UFOlogy with Sarah Scoles and Kate Dorsch Ologies Podcast June 29, 2021

Oh heeey, it's your old DadWard von Podcast, whispering into a ham radio about UFOs today. Did you know that UFOlogy was a thing? Maybe you didn't. I did because it's been on my list for years. But here's how I envisioned this episode, okay? I thought I would be lurking in the back of a basement meeting, maybe looking for people with ponytails who hunt extraterrestrials, and then just adding a grip of asides telling you to take their stories with a very large hunk of salt.

But that is not how this episode turned out. It is very oddly, bizarrely, mind-bendingly more legit because – breaking news, people! – last Friday, June 25th, the Pentagon released a long-awaited, decades-in-the-making report about UFOs, Unidentified Flying Objects, more modernly rebranded as UAP, Unidentified Aerial Phenomenon.

So, we have been waiting six months for this report to drop, and I just so happened to have on my calendar an appointment to chat with two ologists about UFOs. One, a science writer and an editor for *Wired, Astronomy, Popular Science* in her past, and author of the 2018 book *Making Contact: Jill Tarter and the Search for Extraterrestrial Intelligence*, and her brand-new 2021 release, *They Are Already Here: UFO Culture and Why We See Saucers*

Now, the other ologist – that's right, there's two of them this episode! – She got her PhD in History and the Sociology of Science in 2019 with a dissertation titled "Reliable Witnesses, Crackpot Science: UFO Investigations in Cold War America." WHAT! It studied 30 years of UFO research in America. She's now the Acting Associate Director for Undergraduate Studies in the History and Sociology of Science, Technology, and Medicine at UPenn. You're going to meet them shortly, both of them.

But first, a quick thank you to all the patrons who come in peace at Patreon.com/Ologies and contribute a dollar or more a month to the making of the show and submit questions ahead of time for the ologists. We got a lot for this one! Thank you for sending links to episodes to your friends and into the Twitterverse and making new ologites all the time. And thank you to everyone rating the show and leaving reviews, which keeps us hovering at the top of the science charts. Also, I read all of your reviews because I care what you think. And this week's fresh-ass review... Let's do two! One is from W1ndow_Syl for the review that included the sentence:

insert gif of Eleanor from The Good Place saying "my brain is horny"

And thanks to Black Plastic for writing in that the show is:

All encompassing, intersectional, and appropriate for all audiences as long as you don't mind swear words.

I hope you don't, because sometimes this shit's bananas. You gotta swear a little!

Okay, UFOlogy, a real word. A real study. And ever since 1947 when this private pilot named Kenneth Arnold spotted nine round objects near Mount Rainier up in the Pacific Northwest, our eyes have been scanning the skies for more flying saucers.

In this episode, we're going to cover everything from Roswell to abduction trends, alien parades, secret military missions, surprising conclusions, the ologists' own whacky field experience researching UFOs, energy vortexes, UFO statistics, global sightings data, Tic Tacs, space rocks, black

triangles, fighter pilot sightings, Jimmy Carter, and of course the just-released Pentagon report on UAP, unexplained aerial phenomena, with UFOlogists Sarah Scoles and Dr. Kate Dorsch.

Alie Ward: I know time is of the essence. [*laughs*] What a day to talk to you both! I'm going to have you first, just really quick, if you could say your first and last names and your pronouns for me.

Sarah Scoles: Sure. I'm Sarah Scoles and my pronouns are she/her/hers.

Kate Dorsch: And I am Kate Dorsch and my pronouns are she/her/hers.

Alie: Awesome. What a day to gather you all. The long-awaited report just came out, what, an hour ago? What time did it come out?

Sarah: It feels like a million years ago, but it was probably a little over an hour ago.

Aside: So that was Sarah. Soft-spoken lilt and a little higher register voice.

Kate: Yeah, I would agree with that. Roughly an hour or so.

Aside: And that was Kate, with a mild and endearing Midwestern twang.

Alie: Oh my gosh. What a time. I did not realize when we scheduled this that it might drop today. No idea.

Sarah: Yeah, you had good timing. The aliens must've been subliminally communicating with you, perhaps. [laughs]

Alie: I mean, my name autocorrects to 'alien' a lot, so there you go.

First, before we address The Report, I'd love to get a little bit of background on you both. I would say that you are UFOlogists. How did you end up studying UFOs or the people who study UFOs?

Kate: So, I'm actually a historian of science and technology, and at professional gatherings I usually introduce myself as a historian of science who works on knowledge-making processes and expertise. But I came to the UFO question through, first, a research seminar project while I was still in grad school that really rapidly spun up into my dissertation. I'm admittedly a big nerd. So, obviously, as a big sci-fi nerd, the UFO thing held some attraction. But also what drew me to it is that I'm really interested in big-picture, ontological, and epistemological questions. That is: What kind of stuff exists? And how do we know things about the stuff that exists?

And UFOs are these objects that, in the 20th century – and I'm sure we'll talk about this more... but in the 20th and 21st centuries are both real and totally unreal. And they're sort of mythic, and legendary, and religious, and fantasy objects. But they're also really important artifacts deserving serious scientific study, at least for a certain period of time and apparently today.

Aside: So those bigger-picture questions really drew her. And she says if you're going to work on a dissertation for 5, or 6, or 10, or 50 years, pick something you're really into.

How did Sarah gravitate toward floating objects?

Sarah: So, I am a science journalist and I have written about astronomy, and space exploration, and military space technology for a number of years now. And I had never really thought very much about UFOs. I thought a lot about the more traditional scientific side of aliens, looking at the Search for Extraterrestrial Intelligence, SETI; or astrobiology, looking at the

atmospheres of other planets or the geology of other planets to learn about potential microbes there. But I had always, kind of, put UFOs just in this category of things that were not for me, even though, like Kate, I am also a big nerd.

Then, in 2017, the *New York Times* published a big story about this Pentagon research program called the Advanced Aerospace Threat Identification Program, which purportedly researched UFOs. And I thought, you know, "That's interesting," like everybody else thought. So I just kind of started going through that story trying to confirm or to fail to confirm everything that was in it. And it was really in the process of that that I... You know, I talked to historians, and anthropologists, and also people inside UFOlogy who had been studying this for decades.

And I thought, "There's more here than I thought there was when I dismissed it." A lot of people I was talking to were interested in UFOs despite the fact that they didn't really hold any beliefs about them. They were kind of agnostic about what UFOs were or were not, but they were interested in them from the human perspective in part and their historical perspective.

So, I couldn't let it go, and I'm a writer, so when you can't let something go you write a book. So I wrote *They Are Already Here: UFO Culture and Why We See Saucers*, which is kind of an attempt to look at the different things that motivate people to be interested in UFOs and how that's influenced by the politics and culture of the time through portraits of different people. And here we are.

Alie: It seems like people are really, really vocal and considered crackpots, or it's incredibly confidential and it's this big secret field of study that maybe only internal government people know about and are hiding from us.

Sarah: Yeah, I think that is true. I think there are a lot of high-profile, kind of, celebrity speaker circuit UFOlogists ["If we ever encounter aliens, they're not going to speak English, or French, or German. We'll speak and we'll communicate via mathematics."] who would like to say a lot of things in public. And then there are people who say, "I have an NDA," or, "If I talked about that I'd have to kill you." They don't say that literally. But I kind of got around that by focusing more on the people who are somewhere in the middle, who are just regular people researching UFOs in their spare time, or maybe who have had UFO experiences who, you know, the only thing stopping them from talking to me is, you know, maybe not liking the media or some of the stigma around talking about UFOs.

So the way I got around that was just being very upfront about where I was coming from. I would say, "I'm a science journalist. I'm coming at this from a skeptical perspective, but I really want to hear what you have to say and I promise to treat it respectfully even if I disagree with your interpretation of what it is."

Aside: Kate says that, as a historian, she's less interested in abduction narratives and actual sightings than she is fascinated by the culture surrounding them, because just the words "UFO Convention," those are enough to intrigue the most armchair social scientists.

UFO Festival in Roswell? July 2nd through 4th, anyone? Featuring an abduction parade, talks from the Alien Hunter, a former military police officer, and a CIA operative considered the world's leading expert on alien abductions. Also a talk from the author of the book *UFOs and the Murder of Marilyn Monroe*. There's also a screening of the film *Spaceballs*.

Anyway, Kate's research was like the New Mexico desert. Fascinating and sometimes very dusty.

Kate: I'm looking for sources, right? "Do you have this pamphlet from 1974?" And someone almost always does, and that's what I'm after.

But I will say, thinking about these different camps, I've studied the US Air Force investigations, the Project Sign. Grudge, and Blue Book period, and have also gone through a lot of the papers of professional scientists who study these things. And I do want to say that I think that today it's accurate to describe at least the two most visible groups as being the, sort of, crackpot fringy group and then the military if-I-told-you-what-I-knew-I-would-have-to-kill-you group. But there is a group in the middle, and there's been a couple of historical groups in the middle.

For my specific periodization, that is professional scientists who had very prolific, professional, establishment science careers as atmospheric physicists, other kinds of physicists, astronomers, engineers, etc., who also had an interest in UFO phenomena on the assumption that they represented some kind of terrestrial, or in some cases extraterrestrial, technology.

Alie: And what have you found, both of you, about the timeline and when people started thinking that they saw flying saucers or aliens? Has this been going back from the 1700s? Or did it really start around the advent of sci-fi and after World War II?

Kate: People have been seeing things in the sky as long as we have written human records. What, I think, has changed over time and what we need to be careful of, at least as scholars who study this and as historians perhaps, is identifying everything that's been seen over the centuries as UFOs.

In my interpretation and my understanding, UFOs or flying saucers are a particularly post-World War II thing. They are driven by – if you'll excuse the pun – a sort of atomic anxiety, right? Concerns about an unknown enemy, about surveillance states, about nuclear threats, about the unrestrained progress of science and technology, and these powers being in the hands of a mysterious military. And that's not a milieu that you have in, say, the 18th, or 17th, or 6th century.

So, while people are seeing things, perhaps in the Medieval Age or in the Renaissance, they're describing things as being angels, or acts of God, or some sort of demon or monster. We interpret the things we see through our cultural lens, through the things we expect to see. So, I think UFOs in that way are very much a product of the post-war, Cold War era.

Aside: So, although not all glowing, flying objects are identified, perhaps they offer, if nothing else, a blinking, pulsing, reflection of our own anxieties.

What does Sarah think?

Sarah: I feel like a lot of times, and something that UFO people who have been in the UFO world for a long time point out, is that, you know, what we see when we look up at the sky and see something unidentified is often just a slightly better... like the next-next-generation version of something we already have because it's something we can already imagine and interpret that way, which I think maybe aligns with what Kate is saying.

Kate: I was nodding, which... The podcast is an excellent video medium, I know. [laughs] I was agreeing.

Aside: And because I'm here to ask all of our shameless questions:

Alie: What are most UFOs? What are these unexplained flying things?

Kate: I'll let Sarah take this one first!

Sarah: [laughs] Great. I have all the answers to all the UFOs, so that's great. [laughs]

Kate: Excellent.

Sarah: I mean, I think something important that gets lost, especially lately when we're talking about UFOs, is that they do have myriad explanations. A lot of times, recently, you'll hear people saying, like, "the phenomenon" to refer to UFOs, but UFOs have always been a lot of different things. Looking at previous military studies, or civilian studies through groups like the Mutual UFO Network that analyze large volumes of UFO reports, they're anything ranging from, you know, just regular balloons, birthday balloons in the sky, weather balloons, surveillance platforms, sometimes Venus looking really weird on the horizon.

Kate: Yeah, that's my favorite!

Sarah: Which I never understood until I saw Venus, when I was at a high altitude, right on the horizon. And I couldn't tell if it was something that was moving and coming toward me, and it was shimmering and changing colors. And I was like, "I get it. I'm glad I'm not flying a plane toward it right now."

Aside: Did you know that before he became President of the United States of America, a young Governor of Georgia, Jimmy James Carter, spotted a UFO? He described it thusly:

There were about 20 of us standing outside of a little restaurant, and a kind of green light appeared in the western sky. This was right after sundown. It got brighter and brighter, and then it eventually disappeared. It didn't have any solid substance to it. It was just very peculiar-looking light. None of us could understand what it was.

And Carter said publicly, he never really suspected aliens. Many folks speculate that he might've just seen a very bright Venus on the winter horizon. How does that work? Because Venus is closer to the Sun than Earth, it looks like it jumps from either side of the Sun and it can appear to hover or dart around. So it's not Martians out for a joyride, but just looking up and seeing another planet, which is pretty cool on its own.

Sarah: I mean, there's things like ball lightning or other atmospheric phenomena. Just jets. Maybe like a commercial plane flying toward you. Military aircraft can look very strange, especially the ones we don't know about yet. And you know, now, drones all over the place. And there are more, but there has always been a small percentage that remain unidentified, whether that's due to something extraordinary that we don't understand or just lack of data to actually figure out what's going on.

Kate: Sarah has it dead on, pretty much, and I would agree. I always try to frame this by saying... and part of this is that I have a lot of respect for the UFO community. While I may not know what all UFOs are, I do believe that in most cases people are seeing something that they can't explain, right? So yeah, in many cases it's what are called misidentified common objects; airplanes, birds, bugs, trash caught in the wind, right? All kinds of common things. But also, aerial phenomenon; interesting clouds, meteors, Venus is a great one, or Jupiter, astronomical bodies you don't see all the time.

One of the first questions I got when I started researching this subject was, "Oh, so I assume that UFO sightings went up after Sputnik was launched." And in truth, UFO reports went down around the launch of Sputnik because we were looking up at the sky but they had been told what to look for. ["It's a rocket." "A Rocket!"] So they were reporting having seen the satellite.

So, I would be really curious... There is probably no way to get this information, but now that we're more acquainted with drones, for example, and the way drones move and the way they look, what UFO experiences that share similarities between drones and what they saw, what those numbers have done. If there are less UFO reports that we could account for with drones. People report UFOs less when they are looking up expecting to see something.

Alie: Hm. What about in different areas? You know, there are people who say parts of Utah, or the Florida panhandle, or Marfa, Texas, or even parts of Joshua Tree, that more people have sightings in those areas. Is that because they've gone there expecting to see something?

Sarah: That's a hard question to generalize about, and I don't have the latest, you know, sighting and geography statistics. But I think if you are someplace that is dark that has a good view of the sky, it helps if you're near a military installation, you are on average more likely to see something just because you can see more of the sky and more of what's going on there.

For my book reporting, I took a trip out to Area 51... I mean, the area outside of Area 51. They don't let me in there. But you know, people go there expecting to see either some kind of alien test or a military test, and I think the people who go there expecting aliens and see something weird, I have heard anecdotally, see what they interpret as that. And you know, I went there, saw some weird stuff, and I thought, "That was a cool military test," you know? So, I do think expectations play into it.

Alie: What kind of weird stuff did you see?

Aside: Very glad I asked! Buckle up.

Sarah: I saw, right when I was driving into the valley, this set of three or four orange orbs just, kind of, appear out of nowhere in the sky in the shape of a saucer, and float there, and then disappear. And then I kept on seeing things like that as I was driving. And then eventually I realized that it was military flares; jets doing exercises, chasing each other, and then one will fire a fake missile and the other one will send off these flares to distract the fake missile. And you know, the flares, when you see them, your mind connects them into a shape, and sometimes the shape looks like a saucer.

Alie: Ah-ha!

Sarah: Yeah. And then there was this set of many, tiny white lights that would also just appear, kind of taking over somewhere between like a half and a quarter of the sky in this, kind of, perfect matrix, and then all move in unison, and then disappear. So, I mean, it's weird. There's weird stuff out there.

Aside: Raise your tiny gray arm if you have goosebumps.

Kate: Sarah, can I ask a question? Is that okay?

Alie: Please do! Bring it on!

Kate: I'm just curious... I know how I feel about UFOs, right, and the potentiality of seeing one. Was it a weird... Even knowing... In your rational journalist-writer brain, you know what you're there for, you know what you're looking for, and you know you probably have a rational explanation. Did it still grab you somewhere? Was it still a weird experience? Was it unsettling in some way, or did you just manage to embrace it?

Sarah: No, I think I tried to embrace the unsettling nature of it. I mean, the flares experience, I didn't get an explanation for until the next day, and I still don't know what the white lights I saw were. And even though, like, I think those were regular military things, there was

something very cool about seeing something new, and strange, and very outside of my experience, that I was one of maybe a few dozen people seeing. And it felt very special, and like it was mine, and like I had caught a secret that I wasn't supposed to see. And I think that is not dissimilar from the way people who might interpret UFOs differently would feel. It was thrilling. I probably had some extra adrenaline.

Kate: That's so cool. **Alie:** That is very cool.

Aside: So, looking at a map of UFO sightings, it's easy to see most are in the continental United States. And there are more and more of them in areas like Roswell. And one exasperated news headline from May 2021 just reads, "It's happened again, people in southwest U.S. report strange lights in the sky." Which is like, "Okay fine, but don't be a bitch about it, News Source."

Anyway, that story was regarding the recent launch of dozens of SpaceX Starlink satellites that will ring-around-the-rosie themselves around our planet literally forever. And for more on that, you can see the Space Archaeology episode with Dr. Space Junk Alice Gorman. A lot of shiny garbage up there, folks!

Kate: So, first of all, we have a colleague, Greg Eghigian, who has been looking at the modern history of the flying saucer from an international perspective. He's got a book coming out later this year. It's a crazy ambitious project and I'm really psyched to read it. He and I have been in touch for years about this.

Aside: This is Penn State University history professor Greg Eghigian, who has penned papers like "Making UFOs make sense: Ufology, science, and the history of their mutual mistrust," as well as "'A transatlantic buzz': flying saucers, extraterrestrials and America in postwar Germany."

Kate: He's been one of the people who has been trying to unpack this from that international perspective. So, he talks, for instance, about sightings over Germany in the Cold War period. The Germans assume that they're American and Russian, right? It's not like they're aliens or something. These are the Americans and the communists testing weapons over German airspace. Likewise, there's the Swedish ghost rockets, which are a historic case taking place in the late 1940s, and the Swedes assume that they're Russians, right? That it's Russian missile testing. And that's what we can account these "ghost rockets" to, these transparent, technological artifacts that appear and disappear in the sky.

Interestingly, historically, it's very rare that you see two sightings that are described in identical or near-identical ways, even just in different parts of America, let alone in different parts of the world, simultaneously or within a day or two of each other. What is much more common is that there is a sighting that has either one really credible witness or a number of witnesses that gets a lot of attention in the press. It hits the newspapers, first local, then it's in the *New York Times* and the *LA Times*, and maybe it gets picked up by *The Guardian*. And now there are a lot of copycat sightings taking place. So now people all over the world are seeing the same thing.

Sarah: I mean, as soon as you give something a name and, kind of, a category, it's human nature to fit what we see into that category, the first, arguably, being flying saucer. And then a couple of things that come to mind for me are... People talk about seeing the black triangle.

Aside: So these are black triangles that are described as shadowy, hovering, and noiseless – and this part really got me – sometimes bigger than a football field! What?! I guess, no big deal. [scared but trying to be cool about it] Ha... not alarming.

Sarah: ... The Black Triangle spacecraft. And you know, once you see one, you read about it, you see a bunch. And then, I think, most recently, from the military sightings...

[clip from military pilot's radio: "There's a whole fleet of 'em. Look on my SA. My gosh... They're all going against the wind. The wind's 120 miles west. Look at that thing, dude! Look at that thing!"

An object in one of the videos is called a Tic Tac, so people have started talking about the Tic Tac UFOs as if it is a strict category. So yeah, I think it's just our nature to fit things into that.

Kate: Which is so interesting, because my assumption was that the Tic Tac thing would get drawn to the historic cigar UFO, the cigar-shaped thing. But they seem to be persisting as distinct objects, if you will. There's not a lot of overlap in the, sort of, lore happening between the Tic Tac and the metallic cigar that seems very popular in the late '50s and early '60s.

Sarah: Well, that one was paid for by Big Cigar and this one is paid for by Big Tic Tac.

Kate: Ah! Nice. [laughs]

Aside: So these 2004, 2014, '15, and 2019 Tic Tac sightings were recorded through the instrument panels of US Navy fighter jets aboard the USS Nimitz and USS Theodore Roosevelt off the Southern California coast. And according to official reports, they are described as "an elongated egg or a Tic-Tac shape that is solid, white, smooth with no edges, and uniformly colored with no wings."

But it gets weirder. This footage was leaked by a UFO research group started by a guy from Blink-182. If you ask me, that's the weirdest fact in this whole episode, but it does get juicier.

In late 2017, the *New York Times* published three videos, and the world has just been waiting for a big report that came out *one hour* before we recorded this on Friday, June 25th.

Alie: Okay, let's get to the report that was just released today. Again, I cannot believe that I'm talking to you both on this day. We've waited generations, perhaps, for this. Can you tell me what, so far, you've been able to glean from it?

Kate: Sarah, have you taken a look at it yet?

Sarah: I have, yeah. Let's see...

Alie: It's nine pages, from what I understand.

Sarah: Yes. It's nine pages, and it looks like they looked into 144 different reports and were only definitively able to explain one of them, ["One? Only one?!"] which was a deflating balloon, I believe. And Kate, please correct me if my memory of this thing I just read is wrong. And that the rest of them, they were not able to definitively identify, but they were able to fit them into five potential categories or imagine them fitting five potential categories of, basically, trash in the sky. Actual trash, drones, atmospheric phenomena, US technology, foreign technology, and then what they call the other catch-all category.

And of the 143 reports that they couldn't pin down, there were 18 different incidents and 21 reports that seemed to perhaps display some kind of advanced flight characteristics. But

then they said, you know, that could be some kind of sensor malfunction or personal misperception, and that they needed to dig into it more.

Aside: So to recap, because numbers. 144 reports and they knew what one was. It was a balloon. The other 143 were just big ol' shrugs that could've been garbage or drones. But about 20 seemed to fly really weird and really fast, making the experts say, "Whaaaat?"

Sarah: I guess the biggest conclusion of the report, for me, and then I'll turn it over to Kate, is that they don't know... They think people are seeing real things. They catch them on, sometimes, multiple sensor systems. They don't know what most of them are. They want to investigate further, and they would like to have funding and systematized ways for people to report and then investigate what's going on.

Alie: Got it.

Kate: Yeah, I think that's a pretty great summary. Important to note that they're only looking at reports that have come from US government sources, which is a pretty self-selective... This has always been the case when we look at these government reports. They've been very self-selective. And for the early years, were really just military and governmental personnel, they only expanded outwards in the Project Blue Book days.

Aside: Okay, so these are investigated sightings seen and reported by government personnel. Not your cousin who lives in a yurt and drinks his own pee.

But Project Blue Book, what was that? Between 1952 and 1969, the US Air Force investigated and analyzed over 12,000 incidents of UFOs, what we now call UAP; unidentified aerial phenomenon. And they finally concluded: No UFO reported, investigated, and evaluated by the Air Force was ever an indication of threat to our national security. They found there was no evidence submitted or discovered by the Air Force that sightings categorized as unidentified represented technological developments or principles beyond the range of modern scientific knowledge, and that there's no evidence indicating that sightings categorized as unidentified were extraterrestrial vehicles.

Even back then, there were some believers like former Marine Corps naval aviator Donald Keyhoe, an author who was considered a leader in the field of UFOlogy in the '50s and '60s, who disagreed with Project Blue Book's mild "Meh, nothing to worry about" findings. He wrote a book with a really, kind of, wishy-washy vague title called *Flying Saucers Are Real*.

[archived interview with Keyhoe:]

Interviewer: Major Keyhoe, as author of the book Flying Saucers are Real, what is your opinion of these new sightings of unidentified objects?

Keyhoe: With all due respect to the Air Force, I believe that some of them will prove to be of interplanetary origin. During a three-year investigation, I found that many pilots have described objects of substance and high speed. One case, pilots reported their plane was buffeted by an object which passed them at 500 miles an hour. Obviously, this was a solid object that I believe was from outer space.

But that was then, and this is now.

Kate: So these are reports coming from governmental sources. "UAP sightings tended to cluster around US training and testing grounds, but we assess that this may result from a collection bias (which I think is interesting) as a result of focused attention, greater numbers of latest-generation sensors, unit expectations, and guidance to report anomalies."

I've said it before and I'll say it again: It is not surprising to me that these various government bodies, the Navy, and in many cases, the Air Force, have test craft, right? They have these bases. They're doing all kinds of testing on various kinds of technology, manned and unmanned, and we should want them to report the things they see. We should want them to tell us if they're experiencing anomalous performance in their own aircraft, or in the aircraft of others, or if they're having strange physiological reactions to things. But I do think that it's worth pointing out that the sightings tended to cluster around testing grounds and other sorts of places.

But again, people have been asking me for weeks what I expected as someone who has read a lot of governmental UFO reports in my day. It pretty much... It's exhilarating to me and probably boring to everyone else how cookie-cutter it is. It's been 80 years and so much of the language is still the same. And I love it. I am totally here for it. I'm very excited.

Aside: And honestly, she says, in the last century our warfare has been airborne, so it's not crackpot for the military to investigate weird things in the sky. It's a matter of security for governments all over the world and not just a burning, existential curiosity that melts our brains and fucks with our whole sense of reality. Hehe!

Alie: Do you think there's a reason why they released it now?

Kate: On Friday, or ...?

Alie: Well, on a Friday too. [laughs] Like, Friday just after the news cycle ends on the east coast?

Kate: It's a news dump, right? It's a Friday night news dump.

Sarah: As far as this particular Friday, they had 180 days from the passing of the act that mandated this report, to do it. And today is the 180th day so... deadlines.

Alie: Ah-ha!

Kate: It was an obligation that was put into the covid relief bill that was called for. And yeah, I think... Man, they really walked that right up to the wire, but that is historically what they've done. So again, nothing really shocking about the timing or that it's a Friday night at all, to me, really.

Aside: Part of the covid relief bill?? Really? Indeed. It was just... slipped it right in there. And former senator, Democrat Harry Reid of Utah, was a big proponent of getting behind the science of UAPs. And one government investigative program called the Advanced Aerospace Threat Identification Program ran from 2007 to 2012 but it was cut for funding. And five years later, the head of that program, Luis Elizondo, publicly said that he personally believes there is very compelling evidence that we may not be alone.

So this updated report just dropped on Friday, which delivers a big ol' "We don't really know what this shit is" conclusion. It's pretty thrilling.

Alie: Does the report make you excited for possibilities?

Kate: Umm... I mean, as a... I will not, like, *Hardcore History* nerd out on you on this podcast...

Alie: Please do!

Kate: Well, all I will say is that I'm really obsessed with reporting forms, with how over the last 80 years the military has tried to collect data, tried to collect better data about these things, because there's always the concern that they represent some kind of national security threat, right? So, even if you have 10,000 cases and 9,999 of them are BS, ["There can be 100"]

people in the room and 99 don't believe in you..."] if one of them is a nuclear missile, you have a problem, right? So we have to continue investigating them, but we have to get better data. Always the search for better data. So right away on page 3, this report from today is like, "Oh, we need to come up with a better way of collecting data," and I'm like, "Yes!! I love it!"

What struck me in the report is the Navy being like, "We haven't had a formalized process before now for collecting this data," where the Air Force had one in '47. Did it work? The Air Force, sort of, tapped out of this in the early 1970s and was like, "We're never going to solve this problem. We can't square the circle," if you will. So, what I find sort of hilarious, in a fun historian way, is that the Navy is going through a lot of the same challenges, and issues, and growing pains, and struggles, and hopeless battles that the Air Force went through in the '60s. I just want to tell them, like, "You can't win. You're not going to win this one. You will never write a staid enough report to convince people that it's not aliens."

Aside: So the Navy is learning the Air Force's lessons of, "Oh man. UFOs. Really hard. So frustrating! Like, what is iiiit??" But what about Sarah? Is she excited about this report?

Sarah: I mean, I agree with Kate. I think data is good. It's important, especially if you're coming at this from the perspective of national security or a flight safety perspective, to understand, how common is this? And with this report, the instances they looked at were from 2004 to 2021, but they said that most of them were from the past couple of years once the Navy, and then later the Air Force, did create specific reporting systems for people. I think that getting an actual handle on the scale of what people are seeing is important.

And I'm going to draw an alien parallel, even though I'm not endorsing the extraterrestrial hypothesis for flying saucers. But when a topic has a certain stigma associated with it that, kind of, inhibits research into it, like with SETI, the search for extraterrestrial intelligence, part of the way that became a respected discipline was doing things like systematic surveys of the sky to create statistics of how far away a civilization, around what kind of star, how many would we expect to see based on what we've surveyed? Just bringing it out of the world of anecdote and into the realm of something that you can analyze more categorically.

Aside: So the first thing to do is to nix the stigma, because where there is silence, there is a lack of data. And where there's a lack of data, there are a lot of unknowns. A lot of hypotheses, a lot of fear, a lot of flimflam. So ignoring UFOs, it's kind of like the abstinence-only education of the cosmos.

Now, Kate says:

Kate: One thing, if I can, be critical about, even just the immediate reporting coming out right now around the report, like, "The government is confirming that UFOs are real," or whatever. A, I think they've always been, kind of, real. Sometimes they're real things in the sky that we don't know what they are, so that means they're UFOs.

Aside: Again, one takeaway: UFOs are real. We don't know what a lot of airborne objects are. It doesn't mean there are blood-drinking squid people piloting hovercraft, but it's certainly UFOs. That's so rad, it makes me sweaty. I love a mystery!

Kate: All of that aside, the military has an interest in investigating these things, and in figuring out what they are, and in figuring out if we, as citizens, or their pilots are at risk or in harm's way. Even if it's from trash, right? Airborne clutter.

When you generate the stigma around these things, for example the reporting that's coming out right now, "UFOs are real," that disinclines serious pilots from making reports in many

cases. It may make them less likely to report having seen something. Or you know, airline pilots, people who are up there looking at things. The Air Force grapples with this throughout their history of the projects. Pilots are not telling us that they're not reporting, that they didn't see anything, and even if they did, they wouldn't tell us. And that's a problem, even if it's just for national security or the health and safety of our pilots. And I think that continues to be the case and I think that's a real struggle.

One of the reasons why I like to encourage the people I'm talking to, especially journalists, to be careful about how you frame this thing, right? If it is a national security issue, let's treat it seriously as one. ["See something, say something."]

Alie: Can I ask a few questions from listeners who wrote in?

Sarah: Definitely!

Kate: Sure.

Alie: They wrote in great questions.

Aside: Of course we always like to take American money and shower a charity of the expert's choosing, and this week it's going to the Denver Public Library Friends Foundation. When you invest in the library, they say, you invest incredible support for free literacy programs, lifelong learning, workforce development, and equitable access to resources for the millions of adults, children, and youth of Denver. So if you're looking for intelligent life, find it at a library!

So, that was Sarah's choice, and we did such a tight turnaround on this that I don't know Kate's yet, but we will throw money at them and update the show notes with a link when we have it. Those donations were made possible by sponsors of the show. Thanks so much. You might hear about them now.

[Ad Break]

Okay, let's get some answers to your unidentified queries.

Alie: Kellie Dodson wants to know: Have we ever found a crashed UFO?

Sarah: Well, if we mean UFO as in alien spacecraft, to my knowledge, no. We have not found one of those. But the classic example of something that went unidentified for a long time that did crash was the balloon that crashed outside of Roswell and was part of the secret project Mogul, which was to detect Soviet nuclear tests. It was a balloon that flew high and then it crashed. At first, it was reported that that was a flying saucer, then that was taken back.

There was confusion about what it was at the time. Then, you know, the military said it was a weather balloon, and then only later did we get the true story. So, I think there's stories like that, and probably people have seen things in the sky that they couldn't identify that then crashed. But in terms of alien spacecraft, if you find out, Kellie, please let me know.

Kate: Same, same. I also don't know anything about alien spacecraft. But yeah, the Roswell case is great and Sarah did a great job telling it. Yes, a balloon crashed. The version I've heard had this, sort of, junior military personnel come out and tell people, like, "Oh, it's just a balloon. Don't freak out." And then his higher-ups freaked out because there was press interest and it was a highly classified project that was built for spying on Russians, right? So, it was like, "No, no... It's not that. It's anything but that. It's a weather balloon. Or we don't know what it is. Maybe it's not a balloon at all!" But yeah, we know for certain that it was a surveillance balloon.

Aside: And if you're not up on this Roswell incident, a quick overview is that in 1947, a rancher was ramblin' about his land in New Mexico and found a bunch of rubber and tinfoillooking debris. He gathered it up, took it to the sheriff, and then Major Jesse Marcel, a Roswell Army Airfield intelligence officer, I guess, did the world a flimflam and we're still talking about it.

So what became of him? Was he banished to a hut on the fringes of society? Well, he retired from the Air Force in the '50s and he went on to become a TV repairman. He's like, "You know what? Screw this. I'm going to go work on a TV and have a beer with lunch." But it's said that he maintained that what he saw was not of this Earth, but the military made him recant his statements to look like a real jackoff and take the fall. That's what he says.

A lot of people think that something's still fishy. Speaking of:

Alie: Patrons SalmonLikeTheFish and Malika want to know your thoughts on uma– I always want to say "umama-mama." That is not how it's pronounced. "Ow-moo-ah-moo-ah"?

[clip from news report]

A pair of Harvard scientists say a massive, fast-moving visitor to our solar system may have been a probe sent by an advanced alien civilization. Astronomers were excited to discover the interstellar object last year. It was named 'Oumuamua'. That's Hawaiian for messenger or scout.

Sarah: Yeah, I'm not fully up on all of the, you know, latest science of it. But my understanding is that the scientific consensus is that it's an interstellar rock and there's one very prominent scientist who would like us to at least consider the idea that it is an alien probe, but that most other scientists don't agree with him. And I do not have enough information to hold a fully informed opinion, but maybe Kate does.

Kate: I do not, unfortunately. But I fall in the same position that Sarah does.

Alie: A lot of folks, such as RJ Doidge...

Aside: as well as Becca and Olivia Alex, who asked: Why are people so horny for aliens?

Alie: Why is it everyone automatically goes for probing when talking about being abducted? What's the deal? You did mention a space probe. Is there something about just feeling invaded, like, space invaded? ["No, you're not putting those in my butt."] Do you find that a lot of folks do mention probing? Is it all psycho-sexual?

Sarah: Everything is psycho-sexual, probably. But I would say that, at least in my anecdotal reporting, lots of alien things are linked to some kind of feeling of the fear of outsiders or fear of the unknown, and I would be afraid of probing. So, I think there's a little bit of a, maybe, fear of malicious things, fear of the outsider, things like that. I'm going to stop before I get myself into any more trouble.

Kate: I will go out on a limb and then push a colleague of mine even further out onto that limb. In the interest of transparency, as I said earlier in the beginning, I don't really work on the alien question. My interest in the extraterrestrial hypothesis is really, sort of, '50s, '60s, ETH-type stuff.

Aside: ETH, sidenote, is the Extraterrestrial Hypothesis, which is, "That UFO wasn't just a balloon, or Venus, or another country casing the joint. Them things got aliens in them." That's the ETH. Maybe the aliens want to party with our butts. We don't know.

Kate: But I will say, this colleague of mine who I've already named once, Greg Eghigian... Once, we were at a conference together and he was also postulating that a lot of this alien abduction stuff seems to kick up at a time... at least it really comes to the forefront in the late 1970s. It becomes a phenomenon that is taken much more seriously in the mid-to-late 1970s. Perhaps coincidentally, and perhaps not, we can tie some other things into this. Post-Vietnam PTSD, the rise of the social sciences and psychiatry, and second-wave feminism; female taking back of the body, exploring our traumas through psychiatry, and so on. These things might have something to do with the rise of the abduction narrative.

I don't know if that ever went anywhere. I thought it was really compelling at the time. I'm always obsessed with context, historical context around these phenomena. But yeah, again, I don't have much insight into the history of the probe.

Aside: Moving away from probes and toward history, patrons Kathleen Sachs, Jade Pollard, first-time question-asker Bri Gee, Georgia Ploederl, Max Aubry, Dannielle Fougere, Meg, Bailey Bynum, and...

Alie: A few people, Rowan Ridley, and Anna Thompson, wanted to know a little bit about ancient art that has been uncovered. Your thoughts on ancient aliens? Does that ever come up in terms of pictorial representation of UFOs in art? How far back does that actually go, and how much are we just seeing what we want to see?

Kate: I'll take this one first.

Sarah: Please do. [laughs]

Kate: I will, sort of, caveat this by saying that I have some strong personal opinions about ancient alien theory that I have been outspoken about on my Twitter more than once. So if you really want to come at me, I've said some things on Twitter about it.

Aside: I shall read you one of her ancient alien tweets. I went and found it. She said:

Ancient Aliens is scientific racism masquerading as nonsense entertainment, and people are always so sad when I'm like, "You're not allowed to like Ancient Aliens. It's scientific racism."

To which Dr. Lisa Munro, a PhD historian, concurred and said:

We're kindred spirits. Ancient Native people of the Americas built monumental structures and had SCIENCE AND WRITING.

That last part was in all caps, rightly so.

Kate: I think a lot of it is us seeing what we want to see. It comes down to this question of expectation, right? And yes, *Chariots of the Gods?* had a lot to do with that. *Stargate* certainly didn't help. ["It's not that easy. This is a replica of the Great Pyramid of Giza."] And I say that as a *Stargate* fan, gently.

There's been some sort of pop culture stuff around this that has really driven some of this narrative, but I think a lot of it comes down to seeing what we want to see, expecting to see something in ancient art, and then you say, "Well, this one image of what looks to be an airship in ancient South Asian or Indian art could be a UFO. Now I'm going to go back through all of the other art from the period from all over the world and see if I can find similar things." If that's what you're looking for, that's what you're going to find. So, besides my strong feelings about ancient aliens theory in and of itself, I think for many people it's just that you see what you want to see.

[clip from Ancient Aliens: "Is it possible that this incredible dagger has some sort of an extraterrestrial connection?"]

Alie: Jamie Pickles has a great question. Wants to know: Why is aerial footage always so grainy? When can those million-dollar jets get a video upgrade?

Kate: [laughs] Great question!

Sarah: [laughs] Yeah, I mean, UFOs are always about military budgets; this report and otherwise.

Kate: For sure.

Sarah: It would be great to have some clearer footage, and I have few doubts that, among the 144 cases in this most recent report, there are probably better sensor data than we ourselves have seen. But also, as the report says... I don't have it exactly in front of me, but it notes that these cameras and systems that catch other wavelengths like infrared or catch radio transmissions, they're not designed to pick up unidentified aerial phenomena. They're designed to help someone fly their plane and do so in combat.

Aside: You wouldn't ask a spatula to do a knife's job. Also, you shouldn't be talking to spatulas, period. But that's not the point. The point is: these are plane flying tools. They are not UFO photo booths.

Sarah: So they're not optimized for taking pictures of UFOs or UAP, just like your cell phone camera is not. And if you go outside and try to take a picture of the Moon, which I keep doing despite knowing that it doesn't work very well... It just looks like a bad, bright dot and it makes me mad. So I imagine if I saw a UFO and tried to take a picture, the same thing would happen and it's not totally dissimilar, maybe, from a jet where that's just not what it's optimized to do.

Kate: And I will say... Again, like, it always kills me when I have to be like, "In defense of the military..."

In defense of the military, they've tried. They have tried at various junctures to build sensors, cameras and otherwise, devoted to capturing UAP. Back then it was UFO phenomenon, right? Back then, devoted to trying to capture these things when pilots see them, and like, build them into the wings of planes so that when a pilot saw something he could just hit a button and it would take pictures with a bunch of different chemical filters and be able to account for various distances, and temperatures, and chemical makeups of whatever was out there.

I mean, they've tried this at multiple stages, and it turns out that, A, it's incredibly expensive for something that appears to have very little payoff, right? Very hard to justify budgetarily. And then even when you do get budget approval to do it, turns out that it's very hard to attach a camera to a jet plane and then get a good picture, period, let alone of something that is potentially engaged in some sort of high-speed maneuver. It's been virtually impossible to pull off, even with all of the resources ready at hand to the US military.

Alie: Do you think that this report is a little bit of a "Hey, we could use a little more money in these departments"?

Sarah: I can't say exactly what the motivation was, but that is explicitly part of its conclusions, that this would benefit from more funding that would support more data gathering and analysis programs. If the higher-ups listen to that, that is what will result from it, whether it's what was intended or not.

Alie: That makes sense. I always ask the last few questions of your favorite and your least favorite things about your job, but instead I would love to ask if either one of you has, like, a favorite UFO story. Either in history, or is there one that really drew you into a rabbit hole?

Kate: Who should go first?

Sarah: You go first. I'm blanking.

Kate: Okay. I'll just tell the Lubbock Lights story concisely. So, the Lubbock Lights is actually a pretty famous sighting in the history of UFO experience, and what makes it really jump out to me is because some of the biggest questions that I've loved to engage with in the process of working on the history of these things is professional scientists and military grappling with the questions of, like, who's a credible witness, who do we trust, what counts as good evidence, and how much evidence do we need before we declare something "unidentified"? How do we know for certain that we don't know what something is? How can we rule out every known phenomenon in the world, right?

So, the Lubbock Lights, they take place in the 1950s in Texas, and the first sighting is made by four physical scientists who are tenured faculty at the local university. They have, like, weekly or monthly stargazing parties, and they're out back with their big telescopes, drinking beer, looking at the sky, and they see these lights go overhead in formation. And they're like, "Wow. That's really wild." And they tell people about it.

And then they come back again a few nights later and they see these lights again, flying in formation, silently overhead, these small lights. At the same time, on the other side of town, a junior high kid with a camera takes pictures of these things, right? So now you have credible witnesses, trained physicists and astronomers, making these sightings across multiple nights. As they tell people, more people and more people are seeing the Lubbock Lights. We now have video. There's some sort of sensor return. Like, we're trying to get radar returns of these things. People are tracking their paths across various directions. They always seem to be going... I can't remember if it's west to east or east to west.

But these sightings are happening night, after night, after night, and you're gathering more and more data. So first, the Air Force is saying, "We need credible witnesses." Well, you have credible witnesses, right? You have these scientists. "Now we need pictures." Okay, well you have pictures. "Well, it has to happen more than once." Now it's happening nightly, right?

So, all of this data is piling up. And for a substantial period of time, months into years, the Lubbock Lights goes unsolved. At the end of the day, the Air Force is like, "We don't know what this is. We can't rule anything out." And at some point down the road, an ornithologist is looking through some other case files and comes across these Lubbock Lights and says, "Oh, I know what these are. These are ducks."

Aside: Are you dying? I'm dead. Someone play the bagpipes and post a blurry picture of me from our last hangout, because I am deceased. It was ducks.

Kate: This is a specific type of migratory duck that migrates over this area. And because now we have city lights – Lubbock isn't a small place – what you're seeing is the streetlights reflecting off the silvered breasts of these ducks as they fly overhead, which is why they're silent, why it's regular, why they're flying in that V-shaped formation.

Alie: Oh my god...

Kate: What I think is so interesting about this story is that, like, the Air Force keeps setting these bars, right? Like, "We need X, Y, or Z to be a credible sighting, to be worthy of investigation.

It needs this much evidence to be an unidentified flying object." And Lubbock continues to hit those bars, and the Air Force is always sort of trying to ramp up and say, "Okay, okay, we need more," and they continue to get that. And at one point they do. They say, "We don't know what this is. We can't explain these sightings." But eventually, you get the right expert in front of them and [snaps fingers] solved.

I love it. It's one of my favorite... The pictures are so good. There's tons of great data. It's a beautiful, beautiful piece of UFO history.

Alie: Oh my god. What the duck is that! It's amazing!

Kate: I know! The jokes write themselves.

Alie: [laughs] That's the best. I'd never heard that story. [laughs]

Kate: It's good. I love it.

Alie: What a huge threat. They're investigating us; they're going to poop on us.

Kate: Yeah, I was going to say, hide your cars. [laughs]

Aside: I looked at these photos. Imagine a black and white image on a very grainy, dusty chalkboard. It has a V-shaped constellation of white dots; kind of a blurry arrow of terror. And then you go, "Oh, it's ducks," and it becomes hilarious.

Alie: And Sarah, what about you?

Sarah: I think I'm going to take a different and maybe controversial tack and say that the most interesting sightings to me are the ones that I feel are the most common kind for just a regular person not flying a fighter jet. I think a lot about three people's sightings, and they're short so I'll share all three. One is, like, a 16 or 17-year-old-boy I met at a UFO conference who lived just over the Colorado border in New Mexico who saw a regular military aircraft that he said was followed by, like, a weird blue light just, kind of, accompanying it but then flew away and disappeared.

Another woman, who's been researching and gathering other people's UFO sightings for years and years and got into it first when she saw, kind of, like a pink half-moon light in the sky that appeared, flew fast, and then disappeared. And then a person I met who works at this place called the UFO Watchtower in Colorado where I am. She said she was talking on the phone to her mom, she saw a light in the sky that maybe had that classic cigar shape, and then it was flying along, and as soon as she hung up the phone it disappeared.

I think these all illustrate something that the historian Kate has mentioned a few times, Greg Eghigian had said to me early on in my reporting about UFOs, is that what people find so personally compelling about them in their individual experiences, it's not that something weird appears and does something weird, but after that it disappears and it's just gone. So, I think that is the experience of most people.

Aside: Maybe it's not what we find hovering above us, thirsty to sop at our human juices, but it's the Earthlings we've met along the way.

Alie: Do you both have, like, any lifelong friends you've met through UFO conventions, or reporting, or research? Any unexpected friendships come out of this?

Kate: In my personal life, sure. You meet people and you say, "I work on UFOs," then they're your friend for life, right? But I think one of the things I'm endlessly grateful for is the community of scholars, right? When I first picked up this project, I did get some side-eye, right? People

were like, "Hmm, you've got to be careful with this. There's a reason these files have been sitting in the archive for 50 years. You should be careful." And I was like, "Well, screw it. I think it's interesting so I'm going to do it."

And I just... the people you meet from all over, and all different walks of life, with all different interests, both academically and otherwise, I think, has just been such a gift. What a kick-ass community to get to be part of. I'm forever grateful to the UFO... As inconvenient as it can be at some times, I'm just glad to be part of this.

Alie: Sarah, do you have so many people saved in your phone with a UFO or an alien emoji?

Sarah: Yeah, right before the A names in my phone are just a bunch of flying saucer emoji people. [laughs]

I mean, I think one of the people I met in my reporting who had the biggest impact on me was a woman named Annie Ideker, the one I mentioned who worked at this place called the UFO Watchtower, which is a place where you can go camp and stand on this platform and look for UFOs. She had been, for a while, homeless and just trying to figure out what she was doing and had come to this place where the UFO Watchtower was. Gotten a job there, gotten a place to stay there, and it had really just changed her life a lot.

The people she had met, and the experiences they shared, and the experiences she had, it was just very meaningful for her. I think that really illustrates the kick-ass community aspects of the whole thing. If this is an interest that you have in common with people, especially if you have a personal experience, I think it can really bring people together. It was cool to see that happen for her.

Aside: The UFO Watchtower, sidenote, sits at the end of a remote road and there's a small, domed shelter with a rooftop patio built kind of like a scaffolding. And then the rocky driveway is home to some alien figurines and a Yeti mannequin, and a sculpture garden made by a collaboration of visitors who stack things like bent license plates, Mardi Gras beads, and probably a handful of spent glowsticks. There's a printed plaque, I looked it up, and it says:

Since the opening of the UFO Watchtower in 2000, over 25 psychics have visited and told the same story... there are two large Vortexes located on the east side of the tower. A Vortex is described as an opening to a Parallel Universe which is full of energy. We encourage visitors to leave something in The Garden to get their energy there as well.

It made me wonder how I would feel if I went there. And what would I leave behind? What if you had to pee and you unknowingly peed into the center of a vortex? There are more questions than answers. But not for long.

Alie: The last question I'll ask you both. I'm sure you get this one a lot. Do you consider yourself more of a Mulder or more of a Scully? [Scully: "Are you suggesting that the Philadelphia Experiment used alien technology?"]

Sarah: [laughs]
Kate: [laughs]

Alie: Or are we all somewhere in between?

Kate: I want to believe. I do! But I think that I'm more of a... I don't know.... I think I'm somewhere in the middle. I would say I'm probably more of a Scully, but like I said, I try really hard to remain agnostic. I believe that UFO witnesses have... I think their experiences are real and I

think that in an overwhelming number of cases, they've seen something. And I think they deserve our respect and our good faith, but I'm probably more of a Scully if I'm being honest.

Alie: No, this is why people are different, which is wonderful! [laughs] What about you, Sarah?

Sarah: I think I would say I am a Scully who indulges Mulder tendencies. I think sometimes, not just in UFOs but in any kind of reporting on or investigating topics, there's something to be said for indulging some of your wilder thoughts and then calling upon the Scully to come in like, "Okay, let's take this back down." So, I would say I'm Mulder and then I rein it in. Dr. Jekyll and Mr. Hyde, I guess.

Alie: Well, what a day to get to talk to you both. Your phones must be blowing up! I can't imagine how many emails have absolutely pinged you while we've been chatting. Thank you so much for accidentally confirming this appointment weeks ago and having it fall on the perfect day.

Sarah: I'm glad it worked out. Thanks for having us.

Kate: Yeah, it's been super fun. And like we said, what an auspicious day.

So ask intelligent life forms crackpot questions, because the truth is out there and we're all going to die one day, so you might as well ask. But the TL;DR from the ologist experts: We don't know what a lot of stuff is but that doesn't make it Martians.

Do you know how long people, smart people, doctor people, thought that germs were made out of ghosts and that washing your hands before doing surgery was superstitious and witchcraft? When you think of science, you think of all facts and answers, but the truth that is out there is that we don't know shit. We understand a literal fraction of the universe. Dark matter? Dark energy, which make up well over 90% of stuff in the universe? A mystery to our blobs of brains. So maybe ESP has an explanation. Maybe aliens exist. Maybe they like to hang out over Arizona. Who doesn't? We don't know. But for a long time, we also thought that lightning happened because God saw us jack off. So, there's a lot to learn.

But keep learning by following the links in the show notes to Sarah on Twitter, <u>@ScolesSarah</u>. Kate Dorsch is <u>@HPSKate</u>. You can <u>buy Sarah's new book</u>, and I encourage you too. So good. It's called *They Are Already Here: UFO Culture and Why We See Saucers*. That was just released a few weeks ago. And many more links will be up at <u>AlieWard.com/Ologies/UFOlogy</u>.

We are @Ologies on <u>Instagram</u> and <u>Twitter</u>. I'm <u>@AlieWard</u> on <u>both</u>. Thank you to Erin Talbert, who I've known since we were four, for adminning the Ologies Podcast <u>Facebook group</u> of great, wonderful Earthlings. Hello to all the *Ologies* <u>subredditors</u>. *Ologies* merch is purchasable via AlieWard.com or <u>OlogiesMerch.com</u>. Thank you, Shannon Feltus and Boni Dutch, for managing that. Emily White of The Wordary is a professional transcriptionist who makes our transcripts. Caleb Patton bleeps my potty mouth. Transcripts and bleeped episodes are available for free to anyone who needs them for any reason at the link in the show notes.

And stay tuned – Big news. Hot News. I'm hiding this at the end – for an *Ologies* spinoff show just for you littles, smologites. Yep! We have been working super hard behind the scenes to launch *Smologies*, which will be bite-size episodes of your favorite topics that are suitable for classrooms and kiddos, and just a refresher for your brain, all ages. Those will be birthed into the *Ologies* feed in a few weeks. Thank you, Zeke Rodrigues Thomas of Mindjam Media, for working so hard on those.

Susan Hale makes the Instagram quizzes. Noel Dilworth does the scheduling and the *Ologies* merch posts. The Mayor of BabeTown and my soon-to-be not-fiancé, impending husband, Jarrett Sleeper, has been cranking on edits. Thank you so much! And of course, big thanks to Steven Ray Morris, who hosts *The Purrcast* and *See Jurassic Right*. Nick Thorburn of the very good band Islands wrote and performed the theme song. They have a new album that just came out, Islomania. Go listen.

And if you do listen through the end of the credits, I divulge a secret. This week, I'm going to update you with some wedding stuff. It's fun. It's drama. We're getting hitched July 10th, and to be safe I just bought a few thousand dollars' worth of self-tests for folks to make sure that we are a Covid-free gathering. So, shove it up your nassholes, loved ones! It's going to happen.

Also, I still don't have shoes, but the rings and my dress are in the mail. Also, we're not registered anywhere because we're very lucky to have everything we need. We're not fancy people. People's presence is a present. So instead, we started a travel jar. So if any guests are hellbent on giving something, especially local folks, they can just toss in a contribution that we could disburse to folks traveling because weddings are not cheap to get to. So, I don't know, maybe wedding travel jars will become a thing. We shall see. Just throwing the idea out there.

Anyhoozle, thanks for listening. May your contacts list be filled with emojis.

Berbye.

Transcribed by Emily White at <u>TheWordary.com</u>

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And Dr. Kate Dorsch

Buy Sarah's new book, *They Are Already Here: UFO culture and Why We See Saucers*

Or Sarah's previous book *Making Contact*

A donation went to: Friends of the Denver Public Library

July 2-4, 2021: UFO Festival in Roswell

If there are 1000 UFO reports in the file but only one is true....

CBS Sunday morning news clip about Oumuamua

Beautiful graphics of UFO sightings via the South China Post

Hillary Clinton talking UAP

Carter spots a UFO

"It's happened again, people in southwest U.S. report strange lights in the sky"

UFO Watchtower Sculpture Garden

More photos of the UFO Watchtower

More on the Roswell incident

Black Triangles?

The Pentagon's alien search

The Covid-19 Economic Relief Bill

"We may not be alone"

What does Blink 182 have to do with astrobiology?

Navy pilot describes "tic tac"

Project Blue Book

The first "flying saucer" sighting in 1947