a huge, glaring hole in the film. And if you do, then everyone's gonna wanna see it.” So, we actually went back and—during covid, we had to shoot some more interviews and cut those into the film. And that's why it ended up coming out in 2022, even though it was done in 2019.

[00:04:41] **Ross Blocher:** Wow! Okay. And this whole time you've also been—you mentioned—producing *Skeptoid*, a weekly show. You've been doing this since 2006, before the iPhone!

*(They laugh.)*

[00:04:53] **Brian Dunning:** I guess that's true!

[00:04:54] **Ross Blocher:** As far as I know, you've never missed a week.

[00:04:56] **Brian Dunning:** I did miss one week in 2007—the week that my sister died. I give myself a pass for that one.

[00:05:03] **Ross Blocher:** You get a pass for that. Absolutely.

[00:05:05] **Brian Dunning:** Other than that—yeah, it's been a weekly show. That's actually my day job, working for *Skeptoid* Media and doing the podcast.

[00:05:12] **Ross Blocher:** Amazing. Oh, I've sung the praises of *Skeptoid* on this show before, but I should do so again, because you do a really good job of finding one of these urban legends, these popular myths—and it ranges through a lot of topics, but there's a lot of overlap with our show and what Carrie and I cover.

*(Brian agrees.)*

And you do the research, and you boil it down—which I'm in awe of—down to like 10 to 15 minutes of just like here's the facts that you need to know. Here's the setup. Here's what we actually know about it. Is it still an ongoing mystery or, hey, did we actually solve this one?

[00:05:46] **Brian Dunning:** Yeah. Thank you. I love how compatible our two shows are, and yet so different. I mean, it's been more than once when I've listened to one of your shows or one of your series before I was doing an episode on the same topic. And I think it—I think the reverse is true. And it's—yeah.

[00:06:01] **Ross Blocher:** It goes both ways. Absolutely! Oh, I'll always check like, “Oh, did Brian cover this before?” Because it'll be a really quick encapsulation that's really pithy, that there's—it's all solid content. Whereas Carrie and I go off on all these diversions. *(Chuckles.)* And I was doing a little bit of math here, like looking at how long our show's been going since 2011. We don't release every week. We skip a lot! And I calculate we're very close to 500 hours of content. And I think you're probably at roughly half that.

*(Brian agrees.)*

Just because you know how to compose a shortform, digestible content, and we don't!  
*(Chuckles.)*

[00:06:41] **Brian Dunning:** Yeah, I'm actually writing episode number 900 right now!

[00:06:44] **Ross Blocher:** That's amazing.

[00:06:45] **Brian Dunning:** And so, that's an average of about 13/14 minutes a show. So, someone else do the math. I'm not going to. *(Laughs.)*

[00:06:51] **Ross Blocher:** Okay. I think this conversation we're having right now will be episode 383, so there's the math for you. It's very impressive. I always think of Blaise Pascal, mathematician and also theologian. But he wrote to somebody once and said something to the effect of, "I apologize that I did not have time to write a shorter letter."

[00:07:12] **Brian Dunning:** A shorter letter. Yeah! *(Laughs.)* I love that.

[00:07:14] **Ross Blocher:** It takes time to really whittle things down. So, it's a fantastic resource.

[00:07:18] **Brian Dunning:** Ross just stood up, 'cause we're on Zoom right now. We can see each other. He's wearing a *Skeptoid* shirt. What am I wearing? Oh, I'm wearing a different *Skeptoid* shirt.

[00:07:26] **Ross Blocher:** Yeah. I'm gonna want to talk about that design, 'cause you wear that in the film.

[00:07:29] **Brian Dunning:** I do! Yes. Good point. During—in the film—I'm actually in *The UFO*—I'm not in all of our movies. Usually, I just produce. But I'm in this one as the presenter, and I wear a black or dark gray sweatshirt with a logo on it that shows a ghost is better than—no. A rocket is better than a ghost, so with the greater than symbol.

[00:07:51] **Ross Blocher:** Yeah. And the way I read that was Maximum Fun is greater than Snapchat. That's what you meant to say, right?

[00:07:57] **Brian Dunning:** *(Laughs.)* Well, that's the great thing about that design is because it is the ultimate conversation starter.

*(Ross affirms.)*

I never wear this shirt out in public that someone doesn't say, "Hey, what does the shirt mean?"

And I say, "What does it mean to you?"

And if they're dumb, they say, "Rockets are better than ghosts." Hey! Maybe it's got a deeper meaning than that. "Oh, Space Ghost, I get it!" No, come on. Keep going.

*(They laugh.)*

But people come up with some really great ones. I always just say, "Science is better than pseudoscience." That's how I phrase it. But lots of people come up with really clever ones.

[00:08:28] **Ross Blocher:** That's great. I love it. Well, let's talk about this title. Actually, early on, as you were planning this film out over a year ago, you were workshopping titles, and I got included on an email you sent out where you were—

*(Brian confirms with a laugh.)*

You were playing around with ideas, and when you had said *The UFO Movie THEY Don't Want You to Know About*, I instantly thought of Kevin Trudeau. 'Cause he's written books like *Natural Cures They Don't Want You to Know About*, *The Weight Loss Cure They Don't Want You to Know About*, *Debt Cures They Don't Want*—and so on, you know.

[00:08:56] **Brian Dunning:** Yeah. It's become an old joke. It's a parody of itself.

[00:09:01] **Ross Blocher:** But I think you were also trying to do something where you were making the film perhaps more accessible just from the title alone to people who maybe weren't within the skeptical fold, who had unformed opinions about UFOs and thought, "You know, maybe there's something to it!"

[00:09:17] **Brian Dunning:** Yeah, I actually want to talk a lot about who the movie is for and why and how. But yeah, someone added that title to the list of titles that we were all workshopping as a joke, right?

[00:09:26] **Ross Blocher:** As a joke, yeah.

[00:09:28] **Brian Dunning:** And then, when we kept voting and voting through these different rounds, consistently it was the overwhelming winner. People liked it! And I go, "Okay, come on, guys. This is a joke title." But it's the one everyone's talking about. It's the one everyone remembers. And I kind of realized, you know, you can't buy that! When you're looking to title a movie, if you've got a title that everyone talks about and everyone remembers, go with it. *(Laughs.)*

[00:09:53] **Ross Blocher:** Smart, smart.

[00:09:55] **Brian Dunning:** And it actually does make sense from one of the points that I make in the movie, talking about—you know—why would anyone not want you to have a better science informed opinion about UFOs and the physics of alien visitation and all that stuff.

[00:10:10] **Ross Blocher:** Because maybe they have an agenda as well.

[00:10:13] **Brian Dunning:** Think of all the TV shows. *Ancient Aliens*. Their ratings would go way, way down if everyone in the audience was a scientist.

[00:10:20] **Ross Blocher:** As you underscored in the film, the TV producers, they don't care about what's true. They care about what keeps you watching.

[00:10:27] **Brian Dunning:** Exactly. So, there actually are people who would rather you not have a science informed opinion about these questions, these great cosmic questions. So, the title actually makes sense!

[00:10:37] **Ross Blocher:** I was chuckling as I texted you, because I was trying to abbreviate your film, so I didn't have to write out the whole thing. And it ended up being TUFOMTDWYTS, which is—

[00:10:50] **Brian Dunning:** The first time someone—because that's not the first time someone's texted me that. “Hey, how is blah, blah, blah, blah, blah, blah going?”

And I'm going what the hell is this—? I didn't even recognize it!

*(Ross laughs.)*

I was like, “Oh! That's my movie! That's the title. Wow! It is pretty long!”

[00:11:05] **Ross Blocher:** I did you a favor. I looked through lists of films with long titles, and I found other movies with 12 syllable titles. You ready for this?

*(Brian confirms.)*

*The Adventures of Icabod and Mr. Toad. City Slickers 2: The Legend of Curly's Gold. The Lord of the Rings: Fellowship of the Ring. Master and Commander: The Far Side of the World.* Most of these have colons somewhere.

[00:11:27] **Brian Dunning:** Yeah, these are all like a title and a subtitle.

[00:11:30] **Ross Blocher:** *Harry Potter and the Order of the Phoenix. VeggieTales: The Pirates Who Don't Do Anything. Pirates of the Caribbean: On Stranger Tides*, and—ah, that's good enough. But there you go.

[00:11:42] **Brian Dunning:** Now, I have to ask you. Did you find a list of movie titles with the number of syllables written out, or did you, personally—did you use some strange brain feature that you have to just seek titles in the count of syllables?

[00:11:54] **Ross Blocher:** No special hardware required. But I did find there was a website that had a list of certain syllable count film titles, but they gave up around 10, and then they just had 10 and more.

*(Brian laughs.)*

So, I went through, and I did, you know, the finger thing, like I'm making a haiku. This is how I spent part of my afternoon.

[00:12:13] **Brian Dunning:** Oh, I'm touched.

[00:12:14] **Ross Blocher:** So, let's talk about this film. I—well, first of all, you drove out to the desert, a place that I associate you with. You like the desert. You're a desert—

[00:12:24] **Brian Dunning:** I'm a desert rat, yes.

[00:12:24] **Ross Blocher:** I was gonna say dweller. That's your happy place, right?

[00:12:27] **Brian Dunning:** It is. I love the California desert. Where was that?

[00:12:30] **Ross Blocher:** You were heading out to some—yeah, some specific telescopes, radio telescopes. Where were those?

[00:12:35] **Brian Dunning:** So, the main set piece in this film was shot at the Owens Valley Radio Observatory, actually shot outside of it,

[00:12:43] **Ross Blocher:** Okay. And is that where you were interviewing the experts you were talking to?

[00:12:47] **Brian Dunning:** No, we actually did them at wherever they actually do their work. We talked to Dr. Kaitlin Rasmussen at the 107-inch telescope at the University of Texas has outside of El Paso. Miles Currie happened to be working with her. We didn't even know he was gonna be there.

[00:13:02] **Ross Blocher:** Oh, great!

[00:13:03] **Brian Dunning:** So, we interviewed him at the same place. Dakotah Tyler, our astrophysicist—I actually flew him up to Bend, Oregon, where I live, as there is a little local observatory right here where my daughter was actually working at the time, teaching all of the astronomy programs. And so, we shot that just right here, kind of locally at a friendly location. And all the other places were just kind of all over. For the flight instructor with the MTSB, we shot that in the air over Washington DC and Virginia. And—

[00:13:33] **Ross Blocher:** And Hal Bidlack. He's based in—what, Colorado?

[00:13:35] **Brian Dunning:** He's in Colorado. And the funny thing is—so, Hal Bidlack was a missile officer way back in the '60s. '70s? It doesn't matter. And the missile facility where he actually worked part of the time has now been taken away from where it was—which I think was in Wyoming—brought to a museum in Colorado Springs, coincidentally where he lives now, and placed in a museum at an Air Force base there in Colorado Springs. And he said this would be the perfect place to shoot the interview.

[00:14:05] **Ross Blocher:** So, his secure workplace followed him to his retirement community.

[00:14:10] **Brian Dunning:** Isn't that something? Yes, that's absolutely true.

*(Ross laughs.)*

And he of course knows everyone who works at that museum. And I spoke to them on the phone. They said, "Yeah, this would be great. Come on down, shoot it here, no problem. But we are on a military base, and so I'm not sure if there's any permission you might need to get."

Well, long story short, I ended up having to go through the—I forget what it's called. There's a Department of Defense—has a Hollywood liaison office in Los Angeles. And if you're shooting anything on any military facility, any branch of the service, you have to go through them and buy a permit through them. And they would not even let me submit a permit. Apparently, they're only interested in talking to Tom Cruise. They said it has to be one of the major studios. Send us your studio deal, and then we need to see your script. Well, this is a documentary. There is no script. And so, they said, "I'm sorry, until you have those things, we can't discuss getting a permit."

So, we were unable to shoot it at the only place that made the most sense, right where Hal Bidlack lives.

[00:15:08] **Ross Blocher:** Bummer!

[00:15:10] **Brian Dunning:** And it was gonna be so perfect. So, we ended up shooting it at the Wings Over the Rockies Museum, which is also there in Denver. And they were just lovely people. They were super accommodating. They were very easygoing with the filming permit. So, yeah, we had a—I had really great experiences everywhere that I went. Of course, the best was Plains, Georgia. I was at the home of President Jimmy Carter.

[00:15:34] **Ross Blocher:** Oh, you were actually—okay. 'Cause you talked to his grandson in the film.

[00:15:38] **Brian Dunning:** I spoke to his grandson in Jimmy Carter's private office in his house.

[00:15:42] **Ross Blocher:** Okay. I wondered. I assume you would've asked, but he's pretty advanced in age. Maybe he wasn't ready for his closeup.



[00:15:48] **Brian Dunning:** The Carters were both there. And this—I've seen this in the news, so I'm not telling anything that hasn't been reported, but they're both quite frail now. It has not been true for quite some time that they go out and still build the Habitat for Humanity homes. They're really physically not able to do that.

[00:16:03] **Ross Blocher:** Got it.

[00:16:04] **Brian Dunning:** Rosalynn Carter has dementia. And when we were on our way to the house, Josh was driving. I was riding with him in his car. And he called him and said, “Hey, I'm coming by with my friend. We're gonna film a thing.”

And some of the people who work at the house said, “You know, they've had a really hard day. We just got them put to bed.” And it's like, you know, noon or something. “We just got them put to bed, and so you're probably not gonna get to talk to him.”

So, I said, “Okay, well that's fine. That actually takes some pressure off me.” 'Cause I was kinda worried about that! What if I'm interviewing Josh and the president walks in?

[00:16:34] **Ross Blocher:** Sure. Oops. No kidding.

[00:16:37] **Brian Dunning:** (*Laughing.*) Quick, turn a camera around!

[00:16:39] **Ross Blocher:** Carrie just said on a recent episode that her favorite president is Jimmy Carter.

[00:16:43] **Brian Dunning:** There's a lot to be said for that choice.

[00:16:45] **Ross Blocher:** I went to his presidential library, and it was fantastic. This is a really cool moment in the documentary, because we've mentioned that Jimmy Carter had that UFO sighting in 1969. And in the documentary you reveal the actual solution to that, what it is that he saw. And he now agrees that that is what he saw.

[00:17:04] **Brian Dunning:** Yes. You just connected the dots, because I just realized we're talking about Jimmy Carter, and we're talking about a movie about UFOs, and we've not connected the two in anyway. But yes. That's why Jimmy Carter's story is in the film.

[00:17:16] **Ross Blocher:** Uh, yeah. It was *Skeptic's Guide to the Universe* that had kind of made this connection with the grandson, and you explain it so well in the film and give the visuals to really answer what it was that he saw. And that his—one thing I learned from what you were saying is that he was actually very correct in his memory of the bearings, the location, the colors that he saw of these objects in the sky.

[00:17:39] **Brian Dunning:** That was a point that Josh, his grandson, really asked me to please include this in the film. He said, “The president was always really offended.” 'Cause he had trained as a scientist. When he was in the Navy, he'd trained as a—what do you call it? Celestial navigation. He was a lifelong amateur astronomer. And people were always telling

him that his UFO was Venus, and he was always offended that people thought he didn't know what Venus looked like.

*(They laugh.)*

[00:18:05] **Ross Blocher:** Yeah, yeah! “Look, I know what Venus is.” And you know, I'll admit, when I heard initially that tale, I thought, okay, well something got misunderstood. Maybe it was some kind of aircraft. But it ended up being something far more interesting. And—

[00:18:19] **Brian Dunning:** Far more interesting, which I hadn't even heard about until I did the film.

[00:18:23] **Ross Blocher:** Yeah. And it's one of those examples of reality being cooler than fiction. Because—well, at least my fiction; it was better than what I could have come up with as an explanation.

*(Brian agrees.)*

I feel like I'm avoiding saying it. I don't know. You won't lose anything.

[00:18:37] **Brian Dunning:** We're avoiding saying it. We want everyone to listen to this to go rent the film.

[00:18:40] **Ross Blocher:** Okay. Everybody needs to go see *The UFO Movie THEY Don't Want You to See*. Okay. Alright. I won't give the solution here.

[00:18:46] **Brian Dunning:** Streaming now!

[00:18:47] **Ross Blocher:** Yeah. Yeah. I just saw it on Vimeo today, but it's coming soon to other streaming services.

[00:18:51] **Brian Dunning:** It's popping up on—it'll be popping up on all the major streaming services over the next couple of months. It's kind of, unfortunately, a little bit of a black box when it's gonna appear on each one. This is not a major studio release where those dates would all be coordinated. It just kind of comes up as it comes up. So, yes, it will eventually be all on all of them, but it's going like gangbusters on Vimeo right now. Everyone's—people are renting it and enjoying it, so that's cool.

[00:19:13] **Ross Blocher:** That's great. And my wife was watching from behind me, and she said, “OH! That was really good.” So, Cara Blocher thumb of approval.

[00:19:19] **Brian Dunning:** Oh, good! I want no higher praise than that.

[00:19:23] **Ross Blocher:** *(Laughs.)* So, okay. So, you're reminding me now of something else that you kind of teased in the film, and I was wondering if I could get a little more info

from you. You said that you've had three sightings yourself that made you kind of stop and go, “Woah! What is that?”

[00:19:35] **Brian Dunning:** Yes! Yes, I have. I think my most interesting one was—again, since I'm a desert guy, I was out in Death Valley, camping with a couple of friends. And we're there probably nine o'clock at night or so, having our glass of wine in our camp chairs, enjoying the warm evening. And overhead filling half the sky, this enormous shape that I can only describe as like an arrow. It was an arrow made of lights at each little apex of the shape of an arrow.

[00:20:06] **Ross Blocher:** This sounds like a classic UFO sighting. Okay.

[00:20:09] **Brian Dunning:** Very much so. And it went over our heads. All three of us are watching it. We're talking about it. What the hell is that? We could not figure it out. It went all the way, horizon to horizon, and disappeared behind a nearby mountain range.

[00:20:21] **Ross Blocher:** Now, Brian, please. Please tell me that you pulled out a camera and got some kind of footage of this.

[00:20:25] **Brian Dunning:** So, this is at night, and—

[00:20:29] **Ross Blocher:** (*Laughs.*) Nothing would show up.

[00:20:30] **Brian Dunning:** Whatever cameras we had—

[00:20:31] **Ross Blocher:** Were insufficient.

[00:20:33] **Brian Dunning:** And this was probably 20 years ago, also.

[00:20:35] **Ross Blocher:** (*Playfully.*) Oh, your excuses, Brian Dunning!

[00:20:38] **Brian Dunning:** I did not have a camera, but we were talking about what it might be. And honestly, none of us had any clue, and we all had this kind of great rush that you get. Like, what did I just see? I don't know. And the second time it came over—

[00:20:52] **Ross Blocher:** I'm jealous of this experience already.

[00:20:55] **Brian Dunning:** I know! I'm always jealous when someone has a great sighting. But it came over a second time. I'm not sure how much later, probably 20 minutes later, it comes over the—I think it just kind of came from behind us, and all of a sudden it's overhead again following the same path it took before. And this time, I'm not sure what was different, but we saw some more detail, and it was quite immediately clear what it was. Where we were is near China Lake Naval Air Station. This was a formation of planes doing aerial refueling at night.

So, the tanker was the plane at the front of the arrow.

[00:21:30] **Ross Blocher:** Oh, oh! It was a formation.

[00:21:32] **Brian Dunning:** And there was another plane behind it. Yeah. And then, other planes were just kind of stacked around waiting their turns. I'm not sure how they organize it, but then once we realized that each one was an individual plane, then it's like, "Okay, look closer. You can see the lights."

[00:21:45] **Ross Blocher:** The stars in between, in the negative space.

[00:21:47] **Brian Dunning:** You can see the stars in between. That was always a bit of a mystery.

[00:21:49] **Ross Blocher:** But yeah, I'm sure when you have relatively bright lights—and anything that's got lights in the sky is going to be brighter than the stars—it probably occludes your vision of the lights in between. So, yeah, you perceive it as a solid object, especially if it's holding that formation. Oh, fascinating!

[00:22:05] **Brian Dunning:** And we certainly did.

[00:22:05] **Ross Blocher:** This reminds me—okay, now I've gotten one UFO story out of you, but this reminds me of another really key point that you brought up that I know is a constant refrain of yours that I've learned from, which is that when we're listing the things that could possibly be in the sky that we're looking at, we shouldn't jump to some kind of experimental aircraft from the government. That is not a logical leap. Can you break that down a little bit? 'Cause I think that's a really important point that, as you say, both skeptics and believers can miss.

[00:22:35] **Brian Dunning:** I hear it all the time. Someone describes a UFO experience that is something extraordinary looking. Okay? We're not just talking about a light moving across the sky that could be an airplane, could be a satellite. It's gotta be making some pretty radical movements or be doing something strange or unusual. It's gotta look like that's not a plane; I can tell just from what it looks like. I can't recognize what it is, the way it's moving, whatever it is. Something—it's doing something extraordinary. And typically, people say that's gotta be some secret military craft. That's the only thing in the world that could move like that.

*(Chuckling.)* And every single thing about that potential explanation is wrong. First, secret military aircraft are not there. They're at area 51. They're at the national classified test facility. They are not overpopulated areas where you might be seeing them. So, that disqualifies a secret military aircraft right there.

[00:23:31] **Ross Blocher:** Unless you happen to be at Groom Lake or something.

[00:23:33] **Brian Dunning:** Unless you happen to be there. And the second thing is that you've already described that it either looks or is moving in a way that's not consistent with an aircraft. Well, then it's not an aircraft secret, military, or otherwise,

[00:23:48] **Ross Blocher:** That's such a good point. Because, like you pointed out, if you just look back at the history of aircraft, there are always incremental improvements over previous designs. Even something like a flying wing, it's a descent with modification, and it's gonna be maybe a little faster, but it's not gonna suddenly change directions or do whatever bonkers thing that you're seeing in the sky.

[00:24:08] **Brian Dunning:** Right. No aircraft has the ability, has ever had the ability, to make these 180-degree instantaneous changes in direction or looks like some outrageous colored light show. And we wouldn't need aircraft to do to do those things. When we build aircraft to—like, the most secret aircraft in the world we'd build right now would be a high-altitude reconnaissance plane that's hypersonic. If you see one of those flying overhead, it's not gonna look any different than an airliner. You can't tell by looking at it whether it's going 700 or 900 miles an hour or 1,500 miles an hour, if it's an F-18. Or 2,200 miles an hour, if it's an SR-71. You can't tell those kind of changes by your eye. It would look exactly like a regular airplane to you. So, if it's not, then it's not.

[00:24:53] **Ross Blocher:** Right. We'll, come back to Mick West later in this discussion, but I loved how he had visualized in that Sitrec—the situation recreation software—that you project these lines forward toward what you're seeing, and it forms a cone that could be very small and closer, or it could be very large and far away. But you don't know. You really don't have anything to go on with your eyes to tell you the difference.

[00:25:19] **Brian Dunning:** Yeah. This directly goes toward the other popular trope that you hear from UFO people is they say, “Military pilots are trained observers. They can't be mistaken about when they identify something in the air.”

[00:25:31] **Ross Blocher:** Oh, that annoys me so much.

[00:25:33] **Brian Dunning:** I spoke to people who were not in the film for various reasons but including more flight instructors. I said, “What is a trained observer? What is the observation training that military pilots supposedly get?” And nobody said they'd ever heard of any such thing.

[00:25:48] **Ross Blocher:** Okay. Oh wow! Yeah.

[00:25:50] **Brian Dunning:** They're not trained observers any more than you or I are. And anyway—

[00:25:53] **Ross Blocher:** Yeah. Where's this Observation 101 class that you take?

[00:25:57] **Brian Dunning:** When you're talking about you can't tell if something is near and small or far and large, the reason we can't tell that as human beings is geometry. It's not a lack of training. If you don't have a point to triangulate with, there is no way that any human or any optical instrument can tell how far away a dot is. It's geometry. It's not something that can be trained away.

[00:26:21] **Ross Blocher:** We've got depth perception, but the separation between our eyes is just a few inches. So, yeah, it's useless.

[00:26:27] **Brian Dunning:** Yeah. You can't tell if something is 50 feet away or 50 miles away. And that's just a fact of the physical world. So, yeah, so we talked to a number of people to make that point that you've gotta get away from the argument that pilots are trained observers; they can't be mistaken. They are mistaken every day about things—the same things you and I are mistaken about. Our air traffic controller talks about, “Hey, military pilots land at the wrong airports just as often as civilian air pilots do.” That's a pretty darn big mistake! (*Laughs.*)

[00:26:57] **Ross Blocher:** Yeah, that was new information. That was a good moment. Yeah, I'm thinking back to the two Contact in the Desert conferences that I've been to. Carrie and I've been to a few UFO conferences, and the first time I was there they had a star viewing party that was specifically meant for people to seek out UFOs. And they were passing around night vision goggles. And I was there with them as they were looking at things go overhead. And some of them, they'd say, “Okay, that's a satellite.” But I noticed one particular trick seemed to work really well, where one satellite would sort of disappear into the shadow of the Earth, and then another satellite would come out of the same area at a 90-degree angle—'cause it was on a polar orbit or something—and it would emerge from the shadow into the light. And they would say, “(*Gasps.*) It changed direction! Satellites can't do that.”

And goodness. Even the night of there was a lot of excitement I remember, but the next day I could hear the stories compounded as I would hear people tell them to each other. Like, “Oh yeah, we definitely saw this.” And they'd enhance the details. But at this most recent Contact in the Desert, they had a different guy leading, an actual astronomer who answers the MUFON reports. He actually receives those. And to his credit, he shoots down like 97% of them immediately, because he'll do a little bit of that analysis and say, “This was the planet that you saw.” And so, this was a far more sober event.

And while we were there watching the stars this last time, a couple months ago, I could see people start to do that tittering when they would see something in the sky. And guess what? Of course, Starlink shows up, and you've got all these closely spaced satellites. And they started to go, “(*Gasps.*) Look at that! Oh my goodness, what is that?!”

And the astronomer very patiently told them, “Oh no, that's just Starlink. And that's them disappearing into the shadow of the Earth. So, no big deal.”

[00:28:42] **Brian Dunning:** Well, that blows the second of my three personal UFO experiences, which was the first time I saw Starlink. Because I had never heard of it before.

[00:28:50] **Ross Blocher:** It's mind boggling just to look at.

[00:28:53] **Brian Dunning:** That—it really is. It is a major mind warp if you see that and you don't know what it is, because that genuinely is absolutely unprecedented. There is nothing else in the sky that anyone will ever see that looks anything like that.

[00:29:07] **Ross Blocher:** So, what we're talking about is a bunch of freshly launched Elon Musk owned internet satellites that are very close to each other when they first launch. And then over time they spread apart, and you see just this sequence of even dots parading across the sky. And it is amazing looking.

[00:29:26] **Brian Dunning:** The funny thing is I wanted video for the film. I wanted video of the Starlink thing.

[00:29:30] **Ross Blocher:** Yeah. You had a good clip in there.

[00:29:32] **Brian Dunning:** I did! And what I did is I got a couple of these astronomy apps on the phone that'll tell you, "Hey, when is the next Starlink coming overhead?" And every time it predicted one, I went out. I brought like three different movie cameras and had them all set up and all these different lenses and everything all ready to go. And one never came over. I was so bummed! I don't know what was going on. To this day, I don't know what was the disconnect between the app and when I was going out and setting up. And then, one night my wife comes running in. She says, "Hey, you left just before—I filmed them for you. They just came over." And she hands me her iPhone.

*(Ross laughs.)*

And that's the clip that's in the film. My wife shot that on her iPhone.

[00:30:12] **Ross Blocher:** Lisa saved the day!

[00:30:13] **Brian Dunning:** Right after I'd carried all my cameras inside. *(Laughs.)*

[00:30:16] **Ross Blocher:** Amazing! Oh my goodness. Okay. And that's the one you used in the film? *(Laughs.)* Uh, fantastic. That's a good story.

[00:30:22] **Brian Dunning:** So, that's why she's in the credits as additional footage or something.

[00:30:25] **Ross Blocher:** I love it. Yeah. Actually, I think that sighting with the other enthusiasts at the conference was my first time seeing Starlink, and at least I knew in advance what it was. And like, woah, cool! Now I get to see it! Now, for radio astronomy on the Earth, less cool that you have so many satellites in the sky now, but that's a separate issue.

Okay, well, now you gotta complete the trilogy. What was your third sighting?

[00:30:50] **Brian Dunning:** Well, I've actually got four now that you mention it.

[00:30:52] **Ross Blocher:** Hey!

[00:30:53] **Brian Dunning:** The third one was a great mystery. A friend of mine, a guy's who's been friends with me for my whole life—he had become quite a believer in sort of

alien visitation. And the reason was because there was a repeatable sighting that he would often see outside of his apartment, and he was very serious about it. And so, he showed it to me, and I go to his apartment, and he said, “Just keep looking right up there and one of them's gonna go shooting right past.” And sure enough, this light goes shooting right past.

[00:31:24] **Ross Blocher:** (*Gasps.*) Oh, this is what we ask for! Like, show me the repeatable thing.

[00:31:28] **Brian Dunning:** Repeatable! And it was like a gray patch. I mean, very small. Like, if you were to hold your hand out at arm's length, it'd be half the size of your little pinky fingernail. But it was like a gray kind of squarish patch was the impression that it made on my mind. Moving across the sky. So, it didn't look like a star. It was moving too fast to have been a distant helicopter or airplane or anything. And I had been speaking to some ghost hunter friends not too long before, and they'd given me a couple of ideas by describing things that had fooled people into thinking they were seeing ghosts. And I kind of had a suspicion of what I thought this thing might be.

And, well, I'll just cut to the chase. What was happening was we were standing at his apartment door, looking out over the parking lot kind of below us. He was on the second floor. And to our right was the entrance to the parking lot where you'd turn in off the street. And at that entrance was one of those convex mirrors, you know? So, you can—sitting in your car, you can see traffic coming down the road toward you. And—

[00:32:28] **Ross Blocher:** Oh, okay. It's reflecting light from the nearby road. Okay, keep going. Keep going.

[00:32:34] **Brian Dunning:** So, if you were at the intersection—if you made a right turn out of this lot, there was an intersection there. And the cars that were making a left turn at that intersection to come down toward this mirror, to turn into the driveway as they turned, the whole situation was just set up geometrically for this. As they turned, their headlights would sweep across this convex mirror. And the mirror would project—it was strange. It would project what I think was like a vertical slit of light, which would intersect a power line hanging across at the other side of the parking lot.

[00:33:09] **Ross Blocher:** Wow! Oh my goodness.

[00:33:12] **Brian Dunning:** So, that's why it was repeatable and why if you stood there long enough, you'd see it several times. And we would correlate it with individual cars making that turn at the intersection.

[00:33:22] **Ross Blocher:** Amazing!

[00:33:23] **Brian Dunning:** And sure enough, I slept there at his apartment.

[00:33:25] **Ross Blocher:** You have the hypothesis, then you can reproduce it!



[00:33:28] **Brian Dunning:** Yeah, we got up in the morning, and we looked, and there's the power line right there. Exactly the same place as where the thing was.

[00:33:31] **Ross Blocher:** Amazing. I love the thrill—that little shot of adrenaline and whatever other neurochemicals are going on—when you have that kind of mystery. And then I love the even greater thrill when you figure out what's causing it. But boy, the two as a combo is just next level. That's fantastic.

[00:33:51] **Brian Dunning:** And that in a nutshell is why I love doing what I do, which is not just taking the popular story—which is wow in itself—but then going the next step further and actually finding what's really going on. Because that's even the bigger wow. And I'm always amazed that so many people will watch these paranormal shows on television and be happy with, “Oh, it's a ghost. It's the ghost of the lighthouse,” or whatever it is.

[00:34:14] **Ross Blocher:** Cheap thrills!

[00:34:15] **Brian Dunning:** And go, “Wow, that's amazing.” Isn't it even more amazing to go another step and find out what's actually causing that apparition? Whatever it is you're seeing.

[00:34:22] **Ross Blocher:** Yeah. Yeah. If you catch the local who's hiding behind the vestibule and making the sounds or whatever, that's more interesting to me. That's exciting. That's a good story. You used an example in the film that I had learned about from your podcast, which was that that lighthouse that was causing a sighting. You had people wandering around in the woods, and they would say, “Oh, it was over there somewhere, and it showed up. And there it is again!” And you had figured out not only which lighthouse it was, but you had overlaid the sound of the periodicity of the lighthouse—like every five seconds when it would aim toward the people looking. And it lined up perfectly with the audio that was recorded of them stumbling through the woods and going, “(Gasps.) I just saw it!” (Laughs.)

[00:35:04] **Brian Dunning:** Now, other people long before me had figured out that it was the lighthouse that they were seeing. In fact, the very night that it happened, the police—when they called the police—the police wrote down in their logbook, “All these people were seeing was the flashing light of the lighthouse.” So, that was known. I didn't solve that. But what—I did look up the period of the lighthouse, of how often it flashed, and align those beeps up with the people saying, “Wow,” in the audio. (Chuckling.) Which was—

[00:35:30] **Ross Blocher:** It's a great illustration.

[00:35:32] **Brian Dunning:** I really was.

[00:35:32] **Ross Blocher:** But at the same time, you make another point with that story, which is how stories grow and morph over time. That years later someone would say, “Oh, yeah, I had—” And maybe this is a different story I'm conflating, but that people will then add details. “Oh, yeah, I wrote this down contemporaneously, and there was this other element that I just now remembered 30 years hence.”

[00:35:54] **Brian Dunning:** Yeah. And most of the time that's completely honest. In the case of the lighthouse story, there's one of the people who has very obviously been dishonest and intentionally magnifying his story and making a career out of it, but that's the exception to the rule. Most people, most of these eyewitnesses are very honest in their belief of what they saw. They're not intentionally exaggerating anything, but when a group of people all share the same story, and they know each other very well, over 30 years—40 years for some of these—the stories organically grow over time. And when a new person comes in and says, “Well, this and this!” And then everyone kind of augments their memories and adds that to the story.

So, that's why we see—you know, there's a number of famous UFO cases that are always told and retold on all these silly UFO TV shows, and it'll be adults now who are telling about something they saw as children. And “Hey, there was 60 of us in the schoolyard. We all saw the same thing. Our stories were all the same, and we're—here we are, very responsible, honest adults, and we're not lying or making anything up.” Well, that's true. They're not lying or making anything up, and I'm sure they are honest and responsible adults. They're just—they're telling stories in the most contaminated possible situation.

[00:37:06] **Ross Blocher:** (*Laughs.*) Yeah. And what you said in the documentary was something that we were talking about on the show recently. Like, when someone has the story—yes, capture it, but capture it right away, and get them separated from everybody else who was there to cut that contamination short as quickly as you can.

[00:37:22] **Brian Dunning:** Which was unfortunately never done in any of these stories.

[00:37:25] **Ross Blocher:** Yeah, yeah. Fascinating. Well, when you start the film—and I'm sure you put a lot of thought into this. Because, again, you were trying to aim this at people who were on the fence or even people who maybe already were believers. The way you led into the film was by talking about just what we know from science about the laws of physics, the chances of life on other planets. Can you talk a little bit about that storytelling decision?

[00:37:48] **Brian Dunning:** I am actually fairly bullish on the possibility—I would say the probability—of intelligent life in the universe. And almost everyone that I speak to in the astronomy community feels the same way. That's fairly universal among people who are astrophysicists, astronomers, astrobiologists. It's nearly universal that we believe that there's a lot of life in the universe and probably intelligent life. And that's great news. And when you're talking about from a storytelling perspective, how do you open a story by capturing the audience is you want to talk about stuff that you're in agreement with.

Hey, here, we're all on the same page with this. We all want to meet our alien neighbors. And luckily, science does support that they're almost certainly out there somewhere. That's amazing! And it's awesome. And here's some details of this. We don't go into hard science. It's not, you know, an equations movie or anything. But here is the basics of some of the exobiology that we know that we can tell that there's probably gonna be life out there that we're going to be able to detect directly within our lifetimes, probably.

[00:39:01] **Ross Blocher:** Well, I thought you tackled that well.

*(Brian thanks him.)*

Because you introduced the idea of like carbon chemistry and signatures that you could see just from the light that comes from atmospheres and other planets, and then talked about the number of exoplanets that have already been discovered. And I hadn't seen that video before that you included from NASA—from the Kepler telescope of all of the exoplanets just kind of popping onto the map of the Milky Way as they were discovered. That was cool. That was a jaw dropping moment, just seeing that.

[00:39:31] **Brian Dunning:** Isn't it? Yeah. I love that. I love that video that they made.

[00:39:33] **Ross Blocher:** And they put it to music. So, every planet plays a note. Oh, I loved it!

[00:39:39] **Brian Dunning:** Yeah, and good that they placed it in the public domain too. Which is, of course, because they're NASA, they have to. But it's awesome anyway.

[00:39:46] **Ross Blocher:** Your tax dollars at work, literally.

[00:39:48] **Brian Dunning:** *(Laughs.)* And that's a great way to put 'em to work! So, we are able to start the film on a very hopeful note. I really did want to capture people who have unscientific opinions about alien visitation, which is that they turn on *Ancient Aliens* or whatever on TV, and instantly they say, "There we go, proof. Hard evidence that aliens actively visit the Earth."

That's not science. That's not a scientific based opinion, but here is some real science that does support at least part of what you're hoping for! That's tremendous.

[00:40:19] **Ross Blocher:** You establish we're on the same team. We all want this, but we have to stick to the facts and the physics. And I liked your explanation as well of, you know, what I would think of as the Fermi paradox. The question of, "Well, why aren't they here?" Because, you know, we're—

[00:40:33] **Brian Dunning:** Yeah, where is everyone?

[00:40:34] **Ross Blocher:** They should have arrived by now, because we're kind of a second-generation star system. We're made from the remains of previous ones. Somewhere around us there should have been other alien civilizations, and they should have sent out emissaries. And you had this way of explaining it that you call the Christmas tree problem, right?

*(Brian confirms.)*

Yeah. Can you explain that? I like that as a tool.

[00:40:55] **Brian Dunning:** Thank you. There's two main problems, and most people are aware of problem number one, which is the distance. The distance you'd have to travel to

visit another civilization and the astrophysics involved in the fact that you can't travel faster than light. And yes, you can argue that aliens are smarter than us, right? So, they don't have physical laws. Well, it doesn't work that way. That's wishful thinking. That's not science. But anyway, the second problem—first problem is distance. The second problem is time. Maybe aliens did visit us, and it was a billion years ago. And their civilization has been gone for 900 million years.

You have to have civilizations existing at the same time. And over the 14-billion-year history of the universe, that's a lot of civilizations coming and going 100 times, 1,000 times, 10,000 times. You can have civilizations live and die. So, the analogy that I make in the film is of a Christmas tree filled with strings of blinking lights. And every time a light blinks on, that represents the lifespan of a technological civilization. You know, we've got civilizations, but then we've got technological civilizations. Okay? The dolphin people might have a civilization. But they're not—they can't build fire. They don't have tools. They can't make complex electronics.

[00:42:09] **Ross Blocher:** Yeah. You might detect them in the atmosphere maybe, but yeah, they're not gonna send radio signals.

[00:42:14] **Brian Dunning:** Right. We might detect their bio signature. We would not detect any techno signatures from them. So, we're talking about technological civilizations that have the ability to communicate and which might reasonably like to meet one another. So, in the 14-billion-year history of the universe, that's a lot of civilizations that could have come and gone. 100 generations, 1,000 generations, 10,000 generations. A civilization grows, it flourishes, and then it dies. Whether it's a natural disaster, a war, a pandemic, their planet explodes, their sun goes nova, a gamma ray burst. There's a million ways a civilization can die, and this has happened over and over and over and over again throughout the universe in all probability.

That's not a proven fact, because we don't have any data for it yet, but we probably will in the future. And for any one of these civilizations to be able to solve the distance problem, they have to be very, very close to each other. That's not impossible. But it's very unlikely when we remind ourselves that they not only have to be very close, they have to be at the exact same moment. So, that's where the Christmas tree analogy comes into play. Two lights have to turn on, and they have to be right next to each other, and they have to be on at the same time. And when you look at the complexity of a whole Christmas tree system—and of course, we're imagining theoretical Christmas tree lights that actually do blink randomly.

*(They laugh.)*

Not half on, half off, half on, half off. It's just a really elegant way of visualizing the problem, that it's a lot more complicated than just figuring out how to travel faster than light. It's a problem that we don't have a solution to, and it's a problem that everyone who's enthusiastic about one day meeting our neighbors out there is bummed about. I'm bummed about it!

[00:44:01] **Ross Blocher:** Yeah. I was gonna say it's a little depressing to me every time I think about it. Because even if we do get that signal—let's say a planet 50 light years away—

then oh, cool! Okay, they sent us something! You send a response, and you wait at minimum 100 years to get a response.

[00:44:17] **Brian Dunning:** Yeah, very depressing.

[00:44:17] **Ross Blocher:** And you're not around any—oh! Yeah, I gotta admit this whole situation is one where like I intellectually agree with everything you've said about the probability of life on other planets. And if people ask me, “Do you think there's alien life, intelligent alien life?” I say yeah! It seems like statistically, absolutely. But it's not one that I feel. Like, I only intellectually know and just somehow I don't feel that fact. But yeah, that Christmas tree problem is a problem.

[00:44:42] **Brian Dunning:** The thing that I personally found most fascinating—and I mentioned it in the film directly, I thin—is the hypothetical possibility of an alien astrobiologist sitting there on his alien world with his telescope looking at Earth and noticing, “Oh my god, look at that spectrum! It has every conceivable bio signature, and it's got techno signatures.” We've had bio signatures for at least three and a half billion years. And we've had techno signatures for 100 years, so they—most likely, they—if there's ever been any alien astrobiologists out there on their planets that were in range of Earth in any kind of a meaningful range and had achieved at least our level of ability to look at other spectra, it's very possible that Earth has been noticed by aliens.

And that is a—that possibility is scientifically plausible. It is a scientific fact that that is a possibility that we have been noticed by an alien astrobiologist at some point.

[00:45:44] **Ross Blocher:** We're broadcasting that. Yeah.

[00:45:46] **Brian Dunning:** That to me is just—it just blows my mind and is the most exciting thing I can imagine.

[00:45:51] **Ross Blocher:** I like that. And then, I know people then form a split about how they feel about that. I remember Stephen Hawking famously said, “Well, that's a bad thing that we're broadcasting constantly our presence.” I don't agree with that. Stephen Hawking, what do you know? Brian's shaking his head.

[00:46:06] **Brian Dunning:** Yeah. Very few people that I know agree with that perspective.

[00:46:09] **Ross Blocher:** Well, you know, and once you get to the point where you're space fairing, hopefully you're a little more along the *Star Trek* line of things than the *Mad Max* side of things, in terms of your culture.

[00:46:19] **Brian Dunning:** We have exactly one data point to know what a civilization in space would do if they learned about another civilization. And that data point is ourselves. What have we tried to do? We've tried to—we've sent out the golden record and the plaque with the picture of the two people on it. And here's where—here's instructions for how to find Earth relative to some pulsars that you almost certainly know about. Here's what hydrogen

looks like, so you can tell that we understand science, and here's sounds of Earth. I mean, it was the friendliest possible thing that we could have done.

[00:46:51] **Ross Blocher:** That's a good point. 'Cause my first thought was our example was like, you know, colonization of the new world by Europe, but that's far before we were a space fairing civilization. That takes a lot more time, coordination, planning. You have to be kind of at a higher level of interaction where you've hopefully gotten through some of those growing pains.

[00:47:11] **Brian Dunning:** I think so. I still have enough faith in humanity to believe that we're there. I know a lot of people take a lot more cynical view of humanity than I do. But you know, I'm more interested in the possibilities for humanity than I am in our petty quarrels here on Earth. (*Laughs.*)

[00:47:26] **Ross Blocher:** Well, and we still have the problem that they're not here yet. So, make of that what you will. You use another point that—well, everybody does—but it's one I point out all the time. The proverbial White House lawn. If they were here and they wanted us to know about them, they wouldn't abscond with us one by one and tell us this message of human collaboration and cooperation and kindness and love. They could land on the White House lawn, and we would not be able to stop them. So, why hasn't that happened?

[00:47:55] **Brian Dunning:** From the one data point we have is that we would probably—we would probably be friendly and sociable if we met others. Now, that doesn't mean that any other civilizations would be friendly and sociable, but at least some of them would. Some of them might be Stephen Hawking's destructive aliens. Some of them might want to hide and just hide behind a cloud and study us from afar without making themselves known. I think we would announce ourselves in every possible way and try to make contact. And if that's true—if it's true that that other civilizations out there, hypothetical ones, might be like us and would want to be sociable, then that means that some of them are sociable. And some of them would come out on the White House lawn.

Now, if anyone has solved both the distance problem and the Christmas tree problem, then you would think that one of those three things would happen. Someone would've destroyed the Earth in a science fiction movie kind of way.

[00:48:47] **Ross Blocher:** *Independence Day*. Yeah.

[00:48:48] **Brian Dunning:** Well, that hasn't happened. Someone would've been out—jumped out on the White House lawn. Well, that hasn't happened. So, if two of these three—if neither of those have happened, then chances are no one has visited the Earth. And—

[00:49:00] **Ross Blocher:** I love that the White House lawn just gets used, because I can't think of a better piece of real estate. Maybe in the middle of a Taylor Swift concert or something. I'm trying to think of what might have more eyeballs, but... White House Lawn, it is.

[00:49:12] **Brian Dunning:** (*Laughs.*) Yeah, that—jumped, plopped down on stage right next to Taylor. People would just think it's part of the show.

[00:49:16] **Ross Blocher:** Yeah, I mean—again—who could stop them? And people shift arguments like, “Oh, society wouldn't be ready for it.” No, we're ready for it. You could tell me.

[00:49:24] **Brian Dunning:** Well, I heard se Seth Shostak, the director of the SETI Institute, the other day. He made a great point that for some reason hadn't occurred to me. People are always bringing up that thing that, “Oh, humanity's not ready for—the government would have to keep it suppressed, because people aren't ready for that knowledge.” Okay. As of today, 40% of Americans believe that aliens actively visit the Earth, according to a recent *Gallup* poll. Okay? So, 40% of the people are already there, and they seem to be handling the news pretty well. So. (*Laughs.*)

[00:49:53] **Ross Blocher:** (*Laughs.*) Yeah, that's right. They've already accepted it. That's a really good point.

[00:49:57] **Brian Dunning:** Yes. And we're not seeing anyone rioting in the streets and pitchforking babies.

[00:50:01] **Ross Blocher:** Leave it to Seth Shostak. Well, speaking of experts, you brought on the one person that I always urge people to listen to in these conversations, and that's Mick West. We've had him on the show before. And during that whole recent UAP Congressional hearing, I just kept saying like, “Why isn't Mick West on this panel? Come on. We're still talking about Gimbal. We're still talking about Tic-Tac. We're still talking about Go Fast.” And I've watched many of his YouTube videos, and I will say, I think the best presentation I've seen of Mick West's breakdown on those particular sightings—also the night vision one with the green triangles. Your presentation in the film I think is the best that I've seen of that finding.

[00:50:41] **Brian Dunning:** Thank you. I mean, Mick has made some tremendous videos, but I needed to get this down to about 12 minutes, and how do I get all these points explained perfectly in about 12 minutes? Well, the way you do that is by interviewing him for three or four hours and then doing a lot of chopping and slicing and dicing and condensing and putting it all together in a way that makes a very well-structured presentation. So, I had an opportunity to do that that Mick doesn't necessarily have when he makes his videos on YouTube.

[00:51:11] **Ross Blocher:** Which are excellent. I just thought the way you presented it in the film was really well curated.

*(Brian thanks him.)*

And I was looking at your setup with the cameras and thinking like, “Okay, so he had to shoot that and that. And oh! He had to get direct screen capture for that. That's what I would want.”

[00:51:27] **Brian Dunning:** Yeah, and luckily he was all set up to do that.

[00:51:29] **Ross Blocher:** Of course, yeah. And this was news to me. You know, I should have intuited this, but he was even saying that it's not all him. That he has this community and that he's the one kind of wrangling the community, kind of like Susan Gerbic does with all of her Wikipedia editors. And he did a really good job of kind of sharing credit where credit was due in his own findings.

[00:51:51] **Brian Dunning:** That presentation that he made talking about the other people on his team was an important part of another little segment of the film when I was talking about what are the best experts that you should have on these UFO task forces that the Navy and the government are always putting together. Because they're not well done right now, and they could be.

[00:52:09] **Ross Blocher:** You had them talking about how they were gonna bring on metallurgists and various other, you know, people who had interesting areas of expertise.

[00:52:17] **Brian Dunning:** Areas of expertise that have no relevance to any of the things that any solved UFO sightings have ever been found to be.

[00:52:24] **Ross Blocher:** Right. And you had already presented that list. Most sightings have ended up being either celestial objects or airborne clutter or things on the ground.

[00:52:36] **Brian Dunning:** Things on the ground and optical illusions.

[00:52:37] **Ross Blocher:** Right. You said, "Well, you find experts on those particular things." Like, you bring in an astronomer, you bring in a skeptic. I like how you said that—that the Congress person had even mentioned that they wanted to bring in all voices. Well, that's somebody who's worked on figuring these things out.

[00:52:55] **Brian Dunning:** Yeah, I think I said, "You may not like UFO skeptics. You may feel that they're Debbie Downers and always have the negative perspective and are cynical about everything. However, they're the only people with actual job experience doing this job. And a lot of them have been doing it for 30 years, and they've written books on the subject. And they—believe it or not, they do know the things that fool pilots and that fool people on the ground." And if you truly claim that you want to have an all hands on deck approach, which I believe is the term that he used, then their perspective is one that you must include.

[00:53:29] **Ross Blocher:** You may not agree with the Mick West that you bring in, but you want to hear his level of explanation first and at least do what you can to rule that out. Because when you're sitting down with him, having him walk through his simulation software and kind of break down the footage of these four real tent pole sightings, he's looking at the data on the camera. He's examining what type of technology it was, where the lens had to swap into a new mode or change zooming because of the hardware constraints. Like, all of that comes into play. And I always think when we hear that the government's released this and allowed it for the public, I think, "Why didn't they perform this level of analysis themselves?"



[00:54:11] **Brian Dunning:** Well, I mean, I've got the answer for that. This wasn't in the film. Well, one thing that was in the film was Mick's suggestion for who should be on these committees. It wasn't just, "Oh, me. Put me on the committee." It was crowdsource it.

*(Ross agrees.)*

Put it out there. Put it public and let all the world's experts in all these things—and a lot of whom were amateurs—let them have a crack at it. Mick's team did this with a very famous UFO out of Chile, and the Chilean government had a UFO task force. It was actually kind of similar to the way that these Congressional hearings are that we've been having have been organized and put together by lifelong UFO authors who have just become influential to some of these Congress people.

And that's how this Chilean government UFO committee was put together too. It was a bunch of old retired guys from like the UFO Society of Chile. And they had official—they were made an official government department. They had this one very famous UFO case. I talk about it on the *Skeptoid* podcast. It's not in the movie. [Skeptoid.com](http://Skeptoid.com), subscribe today. And they spent two years, and they could not come up with anything. They said, "This craft that we're seeing in the, in the film cannot be of earthly origin. We have no way of determining what it was." And when they finally released the video along with that explanation, Mick's team—

[00:55:31] **Ross Blocher:** Instantly. *(Laughs.)*

[00:55:32] **Brian Dunning:** Mick West's team that made a bunk website solved it in three days. Three days with complete data. They had the flight tracks of all the aircraft involved. They had everything. Three days compared to two years. And that's exactly how it would go with these Navy and these congressional committees that they're putting together today. They simply don't have anything.

[00:55:55] **Ross Blocher:** And they do it free of charge.

[00:55:57] **Brian Dunning:** They do it free of charge. Yeah. And they've got—again, these are the people who have real world experience actually solving these things.

[00:56:04] **Ross Blocher:** And you know what could be more in the spirit of disclosure and transparency?

[00:56:09] **Brian Dunning:** Exactly. Who would object?

[00:56:12] **Ross Blocher:** Right! Right, exactly. On principle, there's nothing to disagree with there. And another visual that I love in the film is when Mick is showing that night vision footage—and I had seen before that he had figured out about the aperture and the planets nearby, but then you see the camera moving in real time along a star map and breaks it down exactly which stars are falling in the path of the camera. And you see that as the camera moves around. It's brilliant. Really good visual.

[00:56:42] **Brian Dunning:** Yeah, again, I put a lot of the effectiveness of that sequence down to the ability to spend—I probably spent six weeks editing just that 12 minutes. It was a lot of work to really put together the best and most succinct and clearest presentation possible. I mean, I had the best source material you could ask, which is Mick's explanations, Mick's videos, his screen capture and everything. And we had the benefit of cutting away to other people for more explanations. We cut away to the air traffic controller to explain things, the flight instructor to explain things. I think we even cut away to Hal Bidlack once or twice in that as well.

[00:57:20] **Ross Blocher:** You took time to write a short letter.

[00:57:23] **Brian Dunning:** I did. (*Laughs.*) Very well said. Yes, I did.

[00:57:27] **Ross Blocher:** Another really useful point from that conversation was about the low information zone. I feel I'll be using that now, 'cause that's something I'm often trying to describe. That Bigfoot and UFOs and a lot of these phenomena—orbs and ghost photos—they kind of reside in this low information zone. And sometimes you have to create that with a certain amount of graininess or lack of fidelity even in the recording media that gives you this kind of noise level that you can read into, that you can perform a little bit of that pareidolia or apophenia.

[00:58:01] **Brian Dunning:** Yeah, just as I'm hoping that the Christmas tree problem will be my personal contribution to the field, Mick's personal contribution that I think is gonna be his lasting one is the concept of the low information zone, the L-I-Z, the LIZ. And it's—yeah, just—you just described it very aptly. It's—the low information zone is anything that's outside the range of our sensor to capture with any clarity, and usually that sensor means a camera. If something's too far away to get a good picture, it becomes a blob Squatch, a Bigfoot photo. That's because Bigfoot lives in the low information zone. We've never seen a Bigfoot that's in the high information zone. He seems to only live in the low information zone along with UFOs.

[00:58:43] **Ross Blocher:** LIZ! (*Laughs.*)

[00:58:44] **Brian Dunning:** That's the idea!

[00:58:46] **Ross Blocher:** That's great.

Hello, Ross. Hello, Brian. This is other Ross breaking in to share some high information zone content. That's right. You're probably wondering where you can go to find wholesome, convenient meals for jam packed days. Well, let me tell you about Factor, America's number one, ready to eat meal kit, which offers chef prepared, dietician approved, ready to eat meals delivered straight to your door. And I've done this! You know what? I really love these as take to work meals. These are great. They've never been frozen, but they show up at your door. Right before I'd leave for work, I'd just grab one out of the fridge, put it in my backpack, ride my bike to work, take it out of the backpack, store it in the fridge there, and as soon as it's lunchtime—(*snaps*) boom! I heat it up. Good to go.

They're just the right amount of food, and there's a variety of packages that you choose from. So, let's see. They've got Protein Plus, they've got Calorie Smart, they've got Keto, they've got Chef's Choice, they've got Vegan and Veggie, which you might imagine that's what Carrie and I tried out. And so far all the ones I've tried have been really fantastic. I got really excited about the vegetarian tamale bowl, as you might imagine. I know Carrie and I had one of them that were the same, because after she tried the spicy sweet potatoes and peanut sauce, she texted me with a picture of hers and said that she's reporting that this is quite good.

But yeah, these are upscale meals with premium ingredients like broccolini, leeks, asparagus, and the meat options look great too. So, maybe you're running around and you're a little busy during the day. This is a good way to have your lunch ready. I think this would make great dinners as well. And you can heat them up in the microwave or the conventional oven. It's ready in just two minutes. No prep, no mess. It's fast. It's tasty. And as my coworker Chris says, "Huh! That smells good." So, head to [FactorMeals.com/ohno50](https://FactorMeals.com/ohno50) and use code "ohno50" to get 50% off. That's code "ohno50", 5-0, at [FactorMeals.com/ohno50](https://FactorMeals.com/ohno50) to get 50% off!

And hey, while you're busy looking at the skies, maybe it's time to get some new glasses. Maybe you want prescription glasses, maybe you want to protect your eyes with some sunglasses. Well, guess what? Pair Eyewear's got you covered. There's a few cool things about Pair Eyewear. First of all, these are just stylish glasses in and of themselves. So, you tell them what your prescription is, or you order the regular glasses, but on top of the base frame you can add tops to your glasses. So, for example, I ordered the Kirby in a tortoise frame design, and got it as sunglasses. So, I've got these great sunglasses that I was just wearing the other day at Disneyland. Oh yeah! That's an interesting story. We took Drew to Disneyland. If you listen to our kidney stone episode, we made sure that he got on Big Thunder Mountain Railroad. He did it three times. He also did Matterhorn, and we're gonna hopefully find out soon how that worked out. So more to come.

But! The important part of this story is that I also got blue reflective sun tops to go on top of the Kirby frame. So—okay, so here's the cool thing on Factor Eyewear, there are built-in magnets on the sides. It doesn't make the glasses any bulkier or anything, 'cause picture a pair of glasses. There's already like an area there where magnets fit. They just had the bright idea of putting those right under the surface so that you can add these snap-on tops that—maybe you ordered some clear glasses, and it can add sun protection on top of those. Or maybe you wanna get some cool colors. Well, you can do that. And that's what I did, and I was thinking like, "Huh, I wonder if you'll be able to tell kind of that they're, you know, not like perfectly aligned or anything." No, they're perfectly aligned! So, it looks like the original design when you snap on the additional designs on top of them.

So, yeah. Really cool design. And you know, what I ended up doing was I got the sunglasses, but then I got additional sun tops to go on top of them. So, it doubled my sun protection actually in full light of day. That was super handy. And I ended up with these kind of nice rose-colored glasses as a result. So, there are hundreds of ways to customize this, because you get the base frame, and then you can add tons of designs—and they're adding new ones all the time—of snaps that go on top of them. So, maybe you get like three different colors, different designs, and then you can quickly swap them out. Maybe today you feel like having blue frames. Maybe tomorrow you feel like having orange frames. You do you! And like I said, budget friendly base frames start at just \$60, including prescription. And the hundreds of top frames you can choose from start at \$25.

So, start building a collection of styles you can swap every day with your same pair of glasses. And they've also just introduced five new wide and extra wide styles, if that is the style you're going for. So! Here's what you do. Elevate your summer looks and get 15% off your first pair when you go to [PairEyewear.com/onrac](https://PairEyewear.com/onrac). That's Pair, P-A-I-R, eyewear.com, slash ONRAC—O-N-R-A-C. And while you're at it, check out this awesome show from Maximum Fun!

[01:04:08] **Promo:**

**Music:** Upbeat, fun music.

**Emily Heller:** I am Emily Heller.

**Lisa Hanawalt:** And I'm Lisa Hanawalt.

**Emily Heller:** And we're the hosts of *Baby Geniuses*.

**Lisa Hanawalt:** We've been doing our podcast for over 10 years.

**Emily Heller:** When we started, it was about trying to learn something new every episode.

**Lisa Hanawalt:** Now it's about us trying to actively get stupider, and it's workiing!

**Emily Heller:** (*Laughs.*) Hang out with us, and you'll hear us chat about:

**Lisa Hanawalt:** Gardening.

**Emily Heller:** Horses.

**Lisa Hanawalt:** Various problems with our butts.

**Emily Heller:** And all the weird stuff that makes us horny.

**Lisa Hanawalt:** It's so weird, all that stuff.

(*Emily laughs.*)

*Baby Geniuses*, a show for adult idiots!

**Emily Heller:** Every other week, on Maximum Fun!

**Music:** *Baby geniuses, we know everything*

*Baby geniuses, tell us something we don't know*

(*Music ends.*)

[01:04:48] **Ross Blocher:** Okay, so there was another really important piece in your documentary that's something I've kind of encountered before, but never quite understood well enough to explain it to others, and that's the whole waterhole frequency. Can you describe that for our listeners? 'Cause I'll do a clumsy job of it.

[01:05:06] **Brian Dunning:** (*Chuckles.*) Yeah, so there is—there's a particular frequency on the electromagnetic spectrum that would be particularly effective for different planets who, if they had the ability and the knowledge, that they would probably both choose to communicate. And that's if you're a scientifically literate civilization, which obviously is what we're limited to by this discussion by definition. It's called the waterhole frequency, and astronomers call it that because it's kinda like the office, you know, water cooler. It's where civilizations would come to congregate on the electromagnetic spectrum.

So, it's got a few things going for it. Number one, it's easy to find, because it's right next to the frequency at which interstellar hydrogen precesses. Now, you don't need to worry about what that means. It's just a frequency that you'll hear ambiently from everywhere in the universe just because there's interstellar hydrogen—a lot of it—out there.

[01:06:02] **Ross Blocher:** So, it's kind of noisy because there's just a lot of that activity occurring.

[01:06:06] **Brian Dunning:** It's not particularly noisy. It's not like—it's not so noisy that it drowns stuff out. It's just a beacon for here's a frequency right here that you would know if you know anything about science and you understand radio astronomy. Here's a frequency. Well, the waterhole frequency is right next to that, so it's a good place to go, because there's a big flag pointed right next to it.

The other thing that's great about it is it penetrates atmospheres, so it's going to be received if you're on the ground. If you're listening with your radio telescope that's on the ground, waterhole frequency signals are among the ones that are gonna make it through your atmosphere.

[01:06:42] **Ross Blocher:** Yeah. How sad would it be if a signal just bounced off the atmosphere back into space? So, this is the one that'll get through.

[01:06:48] **Brian Dunning:** Yeah, so it's got a lot of things going for it. And famously, if anyone who knows anything about radio astronomy—and I know that's a terrible way to start a sentence! (*Laughs.*)

[01:06:59] **Ross Blocher:** Hey, but a lot of our listeners—yeah, we have similar kinds of listeners.

[01:07:02] **Brian Dunning:** Well, great. And that's—wonderful to be here with that kind of audience. You probably know the wow signal, the famous wow signal that we received in 1977 on the big ear radio telescope at the University of Ohio. And this was just a very brief blip in signal strength. We were just listening for signal strength. We weren't like looking for intelligent signals in it. It was just recording signal strength. And just for just a brief little moment, there was this big peak that went up, and it went down. As the telescope—which was flat on the ground, and it's, you know, pointed at a particular direction. It sweeps the sky as the earth rotates, and as it swept past this particular point in space, it recorded this very, very, very clear signal. And guess what frequency it was on?

[01:07:49] **Ross Blocher:** That crazy. I did not know until watching your film that it was in that hydrogen band, the waterhole frequency.

[01:07:57] **Brian Dunning:** It was on the 1.42 gigahertz, I believe. The waterhole frequency.

[01:08:01] **Ross Blocher:** Amazing. And famously the scientist who was looking at the printout of this circled it and wrote, “Wow!” Because that's something!

[01:08:09] **Brian Dunning:** Yeah. That's a great—if you just do a Google image search for the word “wow” you will find that, and it's wonderful to see.

[01:08:15] **Ross Blocher:** Amazing. (*Laughs.*)

[01:08:15] **Brian Dunning:** We don't know what it was. We have ruled out everything that might possibly have tricked us. It wasn't an old *Lucy* show bouncing off of the moon or anything. It was from a point in space—we don't know how far away—in the direction of Sagittarius.

[01:08:34] **Ross Blocher:** Sagittarius. Yeah.

[01:08:35] **Brian Dunning:** It could have been 100 miles away. It could have been 100 billion miles away.

[01:08:39] **Ross Blocher:** And like, since then, SETI's paid close attention to that area of the sky. Right? They've tried this—

[01:08:44] **Brian Dunning:** Yes, and we've never heard anything since from it.

[01:08:45] **Ross Blocher:** Huh. Maybe we got just a glimpse of a Christmas tree light.

[01:08:49] **Brian Dunning:** It's a possibility. I mean, we can't say it's, “Oh yeah, probably that's what it was.” We can't say that at all, of course. But we can say that it is consistent with everything we would hope to find in a signal.

[01:09:00] **Ross Blocher:** But you're saying there's a chance.

[01:09:02] **Brian Dunning:** There is a chance that it was a ghost. Okay? I mean, there—yes, there is a chance that it was what we would love for it to be.

[01:09:08] **Ross Blocher:** Amazing. Have you already been able to—I don't know—use like a test audience of people who are more inclined to UFO belief? Have you gotten any feedback? I know the film is early in its global penetration, but have you gotten any feedback, and how are you hoping maybe that you will get it out to the intended audience?

[01:09:28] **Brian Dunning:** Yeah, so it's—this is a grassroots distribution. This is not something that's a major studio film. It's not *Iron Man 5*. I don't have a huge distributor

behind it or anything. I'm just independently putting it out on all the streaming services, which you can do at a certain level. And the caveat is, you know, basically that you don't know when they're each coming out on each streaming service. That's all done by algorithms and everything.

[01:09:52] **Ross Blocher:** But it's not Christmas tree lights. 'Cause once it turns on, it stays on.

[01:09:55] **Brian Dunning:** That is true. Once it—it stays on until I turn it off, which I'm not gonna do. Because this is not something that's gonna make a tremendous amount of money by any stretch. It's just something that I want people to see, and I hope people share it, and I hope people come away with something valuable from it. And that was my whole intention, that whoever you are, whatever your thoughts about UFOs—whether you insist that they're all swamp gas and that nothing has ever been in any way mysterious, or whether you think that all the stories are true, and every story represents an actual alien visitation to earth, or if you're somewhere in between. My hope and my belief and my intent was that everyone would come away with their thoughts a little bit better informed by some of the relevant sciences, and they would really have more passion for what it is that they believe and take it more seriously.

When I look at the subject, I'm thinking of the possibility of our neighbors in space. I'm not thinking of who are the crackpots going on History Channel with their UFO movies telling ridiculous stories. This movie is not about who are the UFO personalities today. That's something I'm very disinterested in. I am fascinated by the real sciences involved and how those sciences do support what I think all of us have in common, which is a desire to at least know more. If we're not actually gonna meet them in our lifetimes, to at least know more about whether there's friends out there and might we ever meet them, and what are those chances actually.

Because I do believe that at some point in the future—and it might be a long time—we will have some kind of a dialogue. And it might well be every 150 years we get a signal, and they send a signal back, and we send a signal. Because you know that if we got a signal from someone that was intelligent, we would immediately train every transmitter on the planet at that point in space and commence nonstop broadcasting of everything we could think of to send.

[01:11:54] **Ross Blocher:** Yeah, I've heard the idea of like just sending them Wikipedia.

[01:11:59] **Brian Dunning:** Yeah! (*Laughs.*) How great would that be? Would you send the Chinese version or the English version?

[01:12:03] **Ross Blocher:** Yeah. Whichever one is the most complete.

[01:12:05] **Brian Dunning:** I believe there's a non-zero chance that some civilization would likely do the same thing with us. And I believe that it's a better than 50% chance. I would slide my chips on the table to yes, at some point humanity will likely have that experience. And I'm extremely excited about that. I'm a lot more excited about that than I am what I see when I turn on the History Channel.

[01:12:26] **Ross Blocher:** Yeah. Yeah. Well, the film you've made has I think all of the important building blocks for that discussion. So, I feel like it should be kind of a prerequisite for entering into this conversation seriously.

*(Brian thanks him.)*

Because it gives you a lot of really good handholds—like concepts, philosophically, just to have present in your mind. And yeah, I think, I think it would raise the level of the conversation. So, if you have either the UFO believer or the hardened skeptic in your life, sit down and watch *The UFO Movie They Don't Want You to See*.

[01:12:57] **Brian Dunning:** You gotta emphasize it right. It's *The UFO Movie THEY Don't Want You to See*.

[01:13:02] **Ross Blocher:** THEY! The ominous they. Yeah. Which is not us. 'Cause clearly we want you to see it.

[01:13:06] **Brian Dunning:** And if you wanna see it, search all the streaming services. It's appearing on them irregularly. But you can always go to the movie's website, which is [TheUFO.movie](http://TheUFO.movie), and the current streaming options will be right there on the homepage, whatever they are. And you can click right through to them. [TheUFO.movie](http://TheUFO.movie).

[01:13:23] **Ross Blocher:** Fantastic. And generally, where do people find you online, Brian?

[01:13:27] **Brian Dunning:** Find me online every week on the *Skeptoid* podcast, and that's at [Skeptoid.com](http://Skeptoid.com). You can search for *Skeptoid* or me, Brian Dunning, wherever you get your podcasts, *(chuckles)* and we'll pop right up, and you can subscribe, and you get 10 or 15 minutes of *Skeptoid*-y goodness in your earbuds—ear pods? Earbuds? I don't even know what they're called. Every week. Every urban legend you've ever wanted to know the solution to, we've got it on *Skeptoid*.

[01:13:52] **Ross Blocher:** And here's a related question that we get all the time. Hey, Brian, have you run out of topics yet?

[01:14:00] **Brian Dunning:** *(Laughs.)* I remember two years into the podcast, people were saying, “Ah, *Skeptoid*'s done. He's run out of—ran out of topics.” Here we are, 900 years later—not 900 years. 900 episodes later, and in my folder of future topics—I just looked the other day, and there's over 200 in there. So, a weekly show, that's four more years that I haven't even touched the documents for yet. So, no, I will never run out of topics. There are fantastic urban legends all the time.

[01:14:23] **Ross Blocher:** Same. Hard same. Yep. No end of wild and interesting ideas out there to be explored.

[01:14:31] **Brian Dunning:** Oh, and you guys have a slower pace, and you'll take several episodes to cover a topic a lot of the time.



(*Ross agrees.*)

And so, yeah, you've gotta be just absolutely drowning in a sea of riches for topics you've gotta get to.

[01:14:42] **Ross Blocher:** You get it.

(*Brian confirms.*)

But still, everybody said in your recommendations every day—we get him; we love him.

[01:14:48] **Brian Dunning:** Oh yeah, no problem there. They come in fast and thick and furious.

[01:14:52] **Ross Blocher:** It's a good problem to have. You know what? This is totally off topic. We set this wonderful mood like we're transitioning out here, but I gotta ask you—'cause sometimes you'll post hate mail that people send, and I don't know how you get under people's skins with these pithy quick episodes. But like, we get some unhelpful emails. But boy, you get the real cream of the crop there.

[01:15:14] **Brian Dunning:** Yeah, but really every science writer gets those. You can be the tamest science writer in the world. You can write about dinosaurs, and you've just offended someone who's a Young Earth Creation—whatever it might be. Every science perspective on everything offends someone, and you might get death threats and everything. In fact, when we were—at the top of the show, when we were talking about *Science Friction* and going back to shoot someone talking about covid, I said, “Well, okay, what covid experts do I know?” And I happened to know a couple of really good ones. I was friends with basically the Dr. Fauci of Brazil and the Dr. Fauci of New Zealand.

[01:15:53] **Ross Blocher:** Oh, wow!

[01:15:53] **Brian Dunning:** And I spoke with both of them. And when I spoke with the lady in Brazil, who's—her day job is she's a government scientist, but she works at a university. Actually, she works in a government department. I don't recall which one, but Bolsonaro had just been elected to office when I spoke to her.

[01:16:09] **Ross Blocher:** Oh, uh-oh!

[01:16:11] **Brian Dunning:** And we had the interview set up. We weren't gonna go to Brazil. She had a film crew of her own that was gonna set up in her office, and we were gonna conduct the interview remotely. The day before she called and said—

[01:16:21] **Ross Blocher:** My position has been eliminated?

[01:16:23] **Brian Dunning:** No, it was worse than that. Bolsonaro has said that no scientists may talk to the media, period.

*(Ross sighs heavily.)*

About anything. And so, we had to cancel that interview. So, I went to the lady in New Zealand. I won't give her name, because she spoke to me quite passionately. She said, "I'm very sorry. I'm not gonna do your film. And the reason is because it has absolutely destroyed my life being a covid communicator during covid, telling people to wear masks and everything. The number of death threats I get—" She had to have government security at her house. It was—it had made her life a living hell, the threats that she got.

[01:16:59] **Ross Blocher:** Talk about science friction! My goodness.

[01:17:01] **Brian Dunning:** Yeah, I know, right? And she told me, "If you do get someone to talk about this, please don't use a woman. Because women get it—get the hate way, way worse." She gets rape threats. I mean it's—and you can imagine. Everyone listening, you can imagine.

[01:17:19] **Ross Blocher:** I know you work hard when you're putting your films together to try to get as equal of representation as you can, and what a horrible boondoggle to have.

[01:17:26] **Brian Dunning:** It's hard. And so, we got a referral to the woman who's in the film, Dr. Emily Bailey. And I spoke with her, and I said, "Hey, here's what this person said. She said you shouldn't do it, because this will happen to you." Well, she was kind of new at the science communication thing, and I said that. I said, "It's worse than you think, so really consider this." But she didn't care.

She said, "I wanna do it." We had her in the film. And so, that's—

[01:17:50] **Ross Blocher:** And she's still with us?

*(They chuckle.)*

[01:17:53] **Brian Dunning:** She's still with us, yes.

*(Ross sighs in relief.)*

And it hasn't been that bad for her, but I think that's because she did one film. This is not what she does for a living day in and day out, like other people do.

[01:18:01] **Ross Blocher:** But boy, talk about an example of what you were trying to demonstrate with the *Science Friction* there—the obstruction to science communication, maybe in a different form there. Well, now that we've gotten a little far afield of our nice tidy cleanup, I also wanted to ask you. So, when you're shooting in front of those radio telescopes in the desert, the sun is going down, and did you shoot that all in one night and into the next morning?

[01:18:26] **Brian Dunning:** There is a very good story about that. Do we have another few minutes?

[01:18:29] **Ross Blocher:** (*Laughs.*) Yeah! Yeah. I want to hear this. 'Cause you're there, you're wearing the shirt, and I just see—you've got the script clearly well prepared in order, but every time we see you, it's a little darker, a little darker. The lights come up, and then next thing you know, it's morning and you're breathing out cold air. (*Chuckles.*)

[01:18:43] **Brian Dunning:** Yes. So, here's what happened. So, this was all done off of a teleprompter, right? So, we're setting up a teleprompter in the middle of the desert. And it was cold. It was about 15 degrees. Very, very cold. The guys who were off camera, they're all wearing parkas and hats and everything. They're toasty. I'm sitting there. I mean, you saw what I was wearing. I was wearing a hoodie pullover. Now, I had very thick long underwear on, and I had hot packs all over my body.

(*Ross affirms with a laugh.*)

But my head was exposed, and in that cold temperature for hours and hours on end, it got pretty bad. I had written this to be done chronologically. So, we actually recorded it in the order that it appears in the film. And it was in six chapters. So, between each chapter I would stand up and take a break. They were all about the same length. The guys would change lenses, whatever they needed to do. We changed lighting a couple of times, which you may or may not have noticed. I hope you didn't notice.

(*They laugh.*)

And the idea that I had in my mind was we were gonna start in the early evening or late afternoon as the sun's going down and then continue filming in the dark, and it would be completely dark by the end of the film. Well, nature had other plans. During the third chapter, I began to slur my speech.

[01:19:58] **Ross Blocher:** Oh?

[01:19:59] **Brian Dunning:** And it was really weird. It was like—now I've gotten really, really drunk a number of times in my life to the point that I was slurring my speech. And that's exactly what it felt like. I'm like, “Wait a minute. I have not—there's no—I'm not drunk. We had like, you know, a glass of wine at the house four hours ago.” It's like, no, that's not—I don't know what's going on. And it got really, really bad. We're having to do all of these retakes and retakes and retakes. And finally, I said (*blabbers incoherently*). We had a Tesla parked right next to where we were with 75 degrees in camp mode. So, we had a literal—a warming hut with warm bottles of water, more hot packs, and we could retreat to that anytime. That was a precaution that we took.

And so, I went. And I'm retreating to the little warming cabin, but it became clear in chapter four that we could not continue. I was just getting worse and worse and worse. And I don't remember who said it, but someone suggested I was going into hypothermia, and that's exactly what was happening. I went into literal hypothermia.

[01:21:00] **Ross Blocher:** Oh, shit.

[01:21:01] **Brian Dunning:** So, we abandoned the shoot after chapter four.

[01:21:04] **Ross Blocher:** Oh my goodness.

[01:21:06] **Brian Dunning:** And we drove back to the house. We were renting a big Airbnb that everyone was staying in, in Bishop. And I took a hot shower. I drank a bunch of hot water. I called my wife, who's a—what do you call them? Like, a—not search and rescue. But—

[01:21:17] **Ross Blocher:** ENT?

[01:21:19] **Brian Dunning:** Yeah, well, all of that training. And she said, “Drink a lot of hot water.” So, I drank a lot of hot water. And the next thing that I knew, I'm laying on a bed and I wake up.

[01:21:28] **Ross Blocher:** Oh, you passed out?

[01:21:29] **Brian Dunning:** And it's like 1AM. Yeah. I got out of the shower and everything and fell asleep. And I'm going—it takes me a minute to recollect my thoughts and realize where I am, what's going on. Oh, shoot. We abandoned the shoot. It's now the middle of the night. I ran through the house. Everyone else was asleep. And I'm thinking, “Oh my god, having 2/3<sup>ds</sup> of the movie done is as bad as having none of the movie done. Literally. And so, I'm like pounding on everyone's door. “Hey, guys! We gotta go back out there and finish!” Because I didn't have enough money—this was an expensive house! I didn't have enough money to do another night here.

[01:22:04] **Ross Blocher:** To keep that Airbnb. Yeah.

[01:22:05] **Brian Dunning:** With all of these people in the house and feeding everyone and everything. So, the cinematographer was saying, “You know what? Let's just do it right here in the house. You know, it's a black background. It was dark when we left. No one will know the difference. I can light it the same way, and you'll look like you're in the desert.”

And I said, “That's just not good enough. We've gotta go back out there.” And so, we're looking at like what time is sunrise, and we decided, “Okay, at 4:30, we'll wake up, and we'll go back out there.” I was done with the hypothermia. I was recovered. So, the plan was to set up and start shooting at 4:30 and finish the rest of it. And the idea was, hey, if we do that, it'll actually—the sunrise will be right as we're finishing the movie. And that'll make it—it's way better!

[01:22:50] **Ross Blocher:** Symbolically. Yeah!

[01:22:51] **Brian Dunning:** Yeah, it's way better than having it just get dark through the course of the movie rather than we go through an entire night. And then, as we're ending the movie—as you may recall, the movie ends on a very hopeful note.

[01:23:01] **Ross Blocher:** That was a nice touch. Yeah!

[01:23:02] **Brian Dunning:** And to end on a hopeful note right as the sun cracks the horizon was an artistic touch that was just glorious. And so, (*chuckles*) that's exactly what happened. We ended up driving the whole crew back up there, setting up again in pitch blackness, trying to set up the teleprompter in pitch blackness. And the rule this time was Brian is not allowed out of the car at all unless he's actually on camera. The thing that killed me when I was getting hypothermia was the term special relativity. I could not say “special relativity”.

[01:23:32] **Ross Blocher:** Oh, could not say that.

[01:23:33] **Brian Dunning:** (*Slurring.*) Special relativity, special relativity. I could not say it.

[01:23:38] **Ross Blocher:** So, just know as the film progresses that you're watching Brian slowly succumb to hypothermia.

(*They laugh.*)

[01:23:45] **Brian Dunning:** That's absolutely true! And actually, in one of the scenes in which I'm talking, it's sped up I think 8%. Just because I was—

[01:23:53] **Ross Blocher:** Oh! Just to make you sound less drunk.

[01:23:56] **Brian Dunning:** (*Slowly.*) I was so slow that it didn't sound natural.

And I like played with all of these speeds and everything. And at 8% you didn't notice. You didn't notice anything was wrong.

[01:24:05] **Ross Blocher:** Yeah! I did not pick up on that. Wild. (*Laughs.*)

[01:24:07] **Brian Dunning:** So, the last part of it—we had two more chapters to go through the teleprompter. We finished it right on cue, right as the sun cracked the horizon. And I started practicing. (*Slurring slightly.*) “Special relativity. Special relativity.” It was happening again.

[01:24:22] **Ross Blocher:** Oh, no!

[01:24:23] **Brian Dunning:** I was going into it again. But we were done. The guys sent me into the car, said, “You don't get out of the car.” They put everything away and then hightailed it back to the Airbnb.

[01:24:29] **Ross Blocher:** “You're done.” Wow!

[01:24:32] **Brian Dunning:** And we had the whole film instead of 2/3<sup>rd</sup>s of the film all in one night. It was amazing.

[01:24:36] **Ross Blocher:** A second time. I bet there's a lot of people listening, and they're like, “Okay, I'm gonna watch it just for this. I gotta watch this guy freeze to death.” (*Laughs.*)

[01:24:41] **Brian Dunning:** Yeah. Yeah. That's a selling point! And anyone who's done film production who is hearing me, going, “Yep. That checks out. That sounds all about right.”

[01:24:49] **Ross Blocher:** Yup. The happy accidents and everything.

[01:24:51] **Brian Dunning:** Yeah, they're lucky it went so well!

[01:24:53] **Ross Blocher:** Amazing. Okay, there we go. Well, that's another good, hopeful note to end on. Brian, thank you so much for bringing your film to our audience and talking through it.

[01:25:03] **Brian Dunning:** And thank you for letting me. I love talking about this stuff, and obviously I love telling people about the movie, but it's such a fascinating and fun topic. I just think it's—a wonderful addition to anyone's life is to become more interested in these things.

[01:25:15] **Ross Blocher:** Absolutely. And again, it's [TheUFO.movie](#). That's where you go to learn more, figure out—

[01:25:22] **Brian Dunning:** That is actually a website, People don't know that .movie is a suffix for websites, but yes. [TheUFO.movie](#). And you can get all the streaming options, whatever they are right there, and click right on through and watch it on whatever your favorite service is.

[01:25:35] **Ross Blocher:** If Carrie could buy .horse, .movie makes just as much sense.

(*They laugh.*)

Well, thank you again to Brian Dunning for coming on the show. Long time friend of the show and produces so much good research material and science communication at *Skeptoid*. I'd also like to thank Brian Keith Dalton, who wrote our theme music, and Ian Kremer, who is our administrative manager. You can support everything we do here at *Oh No, Ross and Carrie!* by going to [MaximumFun.org/join](#). There you can contribute to this show and also contribute to a co-op. How cool is that? So, become part of the family, make these investigations possible. We've got a lot of fun stuff coming up for you, so please help support and thank you to everybody who does. You can also support us by telling a friend, by leaving a positive review wherever you happen to listen to the podcast. Put in a good word for us, or tell a friend, share an episode, put it on social media. And remember!

[01:26:35] **Brian Dunning:** So, the UFO movie at [TheUFO.movie](http://TheUFO.movie) teaches a lot of really cool stuff about the physics of Alien visitation and how possible and plausible it might actually be. But it also teaches a valuable lesson, which is something that I talk about all the time on my podcast, *Skeptoid*, at [Skeptoid.com](http://Skeptoid.com). And that's that you should always be skeptical.

[01:26:55] **Music:** “Oh No, Ross and Carrie! Theme Song” by Brian Keith Dalton. A jaunty, upbeat instrumental.

[01:27:09] **Promo:**

**Music:** Upbeat, high-energy music.

*(Three bell dings. The crowd cheers)*

**Hal Lublin:** *(Announcer voice.)* The following pro wrestling contest is scheduled for one fall! Making their way to the ring from the *Tights and Fights* podcast are the baddest trio of audio, the hair to beware, Danielle Radford!

**Danielle Radford:** *(Gruffly.)* It really is great hair!

**Hal:** The Brit with a permit to hit, Lindsey Kelk.

**Lindsey Kelk:** The queen is dead; long live the queen!

**Hal:** And the fast-talking, fist-clocking Hal Lubliiiiiin! *(Sweetly, as himself.)* See? I can wrestle and be an announcer!

**Danielle:** Get ready for *Tights and Fights*!

**Lindsey:** Listen every Saturday or face the pain.

**Hal:** *(Announcer voice.)* Find us on Maximum Fun! Now, ring the bell!

*(Ding! Ding! Ding!)*

[01:27:53] **Sound Effect:** Cheerful ukulele chord.

[01:27:54] **Speaker 1:** Maximum Fun.

[01:27:55] **Speaker 2:** A worker-owned network.

[01:27:56] **Speaker 3:** Of artist owned shows.

[01:27:58] **Speaker 4:** Supported—

[01:27:59] **Speaker 5:** —directly—

[01:28:00] **Speaker 6:** —by you!