

TO THE STARS ACADEMY UNAFRAID TO INVESTIGATE THE UNEXPLAINED

Reimagining what's possible with an organization at the outer edge of science

Founding Blink-182 rocker and former Skunk Works exec band together to refute skeptics

BY MATT TILLER

"I DON'T BELIEVE IN ATOMS," said no physicist ever, because it is a fact that atoms exist. While most scientists have not seen an actual atom, there is an overwhelming body of evidence suggesting our basic understandings of atoms and subatomic particles are correct.

Democritus, the Socrates-era Greek philosopher-scientist, is credited as the first to introduce an atomic model of the universe. Around 400 BCE he used the term ἄτομος (atomos), meaning "indivisible," to describe the smallest element of matter. By the 17th century and the time of Isaac Newton, atomism was largely accepted in the Western scientific community as fact. Then in the early 19th century, English scientist John Dalton greatly improved the atomic model, ushering the relationship between matter and energy into

the discipline and tying it to chemistry. But still, it would be more than another century before anyone actually *saw* an atom through a microscope.

Today, thanks to the imaginative researchers at IBM, not only can we see atoms, but we can watch them perform in a short film available online, *A Boy and His Atom*. The one-and-a-half-minute video features animated carbon monoxide molecules taking the shape of a stick figure boy who befriends an atom. The atom first appears as a ball and interacts with the boy in various forms. While it didn't win any Oscars, the 2013 video does hold the Guinness World Record for the smallest stop-motion film.

Technology of this magnitude came from efforts in many scientific fields. IBM's film would have seemed magical to Democritus, but even if it were shown only 30 years ago, surely many

would deem it a hoax. That's because we did not know then what we do now. What's more, there are things once thought to be true that are now known to be false thanks to scientific advancements. For example, bats are not blind, deoxygenated blood is not blue, nor do humans use only 10 percent of their brains. The ideas of Democritus and Dalton paved the way for futuristic technologies like plastic polymers and DNA tests. So what technologies from the future would appear magical to us today? More specifically, what are we observing today that seems magical, unexplainable, or elusive?

For decades, many people around the world have reported seeing unexplained aerial phenomena. This includes anything from a luminous orb to a flying disc, and any serious inquiry of the matter could get you

ostracized from intellectual circles. But there are serious people in serious organizations willing to investigate the unexplainable rather than explaining what remains largely uninvestigated. My curiosity about this topic led me to talk with one such individual, and after our conversation, well, I don't think we should be laughing.

SCIENCE, AEROSPACE, ENTERTAINMENT, ANALYSIS

There exists a worldwide occurrence that defies our understanding and appears as seemingly magically as it disappears. Many people have heard the terminology: unidentified aerial phenomenon, advanced aviation vehicles, flying saucers, etc. All of these phrases describe something that cannot accurately be explained but is real nonetheless.

From 2007 to 2012, the Pentagon operated the Advanced Aviation Threat Identification Program (AATIP) for gathering quantifiable information about these exotic flying machines to assess the possibility of a threat. AATIP collected and analyzed electro-optical data, radar returns, signature reduction, thrust vectoring, and many other types of data. All of this information yields credence to the idea that "We may not be alone," as Luis Elizondo, former director of AATIP, stated during a December 2017 interview with CNN. Logically, many questions arise: Who are flying these objects? Where do they come from? Why are they here? Instead of chasing endless guesses, AATIP sought to answer one question: Are they a threat? In short, no, they do not appear to be a threat.

While gathering this data, AATIP researchers observed what they believed could be advanced technology represented in these machines. And yet another question arose: Can we use this technology to humanity's benefit? This is the question that a public benefit corporation called To The Stars Academy of Arts & Science Inc. – To The Stars Academy or TTSA for short – is trying to answer.



Tom DeLonge launched To the Stars in 2017 with respected scientists, engineers, and researchers.

In October 2017, To The Stars Academy of Arts and Science launched, announcing its intentions to learn more about this advanced technology in order to improve the quality of life on Earth. The organization garnered immediate attention not only for the bold questions it sought to answer but also for the celebrity of its founder, Tom DeLonge.

DeLonge is the former singer and guitarist for Blink-182, a now-disbanded pop punk trio that has sold more than 50 million records worldwide. (DeLonge currently fronts the rock group Angels & Airwaves, which has also found mainstream commercial success.) Today, Tom is the President and CEO of To The Stars Academy, which maintains three divisions: science, aerospace, and entertainment.

On the entertainment front, TTSA made recent headlines with the development of a fictional paranormal TBS series, *Strange Times*, based on the graphic novel of the same name

that DeLonge coauthored in 2015. Its development highlights an unequivocal intersection of art and science that some critics find risky. TTSA also made recent headlines from mischaracterized claims that the organization was \$37 million in debt, based on since-retracted reporting citing an SEC filing statement on shareholder equity.

On the TTSA website, one can find merchandise, such as T-shirts, stickers, books, and posters, caricaturing unexplained phenomena. The products might be juvenile for some but fashionably cool for others. Still others see the entertainment division as contradictory to the serious research TTSA has undertaken and the credible talent DeLonge assembled to assist in TTSA's efforts, including the aforementioned Elizondo; Steve Justice, who retired as Director of Advanced Systems at Lockheed Martin's famed Skunk Works program; Hal Puthoff, former National Security Agency

researcher and advisor to NASA; and Jim Semivan, who spent 25 years in the CIA's Directorate of Operations.

In July 2018, the science division launched the ADAM project (Acquisition and Data Analysis of Materials), which endeavors to analyze materials reportedly from advanced aircraft of unknown origin, similar to the ones observed by AATIP. The TTSA blog states the exotic materials, coming from "private citizens, foreign aerospace investigatory committees, aerospace operators, and government organizations" will be analyzed for technological innovation.

Naturally, I had questions. So I contacted To The Stars Academy and was given an interview with Steve Justice, the Chief Operations Officer and Aerospace Division Director for TTSA.

MOST OF SOCIETY IS AFRAID TO ASK

Justice began his career in the aerospace defense industry and in 1984 joined Lockheed's Skunk Works, an innovation and development arm of the company credited with developing such famed aircraft as the U-2, SR-71 Blackbird, F-117 Nighthawk, F-22 Raptor, and F-35 Lightning. Justice himself held roles on programs for the F-117 and F-22. Along with being credited with numerous patents, he has also received the company's NOVA Award (its highest recognition for achievement). Justice joined To The Stars Academy in September 2017.

"To The Stars is a group of people who came together to answer the questions that most of society is afraid to ask," Justice told me. "There's this overwhelming body of evidence that [indicates] something strange is going on."

While it seemed to me that evidence of this profound nature would be met with great interest by the public, Justice said that the stigma of unidentified aerial phenomena (UAP) hinders widespread investigation. In discussing UAP with

officials from the government and the private sector, he can usually put their response into one of three categories: positive (they remain silent as you speak and promptly change the subject), typical (boisterous laughter, eye rolls, and sarcasm), and negative (outright attack).

Justice and others at TTSA remain undeterred by ridicule for investigating such phenomena. "Why would you not want to seek answers to



"If we go into any study with a preconceived notion of what an answer is, we will automatically tune out the possibility that it's anything else."

that?" he said. But skepticism isn't TTSA's only challenge. "Based on my 39-year career in aerospace, money is always a problem," Justice said. "We have a lot of stuff ready to go but just no resources to do it."

When I asked how the first year of TTSA went, the first thing he said was "slow."

Still, he and others at TTSA consider the start of the ADAM research project a major milestone. Naturally, the idea of analyzing exotic, perhaps extraterrestrial, materials in search of technological innovation draws scrutiny. Justice,

however, insists on an openminded and thorough approach.

"I'd like people to understand if we go into any study with a preconceived notion of what an answer is, we will automatically tune out the possibility that it's anything else," he said.

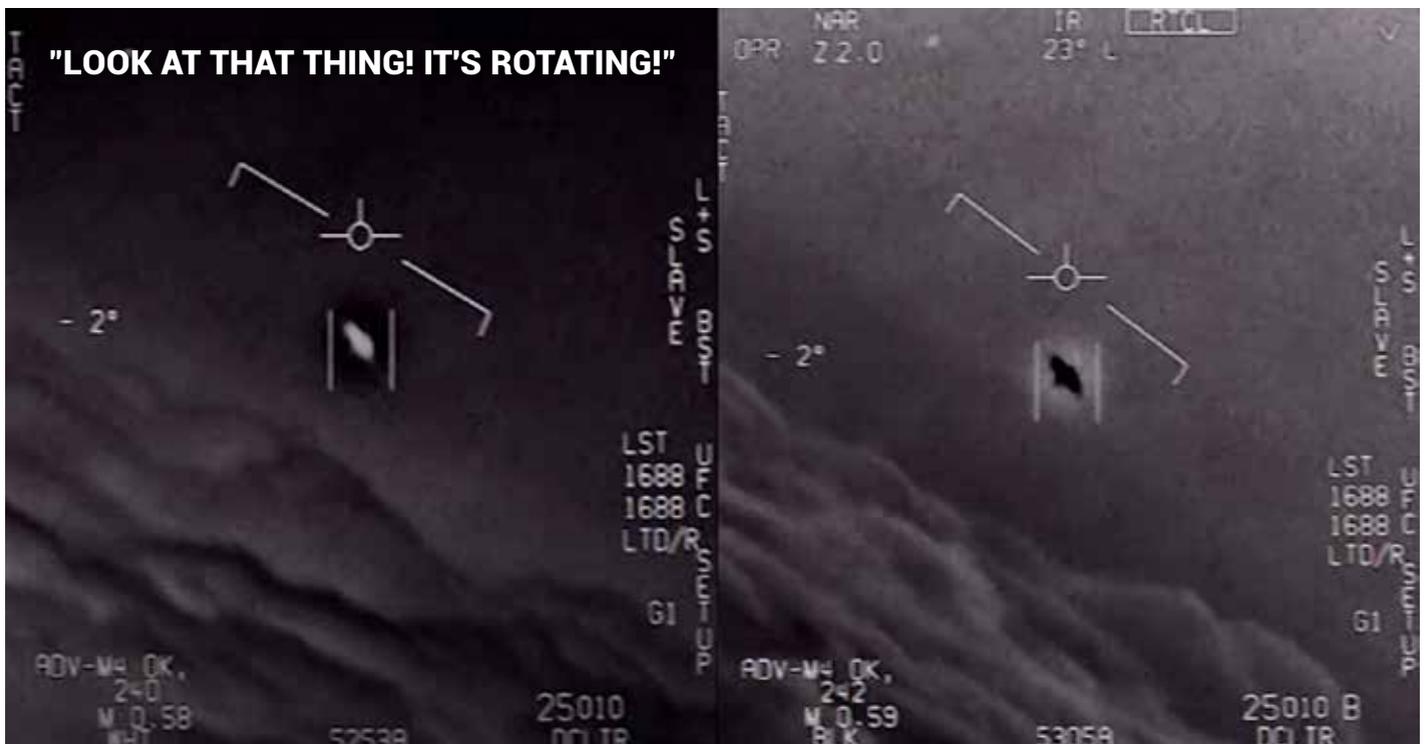
Fair. But what if you're almost certain that material you're analyzing is just an old plane propeller?

"So, even if there's stuff that may [have a] low probability of being something different or unique, we're obligated to make sure that we're not arbitrarily dismissing something that could be a piece of a puzzle in solving this problem," he explained. "There is a multistep process that we go through to determine if there's anything unusual about the material."

TTSA describes its study of these materials of unknown origin as scientifically rigorous. "As soon as TTS Academy is notified that materials are available, a thorough effort will be made to document their origin and credibility, followed by the establishment of chain-of-custody procedures and ownership protocols," the organization's website states. TTSA has a contract with EarthTech International Inc., a research think tank in Austin, Texas, founded by Puthoff, to analyze the materials, evaluating them for such characteristics as exceptional strength, lightweight build, or other unusual properties.

But TTSA's aims go beyond just identifying the nature of materials of unknown origins. They want to figure out what the stuff actually *does* and in the process develop theories about how a mechanism is being used. "We have a glimpse into the physics that can explain what we are seeing," Justice said, drawing on some of the AATIP evidence. "The question is how do we reduce that to practice? You have to turn it from a theory into a technology that realizes the physics and embed that technology into a platform that it mimics what you have observed."

Indeed, it's a challenge taking small fragments of material and trying to



TTSA analyzes videos like this one (tinyurl.com/ydxrut8m) of a mysterious object intercepted by a U.S. Navy F/A-18 in 2004.

tie them to an unknown mechanical process. “It’s like finding an exhaust valve to a V8 engine out in the desert, not knowing it’s an exhaust valve, and trying to reverse engineer the car,” Justice said. “You need to collect all these different types of material to try to build a picture of what the realization of the technology may be. So the ADAM project is trying to quantify these materials by using standardized processes and documented approaches to see if it’s something traceable to realized technology.”

And beyond figuring out what the materials are and what they can do, TTSA’s ultimate goal is to leverage new technology for the betterment of mankind.

“We have no idea how this technology, this expanded physics, could change our lives,” Justice said. “You know, around 2000 you didn’t know you needed a smartphone, and now you can’t live without it. Somebody had the vision to create something you didn’t know you needed.”

And just how could newly discovered technologies benefit human-

ity? Most notably, Justice discussed how the observed technology could improve emergency response services, delivering supplies “instantly, right where they’re needed” for medical support, law enforcement, and disaster victims. How could scientists make this happen? Well, that takes a little imagination.

“Science and imagination are absolutely linked together as we’re trying to break new ground,” Justice said. “If we try to examine the evidence that we have in the context of our current understanding, we’re going to get nowhere. As I said [in October], one of the challenges is to stand in the future and look back, as opposed to standing in the present and looking to the future. Our challenge here is to use imagination to stand in the future and look back.”

Science. Imagination. And ambition.

“The future ahead of us is incredible,” Justice said. “The impossible is just something you haven’t seen yet, and there is a lot of impossible out in front of us. So, watch not only us, but

look elsewhere and watch the impossible become possible.”

DEFY OUR CURRENT UNDERSTANDING

From Democritus to IBM, atomic theories and evidence of atoms led to physical proof captured by microscopic cameras. If TTSA possesses materials from exotic aircraft, these machines can be seen in flight, correct? If so, is there credible evidence?

Between December 2017 and March 2018, the Department of Defense declassified three United States Government military videos of UAPs, releasing them directly through TTSA with chain-of-custody documentation. Each video contains data attainable only from physical evidence – the same data points as ATTIP.

Lift, drag, weight, and thrust are the four forces of flight. These advanced aircraft defy our current understanding, and they appear magical to us today. They might operate in ways that seem impossible, but, as Justice said, the impossible is just something you do not understand yet. 🤖