

Observing The Anomaly

- Unidentified Aerial Phenomena and Other Anomalous Observations With An Emphasis On Using Known Technology And Theory To Better Understand The Observations

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Forward

This work is a culmination of research published on various subreddits by myself, u/efh1, over the course of 6 months. It's presented in a format similar to reddit for this reason. Very little has been changed from the original posts. It's presented in chronological order with a link to each post in each chapter title. The purpose of this work is to compile and archive the research, thoughts and discussions. All of this work is in the public domain, including this book. This book exists as an easier way to access the work of the author as well as a way to reach a new audience. It's also a mechanism for readers to support the author financially for the many hours of hard work if they so choose. Much of the posts are on r/ufo and r/observingtheanomaly. I made [r/observingtheanomaly](#) during the course of this work as a way to share the research and start a better discussion than what is normally found on more popular subreddits. Feel free to check it out.

This work is not a debunking of the subject. It's an open minded skeptical approach to the topic with a focus on physics and materials science. An entire chapter is devoted to reports from throughout history and it's one of the more mystifying portions of the work because I have no explanation for reports of "flying" objects long before humans discovered the physics of flight other than what some call the "other" category.

As interesting as the "other" category is, I'm most concerned with the topics of energy and propulsion because I believe the pragmatic approach is to try to learn and invent. I'm also of the mind that there are multiple explanations for what is being observed.

There are a lot of terms and acronyms that you may not be familiar with so I'll share some below.

TLDR - Too Long Didn't Read (common reddit slang to summarize the main points on a long post for lazy people that won't read all of it.)

UAP - Unidentif Aerial Phenomena

UFO - Unidentified Flying Object (not flying saucer nor aliens and somewhat distinct from UAP, but often used interchangeably.)

AAWSAP - Advanced Aerospace Weapons Special Access Program: This is a verified government program run on Skinwalker Ranch with Bigelow Aerospace that preceded AATIP. A book has been published by people involved in the program called Skinwalker's at The Pentagon.

AATIP - Advanced Aerospace Threat Identification Program: This is a verified government program that was spun from AAWSAP and covered by the New York Times as the government's UFO program with Lue Elizondo as the lead.

DIRD - Defense Intelligence Reference Document: 37 documents commissioned by Hal Puthoff during the AAWSAP program. Leading researchers in their fields were asked to write papers covering where the most advanced technology in their fields and where they think it will be in 50 years.

Here is a google drive link to all the DIRDs plus some related reading material below.

<https://drive.google.com/drive/folders/157TTDiyRIId02tL9Q6dgW0Egn0P2olOa7?usp=sharing>

Here is a dropbox link to all the DIRDs below.

<https://www.dropbox.com/sh/95tgfd2lljqrve3/AABKI58mfojoZjNiKEZAz8gMa?dl=0>

The Link Between UAP and Nuclear Technology.

I've become interested in the phenomena over the last 5 years and done a lot of research. I'm actually an "experimenter" myself. I had a profound experience as a child that I largely never spoke about for most of my life and basically forgot about until 2017. Before researching the topic deeply post 2017, I was very deep into fusion energy research going back to 2012. UAP's are real. There is a nuclear connection. These are two facts as most of you already know.

Most people seem largely unaware about the difference between nuclear fission and nuclear fusion. $E = mc^2$ unlocked the atomic bomb, but apparently never unlocked atomic energy. Most people think of dangerous radioactive nuclear fission plants when you talk about nuclear energy, but that's not the full story. Fusion energy does not require radioactive fuel sources or byproducts. Fusion energy has been the holy grail since we discovered $E = mc^2$. It would create cheaper, more abundant energy much more safely and absolutely sustainably and cleanly. Again, it's the holy grail. It can even be decentralized. Scientists have known fusion energy is the holy grail of energy for almost 100 years, but it's never been achieved (at least publicly.)

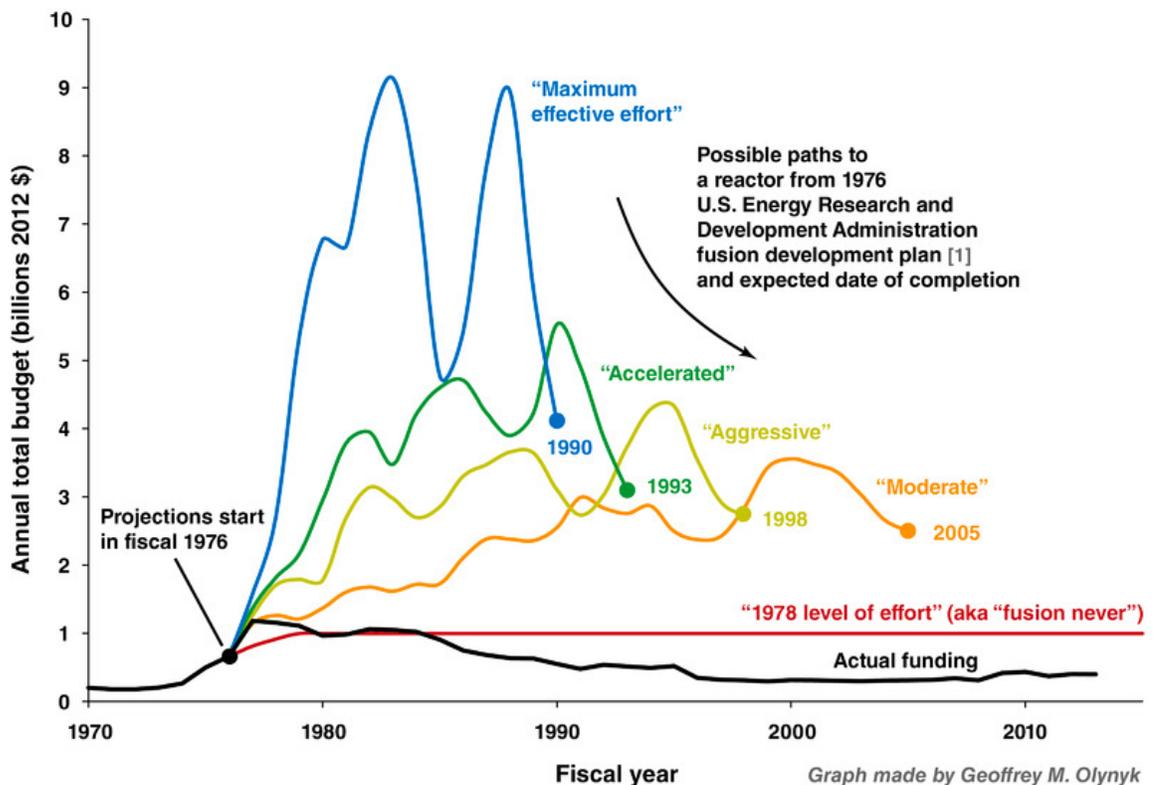
Small reactors that don't create radioactive chambers and directly convert the nuclear energy into electricity are possible.

https://en.wikipedia.org/wiki/Aneutronic_fusion

Why hasn't it been achieved? Gross underfunding for one. Secondly, lack of political will and general knowledge about its promise. The subreddit for fusion energy is 10k people. The budget for fusion energy isn't even 1% of the energy market. Most efforts for alternative energy or green energy focus on wind and solar. The

Department of Energy (DOE) was created specifically to fund fusion research in 1977 during a time when the energy crisis was in the public's awareness and fusion energy had political proponents. There was even the Magnetic Fusion Energy Engineering Act of 1980, which planned to fund fusion energy with a target to achieve it by 2000 and it had overwhelming support. Long story short it never happened. It was never funded and people forgot about it. The numbers are so atrocious it certainly is disconcerting to those that understand how important nuclear fusion is to humanity. Many projects in the 1980's that were making huge advancements were decommissioned for budgetary reasons. Books could be written on the subject and have been.

https://21sci-tech.com/Articles_2014/Suppression_Fusion.pdf



[1] U.S. Energy Research and Development Administration, 1976. "Fusion power by magnetic confinement: Program plan" ERDA report ERDA-76/110. Also published as S.O. Dean (1998), *J. Fus. Energy* 17(4), 263–287, doi:10.1023/A:1021815909065

Okay, back to UAP's. People love to speculate on wild leaps in technology such as space-time metric engineering, interdimensional

phasing, time travel etc. These are all very interesting topics, but how did we skip over fusion? We are speculating the US government may have secret anti-gravity machines and ignoring fusion energy. How did we go from $E = mc^2$ bombs and skip over energy production straight to space-time metric engineering? It's illogical. The energy it would take to warp space time would be enormous. It's the missing piece of the puzzle.

If you look at the list of scientific papers funded by AAWSAP, 4 of the papers are on fusion energy with 2 being aneutronic and one 1 for propulsion.

<https://www.thedrive.com/the-war-zone/26056/heres-the-list-of-studies-the-militarys-secretive-ufo-program-funded-some-were-junk>

General rule of thumb is that military technology is about 50 years ahead of what's in the public domain. Most people don't realize this but there are lots of reasons to believe fusion energy is very close to reaching the public domain. I know of a couple small outfits with very good results that think they are only a few years away from demonstrating net energy (more energy out than in.) We've seen a huge increase in investment money into fusion energy research in the past 2 years. I suspect once net energy is announced we will see a giant influx of investment and commercialization could happen in only 10 years. There is no science to be invented. It's not time travel or cold fusion.

So, let's pretend this happens in 10 years. General rule of thumb says the military had it 40 years ago today. That's around 1980. Speculative I know. But the point is if we are entertaining the notion that the US government has anti-gravity machines then why can't we speculate they have fusion energy?

When we first demonstrated $E = mc^2$ with the atomic bomb we created the first doomsday scenario with nuclear proliferation. It wasn't long before nations were all pointing nuclear weapons at each other and we had to consider mutually assured destruction. This threat still exists today. In the 1970's the complete unsustainability of

our societies due to limited resources and a model that relies on ever growing population and consumption led to the first energy crisis. Oil prices destabilized and inflationary issues arose. Nuclear energy had yet to get a bad PR image. There was hope. Then things changed. The notion that fusion energy was too difficult and far away became prominent as it is today (assuming you even know what it is.) It got thrown in the too hard to try category by those in the know and completely ignored by those outside the know and considered all nuclear technology bad. To this day we still face the same energy crisis. Our societies are not sustainable. The general belief is that we either need to use less energy or de-populate. It's sad because the truth is we just need to figure out fusion energy and the crisis turns into a utopian revolution.

The same scientists that worked on the bombs in the 1930's were working on fusion energy R&D immediately after the war was over. If we really haven't made any secret advancements on this we are in serious trouble. If we have, well I have a lot more I could elaborate about. There are some legitimate reasons to hide the technology. Unfortunately, there are also a lot of illegitimate reasons to suppress it. It would effectively end fossil fuel wars, nuclear weapons production and avert clean water wars. The people with the most to lose would be the only losers.

I'd like to speculate a bit and point out that IF there are advanced ET's or something of that nature that somehow evolved in a similar way as is being claimed by many, then that implies they are well aware of our situation. Mathematically, human civilization is only sustainable if it masters fusion energy. We are very likely to blow ourselves up fighting over fossil fuels until we figure this out. Even if we don't initiate mutually assured destruction via nuclear weapons we will experience economic collapse. People will eventually either starve, get sick or kill each other over the situation. If there is another advanced civilization that resembles us they likely went through this period as well. They would know it's a dangerous period and that humans may not make it. Therefore, they would have little interest in us until we can get past this point. We need to become an advanced

sustainable society to be worth engaging on a serious level. We also likely can't be interplanetary in any substantive way without fusion energy. We would just be going from one planet to the next destroying them until we got stuck on one and died off. **IF there is ET, we have to figure this out on our own and only then can we even sit at the kids table.**

[Hal Puthoff and Ken Shoulders](#)

Hal Puthoff is a huge part of the UFO discussion. He's one of the few physicists that takes the subject seriously and is part of To The Stars Academy (TTSA.) He has claimed to have searched for maverick inventors with his company EarthTech to find innovative propulsion and energy sources to no avail. However, another very credible physicist who also worked at Stanford Research Institute (SRI) worked with Hal in the 1980's to do just that and claims it was successful. I want to share his work and figure out why Hal's connection to it hasn't been discussed. Let's reach a consensus if there is something here and if we should try to ask Puthoff about it.

Hal Puthoff's connection to the UFO topic is well established. He is a part of TTSA and has been researching the topic for years with inside access to materials, scientists and government officials. His career is very interesting having been involved in the CIA's project stargate remote viewing program. These details are well known. His connection to Ken Shoulder's, however, appears to be under the radar.

https://en.wikipedia.org/wiki/Harold_E._Puthoff

Who is Ken Shoulders? Ken Shoulders was an experimental physicist and "father of vacuum microelectronics" with a career at SRI and multiple patents.

https://en.wikipedia.org/wiki/Kenneth_R._Shoulders

More interestingly, he spent the last half of his life researching what he called "exotic vacuum objects" or EVO's and this work was done in conjunction with Hal Puthoff. Ken claimed that he had found a new source of energy in these strange plasma objects and all of his work has been archived by his son. The claims made by Ken are that he found a way to create charge clusters that basically violate known laws of physics and that he could repeat the results. His claims are similar to those made by LENR and cold fusion advocates except that

he actually was getting reproducible results and documenting everything. I've found a link to the archives and there is a wealth of his work available to the public except for a few CD's and DVD's that are inexplicably unavailable to researchers until 2065.
http://dla.library.upenn.edu/dla/pacscl/detail.html?id=PACSCL_SCIHIST_2015003USpaphchf

This is the most extensive story I could find on the subject.
<https://www.sciencehistory.org/distillations/the-frontiersman>

Ken published a book about his research in 1987.
https://freel.tech/charge-clusters/publications/shoulders/1%20-%20Ken%20Shoulders_EV,%20a%20tale%20of%20discovery.pdf

I find Ken Shoulder's work fascinating as he appears to have been a very credible scientist and inventor and his work was inspired by well documented anomalous results by other scientists such as Winston Bostick.

https://en.wikipedia.org/wiki/Winston_H._Bostick

Hal Puthoff being the interesting person that he is makes me wonder why nobody else has stumbled upon his connection to Ken Shoulders? He's not just the remote viewing guy or the UFO physicist, he's also the EVO guy. I'd love to ask him some questions about EVO's and Ken Shoulders.

[A Control Mechanism](#)

This one may get controversial. I've noticed a trend I can't ignore. Jacques Vallee does a remarkable job pointing out how the phenomena seems to be acting as a kind of control mechanism for the human species. If you're not familiar with this idea I suggest his books Invisible College and Messengers of Deception.

<https://www.amazon.com/Invisible-College-Scientists-Discovered-Influences/dp/B09HY7M5CB/>

<https://www.amazon.com/Messengers-Deception-UFO-Contacts-Cults/dp/097572004X>

Lue has an interview where he claims the reaction to knowing what he knows would be described as "somber." After I elaborate on this trend that statement will make sense. The recent book Skinwalkers at The Pentagon <https://www.amazon.com/Skinwalkers-Pentagon-Insiders-Account-Government/dp/B09HR54GQF> highlights the AWWSSAP program that preceded AATIP. In the book they explain how the phenomena has been documented with lots of evidence to make people sick. They also document that observing the phenomena has been shown to be contagious like a virus. They observed it spreading amongst friends and family after leaving the ranch.

In an interview on Theories of Everything, Lue explains DNA would probably be the best type of evidence of the phenomena. This doesn't necessarily mean DNA of an alien. DNA has information encoded in it. Our DNA could have important evidence within it. Understanding the mutations of a virus can provide evidence. With advances in current DNA technology the evidence may be very close to the surface with basically no way of suppressing it.

People seem to forget that before we went to the moon one of the biggest fears was potentially spreading some kind of moon plague.

We didn't know if there were any living organisms up there, but if there was bacteria, fungi or viruses the potential to create a plague is very real. I'm surprised at how few people speculate that perhaps the reason contact is so rare is because it could spread disease. Whether we are dealing with ET, interdimensional beings, time travelers, or a hidden species the threat of spreading disease is very real.

During the times of Black Plague there were reports of cigar shaped objects spraying mist in the air.

https://www.reddit.com/r/HighStrangeness/comments/ezir5u/bizarre_account_from_the_dark_ages_of_cigar/

The Our Lady of Fatima event and subsequent "miracle of the sun" is largely viewed as a religious event, but UFO's were seen and Jacque Valle explains in Passport to Magonia <https://www.amazon.com/Passport-Magonia-Folklore-Flying-Saucers/dp/0987422480/> why this event qualifies as a UFO event. It was witnessed in Oct of 1917 in Portugal by 30k-100k people. The Spanish flu outbreak started in Feb of 1918.

In 2019 UFO/UAP cases saw a dramatic increase. Then we had covid-19. Despite modern technology and a worldwide effort the exact species to species mutations that led to the covid-19 outbreak has never been discovered. Nobody, not even in the UFO community, is speculating it came from aliens. That would be crazy. Clearly I'm speculating. I could be 100% wrong. I just want to point out that if the jump to humans was from a species that doesn't officially exist or if patient zero was working in a covert black budget program I think we all know it's highly unlikely any of that would be revealed publicly.

This isn't supposed to be a discussion about covid and its origins. It's supposed to be about applying disease models to the control mechanism hypothesis. It doesn't require covid to be an actual example. Additionally, we are absolutely in the dark at the moment of any 100% proof of the origins of covid. It's not baseless speculation. Baseless speculation would be saying covid came from Mars. I'm simply saying the phenomena could've played a role in it or perhaps

other diseases. The reason this hypothesis is interesting is because it's testable. If it was the case we could potentially find evidence of it.

The phenomena acting as a control mechanism for the human species and potentially being involved in Black Plague, Spanish Flu and Covid-19 is certainly a somber realization. When Jacques Vallee first proposed the control mechanism hypothesis it was more about using memes. Giving us ideas and influencing ideologies and religion. Influencing war and government. Now we are considering the use of disease, which also spreads like memes. Both are viral and influential. Both will shape our societies over time. It implies we are treated collectively like a petri dish. Somber.

The Boomerang

I would like to introduce you to a drone first developed in the 70's by an eccentric inventor by the name of Ken Shoulders.

This drone "looked like a giant maple seed, the kind that pinwheels down when thrown in the air. But the craft's odd appearance belied the cutting-edge technology onboard. It was able to avoid collisions by bouncing sound waves off obstacles, similar to the way a bat uses echolocation to navigate." He called it The Boomerang.

<https://www.sciencehistory.org/distillations/the-frontiersman>

This work was done under the company name Vertitek. In 2006 a company called VeraTech Aero Corporation had an article written about the exact same drone concept being commercialized and used in a way that when it spins it becomes invisible to the eye and captures 360 images.

<https://www.nytimes.com/2006/12/10/magazine/10section1A.t-8.html>

Vertitek as a company does appear to currently exist as a subsidiary of another aerospace corporation called Valmie and apparently makes racing drones.

<https://www.businesswire.com/news/home/20150128005270/en/Valmie-Resources-VMRI-Signs-Definitive-Agreement-to-Acquire-Vertitek>

Ken was a prolific inventor that worked on many things outside of drones as well. His work has been archived by the Chemical Heritage Foundation Archives, Philadelphia, Pennsylvania

http://dla.library.upenn.edu/dla/pacscl/ead.pdf?id=PACSCCL_SCIHIST_2015003USpaphchf

Here is a list of patents obtained by a simple search(may not be complete.)

<https://patents.google.com/?inventor=Kenneth+R.+Shoulders>

Why is this related to UAP/UFO's? When we are trying to figure out what UAP/UFOs are we inherently are trying to identify something we are observing that is non-obvious. Therefore, becoming acquainted with all known forms of drones including the lesser known is an important part of the process. Additionally, the history and details around certain inventions and inventors is also important to look at. These people and their ideas help us expand our thinking to include explanations we may not have considered. Also, following the cutting edge of industry will help us make informed decisions about who may be behind the "odd" thing we are looking at. The more we can identify "odd" crafts the better we will become at hyper focusing on the truly out there observables. If there is something to find we need to narrow the search. If there's nothing to find we will eventually identify most observables.

Additionally, it is very interesting that Ken clearly was ahead of his time in so many ways. He did some odd research into alternative energy sources that I also think deserves some attention.

[A 5th State of Matter](#)

The information-mass-energy equivalence principle was first proposed in 2019. I immediately realized the implications it would have in explaining the UFO mystery. If information can be converted to mass and energy then, advanced quantum computers could be used for space-time metric engineering. It's as simple as that. This theory is very akin to the idea that we are in a simulation.

<https://www.zmescience.com/science/news-science/information-energy-mass-equivalence/>

He has 3 papers published on the subject.

<https://aip.scitation.org/doi/10.1063/1.5123794>

<https://aip.scitation.org/doi/10.1063/5.0019941>

<https://aip.scitation.org/doi/10.1063/10.0009785>

This would be a revolution in physics if it was proven true. We basically require new physics to explain some UAP. Well this would do it. Instead of just $E = mc^2$, it would be $I = E = mc^2$. This would give us the ability to use our ever increasing data storage and processing technology to eventually reach space-time metric engineering capabilities. It would have to be at the level of quantum computing as right now the effects would be too minuscule. But an advanced quantum computer could create enough information to convert the energy powering it into mass in a controlled way for engineering purposes if this theory is correct.

Truth Embargo

Data is king. I agree. We must follow the data and remain skeptical. However, we must also keep an open mind. The most important aspect of this is the science behind it. If we are observing an anomalous phenomena we are observing anomalous data. There are numerous examples of anomalous data outside of traditional UAP investigation. Some of us are open to Hal Puthoff's research into remote viewing at SRI and project Stargate. Consciousness has been an area of interest for some despite the lack of much scientific understanding of that topic. My point is we are clearly willing to venture into unknown "paranormal" territory. I'm a little confused at how few of us are venturing into the "fringe" science or territory of LENR and "cold fusion."

Perhaps these words carry the same stigma as "alien" or "ufo" and you immediately want to distance yourself from those that talk about wild conspiracy theories related to cars that run on water. I get it. That's understandable. I'm not convinced the water engine is real either. It sounds crazy for sure. I'm not proposing we investigate and discuss these topics as a "believer" in them. I'm pointing out that we have sufficient evidence that we have some sort of gap in our understanding of physics in UAP's. We also can infer that it leads to a potentially new energy source. That's a big deal.

There have been numerous reports from both laymen and credible scientists of what the media called "cold fusion" dating all the way back to the 70's and 80's. They continue to this day. Of course, these claims can be attributed to mistakes, errors, fraud and hoax. However, just like the UAP phenomena this creates a stigma to not take the subject seriously or investigate it. One does not want to look like a fool. One important point often overlooked is that if there is truly an anomalous scientific result, then it's not surprising if it can't be repeated or replicated and that doesn't mean that there is nothing interesting there. If there is some result that is real, but can't be

understood scientifically then it may be very difficult to verify and look like an error.

I'm not a fan of rampant conspiracy theory. Yes, a truth embargo is a conspiracy theory. Allow me to explain how we can be our own worst enemies. If a brand new effect or aspect of science is discovered that could lead to a revolution in physics and industry never before seen, people want credit. They want to earn the Nobel prize and/or the patent. They want the discovery attributed to them and all the riches and glory that go with it and rightfully so. There's nothing necessarily wrong with that. The problem is that this leads to secrecy. Perhaps you find an investor, but they want you to keep it secret. Perhaps you are looking for an investor, but you're afraid they will steal it from you. Perhaps you try to open source it and you are ridiculed and have your career destroyed. Perhaps you honestly thought you understood how it worked and could repeat the results and then it stopped working and you couldn't figure out why. If you already accepted investments you may now look like a fraud, especially if you worked in secret.

We have seen that there is an ability to suppress information related to the UAP topic. Is it a stretch of the imagination that this can manifest itself in the scientific community and academia? That alternative energy research would be an area subject to the same kind of truth embargo?

I've begun my research into this topic and I'm amazed at how many credible scientists have made claims of "cold fusion" only to destroy their reputation and career. I'm sure there were honest mistakes made, but does that account for every case? There is a shocking amount of material that suggests many independent groups have in fact discovered some new nuclear process that leads to transmutation and unaccounted for energy production. Not only is that a big deal, but transmutation is some pretty hard evidence. I'm shocked. There are published scientific papers. There are very credible scientists and organizations working on this. Hal Puthoff being one of them.

Hal Puthoff worked with Ken Shoulders on EVO's. He also has connections to project SAFIRE. SRI has done work related to the subject. There's the [Martin Fleischmann Memorial Project](#), which is open sourcing the science behind this subject. There's so much I honestly don't know how to recommend you begin. I'll simply share this interview between Ross Coulthart and Bob Greenyer.

<https://www.youtube.com/watch?v=7rsHAd9GzLU>

This is my attempt to get the UAP subject to move forward into the science of how the energy and propulsion systems may work. We are living through an energy crisis. We face existential threats. Whatever breakthrough we may find could be a revolution for humanity. When I look at UAP that's what I see. I see proof that we can still solve the energy crisis. I see proof that there is something possible that we have yet to figure out. It gives me motivation to try to figure it out. Who is behind it? I don't know, but let's figure out how it works.

[The Nimitz Incident](#)

One paper is peer reviewed and authored by at least one PHD physicist. The other paper was authored by a very large group of scientists and professionals from the Scientific Coalition of UAP Studies.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7514271/>

<https://drive.google.com/file/d/1uY47ijzGETwYJocR1uhqxP0KTPWChIOG/view>

These objects were measured to be moving at speeds that would require the energy of multiple nuclear reactors and should've melted the material due to frictional forces alone. There should've been a sonic boom. Any known devices let alone biological material would not be able to survive the G forces. Control F "conclusions" to see for yourself.

Basically, we have established that the Nimitz event was real AND broke the known laws of physics. That's a big deal. Our best speculative understanding at the moment (and this is coming from physicists) is these things may be warping space time. I know it sounds like sci-fi.

This data was captured on some of the most sophisticated devices by some of the most highly trained people in the world. The data was then analyzed by credible scientists and their analyses were peer reviewed by other experts in their field and published in a journal.

High Strangeness

I've experienced several high strangeness events in my life and I recently realized that the most recent ones were accompanied by what I would describe as sudden irrational paranoia or a sense of something being wrong/dangerous for no apparent reason. I'm not diagnosed with any mental conditions or anything like that. I'm aware that UAP events are famously connected to military and nuclear assets. It makes me wonder if perhaps paranoia could play a role in manifesting the phenomena. On the flip side it could be that the phenomena is manifesting paranoia. Or maybe a little of both. Obviously, I'm speculating. As I write this I also now realize for me personally these experiences are quite connected to sleep. I know the military works odd and very long shifts so I do think perhaps they may be experiencing a similar pattern related to sleep.

I had a profound experience as a kid where I awoke to a strange buzzing sound that was very loud and didn't wake anybody else up. This was a long time ago so my recollection is a little questionable. This event I don't recall paranoia preceding the event, but the whole thing certainly shook me. I convinced myself it must have been our stereo somehow turned itself on or perhaps my little sister turned it on and couldn't figure out how to turn it off so I got up to investigate. Upon realizing it was off and that I couldn't figure out where the sound was coming from I saw some lights outside the house in the driveway. My immediate thought was car headlights as they were about that low to the ground. As I approached to see who was outside I realized that these were not car headlights. They were too far apart and random in spacing and didn't illuminate the ground. At this point I froze in fear. As odd as it sounds my next recollection is running back to my bed and just pretending to be asleep. I asked everyone in the morning if they heard or saw anything and nobody said they did, so I just didn't talk about it for about 15 years.

More recently I have had a few more unexplainable events. I don't want to go into the details of all of them. I'll just point out 3 which definitely were accompanied by the sudden paranoia I mentioned earlier. One I witnessed literally only inches from my face was a bee that landed on my window and very clearly emitted blue and red lights from its antennae. Right before this I had a sudden urge to turn around and go back home. As I drove home I saw a low flying black helicopter. The sudden onslaught of irrational paranoia proceeding this event I can't explain.

Perhaps you think it's simply mental illness. I wondered the same thing and spoke to some psychologists and doctors. We chopped it up to not getting enough sleep which in fact was true. I was operating at the time on very little sleep. However, not long after I had another event upon waking and what is significantly different about this one is that my fiance also saw the same thing. I awoke convinced that if I went outside I would see something. I fought the urge to go back to bed and looked out the window. To my surprise I saw what appeared to be a person (all black unidentifiable) standing in my driveway staring at me. It was unmistakably a person and not a shadow or illusion. I awoke my fiance to come see. When she arrived we both looked and where the person had been was what appeared to be our black trash can (which is normally close by, but not in that spot.) I told her he must have moved our trashcan and left. We continued to peer out the window to see if we could spot him. Suddenly the trash can literally just morphed into the same person and my fiance screamed. I asked her if she saw it and she said yes. He ran around in very odd jittery circles that don't even seem possible. Almost as if floating and just ping ponging then appeared to dart around the corner. She saw the same thing I did. She saw a trash can that suddenly morphed into a person that jittered around and disappeared.

I had one other experience where my fiance, her brother and I were all trying to go to sleep one night. We all started to hear odd sounds. We couldn't figure out what it was but it sounded very distant and she said bugs and I said maybe a dog howling. They both

proceeded to go to sleep while I stared out the window trying to figure out what it was. I started seeing small blue lights that I thought were lightning bugs. They started in the trees in the distance. Then they started moving towards my direction very low to the ground. As they got very close to the house I started to panic. I for some reason lied down in my bed in fear. Then suddenly there was a very loud sound at the corner of the house and a huge burst of light. Everyone woke up as the power went out in half the house. We all went back to sleep like nothing had happened.

Those three recent events I shared all were accompanied by paranoia. All four events either happened during sleep or after not getting enough sleep. Perhaps there is a connection to sleep and sudden onslaught of paranoia.

I will add another experience that is not mine but my fiance's and I witnessed it. She awoke one night crying and told me she had a very realistic dream of her mother (very healthy and young at the time) with her deceased grandfather hugging her and saying goodbye. I chopped it up to a dream and went back to sleep. Moments later we received a call from her father that her mother was being transported to the hospital and that it was not good. She passed away not long after we arrived at the hospital.

[The Russell Cosmogony: A forgotten philosopher](#)

Below is a simple grab from wikipedia. I know philosophy may seem "off topic" but Russell had some interesting ideas that related to energy and when it comes to UAP we need to figure out the energy source. At the least it sounds like Walter had an experience that really affected him and led to many books.

https://en.wikipedia.org/wiki/Walter_Russell

In May 1921 Russell claimed to have experienced a transformational, revelatory event that he later described in a chapter called "The Story of My Illumining" in the 1950 edition of his Home Study Course. "During that period...I could perceive all motion," and was newly "aware of all things."^[16] Russell used the terminology of [Richard Maurice Bucke](#) in his book [Cosmic Consciousness](#) ^[17] to explain "cosmic illumination." Later he wrote, "It will be remembered that no one who has ever had [the experience of illumination] has been able to explain it. I deem it my duty to the world to tell of it."^[18] Russell's supposed knowledge gained "in the Light" is the subject matter of his book *The Divine Iliad*, published in two volumes in 1949.^[19]

*After five years Russell published *The Universal One* (1926) and *The Russell Genero-Radiative Concept* (1930) and defended his ideas in the pages of the *New York Times* in 1930–1931.^[20] He later published *The Secret of Light* (1947) and *A New Concept of the Universe* (1953).*

Russell copyrighted a spiral shaped [Periodic Chart](#) of the Elements in 1926.^[21]

*The Russell Cosmogony was described in his treatise, *A New Concept of the Universe*^[22] where he wrote that "the cardinal error of science" is "shutting the Creator out of his Creation."^[23] Russell never referred to an anthropomorphic god, but rather wrote that "God*

is the invisible, motionless, sexless, undivided, and unconditioned white Magnetic Light of Mind"[\[24\]](#) *which centers all things. "God is provable by laboratory methods," Russell wrote, "The locatable motionless Light which man calls magnetism is the Light which God IS."*[\[25\]](#) *He wrote that Religion and Science must come together in a New Age.*

Here is a link to a picture of his alternative periodic tables. I find his approach fascinating.

<https://www.flickr.com/photos/esaruoho/albums/72157604222958040/>

Here is a free link to his book. The Universal One. I read some of it many years ago. I admit it started to sound like gibberish so I gave up, but I also gave up trying to read Tesla's patents because they sounded like gibberish.

<https://avalonlibrary.net/ebooks/Walter%20Russell%20-The%20Universal%20One%20Alchemy%20Chemistry.pdf>

Potential Physics Behind UAP

I recorded a conversation with some friends in which I share some personal anomalous experiences and then I propose 3 hypotheses to try to explain UAP. I edited animations to help visualize the discussion and included show notes with sources in the description. It's a long conversation so I broke it apart into smaller parts and included the transcript.

Personal experience intro

<https://www.youtube.com/watch?v=Lr5akuG9DTw>

First hypothesis: Compact Fusion Reactor with MHD

<https://www.youtube.com/watch?v=GgjWvRaZqQE>

Second hypothesis: Information-mass-energy equivalency driven space-time metric engineering

<https://www.youtube.com/watch?v=c4B1MXattTI>

Third hypothesis: Directed Energy Weapons (don't have this clip by itself)

Entire discussion with all 3 hypothesis

https://www.youtube.com/watch?v=_qErjmym_CE

FULL TRANSCRIPT WITH SOURCES: (minus the discussions)

What Are UAP's and How Do They Work?

The jury is still out. Could be a lot of different things. Could have a nuts and bolts explanation. Could have a more esoteric explanation. The nuts and bolts camp seems largely focused on space-time metric engineering with little understanding as to how that could work. Physics implies this is possible, but we just don't understand how from an engineering perspective. Some people

implore zero point energy theories and others refer to Bob Lazar's element 115.

I have 3 possible nuts and bolts explanations that don't revolve around Bob Lazar or zero point energy.

Disclaimer: These are not meant to be catch all explanations. For all we know we are dealing with multiple technologies. The idea is that in some cases this is what we may be seeing. Also, if we wanted to replicate these things this is how we might do it. I'm going to start with the most grounded in known physics explanations to the most speculative.

Non space-time metric engineering. Compact Fusion Energy and Ionic Propulsion Hypothesis.

There are ways to explain some UAP without any new physics whatsoever. If some secret organization somewhere had compact fusion reactors they could be using that technology to power UAP. In fact, this could even be a powersource for space-time metric engineering. But, a compact fusion reactor would be so powerful that it could create almost all of the anomalous flight characteristics without warping space-time.

The lack of a propeller or wings or thruster could be explained by little known non-conventional ion lift and propulsion technologies. These are well established mechanisms of flight that usually are not considered practical because they are energy inefficient and of little value if you're using conventional fuel sources. Basically, a non-conventional fuel source means you can employ non-conventional flight. There are currently research groups working on compact fusion designs that could achieve this potentially in the not so distant future.

Once you have this small and insanely powerful energy source, ionic propulsion technology can explain transmedium travel as it can work in air, water and space. It would be very silent and would require different modes for each medium which also explains commonly reported observations such as it hovered in place then shot into space like a bullet or the infamous tic tac incident where it hovered over the water, which was described as looking as if it was boiling. This could be an attempt to break the surface tension of the water before entering.

Another point I've never heard anybody make before is that most of these craft are observed to have aerodynamic shapes. Triangles, spheres and cylinders are all very aerodynamic. Based on the principles of form and function this stands to reason that they may very well be operating under aerodynamic flight.

Sources:

https://en.wikipedia.org/wiki/Aneutronic_fusion

https://en.wikipedia.org/wiki/Ion-propelled_aircraft

https://en.wikipedia.org/wiki/Magnetohydrodynamic_drive

https://en.wikipedia.org/wiki/Ion_thruster

Space-time metric engineering. The Information-mass equivalency with a quantum computer hypothesis.

Although most of these things appear aerodynamic that doesn't mean they aren't employing multiple different modes of travel. Also, there have been reports of non-aerodynamic shapes such as pyramids and cubes. Additionally, there have been reports of objects that go in and out of the water with ease and great speed which is also hard to reconcile with my previous explanation.

One way space-time metric engineering may be possible is with an added twist to well known physics that actually has some backing by a few scientists and even has some observed precedent by researchers. This is the little known theory that information could be equivalent to mass and energy.

The same way Einstein overturned physics by showing mass and energy are equivalent with $E = mc^2$, this theory basically says information is also equivalent. A harvard physicist published a paper in 2019 where he creates a mathematical model in which information has a small amount of predictable mass and theorizes an experiment to test the theory where he calculates the difference in mass that should be observed between a storage device of 1T of data and one with no data. Unfortunately, we don't yet have sensitive enough measuring devices to test the theory.

Here's a second example to add credibility to the information has mass hypothesis. Physicists in Japan in 2010 demonstrated conversion of information into energy without violating the second law of thermodynamics. The experiment is a bit complicated, but essentially they made a particle do work by receiving information rather than energy. I'll include that article in the show notes.

Now that I've established that the notion that information could be equivalent to mass and energy I want to explain how this could be used for space-time metric engineering. Basically, in the same way the physicist wants to use a large amount of data to detect the mass of the information in a hard drive, I believe a sufficiently advanced quantum computer could have the same effect. Rather than storing a T of data we would process a T of data. It would have the same effect. But then if we ramp it up to way more than just a T of data, which is conceivable with a quantum computer, we would start generating massive gravitational fields. And because we are using a computer we can change the way it's processed to warp space-time to our will. Even more interesting, a quantum computer such

as this not only could become a spac-time metric engineering craft, but it could be quantum entangled to it's operator and powersource and basically travel without an onboard powersource or operator across limitless amounts of space and time.

Sources:

<https://aip.scitation.org/doi/10.1063/1.5123794>

<https://bigthink.com/hard-science/dark-matter-theory/>

<https://physicsworld.com/a/information-converted-to-energy/>

Directed energy weapons hypothesis

There is some speculation that when it comes to some UAP reports, there is more than meets the eye. There have been odd and varying reports that coincide with UAP. Everything from big foot, animal mutilations, poltergeist, telepathic messages, lights, portals, crafts, beings, shadow people, wolf men, moth men, cryptid animals you name it. Places like skinwalker ranch, the bridgewater triangle and Point Pleasant, West Virginia have a rich history of these all being sighted in the same geographical locations sometimes at the same time or close in time to each other.

One possible explanation for this is the ability to manipulate our perception. That's right. You may not be able to trust what you see and hear. It's not inconceivable that a kind of directed energy weapon designed to cause hallucinations could be used in some circumstances as a way for whatever is operating those weapons to disguise themselves. It sounds crazy I know, but there is some science behind its plausibility. The microwave hearing effect or the Frey effect, consists of the human perception of audible clicks, or even speech, induced by pulsed or modulated radio frequencies. The communications are generated directly inside the human head without the need of

any receiving electronic device. The effect was first reported by persons working in the vicinity of radar transponders during World War II.

There's also the recent revelations about Havana Syndrome, which is a reported mysterious condition affecting US diplomats and believed to be the result of directed energy weapons. Its exact origin and cause is still under investigation and highly classified, but is an established real affliction with some people displaying actual brain damage during brain imaging. I will include plenty of supporting sources of information in the show notes.

Sources:

https://en.wikipedia.org/wiki/Skinwalker_Ranch

https://en.wikipedia.org/wiki/Bridgewater_Triangle

<https://en.wikipedia.org/wiki/Mothman>

https://en.wikipedia.org/wiki/Directed-energy_weapon

https://en.wikipedia.org/wiki/Microwave_auditory_effect

https://en.wikipedia.org/wiki/Havana_syndrome

Potential Mental Effects on Humans

In Lue's last interview with Linda she asked him about biological effects. She referenced a document from the UK government on the famous Rendlesham event. Lue claims Russians did a lot of experiments with psychotronic weapons in the 60's. I've included a link directly to the time they discuss this in the video. <https://youtu.be/3mkYu7Wbyz4?t=3191>

If your not familiar with the Rendlesham Forest event here's the wiki below. https://en.wikipedia.org/wiki/Rendlesham_Forest_incident

And just to be clear this event wasn't a hoax as suggested in wiki. One of the people fought for years just to get his medical records and to get treatment for the health effects he suffered. His ill health was very real. <https://popularmilitary.com/air-force-veteran-awarded-full-disability-for-ufo-exposure/>

Psychotronic weapons are mostly treated as conspiracy theory on wiki

https://en.wikipedia.org/wiki/Electronic_harassment

Sound a little bit like Havana Syndrome?

https://en.wikipedia.org/wiki/Havana_syndrome

Lue makes it very clear that biological effects are real. This is well documented and we don't need him to tell us this. He doesn't think it's a big leap UAP could be manipulating human brains. He mentions cases of getting to close causing both bad and good changes. I'd like to know more about the good ones he references.

The document Linda references is called **Unidentified Aerial Phenomena in the UK Air Defense Region: Volume 1 Main Report** but I can't find it online. I've transcribed a bit below from the video.

"it is clear that the recipients of these effects are not aware that their behavior/perception of what they are observing is being modified"

"Experiments (on animals) have shown that low (3mW cm⁻¹ at 450MHz) exposures affect brain calcium ions and that these are known to play an important role in the transmission of nerve impulses. Various modulations (e.g. 5Hz 16Hz) were imposed on the radiation...It is concluded therefore that if some UAPs. as is believed and correlated by actual reports (collateral effects on for example, car electrical equipment) produce EM radiation then there is a high probability that they can affect the human brain"

Lue brings up John Alexander and non lethal technology and exploring technology to disperse crowds. John is an interesting guy.
https://en.wikipedia.org/wiki/John_B._Alexander

Now I just need one of you crazy autist types on this sub to access those newly shared DIRDS to see if we can find any other connections.

<https://www.dropbox.com/sh/95tgfd2lljqrve3/AABKI58mfojoZjNiKEZAz8gMa?dl=0>

[https://warpdrivecar.files.wordpress.com/2020/02/medicalreport.p
df](https://warpdrivecar.files.wordpress.com/2020/02/medicalreport.pdf)

[The Human Body As A Biosensor](#)

I suggest reading *Skinwalkers at The Pentagon* by the AWWSSAP director Lacatski, PHD Colm Kelleher and investigative journalist George Knapp if you haven't because it's very relevant.

<https://www.amazon.com/Skinwalkers-Pentagon-Insiders-Account-Government/dp/B09HR54GQF>

Lue Elizondo is trained in microbiology, immunology, parasitology and counter intelligence with a history in dealing with terrorism. Coincidence? I think not. Rabbit hole is below.

Quick TLDR: I found two old posts by deleted users explaining the AWWSSAP program as basically being a way to use biological data to reverse engineer UAP. It makes a lot of sense. There's a paper put out by Earthtec specifically hypothesizing biological effects could be used to reverse engineer UAP authored by Eric Davis. The hitchhiker effect was well noted in *Skinwalkers at The Pentagon* and that suggests that experiences are somehow spread epidemically among people. I've found 3 slides from Deep Knowledge Analytics that further supports this. Also, I've crawled through TTSA's website on the wayback machine to show most of the team is made up of expertise in the field of genetics, immunology, counter biowarfare, psychology, molecular biology, biochemistry, brain function, brain trauma, and brain consciousness. Colm, The PHD author of *Skinwalkers at the Pentagon* and Deputy Director of NIDS (Robert Bigelow's organization that bought Skinwalker Ranch), is a founding member of TTSA.

I did some digging and found this old post by a deleted user. It's very interesting. Parts italicized below.

https://www.reddit.com/r/UFOs/comments/q7h3sr/elizondos_background_in_microbiology_and/

*From the very inception of the program, the research team placed a new emphasis on the human body as a readout system for examining the aftereffects of close encounters. Why? **Because the human body, including the human immune system and the brain, are exquisitely sophisticated and sensitive information-processing systems that can be “perturbed” by outside influences, for example a close encounter with a UAP.** Beginning in 2008, the AAWSAP scientific staff intuited that the record of that **perturbation in the human body can sometimes be unmasked or decoded with the use of immunological, imaging, or chemical approaches.***

The book goes on to say this research has continued and is moving forward thanks to the “Invisible College.” I’m pretty confident one of these scientists is [Garry Nolan](#).

It should also be noted that in the intervening 11 years since the shutdown of AAWSAP in late 2010, members of what Jacques Vallee has termed the “Invisible College” (the network of highly credentialed scientists who have been working for decades on UAPs in secrecy because of the stigma attached to the topic) have taken this pioneering effort to the next level, conducting extremely detailed and state-of-the-art physiological research. The authors recognize that this research has been conducted in secret, and we will not compromise this secrecy in this book.

One of the [papers](#) produced by AAWSAP explores using research into the biological effects of UAP for reverse-engineering purposes.

HYPOTHESIS ONE: Sufficient evidence exists from human injury / effects to reverse engineer certain aspects of the Energy / Propulsion Systems.

This paper relates, summarizes, and analyzes evidence of unintended injury to human observers. Second, an argument is made that the subsequent work can inform (e.g., reverse engineer), through clinical diagnoses, certain physical characteristics of possible future Advanced Aerospace Systems from unknown provenance that may be a threat to United States interests.

As the purpose of this paper is to argue that data exists to “reverse engineer” propulsion systems of anomalous aerospace vehicles, independent of origin, based on biology.

It seems to me like human biology is a major factor when it comes to studying the phenomenon. Elizondo’s background in microbiology and immunology could be a significant reason he was chosen for AAWSAP/AATIP when paired with his military and intelligence experience.

In his post he links to another great post from a deleted user. Also italicized below.

https://www.reddit.com/r/UFOs/comments/q4vk0a/the_us_government_utilized_the_study_of/

The DIRD titled [“Clinical Medical Acute & Subacute Field Effects on Human Dermal & Neurological Tissues”](#) was produced for the DIA and authored Dr. Kit Green under AAWSAP. In the report, it mentions the objective of this study was to use the results for further research into reverse engineering UAP at least three times.

HYPOTHESIS ONE: Sufficient evidence exists from human injury / effects to reverse engineer certain aspects of the Energy / Propulsion Systems.

This paper relates, summarizes, and analyzes evidence of unintended injury to human observers. Second, an argument is made that the subsequent work can inform (e.g., reverse engineer), through clinical diagnoses, certain physical characteristics of possible future Advanced Aerospace Systems from unknown provenance that may be a threat to United States interests.

As the purpose of this paper is to argue that data exists to “reverse engineer” propulsion systems of anomalous aerospace vehicles, independent of origin, based on biology.

Additionally, there are very clear similarities between injuries sustained from UAP exposure and [Havana Syndrome](#).

Examples of systems the INSCOM analysis described as real and potential include precisely those asserted by good observers

{and victims of injury} consistent with near-field RF / EM / NIEMR / Thermal / Infrasonic / and Coherent light-Laser effects:

Microwave communication / hearing / localized heating

CO2 Laser communication / hearing / localized heating

Ability to instill fear secondary to above, including with use of messaging and RF carrier-wave modulated intra-cranial “voices” through thermoelastic expansion of intracranial spaces at 5 kHz (vide infra)

Ability to direct thermal effects to include directed pain, erythema, and second-degree burns

Ability to cause frontal-temporal headache with mm waves

Pulses of RF (e.g. 2450 MHz / 12.4-1.24 Mev UHF 1.0 dm – 1.0 m pressure waves) to disorient and destabilize muscular coordination: at this frequency 40J/cm and of microsecond duration pulses will cause thermoelastic expansion in brain (as well as the cochlear micophonics for hearing sensation at 0.5-32 micron pulse widths per-pulse thresholds are near 20 J/cm)

Use of mm waves to instigate cortical surface effects and seizures through delta-wave, EPSP & IPSP (excitatory and inhibitory post-synaptic potentials neocortical neuronal synchronization with high voltage 100 kV/m nanosecond pulsed 15 Hz {ELF}:through stimulation of the hippocampus CA3 Pyramidal cells and cells of the pyriform cortex, sustained over 1 – 5 minutes for ictal development for petit mal or grand mal seizures

Loss of Consciousness, muscle spasms, muscle weakness

Parasthesiae with UHF – SHF, lasting for minutes

Increase of core body temperature to above 41’ C(105.8’ F) with VHF (e.g. 225 MHz) within 15 – 30 minutes {1-2 km waves at dose rates about 10 W/kg; 5W/kg will increase a humans core body temperature within one to two hours

Use of pulsed-microwaves to temporarily interfere with short-term spatial memory

Nausea and vomiting, and disorientation can be easily induced with audible frequencies at 145 dB at selected frequencies of 100-500 Hz, within seconds up to a few minutes:

combinations of infrasonic and sonic tones can be selected for specific effects on the vestibular apparatus to induce highly specific Gastro Intestinal and neural effects

Deep Knowledge Analytics

I would also like to refer to you to slides 41-43 of the presentation by Deep Knowledge Analytics

<https://analytics.dkv.global/spacetech/Unidentified-Aerial-Phenomena-Special-Overview-2021.pdf>

"On the other hand, not every sensor might be able to depict the observable phenomena correctly, therefore we prospect the additional focus on Direct neural interface technologies and other solutions that may provide means for "direct" data extraction from humans."

Screen shot of one slide

<https://imgur.com/1lqokD6>

Here's a link to the organization that made that presentation.

<https://www.spacetech.global/>

TTSA/TTS

Remember TTSA? I know 2017 feels like a century ago, but 5 years ago the NYT broke the Nimitz story and TTSA launched their website. I remembered most of the team was made up of immunology and biowarfare people. I thought it odd at the time and didn't know what to make of it. I remember thinking it was **really** odd in 2020 when covid hit. Now it's all starting to make sense. I used the wayback machine to verify because the TTSA website has changed a lot since then (they dropped the A.)

Oct 29, 2017

<https://web.archive.org/web/20171029112116/https://dpo.tothestarsacademy.com/>

Dr. Garry Nolan Genetics Technologies Consultant

Dr. Garry Nolan is the Rachford and Carlota A. Harris Professor in the Department of Microbiology and Immunology at Stanford University School of Medicine. He trained with Leonard Herzenberg (for his Ph.D.) and Nobel recipient Dr. David Baltimore (for postdoctoral work). He has published more than 220 research articles and is the holder of 20 US patents, has been honored as one of the top 25 inventors at Stanford University and is the first recipient of the Teal Innovator Award (2012) from the Department of Defense. Dr. Nolan was the founder and has served on the Boards of Directors for several successful biotechnology companies. He holds a B.S. in genetics from Cornell University, a Ph.D. in genetics from Stanford University.

Dr. Paul Rapp Brain Function & Consciousness Consultant

Dr. Paul Rapp is a Professor of Military and Emergency Medicine at the Uniformed Services University and Director of the Traumatic Injury Research Program. He also holds a secondary appointment as a Professor of Medical and Clinical Psychology. He is a past editor of Physica, and served on the editorial boards of the International Journal of Bifurcation and Chaos, Chaos and Complexity Letters, and Cognitive Neurodynamics. His past honors include a Certificate of Commendation from the Central Intelligence Agency for “significant contributions to the mission of the Office of Research and Development.” Dr. Rapp attended the University of Illinois and earned degrees in physiology (minor in Chemistry, Summa cum Laude) and engineering physics (Summa cum Laude). He received a Ph.D. from Cambridge University, working under the supervision of Professor Sir James Lighthill in the Department of Applied Mathematics and Theoretical Physics.

Dr. Norm Kahn National Security & Program Management Consultant

Dr. Norm Kahn is currently a consultant on national security for the US Government, with a focus on preventing the use of biological weapons of mass destruction/disruption. Dr. Kahn had over a 30-year

career with the Central Intelligence Agency, culminating in his development and direction of the Intelligence Community's Counter-Biological Weapons Program. Dr. Kahn is the recipient of the Agency's Distinguished Career Intelligence Medal and the Director of National Intelligence's National Intelligence Distinguished Service Medal. Dr. Kahn holds a B.S. degree in biology from the City College of New York and a Ph.D. in oceanography from the University of Rhode Island.

Dr. Colm Kelleher Biotech Consultant

Dr. Colm Kelleher is a biochemist with a twenty-eight-year research career in cell and molecular biology currently working in senior management in the aerospace sector. He served as Laboratory Director at biotech company, Prosetta Corporation, leading several small molecule drug discovery programs focused on viruses of interest to the United States Department of Defense. He worked for eight years as Deputy Director of the National Institute for Discovery Science (NIDS), a research organization using forensic science methodology to unravel scientific anomalies. From 2008-2011, he served as Deputy Administrator of a US government funded threat assessment program focused on advanced aerospace technology. Dr. Kelleher has authored more than forty peer reviewed scientific articles in cell and molecular biology, immunology and virology as well as two best-selling books, "Hunt for the Skinwalker" and "Brain Trust". He holds a Ph.D. in biochemistry from the University of Dublin, Trinity College.

Dr. Adele Gilpin Biomedical Research & Attorney.

Dr. Adele Gilpin is a scientist with biomedical academic and research experience as well as an active, licensed, attorney. She served on the faculty at the Johns Hopkins Bloomberg School of Public Health, the University of Maryland School of Medicine, and the Medical College of Pennsylvania. She taught biostatistics, epidemiology, and the design and conduct of clinical trials. Dr. Gilpin led an international team of scientists and physicians in designing and implementing two multi-project programs that were, together,

awarded \$10 million by NIH, designing and conducting multiple clinical trials. Her regulatory law practice focuses on FDA regulated products such as medical devices and pharmaceuticals, and on research law. Since the program's inception in 2007, Dr. Gilpin has collaborated with the DOD's Traumatic Injury Research Program at the Uniformed Services University of the Health Sciences. She was awarded the E. Randolph William award for exceptional pro bono service in both 2009 and 2011. She received B.A. and M.A. degrees and a Ph.D. from Temple University (psychology; quantitative psychology) and a J.D. from Georgetown University Law Center (cum laude).

Colm, The PHD author of *Skinwalkers at the Pentagon* and Deputy Director of NIDS (Robert Bigelow's organization that bought Skinwalker Ranch), is a founding member of TTSA.

Let me break that down for you. Colm is a PHD biochemist that was head of the original investigation into Skinwalker Ranch with billionaire aerospace entrepreneur Robert Bigelow that preceded AWW SAP. He also was a part of the AWW SAP investigation. He is also a part of TTSA. Lue was a part of AATIPP which spawned off of AWW SAP. Lue also was a founding member of TTSA. We have 4 more biology related experts as founding members including Dr. Gary Nolan.

Yes, Gary Nolan was on the team back then. I found some info about his departure. He cited some conflict of interest with a long-term contract and said he would probably do short-term contracts in the future. He still supported TTSA despite leaving the advisory board.

<https://www.theufochronicles.com/2018/10/dr-garry-nolan-resigns-from-tom-delonge-UFO-research-firm.html>

Hope you enjoyed going down this rabbit hole with me! Hopefully some of you crazy autists like myself are digging through what I colloquially like to refer to as "THE DIRDY THIRDY" or the 37 (or is it

38?) reports commissioned under AWWSSAP that have been declassified and made available.

<https://www.dropbox.com/sh/95tgfd2ljqrve3/AABKI58mfojoZjNiKEZAz8gMa?dl=0>

Anomalous DNA

I want to focus on the science of this case because it's very interesting. It's easy to ignore this hair sample because of the story that goes alongside it. I'm skeptical of the story myself. However, the gene analysis is what's important because it's VERY hard evidence and it's interesting to say the least.

The hair sample in question was reportedly obtained in 1992, analyzed in 1999 and a book was published in 2005 discussing the investigation.

<https://www.amazon.com/Hair-Alien-Forensic-Evidence-Abductions-ebook/dp/B000FCKCRE/>

I've only read a synopsis of the full story, but bought the book and skipped straight to the gene analysis because I realized it sounded like technology we now have today. If you're not familiar with gene manipulation (or even if you are) I suggest you check out the trailers to the 2 Netflix documentaries below.

<https://www.youtube.com/watch?v=WlIVh7H6nvl>

https://www.youtube.com/watch?v=_1UkCfDnn6c

What I find interesting about the analysis is that it shows 2 different mitochondrial DNA and there's high confidence that it's not contaminated. This potentially indicates genes from 2 mothers. **We now know how to take mitochondrial DNA from one woman and edit it into a baby's DNA to create offspring with DNA from 2 mothers. This can be done to target specific genes to prevent disease or to choose hair/eye color that is otherwise impossible (designer babies.)** Not only were there odd matches of sequences that are super rare, but there was mitochondrial DNA of two kinds. Even more interesting, there were two deleted genes for the CCR5 protein which provides immunity for AID's and resistance to smallpox. Basically, it has all the signs of a designer baby.

Even in 1999 the biochemist working on the hair sample speculated that it could be from genetic engineering. I did some digging and found one source that claims this was first done in the 90's but was banned.

<https://www.britannica.com/science/three-parent-baby>

This article claims first case was 1996.

<https://www.nytimes.com/2014/06/29/magazine/the-brave-new-world-of-three-parent-ivf.html>

Most sources I find say it was first done in 2016.

<https://www.newscientist.com/article/2107219-exclusive-worlds-first-baby-born-with-new-3-parent-technique/>

I found a paper on its ethics from 2014.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4278475/>

My point being that the hair sample in question very well may be an example of this technology pre-dating the public literature. This technology is now widely known and designer babies are now a thing despite bans in some countries. It's not a stretch of the imagination that this kind of work may have happened earlier than publicly acknowledged considering the controversial nature of it. Below are more sources on the topic.

https://en.wikipedia.org/wiki/Mitochondrial_replacement_therapy

https://en.wikipedia.org/wiki/Designer_baby

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5783712/>

I don't want to diminish the story of the witness that obtained the sample. I'm not calling him a liar. I am speculating that perhaps this sample could be evidence of early examples of this technology. The timing is conspicuous. Or perhaps the explanation is far stranger. I'm not pretending to know.

The author of the book mentions the analysis never could've been done without the PCR method invented in 1993 by Nobel Prize winner Kary Mullis. Apparently this man is quite the character and had his own high strangeness event in 1983 where he encountered a

red light that turned into a talking raccoon then experienced missing time. He recounts it in his autobiography.

<https://www.amazon.com/dp/B004AM5R0W/>

I digress. The hair sample is anomalous even without all the strange stories. In 1999 the weird results of the analysis would've been easy to not fully appreciate because 3 parent mitochondrial DNA manipulation was not yet widely known to be possible. **I personally think 21 years later this case is worth re-visiting and perhaps the sample is worth a second analysis.**

[Ken Shoulders Primary Research Part 1](#)

Ken Shoulders was an experimental physicist that worked at SRI and pioneered modern day microelectronics. He also pioneered early drone technology. He worked with Hal Puthoff in trying to understand EVO's, which he figured out how to control and measure. This is detailed in his short wiki page, but it only scratches the surface.

https://en.wikipedia.org/wiki/Kenneth_R._Shoulders

EVO stands for exotic vacuum object. It's described as a condensed charge cluster of electrons that is far more densely packed than would normally be expected.

An enormous amount of Ken's well documented work is archived in Philadelphia, PA at the Science History Institute.

<https://www.sciencehistory.org/>

So, I paid a visit and started taking pictures of what I found. There was too much for me to document it all and the amount I did manage to walk away with in no way can be covered in a single post. This is a preliminary dissemination of the information I found in the archives (much of which is not on the internet) and related information I've found elsewhere. Ken's work could be studied for years if not decades and he documented a lot of it as well as much of his correspondences, even personal notes about people he met. There are letters between him and Puthoff at the archives, but unfortunately I somehow missed them and will have to go back. This research will give a lot of insight and lead to many rabbit holes, but my primary focus is his discoveries related to EVO's, which are a very real phenomena.

TLDR: Ken Shoulder's is basically like the Nikola Tesla of our era and discovered how to make a new kind of plasma that most physicists would claim violates the laws of physics, but it's very

real and in fact does not. Richard Feynman didn't believe him at first then apologized in a letter. Additionally, it can be explained and replicated. It also explains many reports of "cold fusion" and Ken documented it all with a few others while he tried in earnest to patent and commercialize the technology. It's also covered in one of the DIRDS as "ideal for further research."

Ken became interested in EVO's after realizing others had documented their existence in the literature, but never bothered to fully investigate them as he details in his self published book EV: A Tale of Discovery.

https://freel.tech/charge-clusters/publications/shoulders/1%20-%20Ken%20Shoulders_EV,%20a%20tale%20of%20discovery.pdf

He realizes the work of Winston Bostick is the best source of investigation into a potentially new discovery early in his research. Bostick was a plasma physicist that discovered plasmoids, plasma focus, and plasma vortex phenomena.

https://en.wikipedia.org/wiki/Winston_H._Bostick

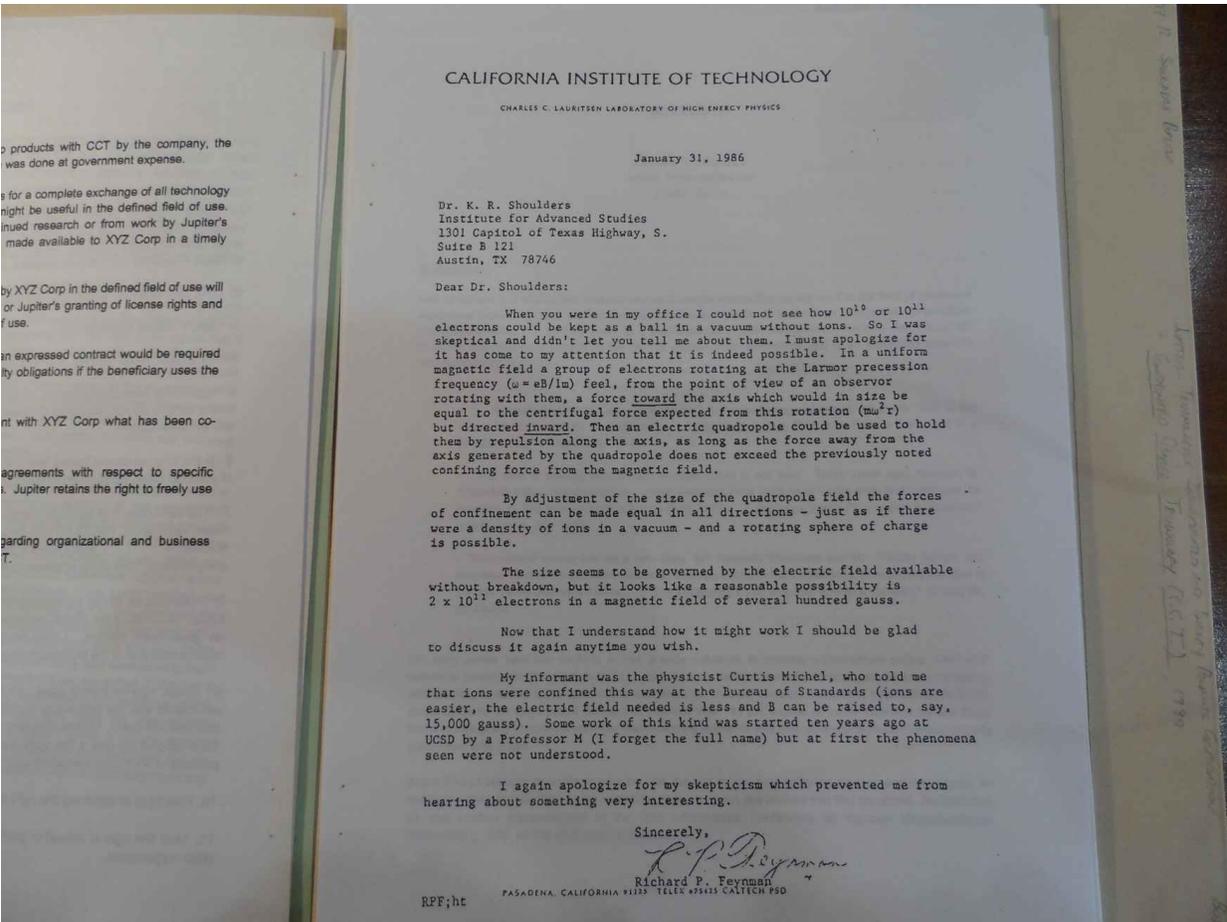
Ken went on to immerse himself in investigating what he coined EV's or EVO's. He published a number of patents related to them including a patent to generate energy from them in 1992.

<https://patents.google.com/patent/US5123039A/en>

One of the recently published DIRDS, *Concepts For Extracting Energy From The Quantum Vacuum*, covers EVO's and concludes that "topic is ideal to pursue for further research."

https://www.reddit.com/r/observingtheanomaly/comments/tm023c/ken_shoulders_evos_mentioned_in_dird_extracting/

Ken shared his discovery with Richard Feynman who initially refused to believe him, but I found a letter from Feynman to Shoulders in which he apologizes and admits that it's real.



<https://i.imgur.com/T4iveGP.jpg>

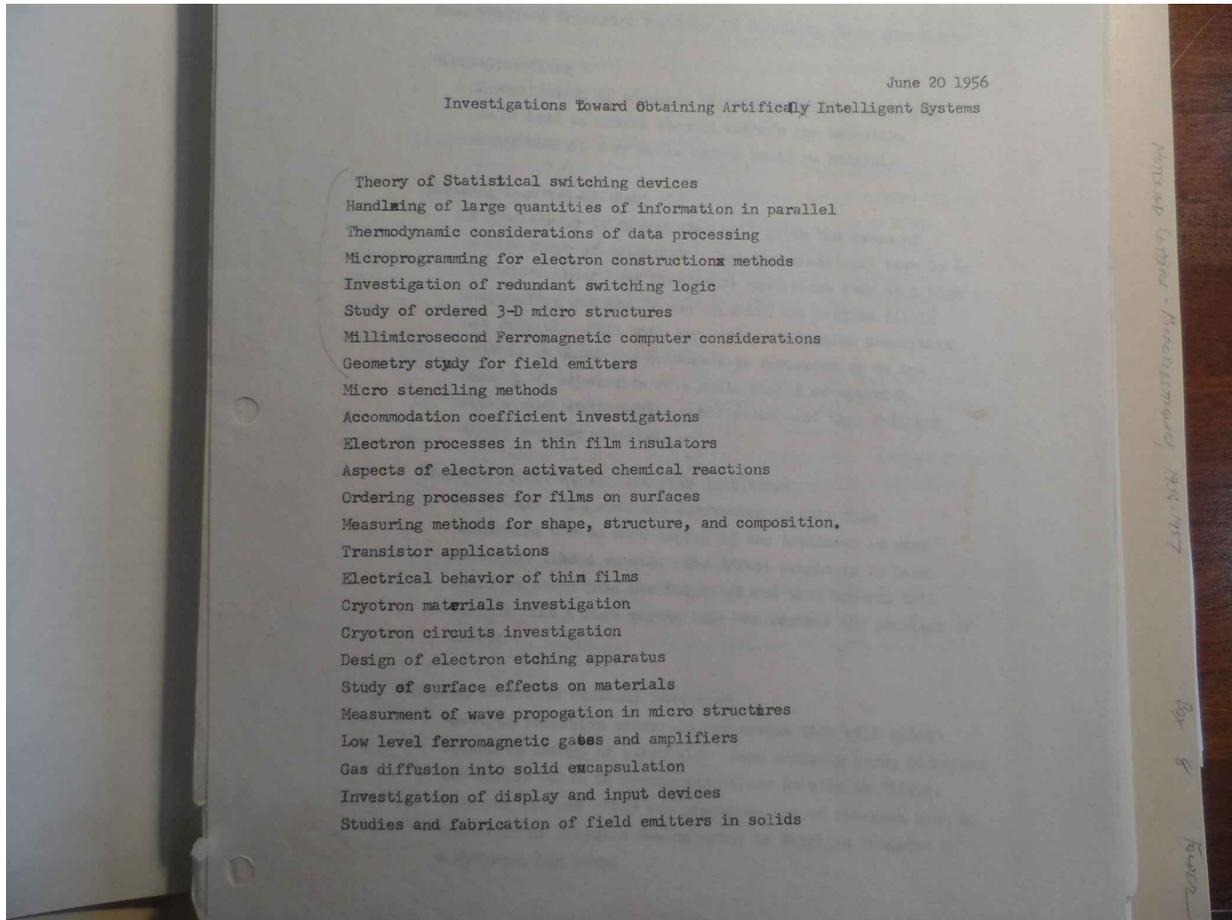
I made a title "EV's, EVO's, Condensed Charge Clusters, and CCT" if you want to skip directly to EVO's. Also, if you want to skip even further to just the biggest finds from the archives go down to "The Meat and Potatoes"

Primary Research (From the Archives)

These are pictures of the documents archived in the museum of his work. I will share some brief notes that corroborate his work in microelectronics and drones to establish his credibility as a physicist. I will share as much as I can about his work with EVO's, but it's difficult to cover it all. I will also share some personal notes that I found interesting and could possibly be used by investigative sleuths to learn more.

Microelectronics

Here are some personal notes dated from 1956-57 about microelectronics. Back then the term didn't even exist. I work in this field and can tell you he is describing things that didn't commercially exist for another 20 years. Below are some notes describing building logic gates using field emitters and micro transistors, ion gauges, clean room design, physical vapor deposition, micro patterning, sputtering, and lift off techniques known to those skilled in the art of microelectronics fabrication.



<https://i.imgur.com/A5bwAwE.jpg>

most important
these should be
over 10 kV insulator
metals.

the seal can be heated
an electron gun, or
is heater.

any alloy can be BT

adhered to the ceramic
and into the ceramic
index as the
be another shoulder.

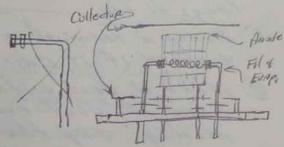
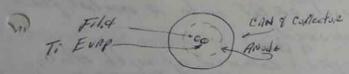
where
ceramic
is - Cu

only one ceramic
it good many
emissive. In the
it may be possible
to the base
of bases, but
special mode
to for the
plate could

is a group
and a ring
would be

Dec 30 1956 Contd

④ Ion pump layout:



JAN 1 1957 Tues

Ion pump Contd.

- ① It seems that several things will be good to incorporate in the first model of an ion pump. These are:
 - ① Do not try to make any spiral path for electrons or any complicated features of electron optics.
 - ② The Titanium source should be the non-walton type, either electron heated or resistively heated without melting.
 - ③ The Ion collector should run at cold temperatures & be easily removed.
 - ④ Heat from the filament should be fairly low - this can be done by having an electron gun using thinned Tungsten.
- ② The Titanium source should be the non-walton type, either electron heated or resistively heated without melting.
- ③ The Ion collector should run at cold temperatures & be easily removed.
- ④ Heat from the filament should be fairly low - this can be done by having an electron gun using thinned Tungsten.
- ⑤ A small auxiliary plate for ion collection can be hung in the system without cooling & serve as a monitor for Titanium evaporation rate.



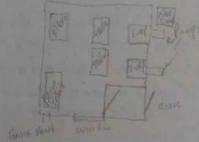
The Titanium Rod can be hung vertical & bombarded for heating, or by passing a current through it.

<https://i.imgur.com/ibhUd9n.jpg>

Mon Feb 18, 1957

Clean Room

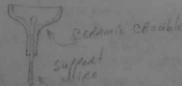
- 1. Clean room should be able to house at least two copper line units, plus associated standard equipment of the Electron microscope. 2. 2000 square feet of the exhaust fan should be provided.



Fri 22 Feb 1957

Design for Expector

- 1. A design is required that will prevent the constant flex to the substrate as possible. In the ideal case it would be a long thin slope, but if bombarded is going to heat the component, the slope must be stable.
- 2. To prevent slaying of the support wire & thus mechanical failure, the support wire should be covered with ceramic down to the end portion.



- 3. A slip cast central ceramic could be connected onto a steam-cure tube.

<https://i.imgur.com/n9blgel.jpg>

Sun Mar 12 1957

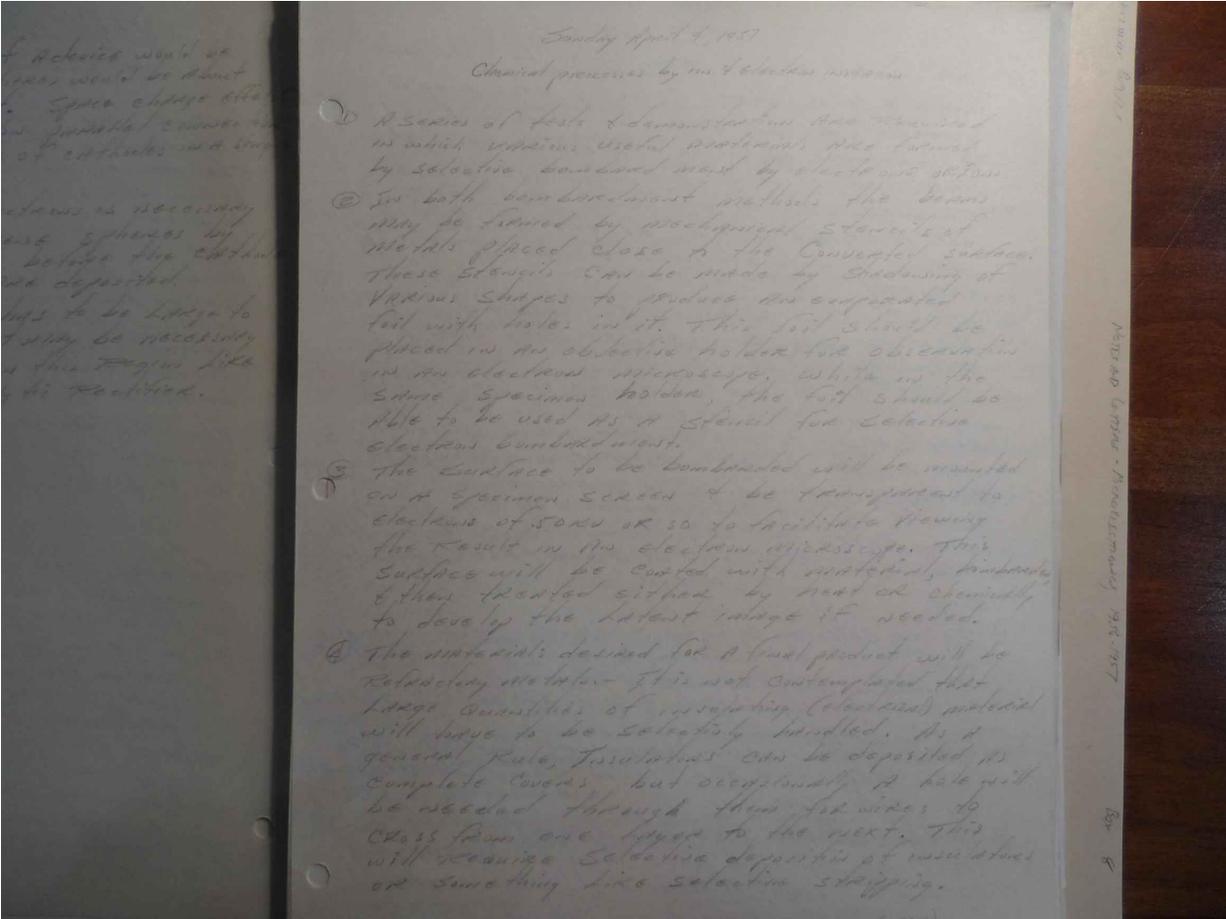
Evaporative Cleanup Design

- ① It looks as if the microwave oven type of evaporator is called for in order to give a stable evaporator, & ability to handle insulators by the same scheme, & increased efficiency.
- ② The containing crucible should be hotter at the top so as to prevent condensation. This means that extra power will have to be used there because of the radiative loss. This may even force the form of the dusting guide to heat the top.
- ③ It seems like the crucibles should be removable while in the vacuum system. The vacuum system can then be used for cleaning the evaporator by simply heating intensely & driving off residual material.
- ④ For small units a spiral filament will be able to hold its shape. The guide can be divided into two sections - the top held at a high fixed temperature, & the bottom can be varied to set the required Evap. Rate.
- ⑤ A single radiation shield will provide more uniformity & greater heating efficiency.

Mechanical Steril Process

- ① It is felt that some simple method is in order for some of the gross work to be done with evaporation of certain shapes. For example the present transmission line work, one such scheme is to evaporate a layer of stripable material like fluorine and then mechanically remove this in spots where permanent lines are required. After the deposits of Cu are made, there is a fair chance of removing the Cu selectively by stripping with the base material which is loosely adhering in certain locations.
- ② For tedious immediate problems, some things could be worked out with the Sand Blaster - (SS white) in which a groove is machined into the base of the material deposited onto this, & stripped from the top later.

<https://i.imgur.com/MAEFk1i.jpg>



<https://i.imgur.com/zqframU.jpg>

Vertitek (Drones)

In 1970 he formed the drone company Vertitek. He planned to make a commercially available toy that operated via ultrasonic frequency to avoid collisions powered by a free piston engine. There's a lot of documents on this endeavor, but I'll just share a few for now.

Sheldon
THE COMPANION
OR ESCORT

5/14/70
KRS

Generally, fads are few and far between and thought to be impossible to predict, but I am predicting one. Moreover, we are setting out to design a fad with international acceptance. It will be a machine that wants to be with you, that is delightfully playful, and has the elements of being capricious. The machine will be capable of agile flight and be absolutely safe to those around it. It can be called at will or sent away from you. If told to wait at a particular spot it will do so until its fuel is exhausted or until you summon it to play games. When it is in a crowd of people or objects, it knows who its master is and will obediently follow you, above the heads and out of reach of others, but when you are alone it will come down and be your companion. When others learn the secret of your attraction they can vie for the attention of your companion. What better way is there to start a fad!

Technically, the machine is a tip jet powered rotorcraft resembling a single bladed boomerang more than anything else. It carries an ultrasonic sound source and appropriate detectors to regulate the vehicle height and sense nearby obstacles and avoid them by vectoring the vehicle thrust away from the object when it is too close. Two competing functions of the control system are to be attracted to objects from a distance but to be overridden by the repel function so as to find an equilibrium distance from an object and to lock there. Ultrasonic whistles can be given to the controlling person that either attract or repel the vehicle. Both the standoff distance and the height are preset before each ascension within limits of about 2 feet at the closest approach to a maximum of 20 ft. from the objects or ground. Calling distance remains fixed up to a distance of 200 feet for a hand operated whistle. The repel and attract channels will be offset tuned from the vehicle ultrasonic source so that doppler shifts will be effective in giving the vehicle more interesting responses. If the repel channel is tuned higher than the sound source frequency, then the objects moving

-1-

Sheldon
5/14/70
KRS
See document from Dept - Personnel
Rev 2
Copy

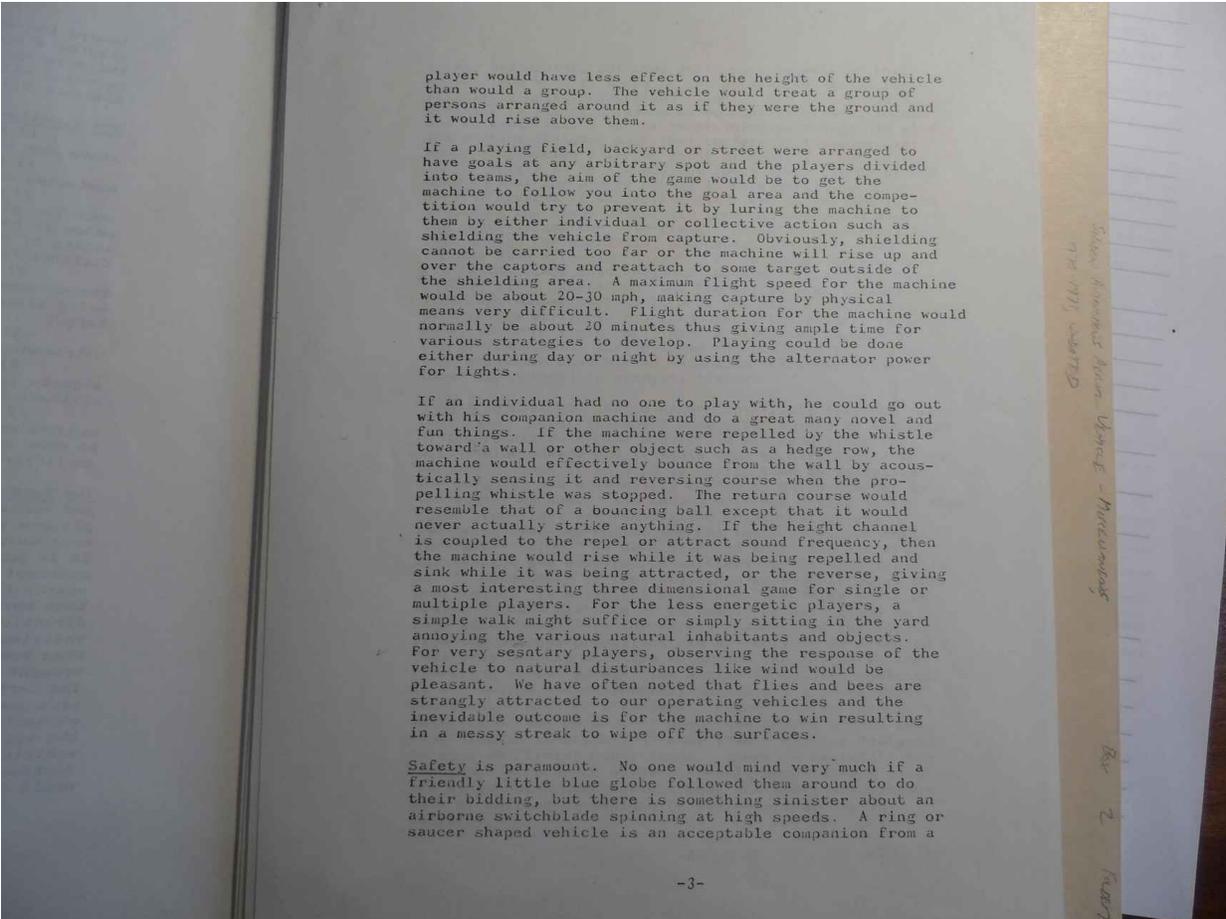
<https://i.imgur.com/QeNEVJD.jpg>

toward the machine will be sensed more quickly or at a greater distance and the machine will run from them, while on the other hand, the objects that are rapidly receding will be chased by the vehicle and the standoff distance will be reduced until the moving object stops.

The Functions produced by the control system are:

- 1) altitude regulation at a prescribed height above any surface or cluster of obstacles.
- 2) anticollision technique or the avoidance of obstacles of almost any size and type of material.
- 3) attraction to objects that are reasonably near the plane of rotation of the vehicle or slightly below it thus combining with the repulsion characteristics of the anticollision system to produce a standoff distance that is preset before each flight.
- 4) variation of standoff distance depending upon the movement of the object relative to the vehicle; being closer for a receding target than for an advancing target.
- 5) calling or repulsion from long range using an ultrasonic whistle.
- 6) height variation by coupling call or repel signals into the height channel to give change of normal altitude only while calling.
- 7) landing maneuver by using both call and repel simultaneously so as to cut the engine power. This must be done at close range so as to overload the height amplifier channel.

The Games these functions would produce are interesting and vehicle response to dynamic situations in which players vie for the attention of the machine by their body movements relative to it is almost beyond imagination. It is possible to steal the machine by executing a complex movement causing the machine to follow the fastest moving nearby target that came from the proper direction and then moved away from the original player in a particular direction. This action could be affected without using whistles or specialized passive reflectors of sound. When such specialized ultrasonic sound sources are brought into play, the game takes on far greater complexity. The vertical beam height sensor will be about 90 degrees wide and will not normally interfere with the lateral obstacle sensors, but when an object comes into the beam, the vehicle will rise over it. For example, when the vehicle is hovering 5 feet high, the lateral detection distance for an object to effect the height channel would be about 5 feet also. Small objects like a single



<https://i.imgur.com/ovwAsY3.jpg>

He has a unique approach to his drones in that they operate with a single wing design as you can see in his patent.

<https://patents.google.com/patent/US3915414>

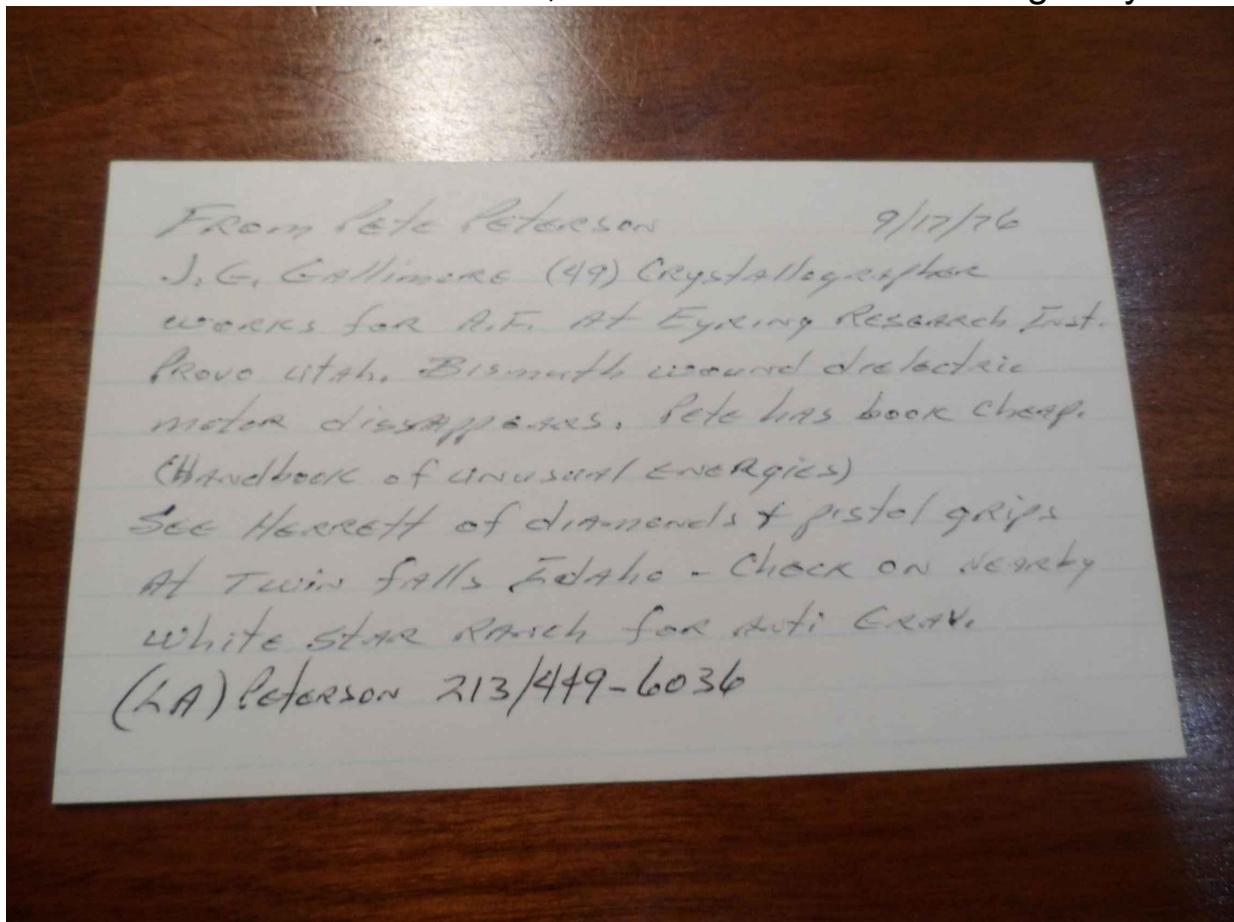
I've found correspondences between Ken and SRI and the military discussing his drone technology as apparently it was first conceived while still employed by SRI. Ken appeared to have some disputes over who owned the technology and was more interested in making a toy out of it. If I recall correctly, he has long pages of notes about discussing opportunities with KB toys and Mattel, but I'm pressed to find them among the 250+ pictures at the moment. It appeared to me that he was given permission to make toys, but that SRI and the military wanted to retain rights to any military applications. If anybody requests I find these I'll dig them up.

Here is a previous post I made showing the potential connection between Ken's company Vertitek and contemporary drone companies.

https://www.reddit.com/r/UFOs/comments/t8vnm5/a_little_known_drone_that_can_appear_invisible/

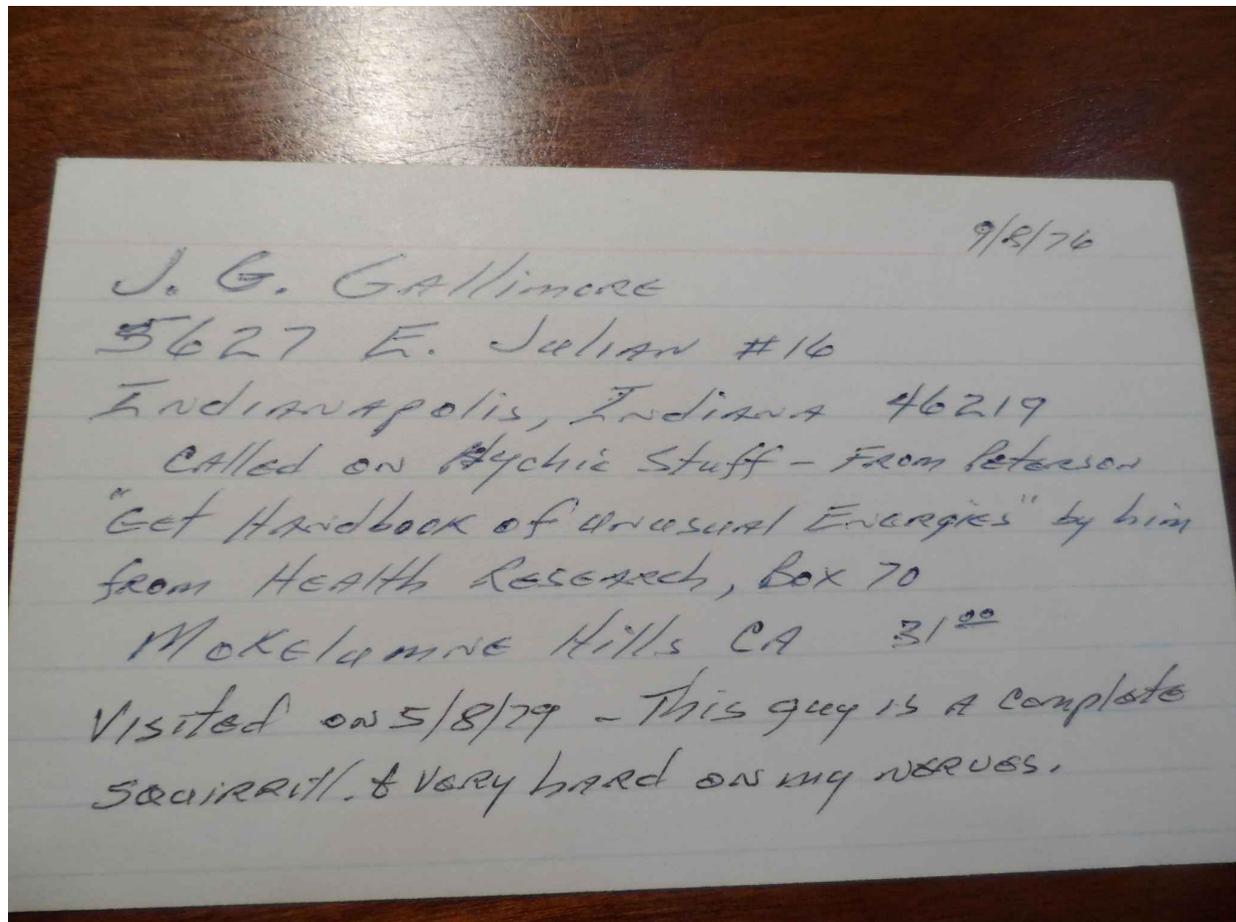
Notes

I found some interesting notecards from 1972 that mention Pete Peterson, J.G. Gallimore, Eyring Research Institute, a missing bismuth wound dielectric motor, White Star Ranch and antigravity.



<https://i.imgur.com/R446oHX.jpg>

He mentions some of these names again as well as "psychic stuff" and accuses one of them of being a "complete squirrel"



9/8/76

J. G. Gallimore

5627 E. Julian #16

Indianapolis, Indiana 46219

Called on Psychic Stuff - From Peterson
"Get Handbook of Orisual Energies" by him
from Health Research, Box 70

Mokelumne Hills CA 31²⁰

Visited on 5/8/79 - This guy is a complete
squirrel. & very hard on my nerves.

<https://i.imgur.com/zqpXdyx.jpg>

Ken appears to have been researching gravity around this time and notes a new theory by Dr. Jakob Mandelker.

player would have less effect on the height of the vehicle than would a group. The vehicle would treat a group of persons arranged around it as if they were the ground and it would rise above them.

If a playing field, backyard or street were arranged to have goals at any arbitrary spot and the players divided into teams, the aim of the game would be to get the machine to follow you into the goal area and the competition would try to prevent it by luring the machine to them by either individual or collective action such as shielding the vehicle from capture. Obviously, shielding cannot be carried too far or the machine will rise up and over the captors and reattach to some target outside of the shielding area. A maximum flight speed for the machine would be about 20-30 mph, making capture by physical means very difficult. Flight duration for the machine would normally be about 20 minutes thus giving ample time for various strategies to develop. Playing could be done either during day or night by using the alternator power for lights.

If an individual had no one to play with, he could go out with his companion machine and do a great many novel and fun things. If the machine were repelled by the whistle toward a wall or other object such as a hedge row, the machine would effectively bounce from the wall by acoustically sensing it and reversing course when the propelling whistle was stopped. The return course would resemble that of a bouncing ball except that it would never actually strike anything. If the height channel is coupled to the repel or attract sound frequency, then the machine would rise while it was being repelled and sink while it was being attracted, or the reverse, giving a most interesting three dimensional game for single or multiple players. For the less energetic players, a simple walk might suffice or simply sitting in the yard annoying the various natural inhabitants and objects. For very sesatary players, observing the response of the vehicle to natural disturbances like wind would be pleasant. We have often noted that flies and bees are straggly attracted to our operating vehicles and the inevitable outcome is for the machine to win resulting in a messy streak to wipe off the surfaces.

Safety is paramount. No one would mind very much if a friendly little blue globe followed them around to do their bidding, but there is something sinister about an airborne switchblade spinning at high speeds. A ring or saucer shaped vehicle is an acceptable companion from a

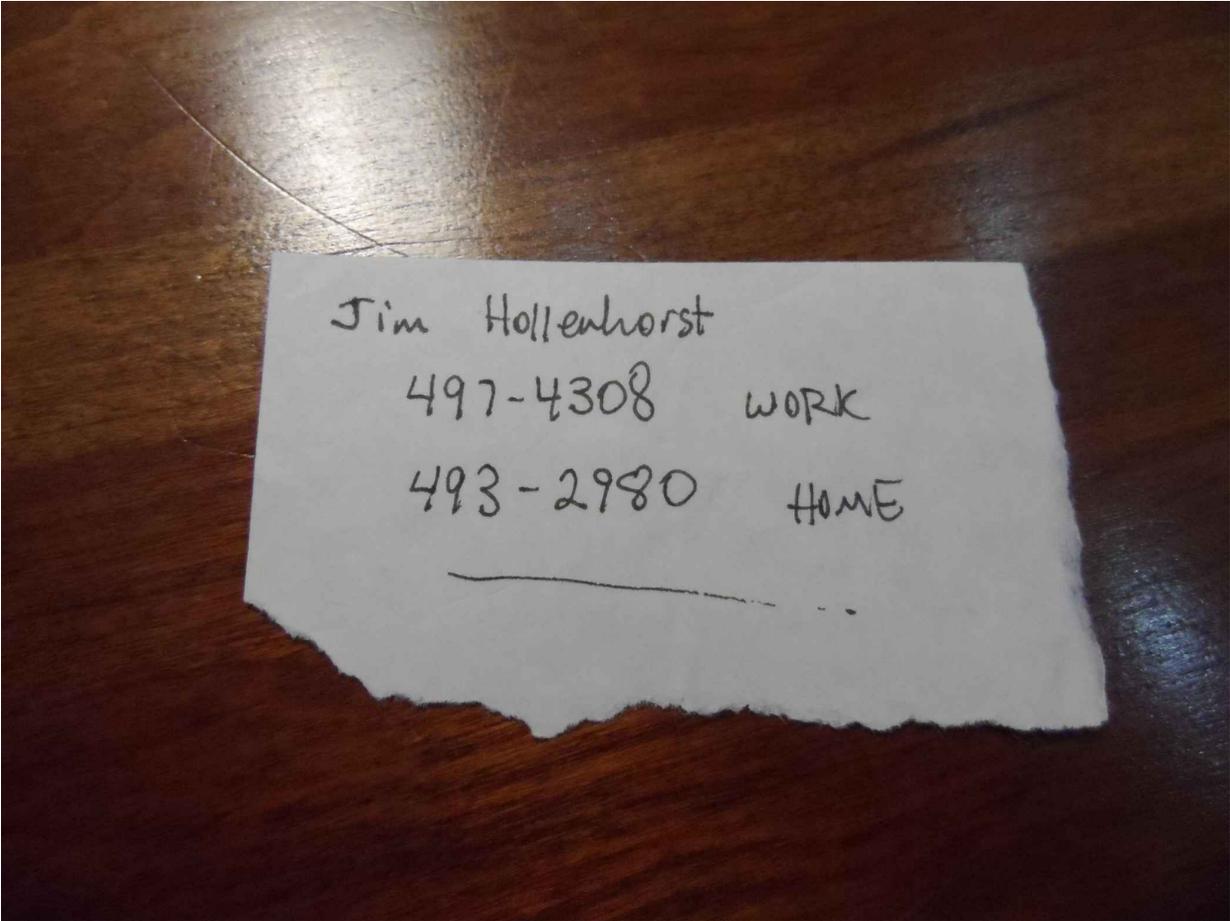
<https://i.imgur.com/Wfpm5fp.jpg>

Roger Billings is a pioneer of hydrogen energy technology

Billings Energy Corp 5/2/79
Provo, Utah 375-0000
Harold Simonds -
H₂ storage Metal hydride 3rd 5th 16
sending data - Complete Dodge system
is \$30,000⁰⁰. Peterson says this is a
Rep off Company.

<https://i.imgur.com/U9z5B1m.jpg>

Jim Hollenurst, who was at Stanford at the time and is big in technology today.



<https://i.imgur.com/52ahzdl.jpg>

Related research to the notes

I tried looking up Pete Peterson and found an interview with David Wilcock S4Ep2 where he discusses meeting Ken in the 70's and seeing his lab. He claims Ken showed him working prototypes of the drone and that it was small enough to fit in your hand with 17 horsepower and powered by isobutene. He also says Ken was at least 50-200 years ahead of everyone else. I do take this guy with a grain of salt, however, because he claims a lot of wild things and it's basically hearsay. Pete covers psychotronics pretty heavily in this series which Lue Elizondo recently confirmed is a real field.

https://www.imdb.com/title/tt9072966/?ref_=tt_ep_nx

Timestamp of Lue confirming Russians experimented with psychotronic weapons

<https://youtu.be/3mkYu7Wbyz4?t=3474>

Eyring Research Institute is a "non-profit" formed around that time with known ties to top secret programs according to wiki.

https://en.wikipedia.org/wiki/Eyring_Research_Institute

Dr. Jakob Mandelker's 1951 book on gravity is hard to find but here is free access to it below.

<https://babel.hathitrust.org/cgi/pt?id=uiug.30112068043451&view=1up&seq=7&skin=2021>

Roger Billings has a wiki

https://yamm.finance/wiki/Roger_Billings.html

Jim Hollenhorst is on linkedin

<https://www.linkedin.com/in/james-hollenhorst-181b944/>

EV's, EVO's, Condensed Charge Clusters, and CCT

EVO's (This is where it gets really interesting)

Intro

There's a lot to take in and I'm honestly not sure where to start. I linked Ken's book to EV's at the top, but even that is overwhelming. He has numerous patents related to them, but patents are also very difficult to make sense of. The good news is that Ken provided sources to try to explain his discoveries using what he called "mainstream" terms. I also was able to find his old website where he shares a lot of information. It appears Ken wanted to get this information out. I also found some correspondence and work of others that helps put things into perspective. **This all culminates in a patent that was written, but appears to have been rejected by the patent office using EVO's for cold fusion.**

Before you write off EVO's and cold fusion I want to reiterate that EVO's are real and very well documented. Ken has slide after slide of SEM and other characterization analysis. EV's or EVO's can also go by the name of high energy charge clusters or a whole host of other terms. It turns out that many people have discovered and documented them and used different terminology because it's not well published information. Before I get into sharing Ken's work I want to point out that Ross Coulthart, famed journalist and author of In Plain Sight, in his interview on TOE mentions cold fusion and the SAFIRE Project using EVO's (he specifically uses the term EVO around 2:19:10 .) Here is a link to the spot where they discuss this.

https://youtu.be/JM3kxeU_oDE?t=8316

SAFIRE has been looked at by Puthoff and Eric Davis as well as Los Alamos and a few other notable names. Coulthart says he's taking the project seriously and notes that academic dismissiveness in cold fusion research is "not entirely legitimate."

<https://www.safireproject.com/>
<https://aureon.ca/>

It's also worth noting SAFIRE is working off of the electric universe theory of Bostick (the discoverer of plasma phenomena that inspired Ken Shoulders I linked above.) What many people don't seem to realize is that SAFIRE isn't the first project to get these kinds of repeatable results. Ken's work was repeatable and thanks to the work of others is now well described as you will see. One project Ross mentions is the Martin Fleischmann Memorial Project.

<https://www.youtube.com/channel/UCey09JW5XAd95JmknU1JOeQ>

Ross actually interviews Bob Greenyer of this project
<https://www.youtube.com/watch?v=7rsHAd9GzLU>

and Bob Greenyer does a great presentation to APEC on EVO's
<https://www.altpropulsion.com/events/apec-1-29-evos-gravity-theory-john-hutchison/>

If you read my comment on the post below you can see how EVO's may potentially be related to the Pais Effect (assuming it's real) because they do in fact create the energy density he claims is necessary.

https://www.reddit.com/r/observingtheanomaly/comments/tsgkzd/interview_with_salvatore_pais/

In this paper it's shown that EVO's can reach 10^6 Tesla and 10^{19} J/m³ using an input of 2.5 kV. It stands to reason that if it scales and I'm not fudging the math, an input that approaches 1 mega volts should also approach the values Pais is claiming will bridge the quantum vacuum with general relativity. (Look around page 11 equation 40.)

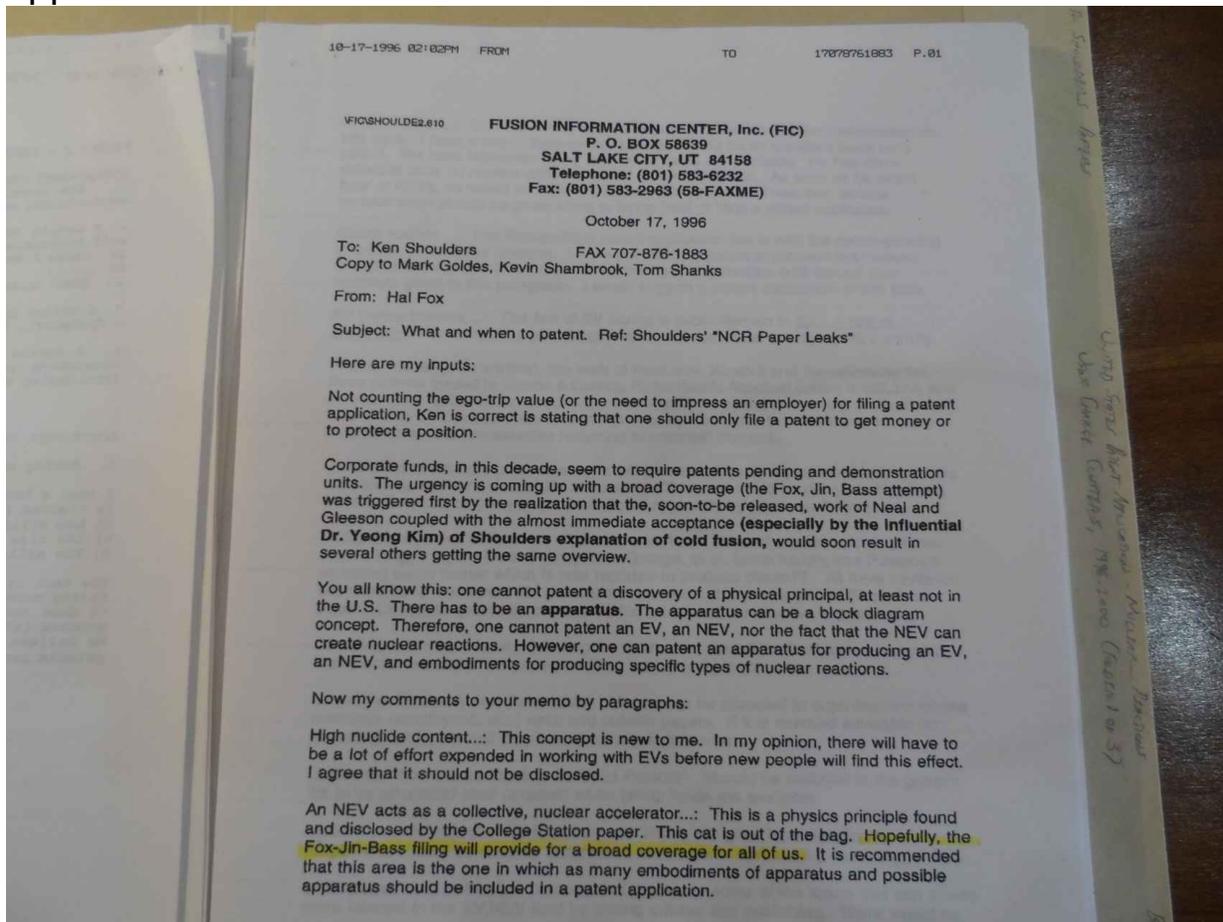
https://freel.tech/charge-clusters/publications/others/2%20-%20JNE1N4_5-20%20-%20Characteristics%20Of%20High-Density%20Charge%20Clusters%20-%20A%20Theoretical%20Model.pdf

The Meat and Potatoes

Observations on the Role of Charge Clusters in Nuclear Cluster Reactions

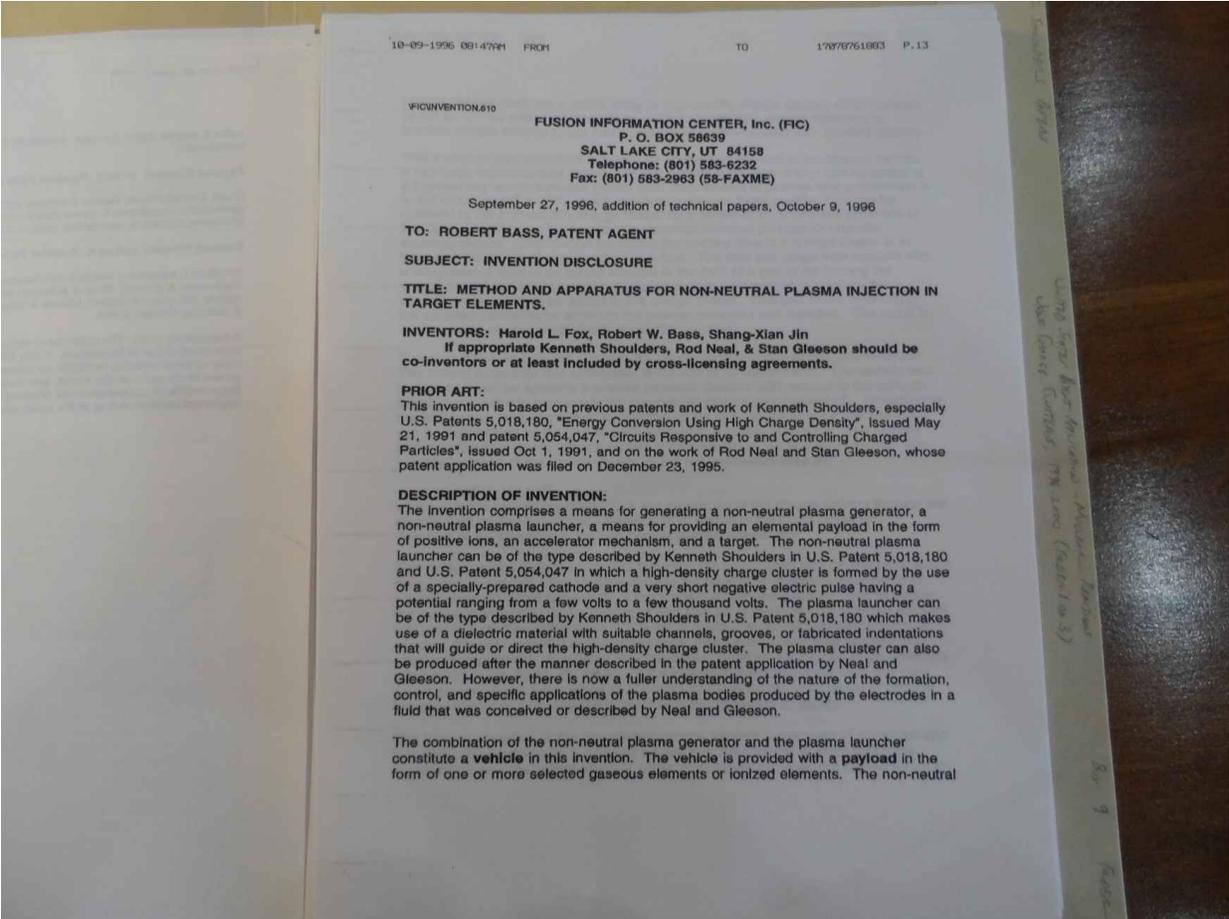
http://oriharu.net/evo/nev_clusters_2.pdf

Here is a letter from Hal Fox describing intent to patent an EVO apparatus to facilitate nuclear reactions with Ken.



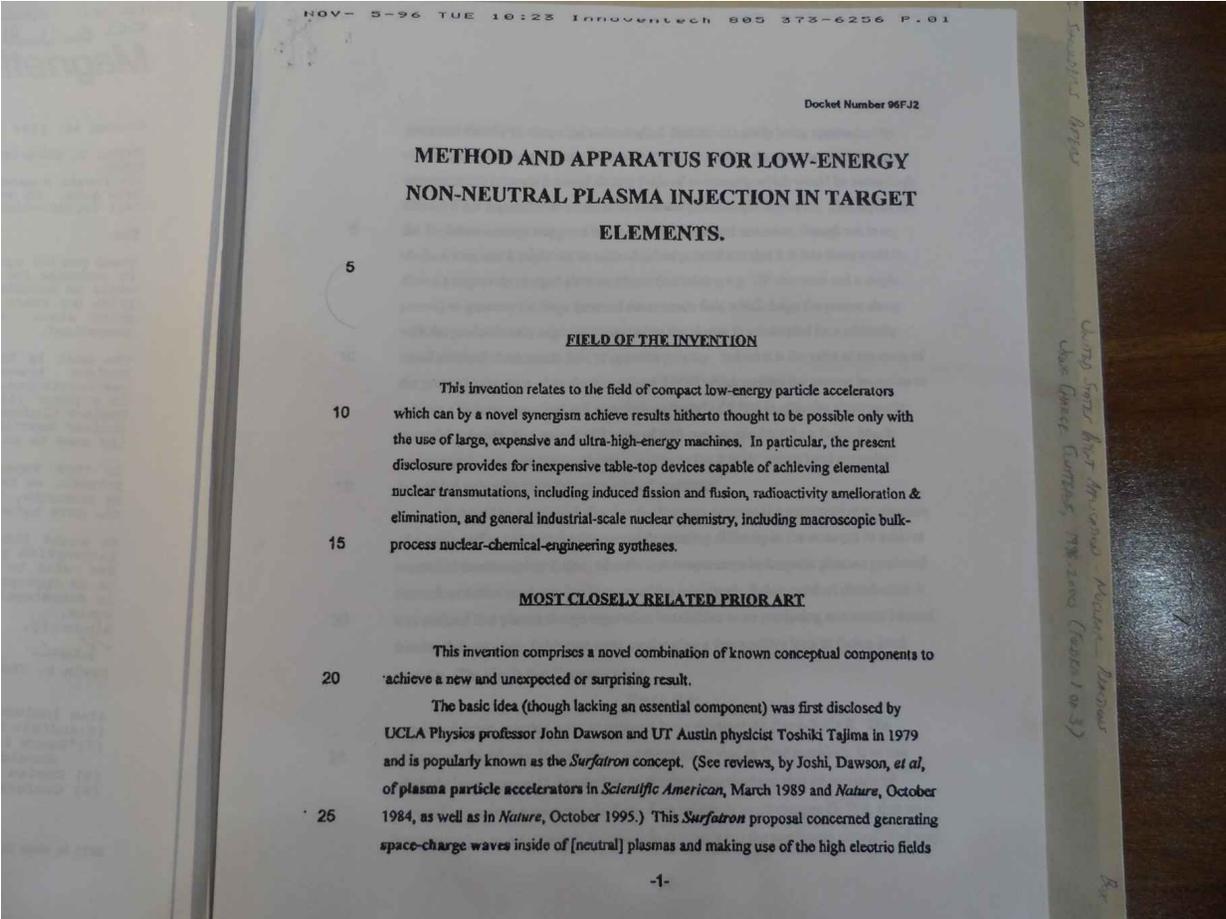
<https://i.imgur.com/zO2SeZb.jpg>

Here is first page draft of said patent from 1996.



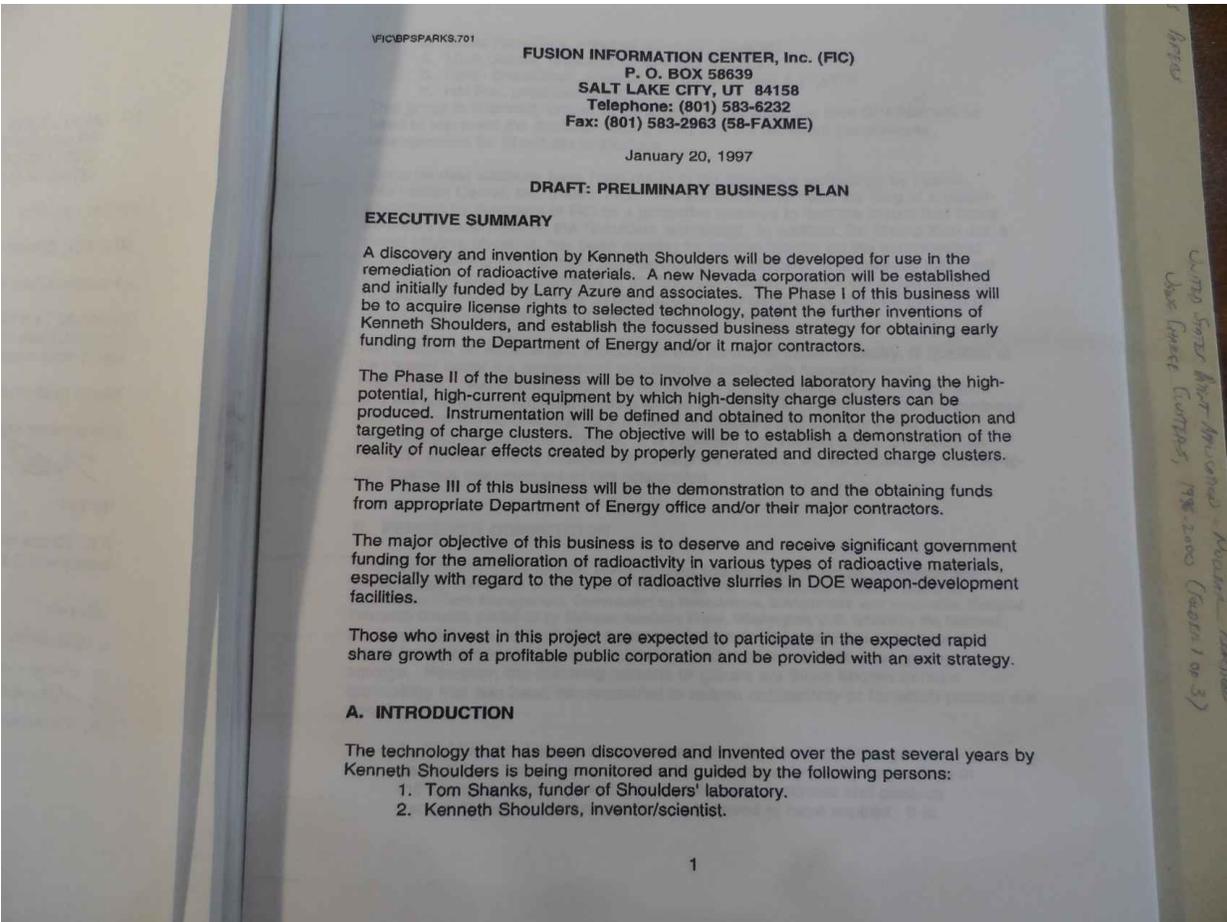
<https://i.imgur.com/XB2bGEN.jpg>

Here's the first page of said patent with docket number. Any lawyers care to look it up for us?



<https://i.imgur.com/LN97XD4.jpg>

Here is the first page of a 1997 Nevada business plan with Larry Azure to remediate radioactive materials and obtain funding from the Department of Energy. It names Tom Shanks as funder of Ken's laboratory.



<https://i.imgur.com/TLtxpLU.jpg>

Ken has an entire print out of the book Cold Fusion: The Scientific Fiasco of the Century in his archives.

<https://www.amazon.com/Cold-Fusion-Scientific-Fiasco-Century/dp/0198558171>

There's an entire folder of information that lists Jupiter Technologies Incorporated (Ken's company) and Energy Products Corporation (unknown entity.)



*CONDENSED CHARGE TECHNOLOGY
(C.C.T.)*

presented by

JUPITER TECHNOLOGIES INCORPORATED

&

ENERGY PRODUCTS CORPORATION (EPCOR)

<https://i.imgur.com/tbGkcpA.jpg>

The information herein is intended to give the average reader
an overview of CCT and some related issues

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** additional characterizations ** advantages **	
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<https://i.imgur.com/ULCW81v.jpg>

SUMMARY

14 May 1990

I. GENERAL: A breakthrough of signal importance (CONDENSED CHARGE TECHNOLOGY - CCT) is claimed, which when commercially realized, will have tremendous global implications for the electronics industry. CCT seems to represent a wholly new "enabling" technology, exploitable now, much like the semi-conductor did once. Executive level information briefings have been given to selected corporate officers, and to many key staff and decision makers in Government, including: ● The White House (Office of the Vice President, President's Council on Competitiveness, OSTP) ● Department of Commerce ● Department of Defense ● Senate/House Staff, etc) - preparatory to significant, coordinated V&V action in the near future.

II. BACKGROUND/ENGINEERING: The discovery was made 10 years ago by a well-known specialist in vacuum microelectronics, Kenneth R. Shoulders, while investigating some advanced Field Emission Devices. At CCT's core is the highly original use of micro-arc discharges and unique vacuum microelectronic components to drive various devices and systems. Charge flow typically occurs at 1/10th the velocity of light. Controlled by deflection as in current steering, electronic memory and switching capabilities as well as kilovolt signal levels in the sub-picosecond time domain have been demonstrated. Instead of dissipating at each logic or memory junction, however, a long serial path of superconductive-like transport is achieved. [Note: The extensive laboratory evidence accumulated during the intervening period strongly supports the observation that, somehow, electronic charge is clustered to densities exceeding by several orders of magnitude that found in conventional electronic devices.]

III. SCIENCE MODEL: Parallel efforts to understand the underlying mechanism are also well along, even though as a commercial enterprise the principal focus is not on science *per se*. A promising, but nascent explanation, invokes the so-called "Casimir Effect" as the binding force; an effect based on electromagnetic zero-point fluctuations (ZPF) of the vacuum. This approach is grounded in the principle of "Occam's Razor"; though it is recognized that there are other candidate explanations, e.g. LEW (localized electromagnetic wave) which may prove valid, despite somewhat more complex natures.

IV. POTENTIAL APPLICATIONS: The plethora of commercial possibilities include:

- Thin, digital, full color, 2000+ line/column displays.
- Low cost, "plastic" radar in 80-90+ GHz ranges.
- Miniature X-ray devices (medical, lithography, etc).
- Powerful etching, boring, etc, manufacturing tools.
- Superfast computers & hi-speed communications in bandwidths otherwise unachievable.
- Novel propulsion "engines" and lightweight, controllable motors.
- Stand-alone energy conversion devices.

<https://i.imgur.com/698yEXF.jpg>

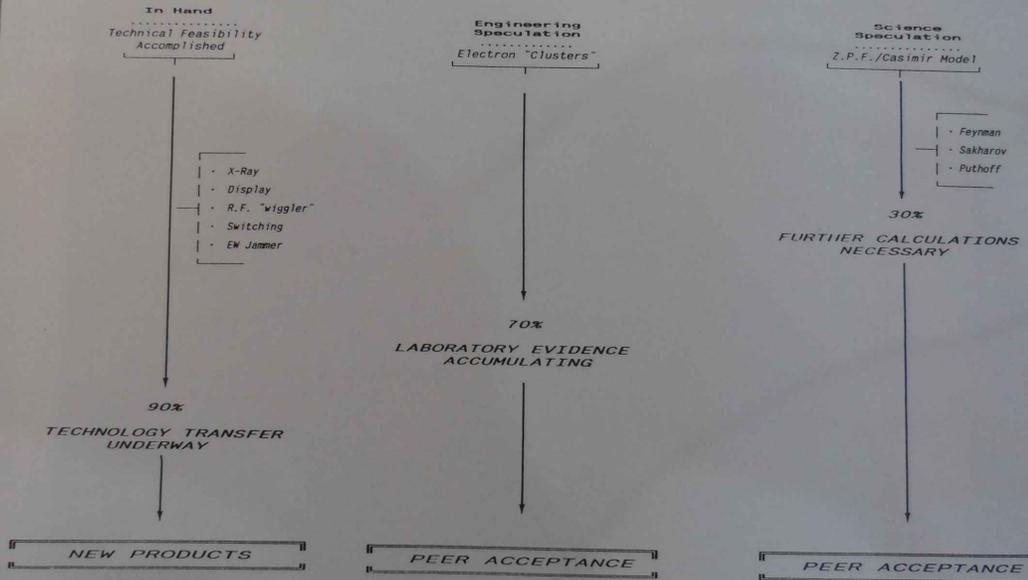
V. STATE OF DEVELOPMENT/VERIFICATION Technology feasibility has been demonstrated—and a short video film is available—with regard to the following: high resolution, flat panel displays of a very unique design; RF "wiggler"; and, switching capability. Technology transfer of these applications to several U.S. and foreign corporations is underway. Active steps are being taken to exploit a CCT-based medical/industrial X-Ray device, which has already been operationally demonstrated by an independent laboratory.

VI. ECONOMIC & TECHNICAL ADVANTAGES OF CCT. Among the most important:

- Exceptionally simple; some applications available for commercialization now.
- Permits engineering designs not heretofore possible. Verification and validation relatively quick and inexpensive, even in basic laboratory.
- Allows more "players" into the electronics game—organizational size less important than other factors.
- Essentially stands alone (e.g., in main does not require integration of other technologies or components)
- Cheap materials sufficient for most products (e.g., plastic/polyimides or ceramics are promising mediums).
- Completely new or extraordinary plant capability not necessary (e.g., no need for clean rooms, etc).
- Already-mature manufacturing technologies also keep start-up costs very modest (e.g., majority of CCT componentry based on well-developed vacuum microelectronics art).
- Low resolution lithography, press print or even molding techniques further permit very low cost manufacturing of sophisticated devices—including certain conformal shapes like curved cockpit displays.
- Operates under variety of demanding conditions: e.g., hard vacuum; low pressure gases; low or high temperature environments (e.g., in one operational test of ceramic-based component the temperature was elevated to =1500° F with no apparent problem); gas streamers; dielectric surfaces; etc.
- Small size per unit power/high gain switching. Low power consumption but high peak power outputs.
- High speed, short pulse circuitry.
- Non-polluting & environmentally immune: EMP, cosmic radiation, temperatures, etc.

<https://i.imgur.com/nrrNN2F.jpg>

STATE OF C.C.T. "ART"



<https://i.imgur.com/2cW34JL.jpg>

FACT SHEET

WHAT IS CCT?

As Hellemans and Bunch point out in their chronology, "The Timetables of Science," there are generically two kinds of technology. One, the zipper for instance, solves specific problems. The other is generalized and can be brought to bear on many fronts, the laser for example.

CCT is an "enabling" technology of the second type – that is, one which will allow design engineers to not only greatly improve existing systems, but also to develop entirely new classes of cheap, powerful electronic devices, heretofore impossible or too costly to produce. CCT functions on the basis of special micro-arc discharges (rather like modified, miniature lightning strokes). Based on analyses of ten years of experimental and other laboratory data, these are thought to contain tightly bound, dense clusters of electronic charge of enormous power relative to their small size. It was invented in about 1981, by Ken Shoulders [biography enclosed], an internationally recognized expert in nanotechnologies, especially vacuum microelectronics and field emission devices.

ON A GLOBAL SCALE HOW DOES IT COMPARE TO OTHER NEW TECHNOLOGIES?

The only other one of similar scope is that associated with so-called "superconducting" material. Significantly, however, CCT can be commercialized now, not many years in the future, and we anticipate that it will actually cut a wider path through the electronics world. As for other technologies, many if not most are in reality incremental, expensive adjustments to old designs. These will be relegated to the margins. To quote the senior scientist of one of Italy's largest corporations: "...if CCT can be commercialized, it will be equivalent to the invention of electricity itself."

ANY FURTHER TECHNOLOGICAL CHARACTERIZATION?

The underlying phenomena are ubiquitous: man made or natural spark/arcs of almost any kind, for example lightning, or even the familiar blue "pop" one gets from static buildup (e.g., when one walks across a carpet on a dry day and then touches a metal object). In its uncontrolled state, such "spark," large and small, is destructive and disruptive, and so scientists and engineers have traditionally labored to eliminate it completely from all electronic systems. Thus, *the most important point about CCT* – and that which distinguishes it from any other electronics technology – is that we have discovered a way(s) to *integrate* spark, or more accurately *micro-arc discharges, into, not out of a system*, thereby taking advantage of the many beneficial properties inherent to the phenomena. We make it, control it and use it on command.

<https://i.imgur.com/ujc4Fy2.jpg>

WHAT DIFFERENTIATES CCT FROM OTHER "SPARK" [ARC] TECHNOLOGIES?

Although electrical discharge phenomena have been investigated for over a century [Heinrich Hertz used spark generation to demonstrate the propagation of electromagnetic waves in 1888], other than in the brief use of spark-gap transmitters earlier this century, as indicated above such phenomena are by and large engineered out of electronic devices because of their generally destructive nature. This is primarily because arc discharges constitute a plasma of energetic ion and electron currents. In CCT engineering the discharge is refined such that [we believe that] a "precipitate" of dense non-space-charge-neutral electron currents is extracted from the plasma "slurry", to provide a highly distilled electronic phenomenon which is then put to use. It is the art-state in the refinement process that differentiates CCT from ordinary plasma streamer discharge phenomena.

WHAT ARE SOME ADVANTAGES OF CCT?

- Very cost effective. CCT combines inexpensive materials, and simple manufacturing processes which will result in highly advanced products that can aggressively compete in any market segment.
- Infrastructure availability/accessibility. Manufacturing & knowledge base(s) already exist in the main – low start-up costs.
- Non-polluting – EMP and cosmic radiation immune.
- Whole new vistas of electronics applications – ready for exploitation now.
- Hypervelocity: operates at super fast speeds.
- Stand alone profile - needs little, if any, integration with other components.

IS IT A COMPLEX TECHNOLOGY?

No. Standing in stark contrast to increasingly complex electronics of the familiar variety, CCT has only two essential components, so its elegant, inherent simplicity is principal among many virtues: ● a "source" of the electronic charge ● a "guide" for control. Typically, we also employ special geometries and techniques to strip away surrounding plasma, leaving only the "pure" electronic charge. CCT thus comprises the integration and operation of only three elements. As for future product development, the necessary microfabrication technologies and techniques are themselves quite mature, obviating the need to learn vastly new sets of skills.

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WHAT ARE SOME POTENTIAL APPLICATIONS OF CCT?

- 60-90+ GHz "plastic" radar, e.g., for automobile/aviation applications.
- Tiny, throwaway X-ray devices (medical, & possibly some kind(s) of lithography, inspection, etc).
- Super quick computers and switching devices.
- Extremely high frequency communications.
- Small, stand-alone energy conversion/storage devices.
- Deep space propulsion.
- Very high resolution, full color flat panel displays of far broader consequence than just HDTV.

WHERE HAS TECHNICAL FEASIBILITY BEEN SHOWN?

- Flat panel display.
- R.F. radar "wiggler."
- Switching & deflection [as for stepping registers].
- Electronic warfare jammer.
- X-ray device.

A video film of the first three applications has been produced and there is an after action report from an independent laboratory of a successful technology transfer/ V&V exercise regarding a prototypical X-ray device.

HOW SOON TO THE FIRST PROTOTYPES?

(1) Basic radar element available now for RF emission tests; advanced designs in ± 8 months. (2) Medical X-ray device the approximate size and shape of a ball point pen could be done in about 10-12 months. (3) Single line/RGB² phosphor multiple pixel capability can be shown now, and a fully working demo of a flat panel display feasible in ± 24 months.

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WHAT IS CCT'S CONTRIBUTION TO FLAT PANEL DISPLAY TECHNOLOGY?

The hi-resolution flat panel [though it might just as well be curved] concept, e.g., is backed by a very detailed engineering design. Rather than consider it, say, only as an "HDTV" candidate, the CCT display will fit into a much more diversified range of information environments, limited mainly by imagination: ● computer work station, where it might pace even complex Cray-generated models, e.g., those involving fluid dynamics problems ● command and control centers (military and corporate) ● 1-piece panoramic aviation cockpits and auto dashboards ● "wrist watch" imaging ● movie screens built into the back of fold-down food trays aboard airplanes, ● industrial dials & meters ● imaging systems for color printing operations, e.g., periodicals ● so on.

A CCT-based display has many other advantages over other candidate technologies, themselves trying to displace the venerable C.R.T., which to now remains unbeatable. Most have one or more severe technical and/or economics-related problems and even after years of development work and considerable investment in scarce resources, still do not appear very promising: LCD, LED, plasma, active matrix, electroluminescence, etc. Conversely, consider these aspects of a CCT display, keeping in mind that *it operates without raster scanning or any electron source excepting CCT:*

- 24 lead wires – 70 frames/s refresh rate & update rate 16 frames/s – high speed addressing – no multiplexing or half-select problems.
- High 200 ft brightness** – low 45 watt power consumption.
- May be "conformable", e.g., molded, curved cockpit – lightweight, possibly plastic construction.
- 4,000,000+ pixel resolution (2k x 2k lines/rows) on 25" screen.
- ¼" thick – up to 48" X 48" size feasible.
- Environmentally immune, e.g., not affected by temperature, EMP/cosmic radiation, etc.
- 4-dot R.G.B.² phosphor pixel – 128 level gray scale – no transistors.
- Already-mature flat panel componentry (e.g., gating) exists – CCT principally introduces a new, powerful, compact electron source.

**In trials done in early April 1990, brightness levels on the order of "several thousand foot lamberts" [by "guesstimate"] were achieved.

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IS THERE A DAUNTING MANUFACTURING CHALLENGE?

Not likely, but there are areas which we will closely monitor as we prototype. In the display, for instance, we will pay strict attention to: Field Emission-type Source and the long, lithographically-produced Guide.

WHAT IS THE STATUS OF TECHNOLOGY TRANSFER?

In various stages. Within the past year about 18 major corporations here and abroad have been fully briefed on an informational basis. As of March 1990, actual hardware components are being constructed to send to two US aerospace corporations and one in Europe. Several organizations in the Far East have inquired about receiving the briefing, following which they propose exchange visits by technical teams. Jupiter has these requests temporarily on hold. Other European and US firms have the matter under serious advisement and consideration. Since about Summer 1989, the US Government has been apprised at the most senior levels, and that process continues.

ANY POSSIBLE GENERAL EFFECT ON ELECTRONICS INDUSTRY?

CCT is the ultimate "fair" system - everyone will start out basically on the same level playing field. It may affect companies in the same manner as individuals - widely and deeply - with the development of new, powerful electronics products not possible with other technologies [hence the term "enabling"]. Though there may be disruptions similar to those caused by the transistor/semiconductor several decades ago, these will be ameliorated by the birth of robust, new electronics enterprises. One small example: a miniature automobile bumper radar in the submillimeter wave regime, for the European Eureka Project Prometheus.

The ease with which CCT can be assimilated, that is, its inherent simplicity, in combination with low buy-in costs suggest at least three credible scenarios. First, relatively small houses could aggressively compete against today's Titans and succeed. Second, major companies not currently engaged in electronics might add wholly new business lines. An automaker, for example, making "virtual world" or panoramic dashboard displays is only one step removed from all other display sectors, including the ultra-lucrative HDTV one. Finally, Old Guard firms might integrate it into existing operations as a survival strategy if for no other reason; but, should they adopt a reactionary posture, that is, do not adjust to this new technology "trail," they risk being overcome by events. [As with NCR when it clung tenaciously to electromechanical devices in face of the semiconductor threat and had to write off a \$140M loss at one fell swoop.]

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MIGHT IT HELP REGAIN "LOST" TECHNOLOGICAL GROUND?

The presumption is, yes, provided that the opportunity to develop it in America does not slip away. One of its real economic advantages is that size and sophistication, or even the historical nature ["culture of the laboratory" so to speak] of one's manufacturing organization are factors not nearly so important as some others. It works both ways, obviously, so it might well turn out that off-shore firms will prove more adaptable to changing realities imposed by CCT. Should these then seize the moment, the US might lag even further behind.

WHAT ROLE FOR GOVERNMENT?

Minimal. In sum, no royalty-free arrangement is envisioned, so particular attention will be given to the legal principle of "reduced to practice." Both Jupiter and EPCOR believe in carrying their own weight insofar as possible, and intend to maintain general control of the technology. On the national/policy legal levels the main need is for that support normally afforded to any American enterprise which has made a technology breakthrough of CCT's magnitude.

Operationally, only a modest, short-term, government-sponsored program of low cost engineering [vice theoretical "science," which in any case will be a natural fall out from well conducted replications of some practical devices like the RF wiggler] verification and validation by some National Laboratories and perhaps several universities is wanted. Aside from the V&V aspects, this step is desirable since we cannot, given certain laboratory limitations, make special parametric measurements. It will also serve the purpose of speeding integration into the commercial sector. We recognize that government will be a major customer, and are cognizant that some national security needs might be met by CCT, but the company does not itself wish to be drawn into classified work. As with potential business partners, our policy is to make full technology transfer, so long as rights are protected.

WHO ELSE IS LOOKING AT USING MICRO-ARC DISCHARGES?

Many are struggling along traditional approaches trying to harness field emission effects. But, given that our work and designs are highly original and are not of the usual garden-variety of FE devices or components, no one we know of is doing anything similar, at least not prior to our briefing them and making the data available. The Soviets have made claims regarding extraction of energy from the vacuum via a so-called "Chernetskii" self-generating discharge device. However, based on access to some of their internal documents, as well as a visit with Chernetskii in Moscow made by our consulting physicist in February 1990, we are not convinced. Nevertheless, the matter should be taken seriously until proven one way or the other.

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From time to time we hear vague rumors about some energy-related work going on, possibly government-sponsored, in "West Virginia," but have no way [or particular interest] in pursuing the matter.

ARE YOU CONCERNED ABOUT PROTECTION - PATENTS/RIGHTS?

Jupiter Technologies, Inc, Austin, Texas has been assigned all rights to the pending patents and related Continuations In Part, filed worldwide. Rights to exploit certain of the potential applications have been further granted to the licensing company, EPCOR (Energy Products Corporation). Naturally, given the impunity with which intellectual properties are plundered here and abroad, considerable attention has been paid to the patent proper. And, as the recent USAF-Hughes satellite autostabilizer case, or the 25-year free use of IC technology by other countries amply demonstrates, the danger threatens even the biggest and can come from any direction. 20th Century history is fraught with examples of those who lost out, or nearly did so, among them:

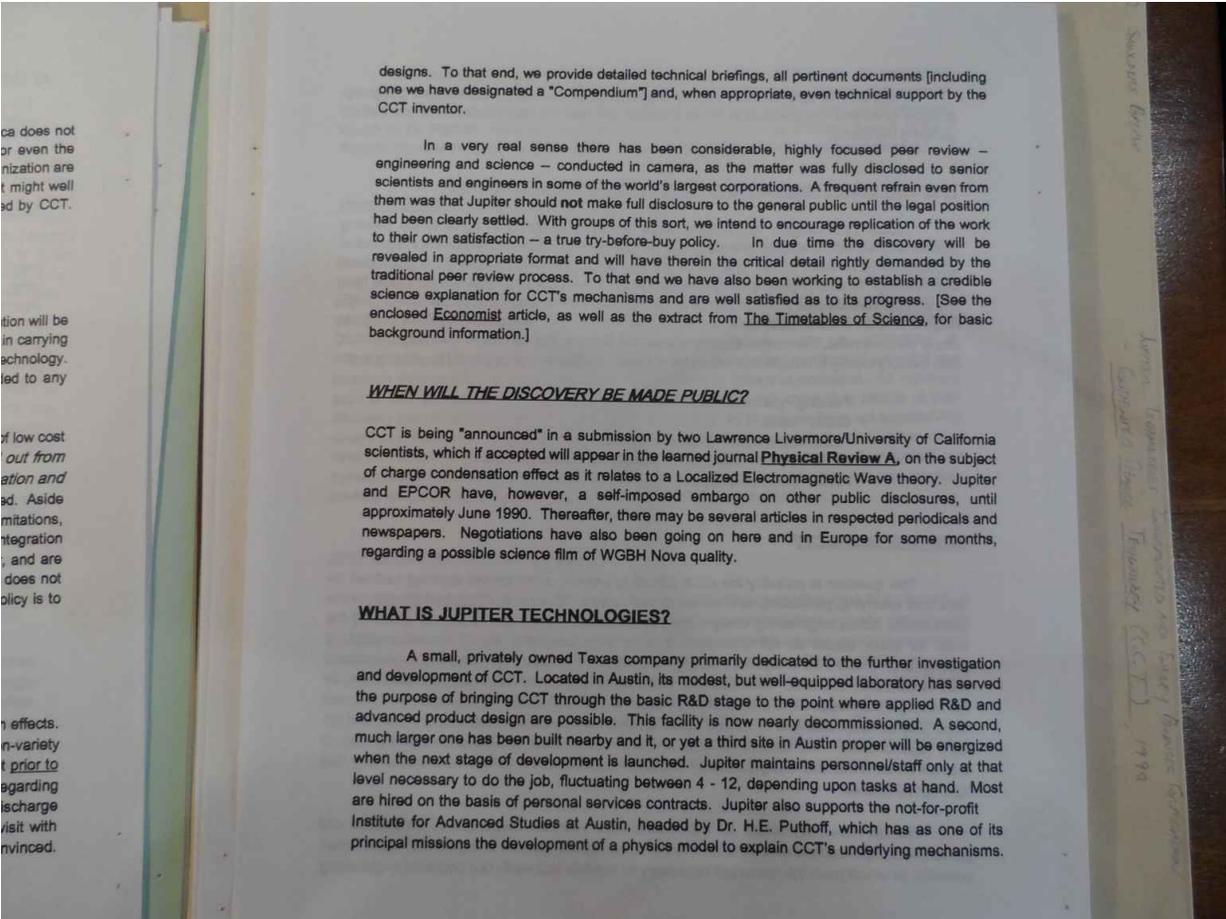
- Fleming - penicillin
- Gould - laser.
- Texas Instruments - integrated circuit.
- Dr. R. Kearns - time delay automobile windshield wiper.
- Xerox - personal computer.

WHY THE SECRECY?

This question is probably the most difficult to answer, since almost anything said will be less than satisfying, particularly as it relates to peer review. [Even in the **Physical Review** piece cited below, actual engineering designs are not revealed.] While we are acutely aware of the need for such, based on full disclosure, it is at what point this should be done which is problematic. In the final analysis it's a judgment call to be made by the company in accordance with its own best interests. Consequently, three years ago a corporate decision was taken, as the strategic plan required, to protect commercial potential at all costs. Thus, data has been kept close hold as recommended by trusted advisors who have enormous business acumen, and top flight legal counsel. The consensus was, and still is, that there is simply too much at risk to embark on an ill-advised, hasty campaign of public revelations. For the moment we will stay that tight-lipped course.

We do, however, share all information with selected corporations, individuals and government organizations who we feel have the capability and interest to exploit CCT to its fullest potential, or which have the resources necessary to validate and verify our empirical engineering

<https://i.imgur.com/EdjEcGP.jpg>



designs. To that end, we provide detailed technical briefings, all pertinent documents [including one we have designated a "Compendium"] and, when appropriate, even technical support by the CCT inventor.

In a very real sense there has been considerable, highly focused peer review – engineering and science – conducted in camera, as the matter was fully disclosed to senior scientists and engineers in some of the world's largest corporations. A frequent refrain even from them was that Jupiter should not make full disclosure to the general public until the legal position had been clearly settled. With groups of this sort, we intend to encourage replication of the work to their own satisfaction – a true try-before-buy policy. In due time the discovery will be revealed in appropriate format and will have therein the critical detail rightly demanded by the traditional peer review process. To that end we have also been working to establish a credible science explanation for CCT's mechanisms and are well satisfied as to its progress. [See the enclosed *Economist* article, as well as the extract from *The Timetables of Science*, for basic background information.]

WHEN WILL THE DISCOVERY BE MADE PUBLIC?

CCT is being "announced" in a submission by two Lawrence Livermore/University of California scientists, which if accepted will appear in the learned journal *Physical Review A*, on the subject of charge condensation effect as it relates to a Localized Electromagnetic Wave theory. Jupiter and EPCOR have, however, a self-imposed embargo on other public disclosures, until approximately June 1990. Thereafter, there may be several articles in respected periodicals and newspapers. Negotiations have also been going on here and in Europe for some months, regarding a possible science film of WGBH Nova quality.

WHAT IS JUPITER TECHNOLOGIES?

A small, privately owned Texas company primarily dedicated to the further investigation and development of CCT. Located in Austin, its modest, but well-equipped laboratory has served the purpose of bringing CCT through the basic R&D stage to the point where applied R&D and advanced product design are possible. This facility is now nearly decommissioned. A second, much larger one has been built nearby and it, or yet a third site in Austin proper will be energized when the next stage of development is launched. Jupiter maintains personnel/staff only at that level necessary to do the job, fluctuating between 4 - 12, depending upon tasks at hand. Most are hired on the basis of personal services contracts. Jupiter also supports the not-for-profit Institute for Advanced Studies at Austin, headed by Dr. H.E. Puthoff, which has as one of its principal missions the development of a physics model to explain CCT's underlying mechanisms.

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As indicated, whilst attention is focused on a particular line of inquiry, we are keeping an open mind on the matter, in the full knowledge that there are other, competing models which in the end may turn out to best explain the phenomena of CCT. [See also the enclosed biographical sketch on Dr. Puthoff. His forthcoming article, "Quantum Fluctuations of Empty Space: A New Rosetta Stone of Physics," to appear Spring 1990 in New Scientist, may also be of interest.]

WHAT ABOUT FUNDING & BUSINESS PLAN?

We have had sufficient private source money. [See also the enclosed "business terms of reference."] The overall business strategy is a variant of that perfected by Ray Dolby and can, thus, be summed up with two words: fees and royalties. Neither Jupiter nor EPCOR will "go public," and do not wish to grow, nor to be engaged in manufacturing. The focus will remain on developing CCT for other applications. EPCOR was formed specifically to handle five near-term CCT applications: ● RF (radar, jammer, etc) ● displays ● x-ray ● computing ● manufacturing devices. To that end, EPCOR may manufacture limited numbers of elements and prototype devices and provide these to other corporations for tests and evaluation. An important point is that contrary to normal practice whereby inventors do not share their details of their discovery prior to financial commitment by the second party, up to now we have not aggressively sought any financial or other business arrangement – private or government – but, rather, have been providing information for senior decision makers to reflect upon; as previously indicated, our try-before-buy philosophy. We have reached, however, the stage whereby we are carefully seeking solid long-term partners who will fully exploit CCT commercially.

WHY IS CCT IMPORTANT TO ME?

As with any transforming technology there will be significant, positive impacts on individual quality of life, worldwide. As previously indicated, whole new product lines – made cheaply and with superior technical attributes – may interest corporate decision makers, while governments will see important, salutary first order effects on the budget process. Perhaps CCT should be treated as a counterpart "technology dividend" to the much-hoped-for and ballyhooed "peace dividend." Expressed in purely financial terms the two "dividends" might well be on equal footing. We would not be surprised if there were changes in the international geopolitical status quo, should some "second world" nations seize the initiative based on the fact that less sophistication is required [e.g., no "clean rooms" are necessary] and start-up costs are minimal.

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is the not-for-profit
which has as one of its
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HOW IS CCT RECEIVED? ANY PROBLEMS?

A good question which cannot be fully addressed herein. Most important is that we have never been refuted on technical merit and thus on the engineering/design levels "acceptance" is excellent. Even so, it is difficult to keep attention focused on hard observables and the fact that CCT can be demonstrated in applications of potentially enormous consequence; and away from speculative science and engineering issues, or worse, the tendency of an occasional few to introduce irrelevancies or personalities into the matrix. [Please refer to the CCT "art" diagram at page 3 of this booklet, particularly the left side flow line.] The following true anecdote exemplifies the occasional attitude "problem":

We were meeting with a distinguished group of scientists and engineers at one of the world's largest, most famous firms. The senior participant opened the session by saying that he had glanced over the data and concluded that we could not have discovered CCT. Our data must be poor science, misinterpreted results, etc. He went on to explain that if such a thing were "discoverable" his own company, which employs tens of thousands working in dozens of laboratories, with practically unlimited resources, would have done so already! [Note: Previously, he was a principal science advisor to the government, and so viewed himself as a peerless expert – one of many encountered along our way – akin to infamous mis-prognosticators like Admiral Bill Leahy, Sir Richard Woolley, Lord Kelvin and Devin, and Ernest Rutherford.] Fortunately, good sense prevailed and following second round talks we expect to make tech transfer.

We sense that CCT has already introduced thorny management challenges to some corporate decision makers, e.g.: ● should existing programs be protected ● the expense and bother of engaging in any new technology—retooling for instance ● political capital and good will depleted during sometimes mind-numbing campaigns to proselytize [the Public, Congress, the Administration, et al] for this system or that ● not-invented-here mentality ● etc. While one perhaps should anticipate and insofar as possible plan for specific, sometimes sublimely subtle problems like these, overly dwelling on them is counterproductive. One could presume, for example, that traditional TV makers and those looking to displace them in the search for the "HDTV grail," may turn away from CCT – even in spite of potentially tremendous near term gain - - not necessarily on technological grounds, but rather due to simple economics and sunk costs; that is, other options, previously quite alluring, albeit now less promising, may have already been chosen and in some cases vast sums already spent. Sometimes we are asked if there is a danger of a big company buying CCT in toto, then shelving it, never to be commercially exploited. That seems highly unlikely in light of how rapidly information and ideas are disseminated nowadays. It is unrealistic that any motivation could tempt a "baron," public or private, even to attempt keeping CCT from the marketplace. In conclusion, it is perhaps more important that we simply maintain a general awareness of the power wielded by both constituent interest groups and individual zealots at all levels.

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GENERAL TERMS LIST FOR BUSINESS RELATIONSHIP

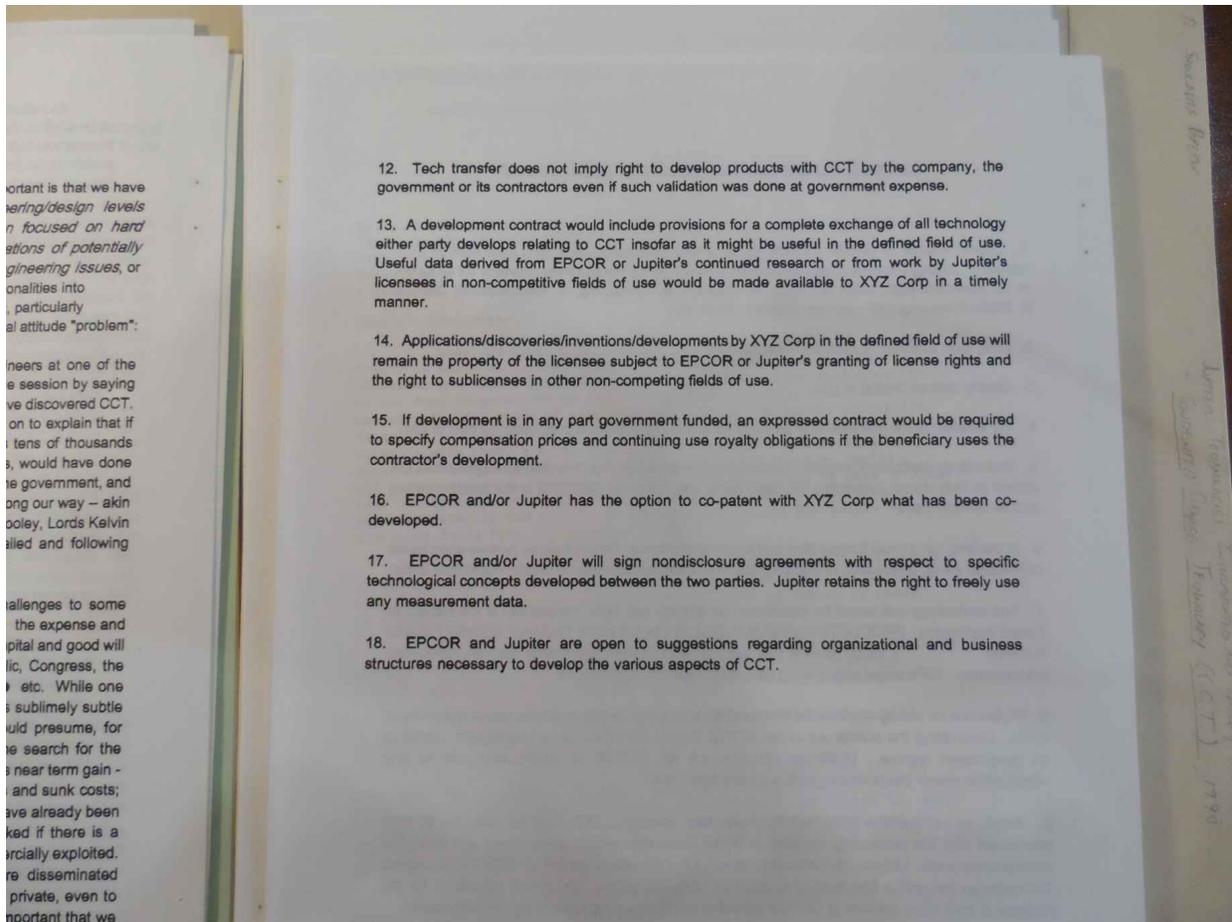
Most important is that we have engineering/design levels attention focused on hard applications of potentially and engineering issues, or personalities into booklet, particularly occasional attitude "problem":

and engineers at one of the opened the session by saying did not have discovered CCT. He went on to explain that if employs tens of thousands resources, would have done advisor to the government, and entered along our way - akin Richard Woolley, Lords Kelvin see prevailed and following

ment challenges to some selected • the expense and political capital and good will [the Public, Congress, the mentality • etc. While one sometimes sublimely subtle One could presume, for them in the search for the tremendous near-term gain - economics and sunk costs; g, may have already been e are asked if there is a e commercially exploited. ideas are disseminated public or private, even to s more important that we tudent interest groups and

1. Jupiter intends to remain primarily an advanced technology think tank dedicated to CCT research. Energy Products Corporation (EPCOR) will act as the business interface for all facets of the near-term exploitation of: X-ray • Displays • Computing • Manufacturing Devices • Radio Frequency (RF - communications, radar, etc).
2. Long term strategic relationships are desired.
3. Clearly defined field(s) of use.
4. For smaller, niche markets, license could be worldwide exclusive in the defined field of use.
5. Technology verification program, cooperative joint development, licensing arrangement all OK insofar as they do not jeopardize the basic rights and claims as described in the pending patent and its continuations.
6. In the long run annual license fees and royalties preferred. Determined by agreed-upon levels of potential sales, delineation of geographical areas and applications involved. Fixed time limits.
7. The technology that would be transferred (or already has been transferred) is the subject of Patent Application: PRODUCTION AND MANIPULATION OF HIGH CHARGE DENSITY (Serial Number:) which covers the basic charge cluster technology and all associated componentry. CIPs cover engineering designs for specific applications.
8. Preference for strictly commercial relationships which completely avoid the use of government funds. Committing the scarce resources of XYZ Corp is important as compared with operating on government monies. Under no circumstance will EPCOR or Jupiter relinquish to any organization use of the technology on a royalty-free basis.
9. Small, non-refundable good-faith fee upon tech transfer. XYZ Corp will assume all cost associated with the technology transfer, both the immediate and ongoing direct and overhead maintenance costs. Unless otherwise stipulated such a transfer does not bind EPCOR or Jupiter Technologies Inc until a first right of refusal has been negotiated. Such tech transfer is for the purpose of XYZ Corp assessing CCT for potential commercial exploitation by the corporation.
10. Possibility of obtaining first right of refusal for defined time period by additional fee payment.
11. Until first right of refusal is granted in writing, EPCOR will continue parallel discussion with other corporations.

<https://i.imgur.com/llrALiA.jpg>



<https://i.imgur.com/wslp181.jpg>

I managed to find Ken's old website on the wayback machine and it's full of more information. I found this because Ken had printouts from the website in his archives. It saves me a lot of work actually.

<https://web.archive.org/web/20070928100909/http://www.svn.net/krscfs/>

Related information

I found and bought a book that covers experiments in Kiev, Ukraine done in the early 2000's that also claim to transmute elements and allow for nuclear remediation. I shared it in the post below.

https://www.reddit.com/r/observingtheanomaly/comments/tjogh3/controlled_nucleosynthesis_breakthroughs_in/

The point being numerous people have been reporting transmutations and anomalous energy output since the famous Pons-Fleischmann results of 1989. Shoulders, Adamenko and SAFIRE are not the only people since then to report these kinds of results. Much like the stigma of UAP/UFO's keeps academia out of the subject the same can be said for "cold fusion."

This is just part 1 of my preliminary research into Ken's work and EVO's. It's so much I haven't had enough time to dive into everything I just shared deeply yet myself. It's like drinking out of a firehouse and I'm sharing this research with you all in real time. There's so much more to come.

You can download those pdfs off his archived site using this link instead

<https://web.archive.org/web/20130316173424/http://www.svn.net/krscfs/>

[The Black Vault FOIA Documents on "Cold Fusion"](#)

"This body of research has produced evidence that nuclear reactions may be occurring under conditions not previously believed possible." - DIA Document

After doing my Part 1 deep dive research into Ken Shoulders and EVO's, I was curious if anybody has FOIA'd "cold fusion" or LENR. It turns out TheBlackVault has a number of documents on it.

https://www.reddit.com/r/observingtheanomaly/comments/tzhva6/ken_shoulders_primary_research_part_1_an/

TLDR: The DIA and Naval research laboratory appear to be taking claims of LENR/cold fusion seriously despite ridicule from the scientific community. Also scientists all around the world are quietly researching it despite lack of funding and they are reporting anomalous results. Excess energy, nuclear particles and transmutation are all reported.

Most Recent LENR/Cold Fusion DIA Document

Here is one obtained in 2021 from the DIA. According to TheBlackVault...

The original request asked for, "... all reports from the DIA Defense Warning Office (DWO) since 1989 concerning Low Energy Nuclear Reactions or LENR or Cold Fusion."

The result yielded four documents, totaling 34 pages. However, three of those documents were withheld in full, which totaled 26 pages. That meant, only 8 were released, in part."

<https://documents2.theblackvault.com/documents/dia/FOIA00380-2016FinalResponse.pdf>

The document is from 2009 and cites 54 sources. Below is the intro, background and source summary statement word for word. I've bolded words for emphasis.

*Scientists worldwide have been quietly investigating low-energy nuclear reactions (LENR) for the past 20 years. Researchers in this controversial field are now claiming paradigm-shifting results, including generation of large amounts of excess heat, nuclear activity and transmutation of elements. Although no current theory exists to explain all the reported phenomena, some scientists now believe quantum-level nuclear reactions may be occurring. **DIA assesses with high confidence that if LENR can produce nuclear-origin energy at room temperatures, this disruptive technology could revolutionize energy production and storage, since nuclear reactions release millions of times more energy per unit mass than do any known chemical fuel**.*.**

Background

*In 1989, Martin Fleischmann and Stanley Pons announced that their electrochemical experiments had produced excess energy under standard temperature and pressure conditions. Because they could not explain this physical phenomenon based on known chemical reactions, they suggested the excess heat could be nuclear in origin. However, their experiments did not show the radiation or radioactivity expected from a nuclear reaction. Many researchers attempted to replicate the results and failed. **As a result, the physics community disparaged their work as lacking credibility, and the press mistakenly dubbed it "cold fusion."** Related research also suffered from the negative publicity of cold fusion for the past 20 years, but many scientists believed something important was occurring and continued their research with little or no visibility. For years, scientists were intrigued by the possibility of producing large amounts of clean energy through LENR, and now this research has begun to be accepted in the scientific community as reproducible and legitimate.*

Source Summary: Statement

This assessment is based on analysis of a wide body of intelligence reporting, most of which is open source information including scientific briefings, peer-reviewed technical journals, international scientific conference proceedings, interviews with scientific experts and technical media. While there is little classified data on this topic due to the S&T nature of the information and the lack of collection, DIA judges that these open sources generally provide the most reliable intelligence available on this topic. The information in this report has been corroborated and reviewed by US technology experts who are familiar with the data and the international scientists involved in this work.

*Although much skepticism remains, LENR programs are receiving increased support worldwide, including state sponsorship and funding from major corporations. DIA assesses that Japan and Italy are leaders in the field, although Russia, China, Israel, and India are devoting significant resources to this work in the hope of finding a new clean energy source. **Scientists worldwide have been reporting anomalous excess heat production, as well as evidence of nuclear particles and transmutation.***

It goes on to report a dozen cases of LENR/cold fusion reports by scientists including researchers in the Navy in 2009 and notes SRI International (same organization connected to Hal Puthoff and Ken Shoulders) has been studying it since the early 90s, which is basically the entire time. Below is another word for word, but this time the bolding is theirs, not mine.

“This body of research has produced evidence that nuclear reactions may be occurring under conditions not previously believed possible. Recent results suggest these anomalous LENR phenomena can be triggered by various energetic stimuli (electric and magnetic fields, acoustic waves, infrared, lasers) and may have a variety of operational modes.”

It appears to me that even the DIA is confirming that there seems to be some legitimacy to the claims of LENR/cold fusion. **Just like the UFO/UAP topic, these claims have been ridiculed and much of the work is done quietly to avoid ridicule.** Keep in mind this document is basically only covering information already in the public domain and 3 other documents were withheld from the FOIA request. That last part about energetic stimuli triggering the LENR phenomena including acoustic waves is reminiscent of the Pais effect, but I digress.

The document goes on to acknowledge the topic suffers from a lack of funding because the fusion community considers it impossible to break the Coulomb barrier at room temperature. It goes on to speculate whether LENR could be used for energy, nuclear remediation (although they don't use that word), or transmutation to create designer materials or critical resources.

For those that are unaware, transmutation is basically like the fabled alchemy of past where you take one element and covert it into another. This is what scientists all over the world have been reporting for over 30 years now. Learning to control this would be pretty wild.

It also speculates it could be used to make a high energy density explosive, which is plausible and admittedly a little scary. It covers that this research is being collaborated on an international level with some proprietary information. It also says there is major corporate funding from Mitsubishi, Honda, and Toyota in Japan and Pirelli in Italy. Below is the conclusion word for word.

Outlook and Implications

If nuclear reactions in LENR experiments are real and controllable, DIA assesses that whoever produces the first commercialized LENR power source could revolutionize energy production and storage for the future. The potential applications of this phenomenon, if commercialized, are unlimited. The anomalous LENR effects seen in these metal lattices containing deuterium may

*also have as-yet undetermined nanotechnology implications. LENR could serve as a power source for batteries that could last for decades, providing power for electricity, sensors, military operations, and other applications in remote areas, including" space. LENR could also have medical applications for disease treatment, pacemakers, or other equipment. Because nuclear fusion releases **10 million times more energy per unit mass** than does liquid transportation fuel, the military potential of such high-energy-density power sources is enormous. And since the U.S. military is the largest user of liquid fuel for transportation, LENR power sources could produce the greatest transformation of the battlefield for U.S. forces since the transition from horsepower to gasoline power.*

The Status of "Cold Fusion"

This FOIA'd document was written in 1998 by the Naval Research Laboratory.

<https://documents.theblackvault.com/documents/coldfusion/ADA338629.pdf>

The introduction covers the context of the 1989 Pons-Fleischman announcement and raises concerns that the results were discredited too quickly. Here is a snippet word for word below.

In the U. S., a committee set up by the Department of Energy issued a negative report on "cold fusion" in November of 1989, even though the situation then was still very fluid. The committee may not have gotten adequate access to then-current information because of secrecy. Many organizations were being very cautious because of commercial or security concerns. The report served to squelch funding for "cold fusion", at least in the U. S. By the end of 1989, "cold fusion" was already largely discredited.

It goes on to point out that an article by Nature magazine declared it an embarrassment in 1990 despite predating many of the primary findings, patents and publications on the subject. It also points out that very few scientific journals would cover it and the few that did are of small circulation. It goes on to cover conferences and patent

history in general terms noting that there is little press coverage of the conferences and much of the patents are not granted in the US. It also points out other terminology. Alternative terms include "anomalous nuclear effects", "anomalous effects in deuterated systems", "low-energy nuclear reactions", "low-energy nuclear transformations", "chemically-assisted nuclear reactions" and, in Japan, "new hydrogen energy".

As I pointed out in my EVO Part1 deep dive, Ross Coulthart, famed journalist and author of In Plain Sight, in his interview on TOE mentions cold fusion and the SAFIRE Project using EVO's (he specifically uses the term EVO around 2:19:10 .) Here is a link to the spot where they discuss this.

https://youtu.be/JM3kxeU_oDE?t=8316

SAFIRE has been looked at by Puthoff and Eric Davis as well as Los Alamos and few other notable names. Coulthart says he's taking the project seriously and notes that academic dismissiveness in cold fusion research is "not entirely legitimate."

<https://www.safireproject.com/>

<https://aureon.ca/>

This subject not only could be a game changer for energy production and propulsion, but it could be used to clean up radioactive waste and even produce rare elements for production. It's potential is insanely disruptive and relates to UFO's/UAP's in that it could be a potential explanation for how they operate. Obviously, more research needs to be done. However, I find it hard to believe so many reports by credible scientists are solely the realm of fraud or mistake especially considering how detrimental it generally is to their careers. Just because it's difficult to reproduce an anomalous result doesn't mean it isn't real especially if we don't yet understand the physics behind it.

Lattice confinement fusion comes to mind. New name same idea. NASA has reported it.

<https://www1.grc.nasa.gov/space/science/lattice-confinement-fusion/>

UFO Patents

I was disappointed by The Debrief's dive into UFO patents. I've written my own patent and have a decent basic understanding of physics as well as knowledge of technological advancements. Rather than searching for patents with pictures that look like something from ufology I simply made an educated guess as to how "some" (some being a qualifying word) of these craft may work and then google searched a couple keywords followed by the word patent. Here's what I found in two minutes.

Magnetohydrodynamic propulsion apparatus

<https://patents.google.com/patent/US3322374A/en>

May 30, 1967

J. F. KING, JR

3,322,374

MAGNETOHYDRODYNAMIC PROPULSION APPARATUS

Filed Sept. 30, 1964

2 Sheets-Sheet 1

Fig-1

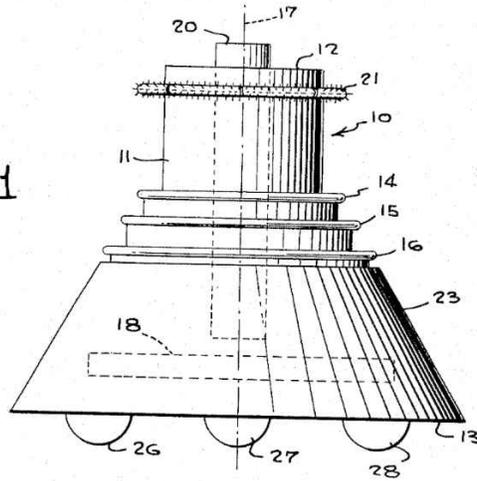
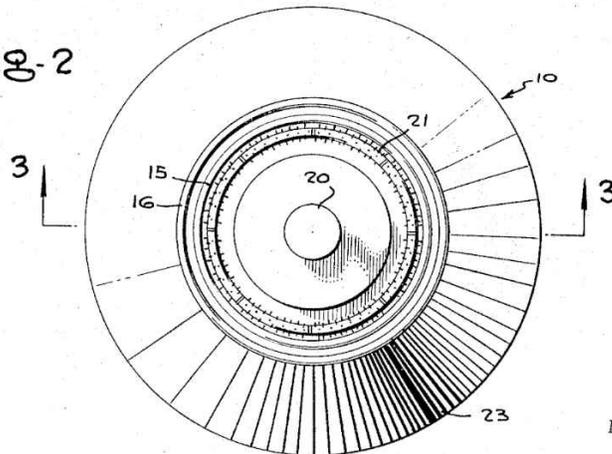


Fig-2



INVENTOR

JAMES F. KING, JR.

BY
Mason, Fenwick & Lawrence
ATTORNEYS

Looks a bit like something from ufology don't it?

Before I jump into this patent let's first define magnetohydrodynamic (MHD.) Here is the wiki <https://en.wikipedia.org/wiki/Magnetohydrodynamics>

the study of the magnetic properties and behaviour of [electrically conducting fluids](#). Examples of such magnetofluids include [plasmas](#), [liquid metals](#), [salt water](#), and [electrolytes](#). The word "magnetohydrodynamics" is derived from magneto- meaning [magnetic field](#), hydro- meaning [water](#), and dynamics meaning movement. The field of MHD was initiated by [Hannes Alfvén](#),^[1] for which he received the [Nobel Prize](#) in Physics in 1970.

The fundamental concept behind MHD is that magnetic fields can [induce](#) currents in a moving conductive fluid, which in turn polarizes the fluid and reciprocally changes the magnetic field itself. The set of equations that describe MHD are a combination of the [Navier–Stokes equations](#) of [fluid dynamics](#) and [Maxwell's equations](#) of [electromagnetism](#). These [differential equations](#) must be solved [simultaneously](#), either analytically or [numerically](#).

I want to point out that the word "fluid" here can be used to describe things that are not always thought of as fluids. Basically, the mediums of space, water and air can also be considered "fluids" and the equations for these mediums are basically the same; they just use a different constant.

From the patent, "The present invention relates in general to craft propelled by magnetohydrodynamic effects and methods of propulsion and control thereof, and more particularly to heavier-than-air craft which are propelled by interaction of magnetic fields upon electrically conductive fluids such as plasma, surrounding the craft." So this patent is for an aircraft that uses MHD by utilizing a conductive plasma around it.

MHD is not a new concept. It's about 80 years old. This patent is from the 60's. MHD is a subset of a larger concept called electromagnetically driven propulsion or EM propulsion.

Electromagnetically driven propulsion

In addition to MHD there is also electrohydrodynamics (EHD) as well as ion drives. All of these are established concepts and technologies.

<https://en.wikipedia.org/wiki/Magnetohydrodynamics>

<https://en.wikipedia.org/wiki/Electrohydrodynamics>

https://en.wikipedia.org/wiki/Ion-propelled_aircraft

https://en.wikipedia.org/wiki/Ion_thruster

We have demonstrated EM propulsion with current technology in the mediums of air, space and water already. These are not sci-fi theories. **They are known existing technology. However, they are not currently practical technology.** Understanding this is really the key insight.

Why is EM propulsion not practical? The answer is current battery and gas technology isn't good enough (and probably never will be.) EM propulsion is very inefficient. In addition to being extremely wasteful, the weight of the fuel source barely makes the technology functional. Its demonstration is mostly perceived as little more than a novelty and waste of time. The ratio of energy necessary to the weight of the fuel source is so horrendous that it would never be practical using batteries or gas. This is because the energy sources of batteries and gas are chemical in nature and simply don't have enough energy density. They will always weigh too much and not get enough bang per ounce necessary to accomplish anything very extraordinary. This means the only way to implement a practical EM propulsion technology is with fusion energy. More specifically, compact fusion energy.

A compact fusion energy generator would be sufficient in powering a craft that uses EM propulsion to navigate the mediums of air, space and water with no visible conventional means of propulsion

(propellers, wings, heat signatures in some cases.) So, such a technological feat can easily be applied to existing concepts and technology to build a craft that matches many (not all) of the unexplainable observables. In fact Lockheed Martin has a patent that covers such an aircraft.

<https://patents.google.com/patent/US20180047462A1/en>

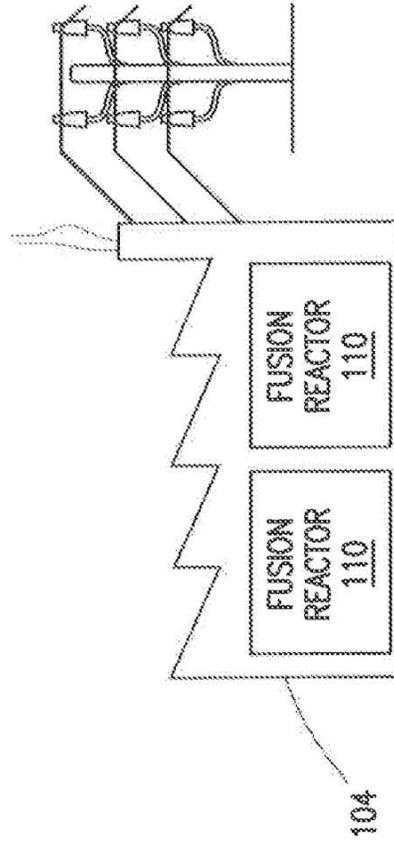
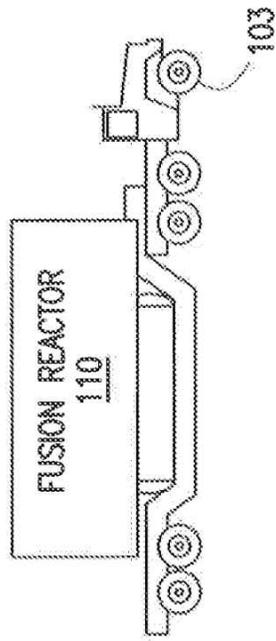
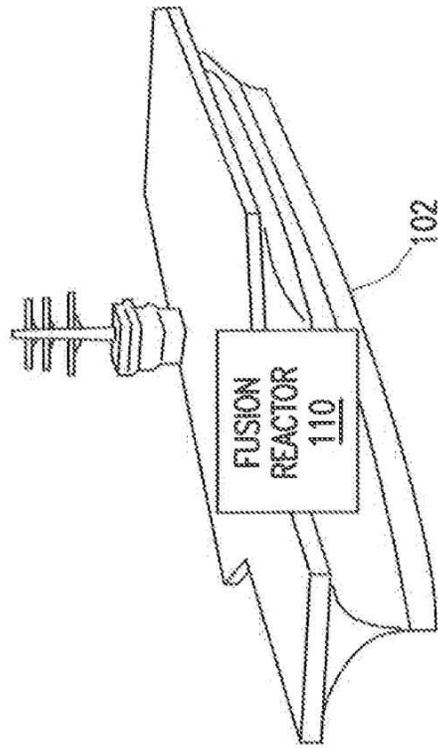
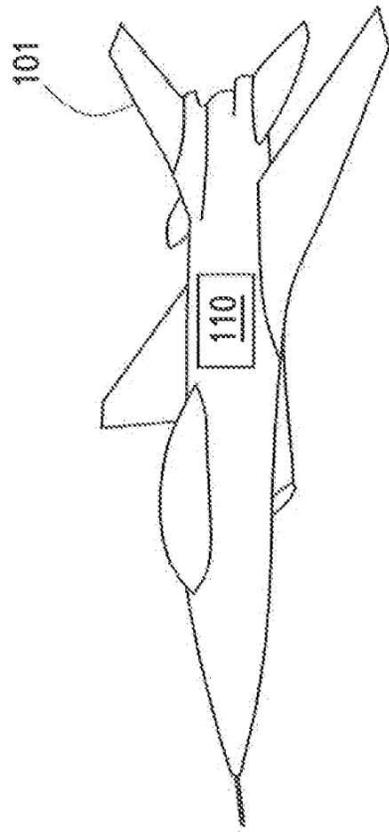


FIG. 1

Here's a decent article on the subject.

<https://www.thedrive.com/the-war-zone/19652/lockheed-martin-now-has-a-patent-for-its-potentially-world-changing-fusion-reactor>

For those of you that think compact fusion is too advanced or far away, I'd like to point out that there are multiple companies working on it and claiming to be very close to net energy including Lockheed Martin. Advances in fusion have been accelerating and funding has been but a drop in the bucket over the decades, however, recently we've seen a rather large spike in fusion funding. It's definitely not 1000 years away. I could and have made entire posts dedicated to the topic of compact fusion feasibility and gross underfunding of its research. I'd also like to point out it's the topic of at least a couple of the recently released declassified DIRDs. Specifically dense plasma focus device fusion approaches as well as aneutronic fusion approaches and specifically MHD as well as fusion powered ion drives.

https://drive.google.com/drive/folders/1IL1b6yHJ_A7bnNEANhKq2w9Y0uuieWh4

Here is a very simple video trying to explain the concept I made in the past.

<https://www.youtube.com/watch?v=GgjWvRaZqQE>

Fusion energy system and plasma propulsion aircraft to produce electricity from a controlled nuclear fusion reaction

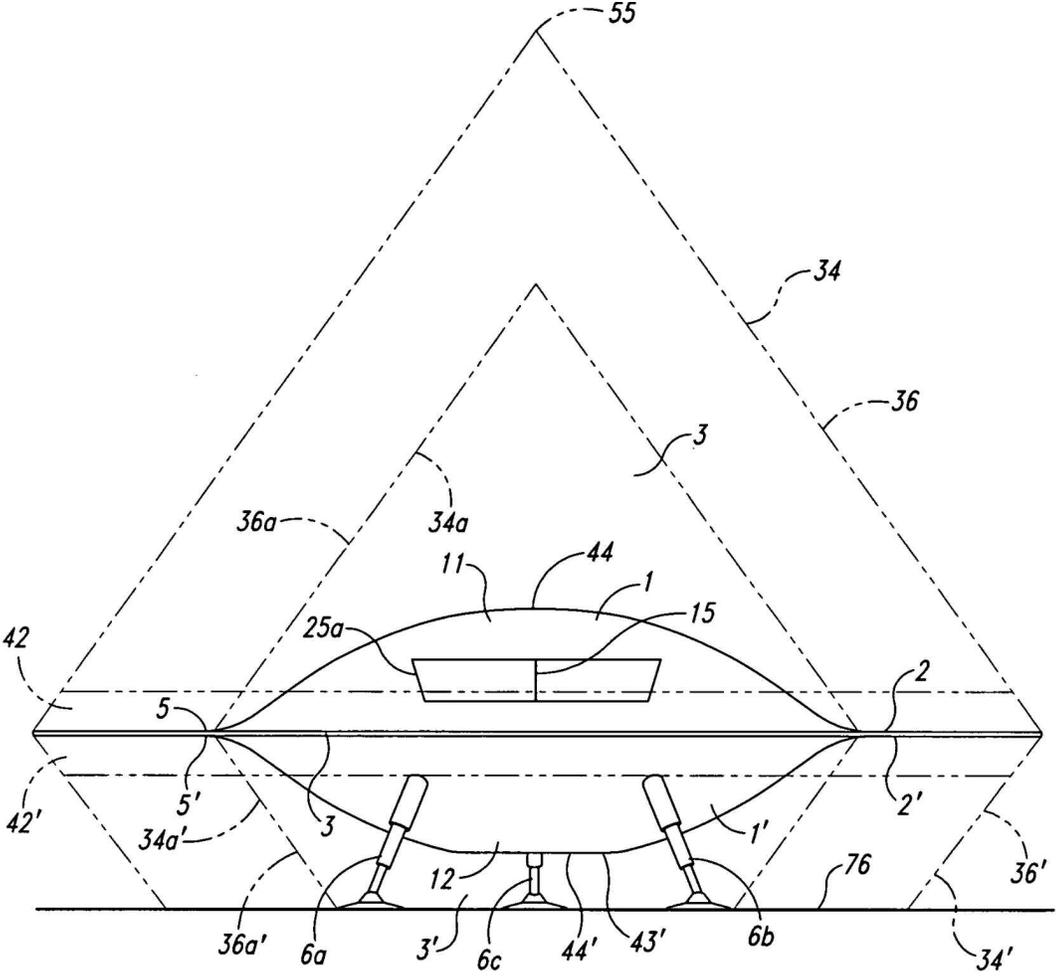
<https://patents.google.com/patent/US20060102795A1/en>

This brings me to this patent from 2005. He also has a tubular design he patented in 2008.

<https://patents.google.com/patent/US20090127383A1/en?inventor=Gary+Gochnour>

His first patent describes a craft that uses either pB11 (aneutronic) or hydrogen fuel for the fusion process. It reads, "Said craft, is immediately capable of space flight, use as a submersible craft, or

use as an energy source in an artificial environment. Said craft is opaque, invisible within the visible spectrum, invisible to electromagnetic radiation, and absorbs radiation it produces. Said aircraft is capable of soundless flight. Said aircraft is capable of vertical ascent, descent and landing. Said aircraft can operate within earth radiation belts. Said aircraft is capable of speeds in excess of the fastest aerodynamic aircraft, said aircraft navigates within a particle field at a faster rate than conventional aerodynamic aircraft within the atmosphere."



Look at the pretty picture.

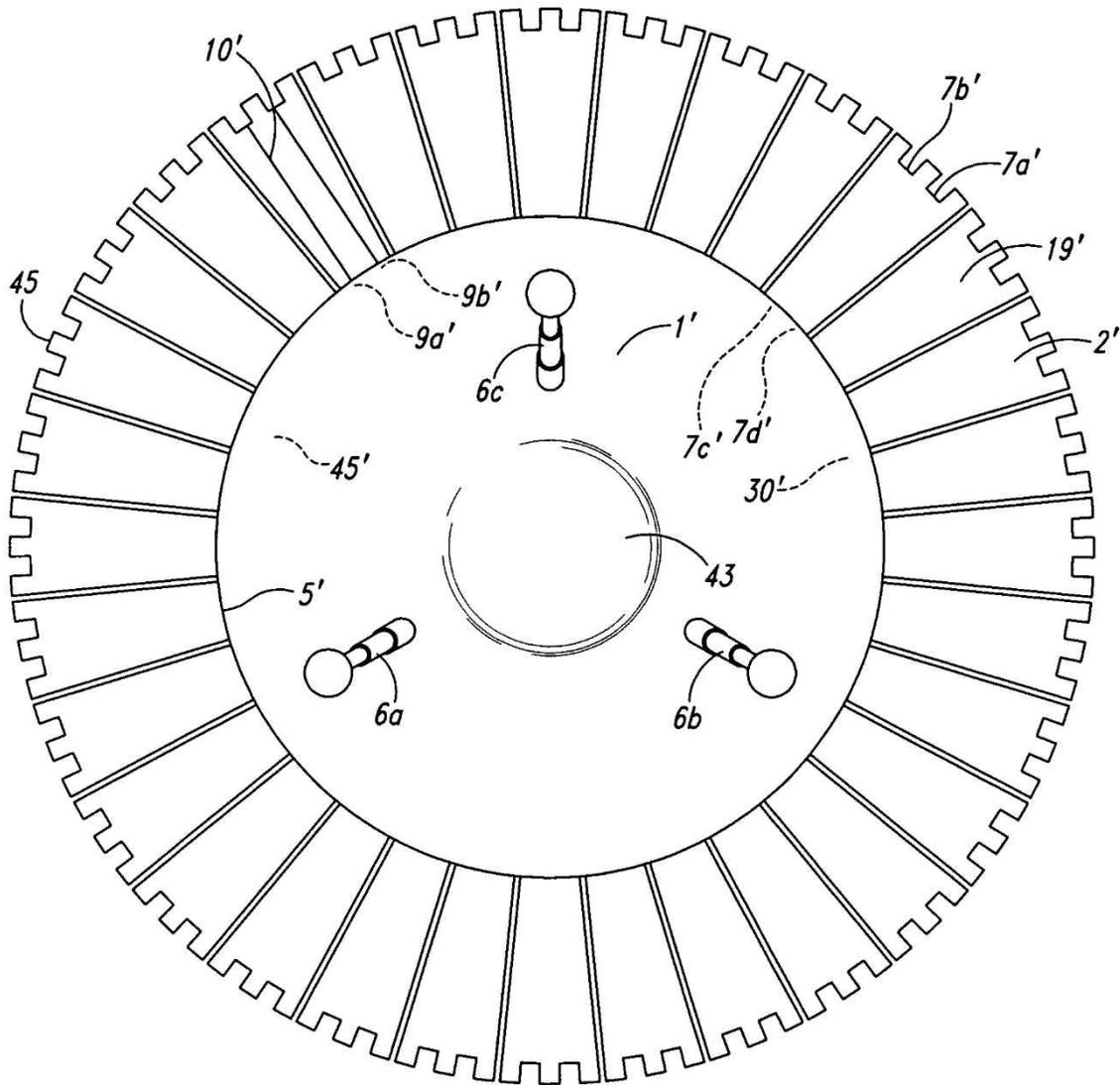
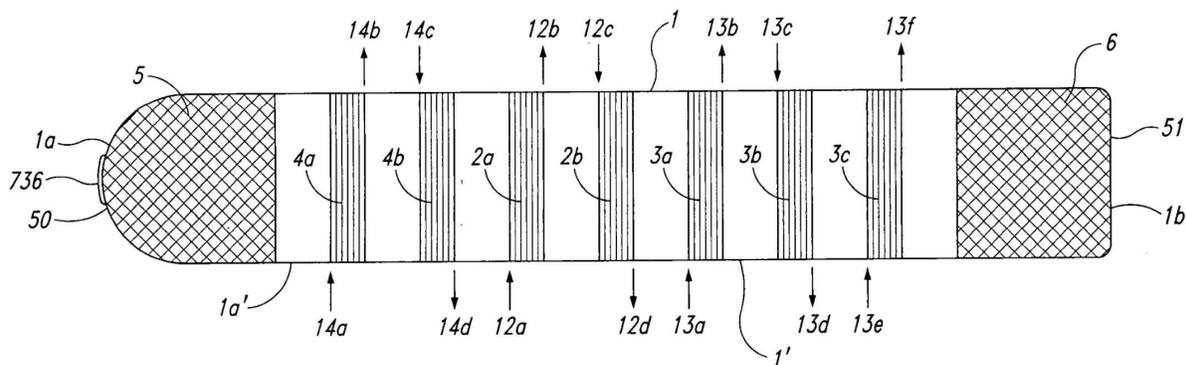


Fig. 3

If I mention Bob Lazar will you pay attention? (This is joke, just like Lazar lol)

His second patent is equally interesting. It reads, "The invention relates to a plasma based aircraft possessing a magnetic field, and, a huge plasma vortex. Said craft is tubular in shape. Said craft has a

vast array of capacitors. The craft has a proton accelerator, plasma guns, diversion devices. Said craft will approach the speed of light. Said craft obtains fuel direct from an atmosphere or a radiation produced atmosphere in space, at no cost. This craft can travel to a g k star for only the cost of construction of craft. This invention is comparable to the discovery of fire insofar as man's future is concerned..."



Looks very tic tacky to me.

Okay, so have I stumbled onto something? This guy's patents look interesting. Who is Gary Gochnour?

It appears there is a man by this name that was in the Army and referred to as a "space explorer" deceased 2015.

<https://www.legacy.com/us/obituaries/seattletimes/name/gary-gochnour-obituary?id=13169191>

An old court case with this name comes up regarding back pay from the Army.

<https://www.plainsite.org/dockets/bkvhykk6/court-of-appeals-for-the-fifth-circuit/gary-gochnour-v-mr-john-o-marsh-jr-secretary-of-the-us-army/>

The BlackVault also has an odd document with the name on it.

<https://documents.theblackvault.com/documents/jfk/NARA-Oct2017/docid-32192752.pdf>

Then there's a missing, but found person story in 2014.

https://www.oregonlive.com/gresham/2014/03/missing_gresham_man_turns_up_s.html

This is turning into a rabbit hole

So, I started this post just to point out that MHD and compact fusion could be used to explain some UAP and use patents to help back it up. Then I found the last two patents and frankly I need more time to look into them and the author. Feel free to help me out. Odd stuff.

Back to the topic...

But this doesn't explain all observations

I'm aware that this hypothesis doesn't explain certain observations where the G forces should destroy the craft. Assuming those conclusions are not in error I have to say even EM propulsion with a compact fusion reactor falls short using known conventions. The best I can do is **speculate** that perhaps there is some unknown convention to explain what appears to be space time metric engineering. I have taken a deep dive into a topic that could potentially explain this known as Exotic Vacuum Objects or EVO's.

https://www.reddit.com/r/UFOs/comments/tzibvc/potential_science_behind_ufos_ken_shoulders_hal/

It's a significantly deep dive so to summarize, these are plasma phenomena that a very well established and credentialed experimental physicist named Ken Shoulders identified and researched. He claimed that they were such dense collections of electrons that they were basically solids and that they were in such a high concentration they could be used as a kind of mini particle accelerator. He also claimed that they had odd gravity like effects and sometimes described them as a blackhole.

"There is a good chance common, small-sized EVOs can be classified as legitimate black holes; although I am sure Astronomers

will object to this as much as they object to associating WIMPS with EVOs. Such associations lower the status of astronomy by being compared to mundane and ubiquitous examples. Still, when making a comparison between common, everyday EVOs, even obtained by sparking to a doorknob, the resemblance in a fundamental sense is striking. EVOs make both negative and positive charges of matter simply go away by removing the effect called charge and mass! If that is not the essence of a black hole, what is? A laboratory scale EVO is most likely a black hole in every real sense of the term. The size is an entirely different matter and should not be confused with the action produced."

Here is an old version of his website where he describes using them as a "universal clutch."

<https://web.archive.org/web/20080513050518/http://www.svn.net/krscfs/An%20EVO%20Clutch%20and%20Microphone.pdf>

I'm still trying to make sense of the whole EVO thing. I believe Ken was onto something. If he was then perhaps a craft utilizing EM propulsion technology and a compact fusion reactor would be able to turn the entire craft into an EVO?

The "Difficult To Explain" No Sonic Boom

US ex-intelligence director John Ratcliffe while discussing UAP said, "...frankly engage in actions that are **difficult to explain**, movements that are hard to replicate, that we don't have the technology for...Or traveling at speeds that exceed the sound barrier without a sonic boom." quoted from a Guardian article.

<https://www.theguardian.com/us-news/2021/mar/22/us-government-ufo-report-sightings>

The Nimitz incident also has been documented to potentially demonstrate a craft traveling faster than the speed of sound without breaking the sound barrier. Below is a post on the Nimitz event if you're not familiar or need to brush up on it.

https://www.reddit.com/r/UFOs/comments/tgml7b/apparently_most_people_here_havent_read_the/

Simply put, based on numerous reports including those still classified we have good reason to believe we are seeing objects break the sound barrier without creating a sonic boom and this baffles us.

However, there is a scientifically feasible way to do this using what is known as magnetohydrodynamics or MHD. Some of you may remember my patent post detailing how MHD could be used in conjunction with compact fusion reactors to create craft that fly with no observable conventional method of propulsion (wings, propellers, heat.)

https://www.reddit.com/r/UFOs/comments/uz5sdl/i_heard_you_guys_like_ufo_patents_heres_what_the/

TLDR;

One of the DIRD's clearly states that MHD propulsion systems are not only feasible and capable of performance beyond conventional craft, but the use of a fusion reactor as an

electricity source dramatically increases the application. It goes so far as to say it likely will "become the standard" in space.

Further in it says, "These nations have the capability to develop such novel technologies within several years and deploying those technologies perhaps within 10 years." This document was published in 2010. So it predicts China, Russia and/or Japan could deploy this by 2020.

It also mentions MHD can in fact reduce sonic boom and some Russian scientists have claimed there is an unknown physical mechanism that can also reduce sonic boom.

Additionally I have found other work by a French engineer named Jean-Pierre Petit supporting the use of MHD to potentially remove sonic boom he did going back to 1965. He has multiple papers published on removing shockwaves using MHD and himself points out the "obvious" connection to UFO's and that MHD machines would be silent and surrounded by bright plasma.

MHD in one of the DIRD's

I've heard knowledgeable people I respect declare what has been observed is technology 1,000 years ahead of ours and I want to explain how short sighted that comment is. Much of the "difficult to explain" observations are definitely explainable with technology that is very advanced, but not as far out as you may think.

For those of you that don't know about the DIRD's they were written in 2009 by leaders in their respective fields and commissioned under AAWSAP (predecessor to AATIP) apparently to highlight where our technology would be in about 50 years. Here is a link in searchable format to the DIRD on MHD titled "MHD Air Breathing Propulsion and Power for Aerospace Applications"

<https://drive.google.com/file/d/12gUjVtgyjArH1w-eLozuiMeFEs9vbu7C/view?usp=sharing>

That link scrambles a lot of the words unfortunately so here is another link in picture format that is easier to read, but can't be searched.

https://www.dropbox.com/sh/95tgfd2lljqrve3/AAAcsm97_O-Oscnsg-UZ31cka/DIRD_33-DIRD_MHD_Air_Breathing_Propulsion_and_Power_for_Aerospace_Applications.pdf?dl=0

The paper strongly supports my first post on MHD that I linked in the beginning of this post. Below is the summary:

*"The paper reviews novel propulsion concepts utilizing plasmas (ionized gases) and magnetohydrodynamics (MHD). **These concepts are shown to be attractive due to their potential to achieve propulsion and aerodynamic performance far beyond current conventional technologies.** However, significant difficulties impede the development and application of these technologies; these include weight, complexity, higher power, and the need for complex and energy-consuming artificial ionization in "cold" air (at Mach <12).*

A well-publicized Ajax concept of MHD energy bypass has been shown to be meaningless below at least Mach 12. In contrast, a new "reverse energy bypass" with Virtual Cowl is potentially practical for air breathing hypersonic vehicles.

*Applications of the Virtual Cowl and other plasma/MHD devices to reentry, global-strike hypersonic gliders, and aeroassisted orbital maneuvering are identified as promising in the near future. The ability of a plasma/ MHD system to generate high power onboard and to provide L/D (lift-to-drag ratio) far beyond that possible conventionally **makes these applications both feasible and desirable** for national defense. **However, these applications are also likely to be implemented by nations such as China, Japan, and Russia.***

The outlook for uses and applications of MHD propulsion could increase dramatically if high-speed (hypersonic) vehicles

begin to carry powerful onboard electricity sources, such as nuclear (fission or fusion) reactors.

*For spacecraft, the current trend of replacing chemical rockets with electric propulsion systems will continue and is **likely to become the standard****. Electric systems can provide a much wider range of operation (e.g., low-thrust fine positioning/pointing, more frequent or nontraditional maneuvers, and longer times on station) than chemical systems can. "

Just in the summary alone it is clear that MHD propulsion systems are not only feasible and capable of performance beyond conventional craft, but the use of a fusion reactor as an electricity source dramatically increases the application. It goes so far as to say it likely will "become the standard" in space.

Further in it says, "These nations have the capability to develop such novel technologies within several years and deploying those technologies perhaps within 10 years." This document was published in 2010. So it predicts China, Russia and/or Japan could deploy this by 2020.

It goes on to cover "plasma for drag reduction" to "weaken the bow shock." **This by definition is reducing sonic boom.** It doesn't go so far as to say it can completely remove sonic boom, but it notes that 10-15 years ago some Russian scientists claimed there was a way to weaken bow shock via some unknown physical mechanism.

Other work on MHD and removing sonic boom

I have found other work by a French engineer named Jean-Pierre Petit supporting the use of MHD to potentially remove sonic boom he did going back to 1965. His wiki says he's an engineer, but his youtube says he's a plasma physicist and astrophysicist. He claims to have papers published, and I've found few with his name in those fields. Below is one on "shock-wave annihilation by MHD action" from 1989 that looks relevant. (I have only skimmed it as of writing this)

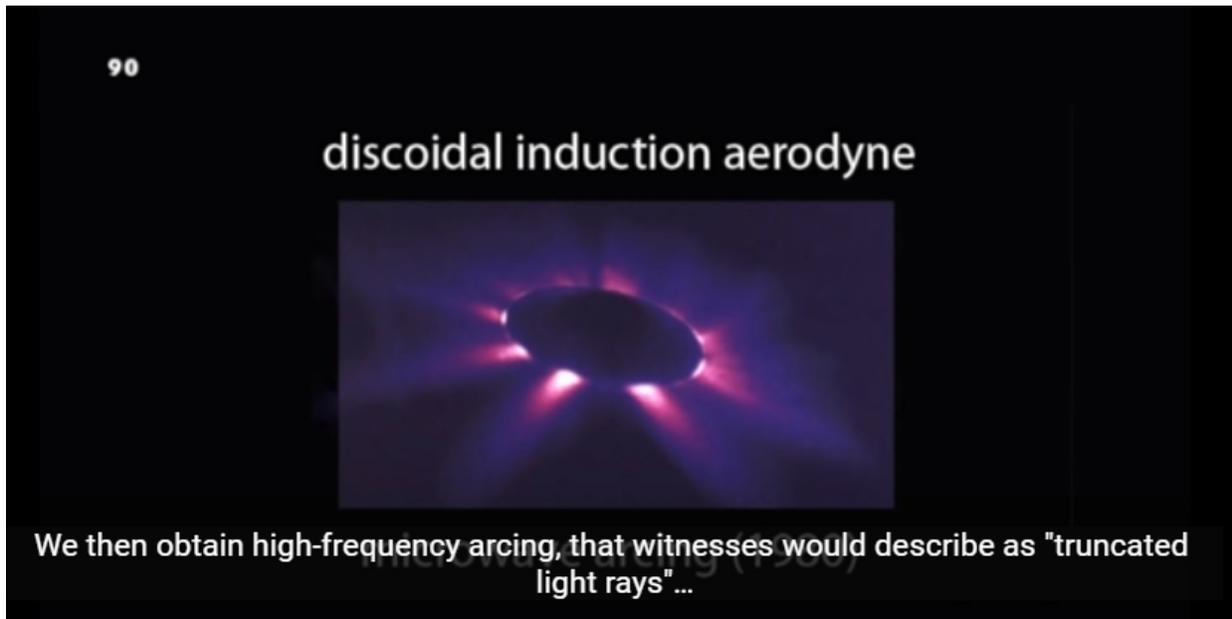
<https://hal.archives-ouvertes.fr/hal-03433636/document>

His youtube and website are in French, but he has subtitles and google translate. It appears he has his own cosmological model, but I won't be digging into that in this post. He also appears to have some affiliation with the UMMO events, but I won't be covering that here either. Suffice it to say he is very into the topic of UFO's and aliens. Below is a link to one of his videos on MHD to describe UAP and I will attempt to summarize it.

<https://www.youtube.com/watch?v=56fGzcp6bIU>

He says his work on MHD started in 1965 at Marseille Institute of fluid mechanics while studying energy production via MHD using a plasma gun. He says the attempt to develop this technology was a failure despite significant resources by Russian scientists. He says some technical limitations from the temperatures caused the work to be discontinued in the 70's. He explains his experiments in France were like no other in the world because he improved the efficiency with his small setup and only did short bursts. They observed the generator slowing down the plasma to the point of creating show waves. He says his lab was the only place where this effect could be produced. From here he got the idea to place a wing in the model and see if they could use the electromagnetic fields to prevent shockwaves from occurring around the object. He published a paper about it in 1975. "The underlying theoretical concept is gradually detailed, that shows the possibility of supersonic fluid mechanics without shockwaves, thanks to an active flow control by an electromagnetic force field. **MHD, which prevents Mach waves to collide, makes shockwaves disappear.**" They tried in the 80's to experimentally demonstrate one can make shockwaves disappear (no sonic boom) but they didn't have the means to carry out the experiment. He goes on to explain how this can also be done in saltwater. He says MHD has been shown to reduce turbulent wake as early as 1976 in cylindrical and spherical objects. He starts to point out the connection to UFO's and silent flight. He says **MHD machines are surrounded by bright plasma. "When they are equipped with electrodes, the increased brightness in their surroundings makes them appear like portholes."** The shapes of

such devices, called "MHD aerodynes," are determined by the laws of plasma physics with strong applied magnetic fields. They no longer have anything to do with the shapes of conventional flying machines, which are governed by classical laws of fluid mechanics. He explains such craft would appear absurd and shows a 1980 experiment of a discoidal induction aerodyne controlled with microwaves that looks a lot like some reported UFO's.



MHD experiment that replicates some reported UFO's

He goes on to mention a PHD thesis on shockwave suppression that was defended in 1988 that presents all theoretical elements to cancel shockwaves with electromagnetic forces.

[https://www-theses-fr.translate.goog/1989POIT2279?
_x_tr_sl=fr&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc](https://www-theses-fr.translate.goog/1989POIT2279?_x_tr_sl=fr&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc)

He goes on to say that some spinning aerodyne concepts were experimentally confirmed in the 80's. He starts to get into the technicalities of why this is important and my best understanding is that it creates stability. Below is his entire paper on it published in a Polish journal.

<http://przyrbwn.icm.edu.pl/APP/PDF/115/a115z672.pdf>

He explains that by the 1980's the experimental set up required to confirm the now more rigorous theories using MHD to cancel shockwaves (no sonic boom) was already dismantled. A new lab needed to be built and he laments that it never happened implying innovation is difficult in France. MHD was completely abandoned in France at that time. He then points out that in 2018 Putin presented new strategic weapons including the Avangard hypersonic glider that travels at Mach 30. He claims such a feat is impossible without MHD protection against shock waves because they would burn in the air. He starts to get into technical stuff about how it would work I'm going to skip. Some of it sounds very much like the DIRD paper. He speculates if the Russians figured it out by taking claims of UFO sightings seriously and attempting to retro-engineer them.

He then goes into his theory that MHD could somehow create negative mass, but he loses me because I don't know how he makes that jump. He explains how negative mass can be used for interstellar travel, which is true. I'm too tired to try to follow him at this point.

The community needs to ask more (different) questions

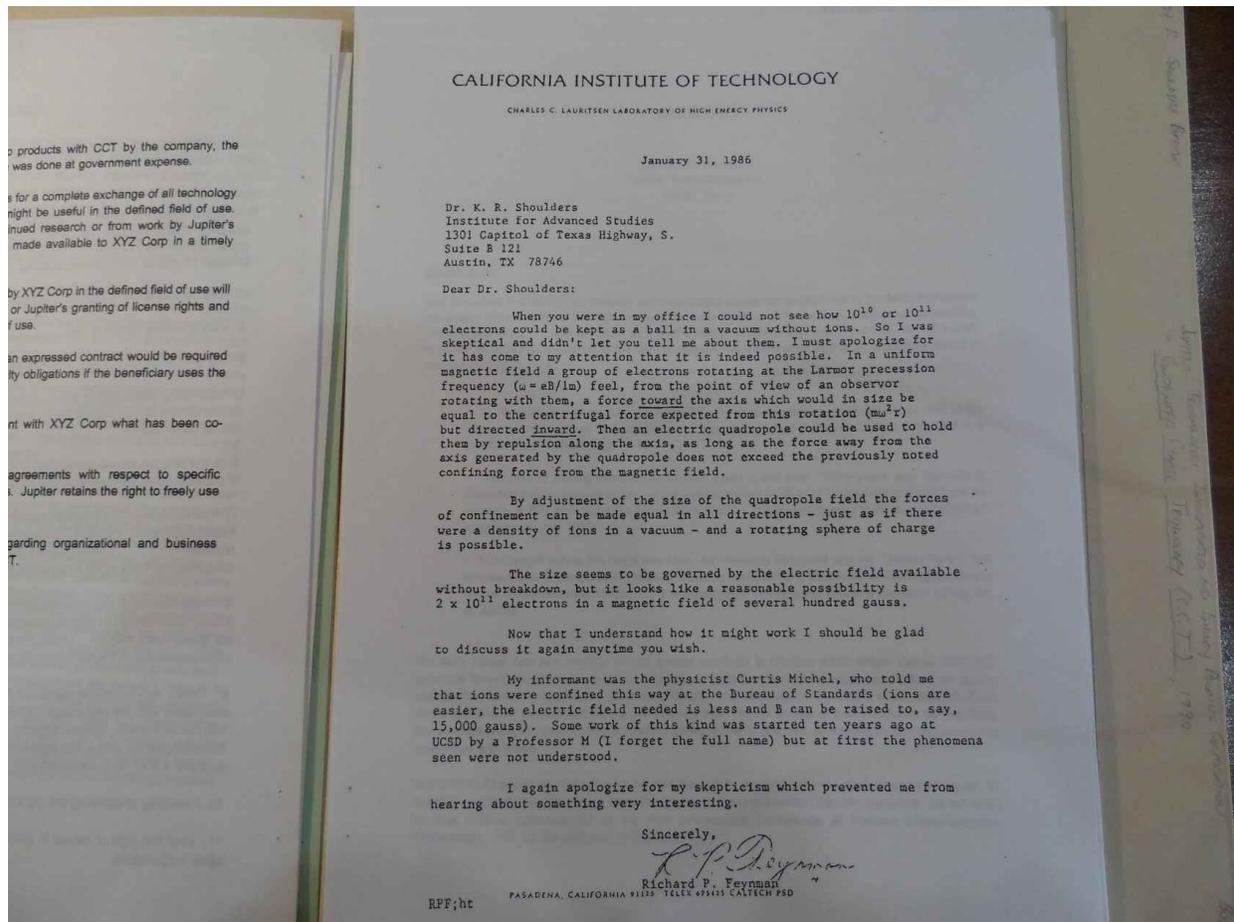
I see so many people speculating how to explain UAP, but I never hear anybody talking about these concepts. Nobody has ever asked Lue Elizondo or Christopher Mellon if these ideas above are plausible explanations. Where are the pop physicists to help us imagine how some advanced technology might explain UAP? I haven't seen anybody else do deep dives into the DIRD's to find more knowledgeable questions to ask. Please read the DIRD's.

One of the DIRD's written by Hal Puthoff covers Ken Shoulder's work on EVO's. I have posted here before a deep dive into Ken's work on EVO's and revealed that Puthoff worked closely with Shoulder's on the subject. Why is nobody asking Puthoff about this?

One of the recently published DIRDS, Concepts For Extracting Energy From The Quantum Vacuum, covers EVO's and concludes that "topic is ideal to pursue for further research."

https://www.reddit.com/r/observingtheanomaly/comments/tm023c/ken_shoulders_evos_mentioned_in_dird_extracting/

Ken shared his discovery with Richard Feynman who initially refused to believe him, but I found a letter from Feynman to Shoulders in which he apologizes and admits that it's real.



Note from Feynman to Ken I found at the archives

I have pointed out that the work of Salvatore Pais is only mysterious because he apparently can't disclose how to create such high energy densities (but assures us it's possible) and that Shoulder's work on EVO's very well could be the missing link.

My point is we may have the ability to explain these things if we do a better job at asking more science based questions and start thinking more outside the box.

UAP's in History

This is a chronological investigation into UAP. Cases range from 1300BC to the 1954. UAP's have been observed in the historical record in ancient times. Some of those are covered as well as cases pre-dating Project Blue Book.

TLDR: This is a long post and it's very hard to do a good TLDR, but the short version is that there's an overwhelming amount of reports of UFO's throughout history and some of them reporting the same disc/saucer shapes as well as cylinder/cigar shapes. These reports are from time periods before airplanes existed. There is also at least one report of "aerial abductions" from 760AD and documented in 1818.

In an attempt to make it easier for some people I made a video. In the description is show notes where you can jump to specific points in case the video is too long for you.

<https://www.youtube.com/watch?v=WFA9pLUv0bQ>

The above video may be long, but it covers a lot of cases and I tried to also make it a little entertaining so that it isn't too dry. It's me going over the cases with 2 of my friends.

Credit to Michai Morin. Not all, but most of the material was taken from his presentation below.

https://drive.google.com/file/d/1ioVNvySqlY-Mj-nKreRD3i00JyjD_MMm/view

Michai presents this on Project Unity.

<https://www.youtube.com/watch?v=hhC-VC6Gp4U&t=2s>

Intro

I'm going to go through a mostly chronological history of UAP. I do have sources for all my information. I'll be recounting quotes from

historians on events from as far back as 1300 BC. I'll breeze through this section and go into more detail as we hit the 1900's.

I just find it very interesting what was being reported in ancient times because it not only resembles modern accounts, but it couldn't possibly have been Russian or American secret technology because America and Russia didn't exist. It can't be drones, it can't even be planes because planes don't yet exist in that era. Anything in the sky in the 1600's or 1200's 200's or 1300 BC that isn't a celestial body is perplexing.

Cases

Pharaoh Akhenaton observed a shining disk in the sky (1347 BC.) This event altered Egyptian history as it led to drastic changes in his religious beliefs as well as the society. They began to worship "the sun."



Pre-Modern UAP References (1,000BC to 1700AD)

Pharaoh Akhenaton, (1347BC)

Pharaoh Akhenaton (Amenophis IV) had a unique experience that was to shape Egyptian history. According to inscriptions on the 'Frontier Stelae' found on the circumference of El-Amarna, Akhenaton was strolling along the river admiring the splendors of nature one summer morning when he looked up and saw "a shining disc" descend from the sky."



Akhenaten and Tutankhamun: Revolution and Restoration (Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 2006), 44-47.

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Pharaoh sees a shining disc in the sky in 1347 BC

Pre-Modern UAP References (1,000BC to 1700AD)

Cannae, Italy (216BC)

During the famous battle won by Hannibal in Cannae (2 August, 216 BC), in the Apulian plain near Barletta, which saw the largest defeat in the history of Rome, a mysterious phenomenon was observed:

"On the day of the battle, in the sky of the Apulia, round objects in the shape of ships were seen. The prodigies carried on all night long. On the edge of such objects were seen men dressed in white, like clergymen around a plow."

36

Ships seen in the sky during a famous battle in 216 BC

Pre-Modern UAP References (1,000BC to 1700AD)

Gaius Plinius Secundus (24AD – 79AD)

Secundus was an Early Roman Naval and Army commander. Later he became an author who wrote, "Naturalis Historia" (Natural History). This book later became the framework most encyclopedias are still built upon.

According to him, in 76BC, "a spark (*glowing orb*) fell from the sky and grew as it descended until it appeared to be the size of the Moon. It then ascended back up to the heavens and was transformed into a light".



Statue of Pliny the Elder on the facade of Cathedral of S. Maria Maggiore in Como

41

Glowing orb seen descending then ascending in 76 BC

Pre-Modern UAP References (1,000BC to 1700AD)

Lucius Mestrius Plutarchus (56AD – 119AD)

Plutarch was the uncle of Sextus of Chaeronea, who was one of the teachers of Marcus Aurelius, and who may have been the same person as the philosopher Sextus Empiricus.

Plutarch studied mathematics and philosophy in Athens under Ammonius from 66 to 67.

According to Plutarch, a Roman army commanded by Lucullus was about to begin a battle with Mithridates VI of Pontus when "all on a sudden, the sky burst asunder, and a huge, flame-like body was seen to fall between the two armies. In shape, it was most like a wine-jar, and in colour, like molten silver." Plutarch reports the shape of the object as like a wine-jar (pithos). The apparently silvery object was reported by both armies.



Ruins of the Temple of Apollo at Delphi, where Plutarch served as one of the priests responsible for interpreting the predictions of the Pythia.

43

Molten silver wine jar seen in the sky in 66 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Rome, Italy (540AD)

"Often a little spark has seemed to come down from the sky to the Earth; then, having grown into a kind of orb like the Moon, it has been seen as disc-like."

John Lydus, *On Pontents*, 8. Quoted in "The Roman Fireball of 78 BC" by Richard B. Stothers, *NASA Goddard Space Flight Center, New York, The Observatory* 107 (1987): 211.

48

Disc-like spark in 540 AD

Pre-Modern UAP References (1,000BC to 1700AD)

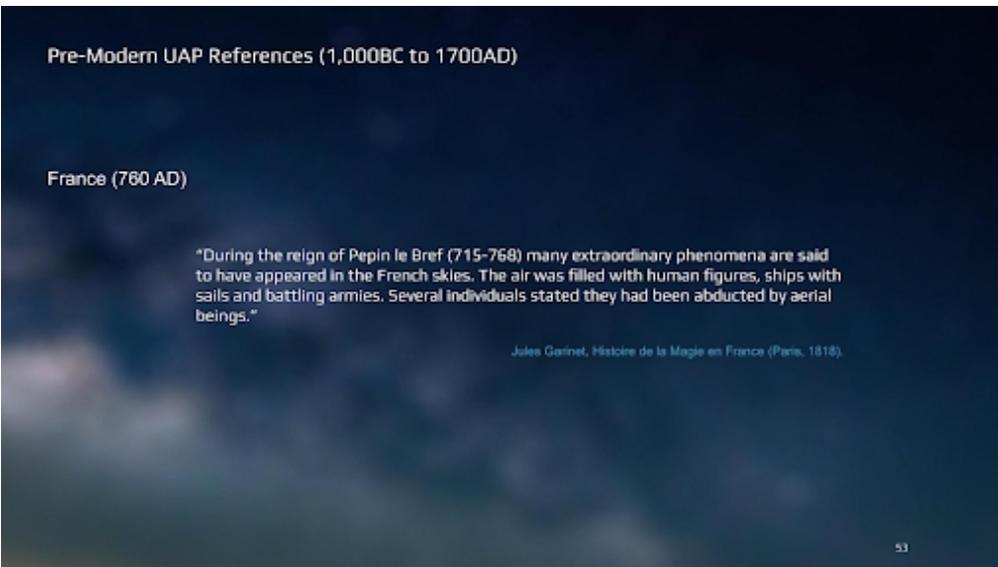
Nara Prefecture, Japan (596AD)

"An object like a canopy or lotus flower descends and appears suspended above the Houryuji temple. It changes color and shape."

Fusouriyakui Vol. 3 (Buddhist history), quoted in: Takao Ikeda, *Nihonnu ufo* (Tokyo: Taikei shobo, 1974).

49

Changing lights and shape in 596 AD



Air was filled with human figures, ships with sails and battling armies. Several reports of being abducted by aerial beings in 760 AD

This one below I find particularly interesting because of the implications. Jaque Vallee describes how UFO's could be acting as a kind of control mechanism. Lue Elizondo and others have made it clear that biological effects are well documented and real. I do a fairly deep dive into fleshing out the connection between these two ideas in the post below.

https://www.reddit.com/r/observingtheanomaly/comments/tnbagz/biotechnology_immunology_and_the_brain_we_are/?utm_source=share&utm_medium=web2x&context=3

If that's too much to read here is a link to the part of the video where we discuss this slide.

<https://youtu.be/WFA9pLUv0bQ?t=564>

Pre-Modern UAP References (1,000BC to 1700AD)

Florence, Italy (June, 1347)

"Writer Gianfranco degli Esposti mentions that "reports relating to the period of the famous Black Plague, between 1347 and the 1350, speak of strange cigar-shaped objects slowly crossing the sky, sometimes at low altitude, dispersing in their passage a disturbing mist."

Gianfranco Degli Esposti, "Travi di fuoco e segni divini: pauna nei cieli del Medioevo" (www.adicolarweb.net/ufocastbr.htm); Lycosthanea, Prodigiurum ac ostentorum Chronicon (Basel, 1557)

68

Cigar-shaped objects reported during Black Plague. Seen "dispersing a disturbing mist" in 1347 AD

Pre-Modern UAP References (1,000BC to 1700AD)

La Spezia, Italy (1546)

Chronicler Father Antonio Casena tells of farmers reporting "a strange disk, changing from yellow to red, with red fireballs shining beneath it". It was seen in two separate areas including the small village of Caranza, near Passo del Bocco "from time to time."

Antonio Casena, Relazione dell'origine e successi della peste di Varese (1558). The original manuscript is lost but a copy made in 1683 is still held by the Biblioteca della Società Economica di Chiavari (ms. Z.VI.29).

71

Strange disc with lights in 1546 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Nostradamus, France (February 1551)

While viewing the night sky, as usual, Nostradamus and everyone else in town, witnessed a "bright burning rod" changed its flight path ... and was in the sky for two hours, displaying a swinging motion.

Contained in a letter written to the Duke of Tende from Nostradamus on Feb. 1, 1554.

73

Nostradamus and entire town witness burning rod in the sky for 2 hours in 1551 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Nuremberg, Holy Roman Empire (April, 1561)

Residents of Nuremberg saw what they described as an aerial battle, followed by the appearance of a large black triangular object and then a large crash outside of the city. The broadsheet claims that witnesses observed hundreds of spheres, cylinders and other odd-shaped objects that moved erratically overhead.



The celestial phenomenon over the German city of Nuremberg on April 14, 1561, as printed in an illustrated news notice in the same month.

74

Aerial battle of Nuremberg in 1561 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Yuan, Shansi Province, China (1639)

"Suddenly a luminous object like a star, red, white, yellow and blue in color, flew over the funeral procession. This brilliant thing did not touch the ground, but it flew around the village for a long time, then rose up in the sky again. Its light was visible five kilometers away."

Shi Bo, *La Chine et les Extrémités*, op.cit., 45, citing scholar Lou Ao, *Histoire Locale du District Fengshan*.

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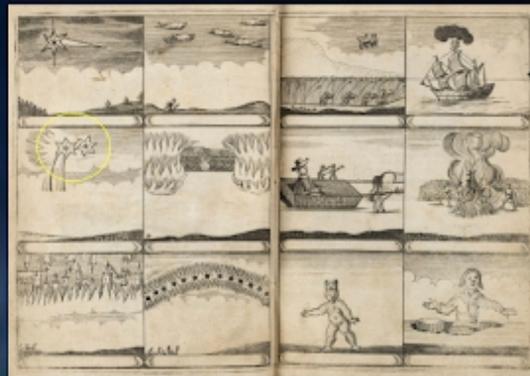
Colorful luminous object flew over funeral in 1639 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Essex, England (November 1660)

"Very early in the morning two men saw a fiery cloud in the southwest. From under it appeared two bright objects as large as the moon, which began a dogfight in the atmosphere. One of them eventually grew dimmer while the other increased in size and remained in view for two hours, "a great part of which time they saw streaming from it, streams of fire and streams of blood." It then diminished until it was no larger than an ordinary star."

Mirabilia Annus (1661)



89

Fiery cloud in the sky for 2 hours in 1660 AD

Pre-Modern UAP References (1,000BC to 1700AD)

Stralsund, Germany (April 1665)

"Aerial ships and a saucer-shaped object with dome were reported flying over the church of this town located near the Baltic Sea, and hovered there till evening. Witnesses were left trembling, with pain in their head and limbs."

Best UFO Cases - Europe published by the National Institute for Discovery Science in 1998.

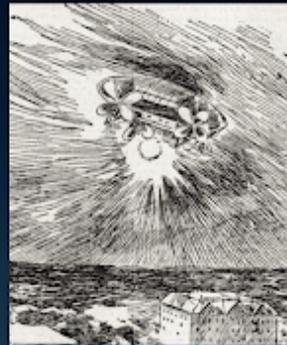


Saucer-shaped object with dome reported over church in 1665 AD

Modern UAP References (1700AD to Present)

South and MidWest USA (1896-1897)

Thousands of accounts, nationwide, of unusual (sometimes glowing) aircraft moving erratically across the sky. Some accounts describe them as cigar shaped and shiny metallic. These events lasted over a year with witnesses proclaiming their accounts in various newspapers.



Thousands of accounts nationwide in US of cigar shaped and shiny metallic aircraft in the sky in 1897-97

Modern UAP References (1700AD to Present)

Los Angeles, USA (February 1942)

Unidentified aerial objects trigger the firing of thousands of anti-aircraft rounds and raise the wartime alert status. Witnessed by thousands of California residents and servicemen, describes as both metallic saucers and glowing spheres.

Los Angeles Times, 25 February 1942



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The Battle of Los Angeles in 1942

Modern UAP References (1700AD to Present)

Western Europe (November 1944)

Donald J. Meiers, radar operator for the 415th Night Fighter Squadron, initially coined the term "Foo Fighters" to describe objects seen both visually by infantry men, and via radar by himself. The Foo Fighters are described as glowing spheres that move erratically and followed both Planes and Ships during wartime operations. Thousands of servicemen with the Allies made formal statements on their respective observations.



88

Foo Fighters reported in 1944

Operation Highjump

This is another interesting case in ufology. I'm not trying to get into "crazy town" speculation on this one. The fact is Operation Highjump did happen. Byrd went to Antarctica with a fleet of ships and troops.

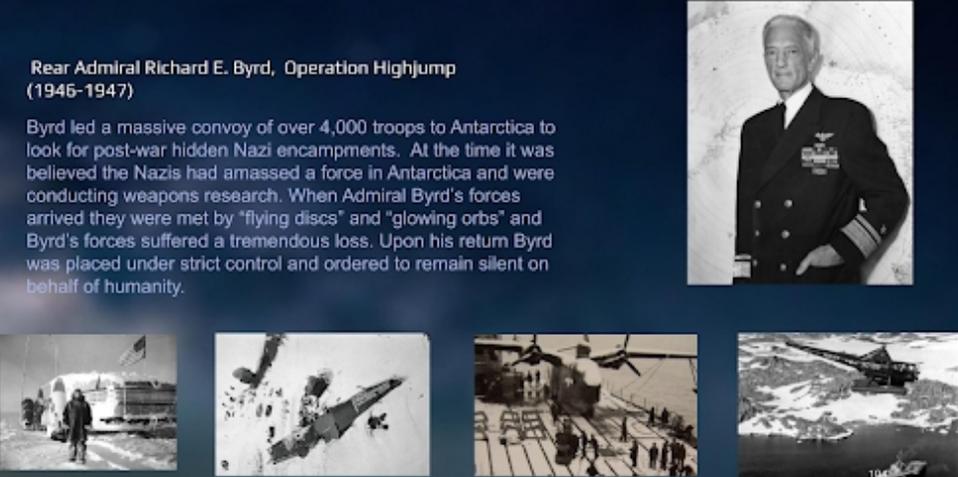
The official story is that it was simply an exploratory and scientific operation. The rumors are that it was a hunt for hidden Nazi encampments. I want to make it clear that the many claims around this story are not verified or established facts. Rumors and speculation aside, the verified facts around this topic make it a very interesting discussion for speculation. Byrd did make some odd claims on the record after this mission that certainly can pique one's curiosity about what may have happened. They don't authenticate the conspiracy theories at all, but it's still an interesting topic of discussion because it's not a huge stretch of the imagination that there's more to the official story of Operation Highjump. Here is a link to where we discuss this.

<https://youtu.be/WFA9pLUv0bQ?t=2882>

Important Soft Data Sources (Present Day)

Rear Admiral Richard E. Byrd, Operation Highjump (1946-1947)

Byrd led a massive convoy of over 4,000 troops to Antarctica to look for post-war hidden Nazi encampments. At the time it was believed the Nazis had amassed a force in Antarctica and were conducting weapons research. When Admiral Byrd's forces arrived they were met by "flying discs" and "glowing orbs" and Byrd's forces suffered a tremendous loss. Upon his return Byrd was placed under strict control and ordered to remain silent on behalf of humanity.



Operation Highjump: The info on this slide is not verified to be factual

I'm reaching the maximum amount of images that can be used in a post. I'm going to continue without images for some cases.

James Forrestal

1947 Roswell: We cover everything other than Roswell. The coining of "flying saucer" and then the formation of the National Security State

<https://youtu.be/WFA9pLUv0bQ?t=3247>

James Forrestal was the first US Secretary of Defense of the newly created Department of Defense on July 26th 1947 just 16 days after the infamous Roswell incident on July 8th 1947. James died March 29th 1949 from a 16 story fall from a window. He was under psychiatric evaluation at the time and his death was ruled a suicide, however details around the death alude to foul play.

Time-line:

July 8th 1947: Roswell event

July 9th 1947: National Security Act is passed in the Senate.

July 19th 1947: National Security Act is passed in the House.

July 26th 1947: President Truman signs the National Security Act into law which set up a unified military command known as the "**National Military Establishment**" and the Department of Defense is officially created.

Sept 18th 1947: "National Military Establishment" formally begins operations and CIA is formed. James became the first US Secretary of Defense under the newly created Department of Defense (DOD).

The efforts to begin the National Security Act started in 1944. However, perhaps by coincidence, it was abruptly passed by the Senate 1 day after Roswell and signed into law 18 days later. 2 months after Roswell the entire military is re-arranged with the creation of the DOD and CIA with James Forrestal put in charge of it all as the first Secretary of Defense. If anybody was in the know it was him. James later had what appears to be a nervous breakdown and was forced to resign in 1949 and in very short time appears to have been Epstein'ed.

UFO's Over The White House, 1952

This was during one of the biggest UFO waves in the history of the US. These were seen by witnesses and by radar over the White House and the United States Capitol. Jet fighters were scrambled and when they got there all the objects disappeared. When the jets left the objects re-appeared. This made front page headlines around the country. Project Blue Book, which was active at the time, didn't hear about it until the newspaper's reported it. A Blue Book investigator was stone-walled from investigating the incident and The Air Force attributed it to unusual weather conditions.

One jet fighter that tried to intercept the objects. According to Albert Chop, when ground control asked him "if he saw anything", he replied "'I see them now and they're all around me. What should I do?'...And nobody answered, because we didn't know what to tell him."

Stadium of 10,000 Spectators, 1954

In Florence, Italy cigar shaped objects and glowing orbs reportedly hovered over a stadium during a football match. Documented by newspapers at the time.

Modern UAP References (1700AD to Present)

Florence, Italy (October 1954)

A football game between Fiorentina and Pistoiese was under way at the Stadio Artemio Franchi when a group of UFOs traveling at high speed abruptly stopped over the stadium. The stadium became silent as the crowd of around 10,000 spectators witnessed the event and described the UFOs as cigar shaped and glowing spheres.



La Nazionale's headline reads: Glass fibres fall on Tuscan cities after globes and flying saucers pass by. Lower headline: The sightings over Florence (with a photograph, now lost, of the UFOs).

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Miracle of the Sun, Portugal (1917)

This event, known as “the miracle of the Sun” was witnessed by 30k-100k people and was recognized by the Catholic Church as a genuine miracle in 1930 due to the overwhelming evidence. It was religious in nature but was accompanied by various UAP and even photographed and documented cases of healing that occurred that couldn't be explained by doctors. Unfortunately, all the camera's could capture at the time appeared as large white blobs. Jaque Vallee is the first person to interpret this highly religious event as a possible UAP event and discusses it in Passport to Magonia.

The pope canonized the children the apparition first appeared to in 2017 during the centennial of the first apparition. This is a wild historical event when you look at it through the lens of UAP because it's traditionally considered a religious event. Basically a modern day miracle. I personally find it interesting that this massive event happened right before the Spanish Flu outbreak and that the children that saw the apparition and gathered the people to witness the miracle were canonized in 2017, which means the church now considers them saints. **Below is a link to the part where we discuss this.**

<https://youtu.be/WFA9pLUv0bQ?t=2307>

Notable Discussions

UAP signals traced back to coming from the water

We discuss the Italian military confirming they detected UAP signals coming from the water <https://youtu.be/WFA9pLUv0bQ?t=2623> T

The episode of the documentary with Lue Elizondo that uncovers this oddly overlooked fact <https://www.imdb.com/title/tt10526906/>

We discuss why digging deeper into each of these cases could lead to further insights and the potential of using AI to help us find patterns

<https://youtu.be/WFA9pLUv0bQ?t=1440>

We get into the Terrance McKenna Interpretation

<https://youtu.be/WFA9pLUv0bQ?t=1615>

Germany (1665) saucer shaped ships with dome were reported flying over a church. Witnesses were left trembling with pain in their head and limbs. This is reminiscent of biological effects due to radiation.

<https://youtu.be/WFA9pLUv0bQ?t=1934>

Project Blue Book to Project Stargate

<https://youtu.be/WFA9pLUv0bQ?t=3924>

We get into a political approach to UAP

<https://youtu.be/WFA9pLUv0bQ?t=4063>

We get into a way to create political action around UAP: The Counter-Wedge Issue

<https://youtu.be/WFA9pLUv0bQ?t=5102>

Below is NASA's own investigation into historical UAP's/UFO's with much of the same content.

<https://pubs.giss.nasa.gov/abs/st02710y.html>

Genetic Analysis of the "Alien" Hair Sample

[youtube.com/watch?...](https://www.youtube.com/watch?...)

It's from a book which is referenced in the video.

The book is Hair of the Alien

<https://www.amazon.com/Hair-Alien-Forensic-Evidence-Abductions/dp/0743492862>

Published in 2005. The sample was analyzed in 1999 and reportedly obtained a few years before that.

The connection I make is that in 1999 this kind of genetic engineering using mitochondrial DNA from a 3rd parent wasn't known yet as the first official case was 2016 (I've seen some reports it was done in 1996 but can't find much on it.) the point being this wasn't considered during the analysis in 1999. Most people figured it must be a contaminated sample at the time. In hindsight it fits the description of what is now a form of genetic engineering that people are doing. My speculation is that perhaps it's evidence of an illegal early application of the technology as it's been outlawed and is very controversial.

The technical results and discussion in the book are an entire chapter. Below is a snip where it spells out that the sample has 2 mitochondrial DNA.

European at a very-low level as noted in Table I. A PCR test for nuclear CCR5 also showed no contamination from any local source.

New Results on Mitochondrial DNA from the Blond "Alien" Hair Root

Our new results on the blond "alien" hair may be summarized as follows: its mitochondrial DNA appears to be of two kinds, depending on whether we analyse the hard hair shaft or else the soft root.

Thus, from the lower hair shaft we obtain again the same Chinese mitochondrial DNA, which shows a characteristic substitution 16,304 T-to-C. But from soft root tissue, we obtain a novel Basque-Gaelic mitochondrial DNA, which shows a rare substitution 16,255 G-to-A, along with several other characteristic substitutions 16,223 C-to-T, 16,278 C-to-T, and 16,294 C-to-T (Piercy, R., et al., *International Journal of*

[The Intelligence Agency Hypothesis:](#)

This hypothesis started as a look into the claims of Tom DeLonge and how they relate to subjects of which I have studied in technical detail such as MHD, biological effects, and DNA. It's an informed extension of Eric Weinstein's psyop conclusion. There is a lot of background material that must be covered in order to understand the hypothesis and explain how it applies to specific examples. Once the hypothesis is explained and the examples covered, I go into applying it to some of Tom DeLonge's statements as well as how it correlates to the founding of To The Stars Academy (TTSA.) Through this lens it becomes clear that TTSA is an organization not just interested in UAP, but made up of members with backgrounds in DNA/biotechnology and it's logical to speculate that there is a connection. The conclusion is largely that the UAP subject acts as cover for intelligence leaks related to the most recent advances in biotechnology.

TLDR; UFO's/UAP's/The Phenomena are the perfect subject for intelligence agencies to create an obfuscation process through which they can more safely leak information to each other on cutting edge top secret technology programs. This hypothesis is not intended to disprove any other hypothesis as multiple can still hold true. If we apply this hypothesis to TTSA we can support the idea that their major area of interest is actually DNA and biotechnology.

A post chronologically compiling the more interesting claims by Tom DeLonge on UAP has caught my attention as it touches on a few topics I've done a deep dive into already. Namely magnetohydrodynamic drive (MHD), biological effects and DNA. I'd like to show the supporting arguments for technological feasibility on these topics as well as offer some speculative alternative explanations using the logic of Eric Weinstein. Weinstein has said that he's seen enough evidence to conclude that either some of this

stuff is real or we are being lied to in a very sophisticated way. Below is a video that starts where he says this. You only have to listen for about 1 minute to hear him say it in his own words.

https://youtu.be/fdwuhU_zu8Y?t=531

Some people would call this act of lying a “psyop,” short for psychological operation which is a known intelligence method of obfuscating information in order to obtain a goal usually to protect sources and methods (truth.) I will use this idea to develop what I call The Intelligence Agency Hypothesis. Feel free to skip to this section below if you aren't interested in the Defining A Skeptic section or the Scientific Method Section.

Defining A Skeptic

Before I go into this I want to take a moment to define who a skeptic is. A skeptic is someone that hasn't made their mind up yet and is still questioning. I want to make it clear that I am a skeptic as it is intended to be defined. Too many people that don't fit this description call themselves a skeptic and this needs to stop.

I am not a “believer.” One thing I will not even be speculating on in this post is that it's aliens. I'm open to this hypothesis, but I won't be covering it in this entire post so I would appreciate it if the first dozen comments aren't ridiculing the alien hypothesis because it's literally not even relevant to the discussion and also ridicule in general is not cool. Try to be cool. I know it's very difficult for some of you.

I am not a debunker. Skepticism and debunking are not synonymous. Please learn the difference.

I am not discussing “disclosure.” Frankly, I'm still confused what that means. I don't find bringing that word into the discussion is helpful. I've noticed the same people that enjoy ridiculing the ET hypothesis and “believers” also like to bring this word up and attempt to ridicule. Please don't do that here because I'm not discussing disclosure. It's not a relevant critique to start ridiculing “disclosure” if nobody is even talking about. Don't be that person. (Somebody is going to inevitability comment on this post about aliens, believers

and/or disclosure in a derogatory manner.) Also, please understand that this hypothesis is in direct opposition to the very idea of intentionally being transparent about the subject matter to the public. This doesn't mean that there aren't pro transparency individuals, but it does mean that intelligence agencies in general will always find a way to obfuscate as it's part of their job. The instance to "look over here" while the magician performs his trick is the best analogy.

The Scientific Method

One last clarification before I jump into the analysis. I want to describe how the scientific method works for anybody that may not be aware. We start with a hypothesis. A hypothesis is an educated guess. It's speculative in nature, but based on some form of knowledge or logical reasoning. Once you have a hypothesis you develop a testable theory (testable here is key.) Then you design an experiment to test the theory. The purpose of the experiment isn't to prove the theory! The theory usually predicts what the results of the experiment will be. If the prediction is wrong we usually assume the theory is wrong and we adjust the hypothesis. Assuming there is no flaw in the experiment this is the only correct course of action. If the prediction is correct, it doesn't prove the theory! It increases our confidence in the theory. The more we experiment to try to disprove the theory and we can't, the more we gain confidence in the theory. If a theory has held up to this process numerous times and there is no alternative theory then it usually becomes the prevailing theory.

The Intelligence Agency Hypothesis

Let's return to Weinstein's psyop speculation. I want to take this idea a bit further and point out that there can be some truth to these things and still a psyop going on. I think this is what Weinstein is actually trying to get at. The clear incongruence of the military on this topic is highly suspect in conjunction with the evidence even as dubious and ambiguous some of it may be.

What I want to point out is that there can be some truth to some claims and a psyop going on at the same time. And it doesn't

necessarily have to be strictly as a form of cover up. One explanation for this is to simply use the mystery of the subject matter as cover for intelligence leaks. Internally adding elements of obfuscation to the subject creates the perfect environment for intelligence leaks.

If everybody is confused about what is going on and busy chasing false leads and wildly inaccurate theories it provides the perfect cover for an intelligence leak. Also, keeping the subject stigmatized and ridiculed helps keep people away from even investigating the subject.

What I want to do is attempt to find technologically feasible explanations for some claims as well as potential psyop explanations that help explain why an intelligence community might be interested in this technology. It's not meant to disprove any other hypothesis. As I've stated before, there can still be multiple explanations. I just want to point out that this topic offers a great opportunity for such intelligence leaks. The fact is intelligence wants to protect sources and methods. I will give a few examples of how some things could be potentially explained as an intelligence operation leaking information and protecting sources and methods.

Example 1: Crop circles

One potential explanation for crop circles is a top secret satellite may have lost its orientation and some intelligence agents were using the circles as a way to try to figure out the orientation of the satellite so that it could be re-oriented. The crop circles were made large and with patterns to try to make it easier for the satellite to spot them. They were spread out all over because they didn't know where the satellite was pointing. By creating specific patterns of sufficient size all over the globe they mathematically can figure out the satellites orientation when it inevitably spots one of the crop circles. The problem is that there is a risk that this operation could expose the location of the top secret satellite. So, they have to add some obfuscation. They can hoax some other crop circles and spread false leads to connect them to ufo's. Then the ufo researchers will get in

the way of other intelligence agents attempting to uncover the location of the secret satellite. Other copycat hoaxers continue to muddy the waters and the public debate never considers the intelligence operation as an option.

Example 2: Remote Viewing

Applying this hypothesis to remote viewing works regardless if remote viewing is real or not. The reported accuracy of remote viewing even at best is around 60%. So, it's not very accurate. It comes with a significant amount of woo so it's not taken seriously or investigated by most. It attracts attention by amateur investigators outside intelligence agencies that get in the way of actual intelligence agents. Most importantly, it provides cover for sources and methods. If there is a spy that wants to share the location of a top secret plane, it can be very risky to do so. It can be dangerous to be compromised and obviously you would lose a valuable source. So, you leak it to the remote viewing program and they claim the information came from a psychic. Literally explaining intelligence leaks with magic is the ultimate obfuscation process. How this isn't pointed out is beyond me. Perhaps there is some truth to remote viewing. Using it to leak intelligence isn't disputing its authenticity. In fact, if there was some truth to it I'd say also using it for leaks would make it insanely difficult to make sense of what's really going on; a mixture of magic, lies and deception. I personally can't ignore how useful such a program would be for sharing intelligence without compromising methods and sources regardless of whether or not there's anything to the authenticity of remote viewing.

Example 3: Cattle Mutilations

It's been speculated elsewhere that the cattle mutilation phenomena was actually a clandestine operation to study the newly discovered disease of prions, which were connected to mad cow disease. It's a plausible theory. Like crop circles it kind of flared up then went away. It was connected to ufo's and had significant woo. It would make sense for a study into a new disease spread to be

clandestine. Obviously, if it's an intelligence operation some of the obfuscation process was pretty dark and involved killing innocent people's cattle. However, if this was a secretive culling process it could be justified as for the greater good. (I'm not defending nor supporting that argument.) Just like crop circles it's possible some hoaxing was done to obfuscate and cover their trail and then some copycat hoaxing may have happened as well once the topic garnered interest from the public. Once again, by this point the public discussion is about just about everything other than prions.

Example 4: Modern day admission that UAP are real

The admission that UAP are real and the eventual culmination of Congressional briefings and even hearings on the subject may be less about publicly getting to the bottom of what UAP are and more about creating a new intelligence sharing mechanism. The first thing TTSA focused on was removing the stigma of reporting UAP. A potential explanation for this could be related to the rising tensions between the US and nations like Russia and China. The escalation of tensions with these nations has been long in the making. The Ukraine-Russian conflict has been going on since 2014 and concerns about China's ambitions to secure semiconductor manufacturing via Taiwan has been on the radar of people in the know for at least just as long. It's conceivable by 2017 it became clear some new reporting mechanisms would need to be put in place. Drones are often used to collect data and increased activity is an alarming sign. It's recently come out that a few US ships have been swarmed by drones that are likely Chinese in origin. This behavior is indicative of preparing for military operations. I'm speculating that the admission that UAP are real was mainly to justify creating a formal reporting mechanism and remove the stigma of reporting odd things that may normally go unreported. The fact is that we can't afford to have a spy drone go unreported because an officer is afraid he will be laughed at or not taken seriously. The increased probability of the use of drones and nonconventional technology is real. The purpose of the UFO hearings is to share intelligence about the ongoing war in Ukraine and

whatever operations China is up to as well as the most recent advancements in technology and warfare. Public hearings are mostly for show and to keep the public interested in mostly nonsensical UFO debate. While the public focuses on the mythology of UFO's, they are behind closed doors preparing for potential counterstrikes.

DNA

Where The Research Currently Is

The topic of DNA is very interesting if we look at it from this perspective. Biotechnology is currently going through an explosion in innovation and huge strides in mapping DNA and manipulating DNA are being made. One could argue it's one of the biggest ethical issues of the human species today. Of course, most people are unaware and it's conceivable there are some secretive programs that touch on this topic and technology. When we understand these facts and then look at some of the cases in "ufology", the people involved with To The Stars Academy, and the statements of Tom DeLonge the topic of DNA becomes VERY interesting.

In case you're not aware we not only have mapped the entire human genome, but we are now creating designer babies with gene modification. Essentially, you can choose the hair color and eye color of your child and use the mitochondrial DNA from a second mother to modify these traits. The cost to engage in genetic manipulation has become so cheap that there are already garage based amateurs experimenting with manipulating microorganisms, plants and animals as well as some individuals experimenting with manipulating themselves. This movement is known as biohacking. The technology will only get cheaper and the capabilities more impressive. This obviously creates all kinds of ethical questions and concerns. There are concerns about bioterrorism as well as eugenics and potential genocide. Labeling some genes as good and others as bad and eradicating the bad should be an obvious area of ethical concern. The ability for anybody to modify a virus is also an obvious bioterrorism concern. But, the questions go even deeper. People now have the ability to manipulate genes in a way that the modifications

will be carried to their offspring. This means that the act of this type of manipulation forever alters the gene pool. Then there are the concerns of super soldiers and a rise of one class of people that can afford to modify themselves and a class that can't. Regulations can't keep up with the advancements in technology and few people are even debating the ethical and philosophical implications.

How It Relates To UAP And The Hypothesis

Now that I've established a quick rundown of where DNA research and biotechnology currently is, I'd like to tie it into the UAP subject and particularly the intelligence agency hypothesis. There is a really interesting case of reported "Alien" DNA worth looking into from this perspective. A book called Hair of Alien documents how a man reported an alien encounter and obtained a hair sample in 1992. By 1990 some researchers had the sample analyzed and the results and discussion were publicized in the book in 2005. The results did not prove aliens, but were very interesting. There were a number of irregularities and even an anomaly largely written off by skeptics as a clear sign of contamination. This anomaly was the presence of 2 forms of mitochondrial DNA, which indicates 2 mothers and is not something thought to occur naturally. Recall how I mentioned above that we currently have the ability to make designer babies using the mitochondrial DNA from a second mother. In 1999 such technology was not legally in practice anywhere. It's not hard to imagine how puzzling the results were back then. The expert that did the analysis did say it could be the result of genetic engineering, the 2 mother gene editing now in practice may not have even been known to them at the time. It's something that roughly 30 years later can be gleaned from hindsight. The genes analyzed in 1999 were a combination that is incredibly rare and even had known sequences related to resistance to diseases such as AIDs. Could the "alien" hair have been the hair of a human from an early gene modification program? The evidence suggests so. The first public case of this technology was 2016 and it's been very controversial since inception. It was quickly outlawed including simply researching it in some countries. It's conceivable that the controversy and legality of this technology lead

to the earliest programs not being public. In fact, it seems highly likely. Therefore, I'm using the intelligence agency hypothesis to speculate that perhaps the case of the alien hair is actually a case of an intelligence leak about some secret human genetic modification program. It's a logical suspicion and supported by the evidence.

If you're interested in learning more about this case I do a more detailed analysis in this post here.

https://www.reddit.com/r/observingtheanomaly/comments/tpzyig/anomalous_dna_connected_to_an_abduction_event/?utm_source=share&utm_medium=web2x&context=3

I also made a quick video covering it below.

<https://www.youtube.com/watch?v=Dvsg2Eu9WqI>

TTSA's Connections To Biotechnology and Biowarfare

The topic of DNA and how it relates to the UAP subject is fascinating if we continue to dive deeper. TTSA's website on the wayback machine shows most of the team is made up of expertise in the field of genetics, immunology, counter biowarfare, psychology, molecular biology, biochemistry, brain function, brain trauma, and brain consciousness. Colm, The PHD author of *Skinwalkers at the Pentagon* and Deputy Director of NIDS (Robert Bigelow's organization that bought Skinwalker Ranch), is a founding member of TTSA. As you can see the team has a background predominantly in biowarfare. This information is no longer on the website and is from 2017. It's hard to ignore that an unprecedented worldwide pandemic hit in 2020. The potential for pandemic is another issue that was predicted for a while. It's not crazy to speculate that bad actors would potentially plan to use a pandemic to conduct what is akin to biowarfare rather than try to stop it and the counter intelligence community would have to prepare for this potentiality. Nasty biological weapons can be scarier than nuclear weapons. Especially now that we are reaching a point where the resources to carry out an attack are far less.

If you want to see a more detailed analysis of this topic I share it in the post below.

https://www.reddit.com/r/observingtheanomaly/comments/tnbagz/biotechnology_immunology_and_the_brain_we_are/?utm_source=share&utm_medium=web2x&context=3

One last point of interest in all of this is memes. Memes are ideas that evolve and spread like genes. They are not just a funny picture on the internet. Ideas and more importantly ideologies can spread just like a virus. This is an established fact. There are mathematical models for how a disease spreads and it applies to ideas and ideologies as well. It's inherent in the terminology when we say a person or video has gone viral. Jaque Valle has written about how the phenomena acts as a kind of control mechanism. He also has written about how untangling the web of what is going on is difficult because it intersects with intelligence agencies and hoaxers. If I was a member of an intelligence agency I would use the mythology that is inherent to the phenomena and amplify it for cover. I'm not arguing every case has a prosaic explanation by submitting this hypothesis. I'm not denying there could be some legitimate beyond conventional explanation cases nor am I trying to disprove any other hypothesis. I'm simply pointing out that there is likely much more going on than just trying to identify UAP.

Analysis of Tom DeLong's Claims Using This Hypothesis

I mentioned a post compiling Tom's claims in the beginning of the post. Here it is below.

https://www.reddit.com/r/UFOs/comments/vdmfe9/tom_delonge_claims/

My original intent was to go through this entire post and apply my technical research and new found hypothesis to try to make some educated guesses as to how to interpret what he's saying. I've decided to save this for Part II assuming people are interested in it.

I'll just add the one major one for now that stood out to me because I already have done several deep dives into the technical

background of the subject.

"So I started talking about the craft, **and its magnetic slide system and how it displaces over 89% of the mass of the ship, how it ionizes the engine, how it glows**, I went through the whole thing, and this engineer looks at me, this guy is 70 years old, and he goes, "You better be real fucking careful about what you're talking about." And I go, "Okay, so I'm close." And he goes, "I'm not fucking kidding with you. You better be really fucking careful."-Tom DeLonge

Some of you may have seen my post on UFO patents and magnetohydrodynamics (MHD.) It goes into the technical feasibility of MHD and how it can remove sonic booms. Towards the end it covers exotic vacuum objects (EVO's) and speculates how they could potentially bring the technology into the realm of space time metric engineering. Ken Shoulders called it a kind of universal clutch that could remove mass. The post is below.

https://www.reddit.com/r/UFOs/comments/uz5sdl/i_heard_you_guys_i_ike_ufo_patents_heres_what_the/?utm_source=share&utm_medium=web2x&context=3

UFO's and Counterintelligence

I'm surprised this idea took me so long to formulate as it's a fairly logical conclusion to come to if you study the subject well. By analyzing the long held historical position of the military and government in hindsight we can learn some interesting things about their biggest motivations. Then once we have that background context and look at what's been happening in the past 5 years with the huge shift from denial to what I'll label apprehensive admission, we can start to analyze what the current motivations are and it's basically in plain sight. Hint: It's not "disclosure" nor a conspiracy. It's barely reading between the lines if you take a step back and just consider what it is that concerns those in charge of national defense. It's also the easiest explanation for the apparent sudden change within the government and military.

TLDR; An adversary that is aware we don't properly investigate such things could intentionally attempt to mimic a UFO event while gathering intelligence against us.

The 1950's

This period saw a lot of UFO "flaps." It was also during the Cold War. The term UFO was birthed to replace the term "flying saucer" which had just been coined only in 1947 by Kenneth Arnold. UFO's may have existed before this point, but the modern day term was brand new so for all intents and purposes this was largely considered a new phenomena at the time.

We now know that the military intentionally tried to play down the subject and that one of their main concerns was that UFO hysteria might foil US air defenses. It's not an irrational concern especially for the time. Such a concern also is valid whether or not one believes UFO's are real. It's the concern of people who's jobs are national

security and how an adversary may capitalize on the media frenzy to blind side us with an attack. An article from 1997 covers it well and I'll quote just some brief passages below.

U.S. officials worried during the Cold War that the Soviets might try to disrupt America's air defense system or the government itself by orchestrating mass UFO sightings, says an historian who scrutinized CIA documents of the period.

Such concern prompted the Air Force and others to play down the UFO issue during the 1950s and to concoct false cover stories to explain sightings of alleged "flying saucers" that were really super-secret U.S. spy planes, according to an article last spring in a CIA journal.

...He said the U.S. spy agency also was concerned about the possibility that hysteria over UFO sightings might "overload the U.S. air warning system so that it could not distinguish real (military) targets from phantom UFOs" and provide the Soviets an advantage for a surprise attack.

He said a special panel studying the issue concluded that "potential enemies contemplating an attack on the United States might exploit the UFO phenomena and use them to disrupt U.S. air defenses," wrote Haines.

The article, entitled "CIA's Role in the Study of UFOs, 1947-90" was published in the spring issue of Studies of Intelligence, a CIA journal. An unclassified version appeared recently on the Internet.

Source:

<https://apnews.com/article/7aa126b4b1104a419c2a1b9b7c1486af>

So, the brand new UFO subject was officially a topic of national security concern solely because of fears that the Soviets could use the subject to spread hysteria as cover for an attack. The official stance directly translated into the scientific and public sphere to permeate a culture of stigmatization around the topic. It was no longer a serious area of study and allocated to the fringe including within the military itself. Any serious investigation into the topic had to

be done secretly. After about 70 years this attitude persisted making it heavily ingrained into our culture.

So for 70 years how did cases of UFO's unfold? The answer is people mostly didn't report them. And when they did it was usually met with ridicule. This creates a feedback loop on further non reporting. If you ask military and pilots it's fairly common knowledge reporting a UFO could be career suicide. Any scientist that tries to do it publicly could also be committing career suicide. Even internal members of the military can't officially investigate it because the official stance is that it's all nonsense.

Modern Era

So, what's changed? Well we know that the military now has acknowledged UAP are real and created formal reporting mechanisms for them. We know that laws are being passed and funds disbursed to collect and share more data on this topic. We know politicians are being secretly briefed. All of the sudden the UFO became the UAP and it's real. Not only that, it's being taken seriously. But why?

Is it disclosure? Is it a conspiracy? So far little evidence exists to support this is "disclosure" or a conspiracy. If we look closely at what's changed we see that it's specifically reporting mechanisms. We also are hearing that UAP flaps have been happening just like what was happening in the 1950's. The difference between the 1950's and now is the culture and adversaries have changed. Yes, technology has changed as well but we can actually ignore that for this hypothesis to hold. Just like the national security concern of the 1950's where the reality of UFO's didn't really matter for it to be used by an adversary to initiate a potential attack, we have a similar situation. The culture shifted so much to not reporting UFO's/UAP's that it's become a vulnerability in national defense. **An adversary that is aware we don't properly investigate such things could intentionally attempt to mimic a UFO event while gathering intelligence against us.**

I believe this is now the main concern of the military and government. In fact, it's possible that's exactly what some may expect has already happened. The stories of drones swarming ships is a prime example. It's possible the culture of the past 70 years finally caught up to us and now we are concerned it's being exploited or could be exploited. It has nothing to do with wanting to share all the secrets with the public nor is it all make believe to get more funding. It's basically a forced admission that the culture needs to change out of fears that it can now be exploited and used against us. It's still a win for those that have been insisting it's a real phenomena this entire time and absolutely can be used to get more serious scientific investigation. In fact, the national security concerns now align with that attitude.

I know many people will say that this can't be Russian or Chinese technology and people who say that are fooling themselves. My counter to that is that the real concern is that adversaries like Russia and China could use that attitude to trick us into letting our defenses down. This concern doesn't need to believe one way or another that UFO's are real or what they really are necessarily. It's the concern that under reporting and investigation of unknowns will be exploited and it's a very valid and logical concern. As Lue Elizondo said, we can' just put our heads in the sand. If you listen very closely to what Lue says his words and actions align very well with this hypothesis.

My personal concerns of dogma and theocracy

One very interesting way to look at the UFO subject is through the lens of Jaque Valle or Diana Pulska. The phenomenon in general can be looked at in a similar manner as I outlined above where it's reality doesn't have to even be considered other than how the belief in it has very real world consequences. The many relations to spiritual belief systems and religion are apparent in the subject if you simply look for it. Perhaps there is something about attempting to explain the unknown or even just the perception of the unknown that is related to faith based belief systems. The way we must access our imaginations in order to look for answers during the investigation perhaps opens us

up to all kinds of biases and even malleability. Dogma can creep in. Religious interpretation can creep in. We've heard this referenced by Lue Elizondo once again that some people within politics and government think the phenomena is demonic in nature and that this belief hampers proper investigation in his opinion.

It's not my intention to get political, but the apparent slide towards a theocratic state happening within the US while we simultaneously begin to grapple openly about the UFO subject does lead me to some concern. Have any of you seen Roger Stone claiming that there are demonic portals opening up above the White House? I don't believe that's true, but apparently he does (or he at the very least wants people to believe it's true.) I have to say that I see red flags all over the landscape where groups dominated by dogmatic belief structures within government and politics appear to be slightly intersecting with this topic. The Wikileaks that outed Tom DeLonge as working with Podesta and implicitly the Clinton campaign to make the UFO subject a part of the public discussion was also riddled with pizza gate conspiracy theories that morphed into Qanon. A lot of the conspiracy websites interested in UFO's and aliens got completely overrun with new topics that no longer cover those subjects. Some of the most popular conspiracy theorists have risen to their highest levels of prominence during some of the biggest shifts of UFO culture and are basically completely silent on it. In fact a conspiracy theory consistently pushed in the UFO comment is that Tom DeLonge is an agent of misinformation. I follow conspiracy theory circles because I personally find them fascinating not because I necessarily believe them. Conspiracies do often have some kernel of truth to them, but the theorists themselves usually lack consistency or even logic. Sometimes it's 100% bullshit and sometimes it's a fact surrounded by paranoid delusions. Rarely do they hit the nail on the head, especially if they are full time conspiracy theorists. I've noticed a basic underlying principle where they don't operate as "trust but verify" and instead operate under the principle of "distrust but verify" and it tends to have disastrous consequences in their ability to ever verify anything in an unbiased way as well as their mental health.

There are arguments made by many intelligent individuals including psychologists (Jung) and professors of religious studies (Pulska) that UFO's represent a kind of new religious formation. Even Vallee who is one of the most prominent researchers and thinkers in this field discusses it. The point I'm trying to make is the timing of society now lifting the stigma and giving more investigation into this subject is coinciding with other elements of society attempting to create a theocratic state (I haven't discussed the details of this here, but many of you will know what I'm referring to) and the concern is that this could in the future cross paths in a way with tremendous consequences.

"Cube-In-A-Sphere" UAP

A recent article by The Hill has highlighted the reports of "cube-in-sphere" UAP's military pilots have been seeing as reported by Graves where he once again highlights how often our pilots are seeing these things and why he doesn't believe they are conventional drones or balloons. Article is below for your reference.

<https://thehill.com/opinion/national-security/3545072-stunned-by-ufos-exasperated-fighter-pilots-get-little-help-from-pentagon/>



Artist rendition

TLDR; The major takeaway is that trans medium MHD craft that operate silently and stealthily are technologically feasible and the energy density limitations that would normally require a compact fusion reactor can be overcome using aerogel designed to hold a vacuum to create buoyancy.

Quick Recap on MHD and the First UFO Patents

About a month ago I did a deep dive post into UFO patents and how magnetohydrodynamic (MHD) propulsion systems could explain some of the observations. It includes an expired patent from the 1960's and a few newer patents describing not only the propulsion, but how the plasma field can make the craft invisible to radar. The post is below for your reference (links to the patents are in the post.)

https://www.reddit.com/r/UFOs/comments/uz5sdl/i_heard_you_guys_like_ufo_patents_heres_what_the/

May 30, 1967

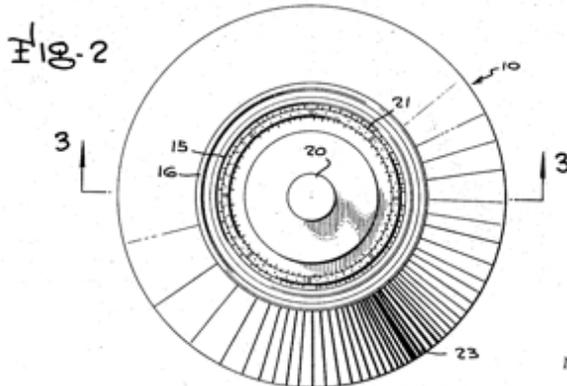
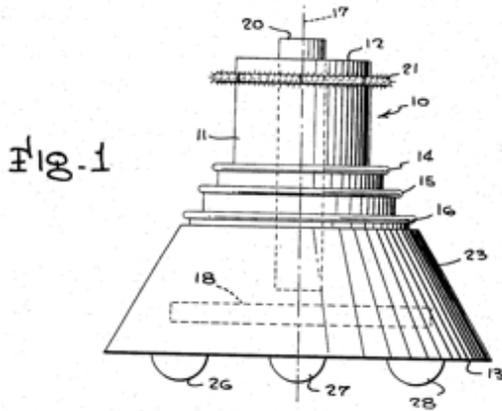
J. F. KING, JR

3,322,374

MAGNETOHYDRODYNAMIC PROPULSION APPARATUS

Filed Sept. 30, 1964

2 Sheets-Sheet 1



INVENTOR

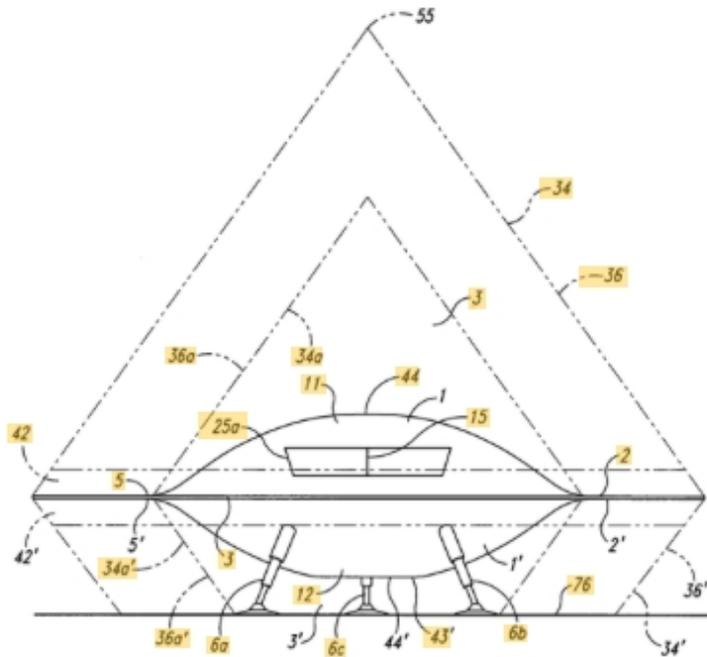
JAMES F. KING, JR.

BY *Mason, Fenwick & Lawrence*
ATTORNEYS

1964 patent for MHD propulsion

To just give a brief recap, it's not just theoretically possible to create a craft that flies without wings, propeller nor heat source, it's been demonstrated albeit with simple devices. Furthermore, such a craft has been demonstrated for use in water as well as the medium also works. Additionally, it's a proposed method for future spacecraft. **The major takeaway is that trans medium MHD craft that operate silently are technologically feasible.** The reason it isn't in practical

use isn't because of theory or feasibility, but because it's insanely energy inefficient to the point it's not only wasteful, but extremely limited by fuel sources. In a nutshell, you basically need a compact nuclear energy source to really make this idea work.



2005 patent for fusion powered MHD trans medium craft invisible to radar.

The idea of a compact fusion reactor may sound too far technologically advanced for some people, but I cover why that may not be the case in my original ufo patent post. What I've discovered now after being inspired by the cube-in-a-sphere report is that there is a "trick" that is also technologically feasible and it may even potentially explain the sphere around the cube.

Using Aerogel to Create Lighter Than Air Craft (A New Submarine)

If you've never heard of aerogel it's a metamaterial made using nanotechnology where a solid material is created in a way that it's made up of a complex network of air pockets to the point where it's mostly air and there is very little solid material. It dawned on me that

perhaps such a material could have the air evacuated so that it's mostly composed of vacuum. This is akin to how a submarine uses buoyancy to operate. **The energy density limitations that would normally require a compact fusion reactor can be overcome using aerogel designed to hold a vacuum to create buoyancy.**

Aerogels are fabricated of various materials; silica, i.e. quartz, is one suitable material. To make a flotation solid with vacuum fill, one has to have a compressive strength that exceeds atmospheric pressure (15 psi), and an atmosphere-impermeable outer layer.

For a sufficiently large object, volume (goes as dimension cubed) will always dominate area (goes as dimension squared), so the weight of the impermeable outer layer may be regarded as insignificant. We need only consider the density of the aerogel structure as it relates to the compressive strength.

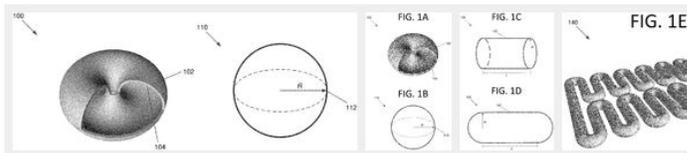
It turns out it's not only theoretically possible, but I found a patent for it connected to the DOE and Los Alamos National Laboratory <https://patents.google.com/patent/US11027816B1/en>

Air-buoyant structures and vehicles

Abstract

Air-buoyant structures, and vehicles incorporating air-buoyant structures, are provided. Hollow, air-buoyant structures may include a shell of ultra-low density aerogel material, foam material, or vapor-expanded material that is strong and stiff enough to withstand atmospheric pressure and lightweight enough to achieve buoyancy in air under evacuation. The shell may be reinforced with a suitable reinforcing material, such as helical nanofibers. The air-buoyant structures may also include vacuum pumps and valves operably connected to or integrated with the hollow shell. The vacuum pumps and valves may be configured to pump air out of the hollow shell and allow air back into the hollow shell to control buoyancy.

Images (14)



US11027816B1
United States

Download PDF Find Prior Art Similar

Inventor: Il Miles Frank Beaux, Igor Olegovich Usov, Brian M. Patterson
Current Assignee: Triad National Security LLC

Worldwide applications
2018 US

Application US15/997,163 events ⓘ
2017-06-05 Priority to US201762515469P
2018-06-04 Application filed by Triad National Security LLC
2021-06-08 Publication of US11027816B1

2018 Patent using vacuum filled aerogels to create aircraft based on buoyancy by Triad National Security LLC.

STATEMENT OF FEDERAL RIGHTS

The United States government has rights in this invention pursuant to Contract No. DE-AC52-06NA25396 between the United States Department of Energy and Los Alamos National Security, LLC for the operation of Los Alamos National Laboratory.

Language from the patent

The current assignee to the patent is Triad National Security LLC. Their website says they bring "world-class expertise in lab management, nuclear operations, national security and scientific research to the National Nuclear Security Administration." The National Nuclear Security Administration is described by wikipedia as a semiautonomous agency created by Congress in 2000 within the DOE.

https://en.wikipedia.org/wiki/National_Nuclear_Security_Administration

The way this patent reads they go so far as to actually consider using an onboard vacuum system to evacuate and re-fill the aerogel in order to control buoyancy. This is an amazing idea by itself, but when you apply it to the problem of creating MHD craft it becomes a potential game changer. By effectively reducing the weight of the craft by surrounding it with an aerogel that is mostly made up of vacuum you now require very little energy for propulsion! It helps to significantly reduce the limitations of the energy efficiency problem of MHD crafts. **The speculation being the sphere around the cube could be an aerogel or perhaps it would be better called vacuumgel.**

This is a very interesting idea because it also shouldn't hinder the principle of MHD operation being made up of mostly vacuum and in fact the aerogel can be manufactured to have electrical properties to assist in the operation. If it's permanently under vacuum it wouldn't handle going underwater well, but if it utilizes the ability to fill and pump back down, it's basically a submarine that can float into outer space. The brand specifically listed in the patent is Airloy and their website is below.

<http://www.airloy.com>

I'm considering buying some that fits the description and attempting to vacuum seal it to test the idea.

What Would That Look Like?

Another interesting point is how it may look when viewed by FLIR or radar. As the earlier patent pointed out, plasma can be used to potentially become invisible to radar. As for the FLIR, well it probably depends how the plasma is being used. If it's not being used at all or very low energy the craft may show up as very cold because it's surrounded by vacuum. This is what one of the team members with UAPx on A Tear in The Sky claims he has captured on thermal imaging of some UAP's. Such a technology could be very stealthy indeed. In fact, I could conceive of it using electrostatic forces to "hitch" a ride on an unsuspecting aircraft in a very similar manner as has been reported. Such tiny craft could go easily unnoticed visibly and potentially practically invisible in other spectrums at will.

Fuel Source

The new restrictions on limitations for such a craft now allows us to consider fuel sources that once again have already been demonstrated technologically. Instead of a compact fusion generator, which nobody has ever built before (at least publicly,) such a craft could use a myriad of different nuclear battery technologies aka atomic batteries. Nuclear batteries aren't actually batteries, but different methods of generating electricity from nuclear sources other than a steam turbine. We used them already on space missions. In fact we've also been making some huge strides in this technology not only in efficiency but also the ability to become compact.

https://en.wikipedia.org/wiki/Atomic_battery

"Two researchers—a former Los Alamos National Laboratory engineer and an Alabama A&M University researcher—have developed highly efficient nanotube-based tile materials that can convert radiation, not heat, from nuclear materials into electricity.

The tiles are made of carbon nanotubes packed with gold and surrounded by lithium hydride. Radioactive particles slamming into the gold push out a shower of high-energy electrons that pass into the lithium hydride and then into electrodes, allowing current to flow."

<https://www.newscientist.com/article/dn13545-nanomaterial-turns-radiation-directly-into-electricity/>

Notice how this new nuclear battery tech was created by researchers from Los Alamos and Alabama A&M University. The aerogel patent is assigned to Triad National Security which is made up of Battelle Memorial Institute (Battelle), **The Texas A&M University System** (TAMUS), and The Regents of the University of California (UC). Also, the patent lists **Los Alamos** under its statement of rights.

Considering that this patent is under DOE and National Nuclear Security Administration and the work clearly has some crossover I'd say they may have ventured onto the same idea as me that this technology could be used with a nuclear battery to create one crazy stealthy little MHD craft. Frankly, if they haven't connected the dots, I'd like to be offered a job. Long hours in the sky become less anomalous if we recognize the technological feasibility of such a craft. It's interesting that also in 2018 Triad National Security took over Los Alamos. Perhaps that's a coincidence.

<https://www.lanl.gov/discover/news-release-archive/2018/November/1101-triad-takes-the-helm.php>

I can already hear people saying, "but those UAP were reported before 2018." Yes, that's true. My main point is about technological feasibility and that still holds true. As for the cube-in-a-sphere reports pre-dating the patent my response is that it could've been in development before the publication. The publication of the new nuclear battery research was in 2008. The thing about technology is that it progresses everywhere. Multiple groups can be working on the same thing. I'm pointing to these particular groups just as examples

that the technology is feasible, not that they are necessarily behind any particular UAP report.

It looks like the contract goes back to 2005 and is for \$36B

<https://govtribe.com/award/federal-contract-award/definitive-contract-deac5206na25396>

<https://patents.google.com/patent/US3671965A/en>

Very interesting. I only had time to skim it but it sounds like they are describing a collapsible radar reflective device designed to increase detection to radar.

I guess this coupled with using plasma to become invisible to radar would make an entirely tunable device that can be invisible or apparently large at will. Very interesting.

THE EMPEROR HAS NO CLOTHES

This is a lot to unpack, but I'll do my best and promise it's worth looking at. Let's start by recognizing that there is a crisis in cosmology as that part isn't controversial. Below is an article that briefly discusses it. In a nutshell, the observations are not fitting the predictions and this has become an increasing trend.

<https://www.space.com/why-is-there-a-cosmology-crisis>

The controversy is in resolving it. Let's entertain for a moment as some PhDs, astronomers, and plasma physicists have and consider that the Big Bang hypothesis is wrong.

Why is it wrong? Well I can give you at least 16 examples of the predictions not fitting the observations and in some cases by as much as 5 sigma. (More on that is further below.) That's bad. But, before I dive into it I will warn that it gets worse. A group of astronomers and physicists are now claiming that attempts to publish work that explicitly states the Big Bang is wrong are being blocked even by pre-publications like arXiv, which is supposed to provide an open public forum for researchers to exchange pre-publication papers, without peer-review.

TLDR; Since 2016 there's been more peer reviewed publications that observations did not match the predictions than matched for the Big Bang Hypothesis. Part of the reason for the James Webb Space Telescope is to provide better data to resolve this. A paper that makes predictions about the upcoming data has been blocked from pre-publication simply because it asserts the Big Bang never happened and a petition is forming for these ideas to be allowed into the scientific process.

Scientists Protest Censorship in Cosmology

Twenty-four astronomers and physicists from ten countries have signed a petition protesting the censorship of papers that are critical of the Big Bang Hypothesis by the open pre-print website arXiv. Run by Cornell University, arXiv is supposed to provide an open public forum for researchers to exchange pre-publication papers, without peer-review. But during June, 2022, arXiv **rejected for publication** on the website three papers by Dr. Riccardo Scarpa, Instituto de Astrofísica de Canarias, and Eric J. Lerner, LPPFusion, Inc. which are **critical of the validity of the Big Bang hypothesis**: “Will LCDM cosmology survive the James Webb Space Telescope?” , “Observations of Large-Scale Structures Contradict the Predictions of the Big Bang Hypothesis But Confirm Plasma Theory”, and “The Big Bang Never Happened—A Reassessment of the Galactic Origin of Light Elements (GOLE) Hypothesis and its Implications”.

The papers had previously been rejected by MNRAS, with the anonymous senior editor writing of two of them: *There are many journals which would be interested in publishing a well-argued synthesis of existing evidence against the standard hot big bang interpretation. But MNRAS, with its focus on publication of significant new astronomical results, is not one of them.*” The editor in chief, Dr. D. R. Fowler, confirmed that no such comprehensive critique of the Big Bang hypothesis would be published.

In the petition, the scientists write: **“Without judging the scientific validity of the papers, it is clear to us that these papers are both original and substantive and are of interest to all those concerned with the current crisis in cosmology. It plainly appears that arXiv has refused publication to these papers only because of their conclusions, which both provide specific predictions relevant to forthcoming observations and challenge LCDM cosmology. Such censorship is anathema to scientific discourse and to the possibility of scientific advance.”** (LCDM cosmology is the current, dark-energy-dark-matter, version of the Big Bang Hypothesis.)

The scientists conclude: **“We strongly urge that arXiv maintain its long-standing practice of being an ‘open-access archive’ of non-peer reviewed ‘scholarly articles’ and not violate that worthy practice by imposing any censorship. Instead, we encourage arXiv to abide by its own principles, and publish these three papers and others like them** that clearly provide ‘sufficient original or substantive scholarly research’ results and are of obvious great interest to the arXiv audience.”

While the petition was initiated in response to arXiv censorship of the three papers submitted in June of this year, in the course of gathering signatures, evidence emerged that there is indeed a general policy of censoring papers that questioned concordance cosmology. **“I have had exactly the same experience”** said Dr. Vaclav Vavrycuk, Czech Academy of Science and a signer of the petition. “Last December I submitted my paper, ‘Cosmological Redshift and Cosmic Time Dilation in the FLRW Metric’ to arXiv and the manuscript was rejected with no clear reason. The paper is now [published](#) in Frontiers in Physics. It’s ridiculous.”

Starting in January 2019, a series of papers by Grit Kalies, HTW University of Applied Sciences Dresden and Christian Jooss, Institute of Materials Physics, University of Goettingen, also signers of the petition, were rejected by arXiv and they too questioned the validity of the Big Bang Hypothesis. They wrote in a letter to arXiv, “the anonymous moderators are misusing arXiv to promote their personal or the prevailing worldview in physics.”

“Clearly, a wide-reaching censorship was put in place in 2019,” says Eric J. Lerner, one of the authors of the June 2022 papers. “Even as recently as 2018 I had no trouble publishing on arXiv a paper refuting aspects of the Big Bang hypothesis. But as the crisis in cosmology became obvious in 2019, the arXiv leadership and others like them **have circled the wagons to protect this failed theory with censorship, because it now has no other defense.** That is not how to advance science. We are shouting out that **the Emperor**

has no clothes, while the cosmological establishment is trying to put their hands over our mouths.”

The signers of the petition are affiliated with some of the leading institutions in astronomy and physics, including the Instituto de Astrofísica de Canarias, which runs the world’s largest ground-based telescope and CEA Saclay, one of Europe’s leading physics research centers. Together, the signers have published over 370 papers on arXiv.

“We’ve just begun to collect signatures and we invite scientists and engineers who oppose censorship to sign on by sending their names and affiliations to me at eric@lppfusion.com,” says Lerner. “We’re also urging everyone to evade the censorship by reading the censored papers for themselves on our own [page](#), and spreading the link to others. Censorship in science can’t be allowed to prevail.”

James Webb Space Telescope

One of the papers makes predictions about what the soon to be released data from the James Webb Space Telescope (JWST) should reveal. The paper compares the predictions of what JWST will observe if the Big Bang Hypothesis is valid or if it is not and there was no hot, dense beginning to the universe 14 billion years ago. Predicting data ahead of observations is crucial to testing the scientific validity of hypotheses and is central to the usefulness of science.

https://www.lppfusion.com/storage/Will_LCDM_survive_JWST.pdf

From the abstract:

The James Webb space telescope (JWST) is about to deliver scientific data. Fundamental contributions are expected in all fields of astronomy. Here we focus on the distant Universe, for the JWST is expected to consolidate once and for all the Lambda Cold Dark Matter (LCDM) cosmology. Most crucially, “The End of the Dark Ages: First Light and Reionization” and “The Assembly of Galaxies” are the first two of the four primary JWST Science Goals. Here we critically challenge the general expectations, giving a set of alternatives,

presented before they can be either proved or disproved. Our conclusion is that the JWST will provide data incompatible with LCDM cosmology, forcing a revolution both in astronomy and fundamental physics.

Lerner points out in his grievances that getting results published in peer review that refute the Big Bang Hypothesis is possible, but explicitly stating that it's wrong will not be published. He has had papers pointing out the inconsistencies with the observations in other peer reviewed journals in the past such as his 2018 paper on surface brightness predictions in the Royal Astronomical Society.

<https://academic.oup.com/mnras/article/477/3/3185/>

16 Examples of The Big Bang Hypothesis Predictions NOT Fitting Observations

The third and most comprehensive paper, again by Lerner alone is titled “The Big Bang Never Happened—A Reassessment of the Galactic Origin of Light Elements (GOLE) Hypothesis and its Implications.” The paper starts by noting that the most fundamental prediction of the Big Bang Hypotheses, that the universe started with a hot dense epoch, leads to the production of an exact amount of certain light elements and isotopes—deuterium, helium and lithium. But while the Big Bang deuterium predictions are correct, the lithium and helium predictions have been completely refuted by observations, **with the lithium prediction 20 times and helium prediction double the observed abundances.** Lerner shows that there are no valid explanations for these gross contradictions with the Big Bang Hypothesis. The paper then re-examines the alternative GOLE theory, that all elements other than hydrogen were formed in the early evolution of individual galaxies, without any need for a Big Bang. With the latest data and more detailed calculations this hypothesis gets all the predictions right.

The paper then steps back and surveys a complete comparison of the predictions of the Big Bang Hypothesis against those of the alternative—no Big Bang. “Such a survey of the whole situation is essential”, says Lerner, “because every time a contradiction of Big

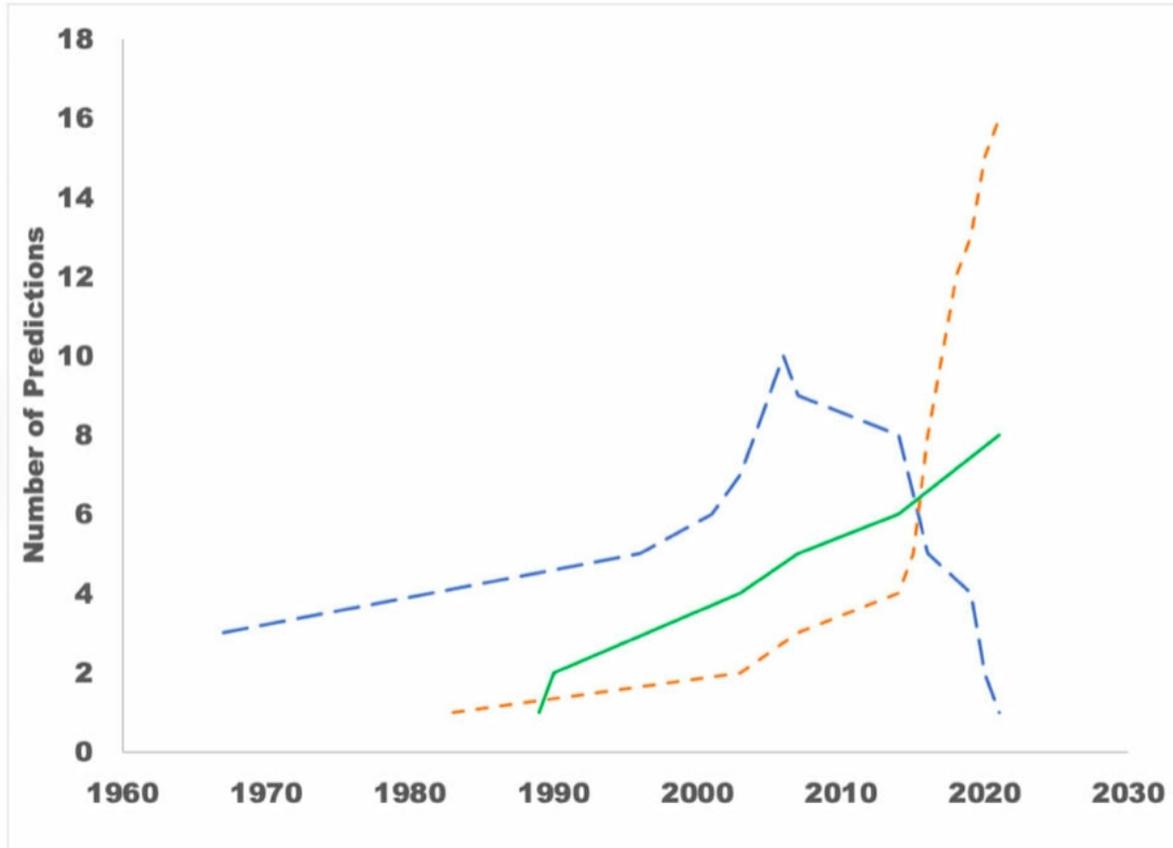
Bang predictions is demonstrated, its defenders say: ‘yes, this anomaly exists, but overall the theory is strong.’ But the survey in this paper shows that the **Big Bang predictions are wrong for 16 separate data sets and only right for one, the deuterium abundance.**”

In addition to the helium and lithium abundance predictions, the too large structures, the impossibly small distant galaxies, contradictions already mentioned, the new paper points to the contradiction in the basic surface brightness predictions of any expanding universe (already published by Lerner and colleagues). The paper demonstrates a new contradiction with the predicted durations of supernovae explosions. It then lists the many other contradictions that have come out in the literature as the crisis in cosmology has deepened over the past few years: the wrong predictions for the Hubble constant, for the density of matter, for the flatness of the universe, for large scale fluctuations in the Cosmic Microwave Background, for the randomness of the background, three different contradictions with dark matter predictions, for galaxy merger rates and for the well-known and very old contradiction with the amount of antimatter in the universe. The paper details when each contradiction emerged in the literature. (See Fig.3).

“I challenge any supporter of the Big Bang theory to show, based on the published literature, that the Big Bang Hypothesis has more correct predictions than wrong ones. I doubt that they can find even one correct additional prediction—and my count of 16 wrong ones is probably incomplete,” says Lerner.

The paper then shows that the Cosmic Microwave Background can also be understood without a Big Bang, as the product of energy produced by ordinary stars, scattered by plasma filaments and updates the growing observational evidence for such a “radio fog”. The only new physical hypothesis required for a non-Big Bang understanding of cosmic evolution is some new mechanism for light to lose energy as it travels, producing the redshift without expansion.

But the Big Bang, inflation, dark energy and dark matter could all be dispensed with.



Number of independent predictions of BBH that were reported in peer-reviewed papers as verified by observations made after the predictions, against the year (long-dashed line).

Number of BBH predictions that were contradicted by observations, as reported in peer-reviewed journals (short-dashed line) Number of confirmations of GOLE predictions in peer-reviewed journals (solid line). Since 2016 there are more data sets contradicting than confirming the Big Bang hypothesis and contradictions have shot up in the last three years.

With all this evidence against the Big Bang, why is the theory still so widely supported? In the paper, Lerner points to the concentration of funding sources, all controlled by adherents of the Big Bang Hypothesis. **“This concentration of funding sources creates a strong ”Emperor’s-New-Clothes” effect where those who don’t**

see the beauty of the BBH are deemed incompetent and thus unworthy of funding,” the paper concludes.

Now, that many are starting to see that the Emperor is indeed naked, only censorship is supporting the theory. “Censorship always holds back scientific progress,” Lerner emphasizes. “This censorship must end. With open debate, it will become clear that the only way to end the crisis in cosmology is to recognize that the Big Bang never happened.”

Below is a link to the paper

<https://www.lppfusion.com/storage/GOLE-Lerner.pdf>

The third paper in question, Observations of Large-Scale Structures Contradict the Predictions of the Big Bang Hypothesis But Confirm Plasma Theory, is below

<https://www.lppfusion.com/storage/Structure-2022-.pdf>

Lerner has also produced a youtube video to explain the situation in laymen

<https://www.youtube.com/watch?v=ZIFpg49Ri8Y>

Recovered UAP Materials Part 1: SPINTRONICS

A FOIA request for recovered UAP materials being studied in Las Vegas has been answered with 154 pages. Those pages are 5 of the 37 DIRD's commissioned by AAWSAP that have already been released. Nonetheless, the response is interesting. The titles are Metallic Glasses, Biomaterials, Materials for Advanced Aerospace Platforms, Metallic Spintronics, and Metamaterials for Aerospace Applications. Below is a post with the response (look for the links in the submission statement).

https://www.reddit.com/r/UFOs/comments/vw0cyt/dia_releases_154_pages_of_uap_test_results_after/

I have already been combing through the 37 DIRD's and immediately made a few connections. For your reference here is a link to all of them in a searchable format.

<https://drive.google.com/drive/folders/157TTDiyRld02tL9Q6dgW0Fgn0P2oIOa7?usp=sharing>

And here is another link for redundancy that is picture format.

<https://www.dropbox.com/sh/95tgfd2lljqrve3/AABKI58mfojoZjNiKEZAz8gMa?dl=0>

As someone who has researched spintronics and meta materials in the past, they stand out to me in particular. I will be doing a deep dive into those 2 papers and how they may relate to the topic. This post will only be PART 1 and cover spintronics.

TLDR;

AAWSAP commissioned 37 scientific papers that are now public. Someone FOIA'd about UAP materials being studied and DIA responded with 5 of these papers. One paper was on spintronics and another on metamaterials. TTSA bought an alleged sample of Roswell crash material and gave it to the Army

to study in 2019. According to Puthoff it appeared to be a metamaterial that acts as a waveguide at the terahertz frequency. The two papers on spintronics and metamaterials also touches on creating materials that operate at this frequency and specifically that such materials would be radiation resistant and ideal for long space travel.

The Bismuth/Magnesium-Zinc Sample

Perhaps some of you remember TTSA announcing a partnership with the US Army in 2019 to study some "exotic materials" (alleged UFO crash material) and also study some pretty wild science, such as active camouflage, inertial mass reduction, and quantum communication. I know I do as this announcement is what got me particularly into researching the UAP topic. Below is an article about that announcement.

<https://www.vice.com/en/article/wjwywx/the-army-told-us-why-it-partnered-with-tom-delonges-ufo-group>

From the article:

Halleaux explained that the government believes the “key technologies or capabilities that [the Army] is investigating with TTSA are certainly on the leading edge of the realm of the possible” and comes at a low cost for the government.

A little more digging reveals that the material in question is but a few pieces that have been making the rounds in ufo circles, but that this piece is the one acquired from Linda Moulten Howe who acquired it from Art Bell who acquired it anonymously and is allegedly from the Roswell crash.

Hal Puthoff also discusses the sample with UFO Joe. Notice the bolded statement below.

So the answer is, we don't, yet, really know where it came from. And it's true that ten years ago Linda Howe provided us with a sample. And we did a lot of tests. Got electron microscope pictures and irradiated it with various gigahertz frequencies, megahertz frequencies and so on. We couldn't make anything out of it. So it kind

of went on the shelf. And it was only after this paper on metamaterials was published, we said, "Oh my gosh. The claim here, that this could have some real utility as microscopic waveguides, would actually fit the structure, you know, that we see there." Okay, well where do we go with that?

Well, the truth of the matter is, that piece is actually pretty mangled and what you'd really like to do is say, "Okay, well let's have a nice, clean piece of this, and let's irradiate with terahertz frequencies, first of all, to see if it really does act as a microscopic waveguide for terahertz frequencies. And then, if that works, we'll irradiate it with other kinds of fields and see if there are any unexpected responses and so on." So it is still, despite the fact it gets unbelievable publicity out there, it's still an absolutely unknown. It does range all the way from...this was a fraud of junk material sent to us, to...no, this came off the wedge of an ET craft.

We don't know the answer to that, and the only way we are going to get something of value is to determine its properties or maybe reproduce it under nice conditions and determine its properties. So, it is still a giant question mark out there. So even though it's, you know, it's like...a few percent of our effort at TTSA, it's like 99% of our criticisms (laughs). That's just what you get in this field. That's the way it goes. Some of us have developed very hard skins. Another question?

<https://www.ufojoe.net/hal-puthoff-transcript-transiitontalks-qa/>

Puthoff elaborates further in another interview:

Well, years later, decades later actually, finally our own science moves along. We move into an area called metamaterials, and it turns out exactly this combination of materials at exactly those dimensions turn out to be an excellent microscopic waveguide for very high frequency electromagnetic radiation terahertz frequencies. So, the wavelength is 60 microns, which is a pretty small size. But it turns out because of the metamaterial aspect of this material, those bismuth layers that act as waveguides can be one twentieth the size

of the wavelength, and usually when you make a waveguide it's gotta be about the size of the wavelength. So, in fact this turned out to be a material that would propagate sub-wavelength waveguide effects. Why somebody wants to do that we still don't know the answer to that.

<https://whatsupwithufos.com/stanford-professor-gary-nolan/>

Okay, so the speculation here by Puthoff is that the alleged sample in question could potentially act as a waveguide at the terahertz frequency (and maybe verifying it?) This is very interesting because few people are currently making things at this frequency, but it's one we can reasonably expect future technology is heading towards. This means that it would actually be very difficult and expensive to test this idea. Perhaps that's the reason it's been given to the Army for testing. (It also could be a clever leak of somebody's classified material to the Army using ufo's as a cover story, but that's pure speculation on my part. I've made similar speculations about using ufology as cover for leaking physical evidence of cutting edge research in my post about the Hair of the Alien dna story.)

https://www.reddit.com/r/observingtheanomaly/comments/tpzyig/anomalous_dna_connected_to_an_abduction_event/?utm_source=share&utm_medium=web2x&context=3

If the bismuth sample is in fact a waveguide at the terahertz frequency then it is an example of some advanced engineering even by today's standards. This doesn't mean it's alien in origin, but is interesting nonetheless. The chain of custody (assuming no funny business) goes back to the 90's. It's alleged to be from the Roswell crash which was in 1947. Of course, that can't really be verified so it's always possible that it was made in the 90's and has a falsified origin story. It would still be very difficult to explain who made it and exactly why even if it was made in the 90's or today. Alternatively, it could legitimately be a mysterious piece of engineering we are only beginning to figure out because our current technology is finally catching up to it. Obviously, such a thing in 1947 is very difficult to explain.

DIRD on Spintronics

This paper specifically mentions materials that could be made to operate in the terahertz frequency. Considering the fact the paper was commissioned by AAWSAP it's possible the very same bismuth material may have inspired or at least influenced the paper. Therefore, there may be something to learn by reading the paper.

It opens up by explaining how the further miniaturization of computer chips faces serious challenges and how spintronics could be used to make the next generation of computer chips. The necessary adoption of radical new technology to keep Moore's Law going is known to those knowledgeable in computer chip manufacturing. Spintronics are a new class of electronic devices where information is carried not by the electron charge, but by the intrinsic spin of the electron. Changing the spin of an electron is faster and requires less power than moving it. It also could have applications for quantum computing. These devices are built with alternating layers of ferromagnetic and nonmagnetic material. It claims that in the past 20 years (written in 2009) this field has seen unprecedented growth and already spawned major technological growth in information storage.

GMR = Giant Magnetoresistance

STT = Spin-Transfer-Torque

Below is a direct quote on applications that could be used in terahertz range.

The STT application in high-frequency technologies is based on the spin-transfer-induced precession of spins. The previous section discussed how precession of magnetization in GMR devices can convert a dc current input into an ac voltage output. The frequency of this output can be tuned from a few GHz to > 100 GHz by changing the applied magnetic field and/or the dc current, effectively resulting in a current-controlled oscillator for use in practical microwave circuits. Hence, the STT effect in GMR structures provides a means to engineer a nanoscale high-frequency oscillator powered and tuned

by dc current. Such an oscillator could have frequency characteristics spanning more than 100 GHz and perhaps into terahertz range.

If I'm understanding this properly the application is for information transmission and processing including wireless applications.

The paper goes on to summarize that current computer chip technology has a thermal dissipation problem that might end progress in the computer chip industry well before 2035. This has been termed "The Red Brick Wall" where no known manufacturable solutions exist for continued scaling.

Below is a direct quote of future applications:

*A number of new spintronic devices based on GMR and STT have been proposed. These include high-frequency (GHz) oscillators, sources, and detectors, as well as magnetic field sensors-for example, in nonvolatile memories such as racetrack and STT magnetic random access memory (STT-MRAM). However, much fundamental work remains to be done before we see commercial applications of these devices. For the memory industry, development of these spintronic applications may lead to a universal memory that would combine cost benefits of DRAM, speed of SRAM, and nonvolatility of flash RAM. Potentially all logic operations on a chip could be carried out by manipulating spins in metallic systems instead of manipulating charges in semiconductor transistors, as in conventional microchips. Moreover, such operations could be combined on a chip with a universal memory. **This would result in a new scalable and radiation-resistant electronics, computers, and so forth. The radiation resistance would be of particular interest for aerospace applications because the radiation in space is known to severely damage conventional electronics by building up a destructive charge in transistors.** Long space trips that would expose onboard electronics to years of radiation would benefit from the radiation resistance and reduced power consumption (for example, like a nonvolatile memory that can retain the stored information even when not powered) of metallic spintronic devices.*

More generally, the impact of reduced power consumption in electronic devices is hard to overestimate, as we rely on such devices in almost every aspect of our everyday lives.

The paper is pretty lengthy and detailed, but the major takeaway is that a better class of computer chips can be made using spintronics that not only is faster and more efficient, but radiation resistant for long space trips.

Additional Research

This is a fast growing field and the paper was written in 2009. Also, the bismuth material was given to the Army in 2019 so looking into recent publications on the topic could be insightful. I'm also interested in attempting to gleam the thought process of Puthoff. The DIRD on spintronics doesn't ever use the term "topological insulator" but it's a relevant concept that's worth understanding because the bismuth sample in question is likely this and not the layered ferromagnetic/nonmagnetic devices discussed in the paper.

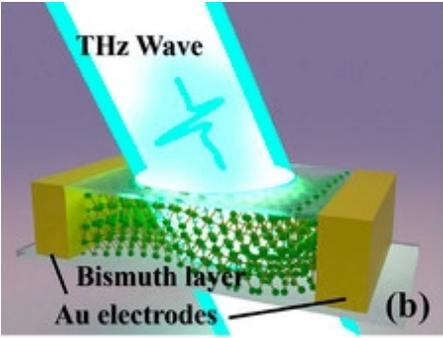
https://en.wikipedia.org/wiki/Topological_insulator

I did some digging to find what paper Puthoff was referring to that led them to speculate the bismuth sample may be a terahertz waveguide and I found this paper from 2007 making the prediction bismuth could be made to act as a topological insulator.

https://repository.upenn.edu/cgi/viewcontent.cgi?article=1172&context=physics_papers

I found a 2021 paper demonstrating terahertz modulation via dc current using bismuth topological insulators that sounds very much like what the DIRD on spintronics was describing.

<https://aip.scitation.org/doi/full/10.1063/5.0048755>



Also, in 2017 there was the discovery of a hexagonal 2D for of bismuth that works at room temperature.

<https://phys.org/news/2017-07-breakthrough-spintronics.html>

PART 2 - METAMATERIALS FOR AEROSPACE APPLICATIONS

This is an analysis of one of the 37 DIRDs that have been released from the AAWSAP program that proceeded AATIP. It was 1 of 5 DIRDS the DIA responded with from a recent FOIA request for information on recovered UAP materials. I did a cover of one of the other DIRDS - SPINTRONICS in PART1.

https://www.reddit.com/r/observingtheanomaly/comments/vx4mu2/foia_request_answered_for_details_surrounding/

TLDR; It's possible to envision a craft that is powered by THz power beaming and also communicating via power beaming in a way that is mostly way outside our current detection capabilities. Such a craft would also have advanced computational abilities as well as an electronics system capable of withstanding the harsh radiation of deep space travel. This DIRD is also describing a potential futuristic energy harvesting and transmission system.

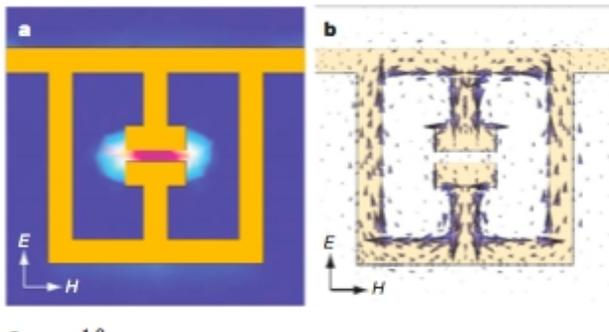
This was a tough paper to get my head around at first and I realized that the original document dump of DIRDs didn't actually have the last several pages for this DIRD, so the FOIA response may have actually filled in a missing gap of information generally speaking. Below are 2 links that cover the entire response with the missing several pages in the second link.

https://7f215854-ce29-4a12-9bb0-f4e7eb88d38a.filesusr.com/ugd/aa4aac_e69847bdf5814f43b69d49e2962a17d8.pdf

https://7f215854-ce29-4a12-9bb0-f4e7eb88d38a.filesusr.com/ugd/aa4aac_4b1d0bacf5bc4db0922c82b4fad3d132.pdf

Quick synopsis

The author focuses on work related to using metamaterials to create negative refractive index materials. These have very interesting applications in creating new kinds of microscopes that can allow us to see past the diffraction limit. They also have applications in photodetectors and other kinds of imaging applications as well as novel lithographic techniques (big semiconductor manufacturing application.) **It get's really interesting once the author starts discussing energy harvesting applications and power beaming.** It's all insanely technical and I will do my best to convey it as best I understand it and share direct quotes that get straight to the heart of what the author is saying. He get's into things like how to engineer light to "slow" down and even make it stand still, so it's some heady stuff and starts to sound like [r/VXJunkies](#). I know it may sound like sci-fi, but metamaterials are amazing in that they can allow for engineering that conventionally isn't possible. I like to think of it as a trick.



Experimental design of the active THz metamaterial device that could potentially enable THz quantum cascade lasers as a "near term practical application." -Peer reviewed paper in 2006 taken from one of the references.

https://www.researchgate.net/publication/6662842_Active_Terahertz_Metamaterial_Devices

From the DIRD:

"A metamaterial is defined as an artificial medium whose properties (mechanical, optical, magnetic, or other) cannot be found in naturally-occurring materials. The emphasis of this study will be on electromagnetic and optical metamaterials. Such metamaterials can

exhibit rather extreme properties, such as negative refractive index, which implies that both electric permittivity and magnetic permeability must be negative."

*"While the most spectacular progress in the field of electromagnetic metamaterials has so far occurred in the microwave range, it is the optical (visible, infrared, mid-infrared) spectral regions that hold most promise for revolutionary applications. Electromagnetic metamaterials have a tremendous potential for revolutionizing propagation, storage, and **conversion of electromagnetic waves across the entire Electromagnetic Spectrum. In our opinion, the most exciting applications that are relevant for aerospace applications include energy harvesting***, developing novel optical devices with unusual yet practically important capabilities (for example, non-reciprocal devices), enhancing the efficiency of nonlinear optical devices, developing novel imaging modalities capable of breaking the diffraction limit (for example, super-lenses, hyper-lenses, far field super-lenses), and developing novel lithographic techniques."*

*"Also described are the ongoing efforts in the field to make extremely compact metamaterials-based lasers. Smaller lasers mean smaller weight and more room for other diagnostic devices and useful payload within the confines of a space vehicle...**Development of ultra-thin photovoltaic and thermo-photovoltaic cells is hampered by weak photon absorption in semiconductors. Metamaterials can modify absorption making it wavelength-selective (tunable), highly efficient, and, if desired, wide-angle.** Recently a way has been found for creating quarter-wavelength resonators backed by leaky mirrors made out of CMMs."*

"Metamaterials offer an exciting opportunity to slow down light. This has two major implications: (a) light can be stored/manipulated in smaller volumes, and (b) nonlinear effects are strongly enhanced by the resulting energy compression."

"For advanced aerospace platforms it is easy to envision a scenario where an airborne platform is powered by a high-power

infrared laser source located on Earth."

What does that all mean?

The type of technologies the author is describing includes IR power beaming as a source of energy. This is because of the potential of these metamaterials to absorb the energy at up to 100% efficiency. It is also possible to make these materials tunable to different wavelengths including visible, microwave, and terahertz (THz.) The author specifically sources a paper on modulating THz frequency. My own research indicates THz frequency not only outperforms microwave for power beaming applications, but has distinct advantages over IR and the author also points this out. It's also pointed out that the power beaming could also be used to transfer information and communicate with the target. The creation of much more efficient thermophotovoltaic cells is another application. This is the mechanism the energy being beamed would be converted into electricity.

Some speculative takeaways

It's possible to envision a craft that is powered by THz power beaming and also communicating via power beaming in a way that is mostly way outside our current detection capabilities. This would work both in air and space and the source could be from land or space (water would be difficult but has been demonstrated using lasers.)

When you combine this DIRD with the one on spintronics such a craft would also have advanced computational abilities as well as an electronics system capable of withstanding the harsh radiation of deep space travel.

I think another really important takeaway is the implications of any technological system that can create high efficiency of thermophotovoltaic cells because **these are basically solar panels that work at night.** There is a lot of energy in the EM spectrum and we only focus on collecting it from the visible spectrum and this is one of the major downfalls of solar technology, but there is still tons of

energy to be captured radiating from the ground at night and other sources that we can't see. This stuff is theoretically possible and we now have a kind of roadmap on how to get there. So, whether you think this is a secret black program and human technology people are witnessing or non human intelligence (NHI) I think a more important question is what is the energy source? How does that work? Is somebody demonstrating this technology?

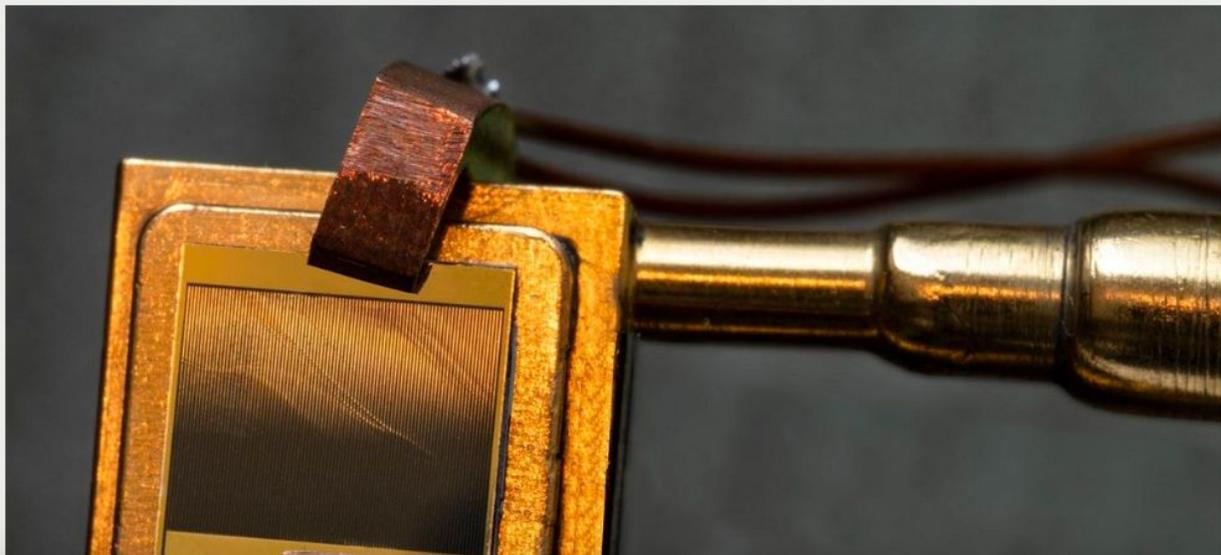
This DIRD is also describing a potential futuristic energy harvesting and transmission system.

Here is a 2019 paper describing such a system using more conventional approaches.

https://www.researchgate.net/figure/Overview-of-the-IR-Solar-Power-Beaming-System-in-LEO-4_fig2_336856325

Generating Electricity From Heat With No Moving Parts > Record-high thermophotovoltaic efficiency exceeding 40 percent could lead to thermal batteries for power grids

BY CHARLES Q. CHOI | 16 APR 2022 | 4 MIN READ | 



Just this year a team at MIT has demonstrated a remarkable breakthrough of over 40% efficiency.

“A turbine-based power production system’s cost is usually on the order of US \$1 per watt. However, for thermophotovoltaics, there is potential to reduce it to the order of \$0.10 per watt.”—

Asegun Henry, MIT

<https://spectrum.ieee.org/thermophotovoltaic>

Alternative Idea Concerning the Bismuth Sample

Some really interesting discussion and sources in the comments lead me to some more interesting sources. I did a little rethinking and have formed an alternative hypothesis concerning the bismuth/magnesium-zinc sample. It's purely speculative, but interesting nonetheless. The idea is that it's not a functional piece at all and the leftover result from an additive manufacturing process where different layers are deposited on a substrate. This is common in materials manufacturing.

I found an analysis of the sample I've never saw before where Erik Hauri, Ph.D. claims, "The Bi-Mg sample gave count rates of positive magnesium ions, which were enhanced **sixty times more** than in the pure Mg metal standard."

<https://www.linkedin.com/pulse/mysterious-micron-layers-alternating-bismuth-from-ufo-moulton-howe>

This led me to research on magnesium ion batteries, which have a lot of potential to replace lithium ion batteries. Interestingly, there is research in using bismuth as a protective layer of the magnesium anode. <https://pubs.acs.org/doi/abs/10.1021/acsenergylett.1c01243>

It's just a thought. It could be wrong. It certainly adds perspective to the mystery of the sample as the magnesium allegedly generating ions seems very interesting in trying to deduce its function/purpose/origin.

I will add that there is some literature on using bismuth coatings as a kind of friction or lubricant layer. So another way to skeptically analyze it would be to consider if that property plays a role.

Potential Physics Behind UAP Revisited

Wingless Electromagnetic Air Vehicle (WEAV) is a heavier-than-air flight system which can self-lift, hover, and fly reliably with no moving components. WEAV was invented in 2006 by Dr. [Subrata Roy](#), plasma physicist, aerospace engineering professor at the University of Florida, and has been a subject of several patents. WEAV employs no moving parts, and combines the aircraft structure, propulsion, energy production and storage, and control subsystems into one integrated system. An early prototype of the WEAV was able to sustain hovering flight a few millimeters above the ground for approximately 3 minutes. Prototypes of varying radii were also successfully tested, suggesting scalability of the design.

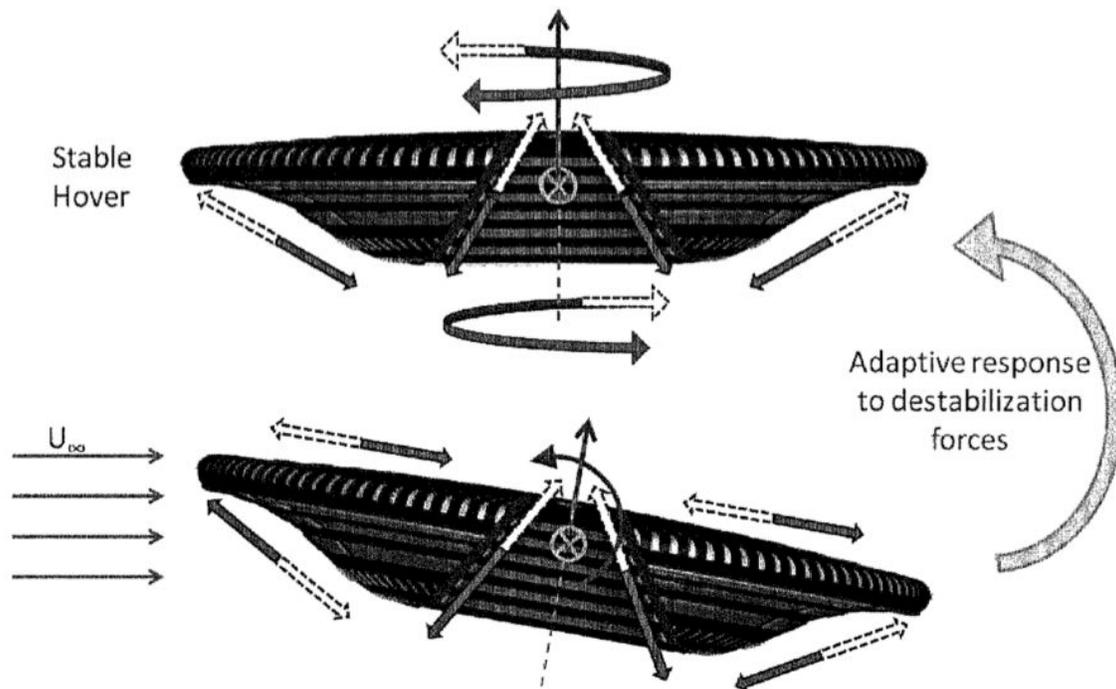


FIG. 20B

This was funded by and demonstrated to the Air Force. From the document:

It will support AFRL strategic vision of 2015-2030 to “deliver precision effects: ubiquitous, swarming sensors and shooters” and will be relevant to the WMD sensing ISR missions.

With a flight profile similar to a spinning disk, WEAV will be able to soar for long periods of time and utilize EHD thrust to acquire and maintain desired altitude and attitude. This revolutionary concept is based on the use of an electro-(or magneto) hydrodynamic (EHD/MHD) thrust generation surface that is coated with multiple layers of dielectric polymers with exposed and/or embedded electrodes for propulsion and dynamic control. This technology has the unique capability of imparting an accurate amount of thrust into the surrounding fluid enabling the vehicle to move and react. Thrust is instantaneously and accurately controlled by the applied power, its waveform, duty cycle, phase lag and other electrical parameters. Once the applied power is removed the thrust vanishes. Combining the EHD/MHD technology with emerging batteries and thin-film photovoltaics provides both energy source and storage in the same structure.

<https://web.archive.org/web/20130517063830/http://www.dtic.mil/dtic/tr/fulltext/u2/a564120.pdf>

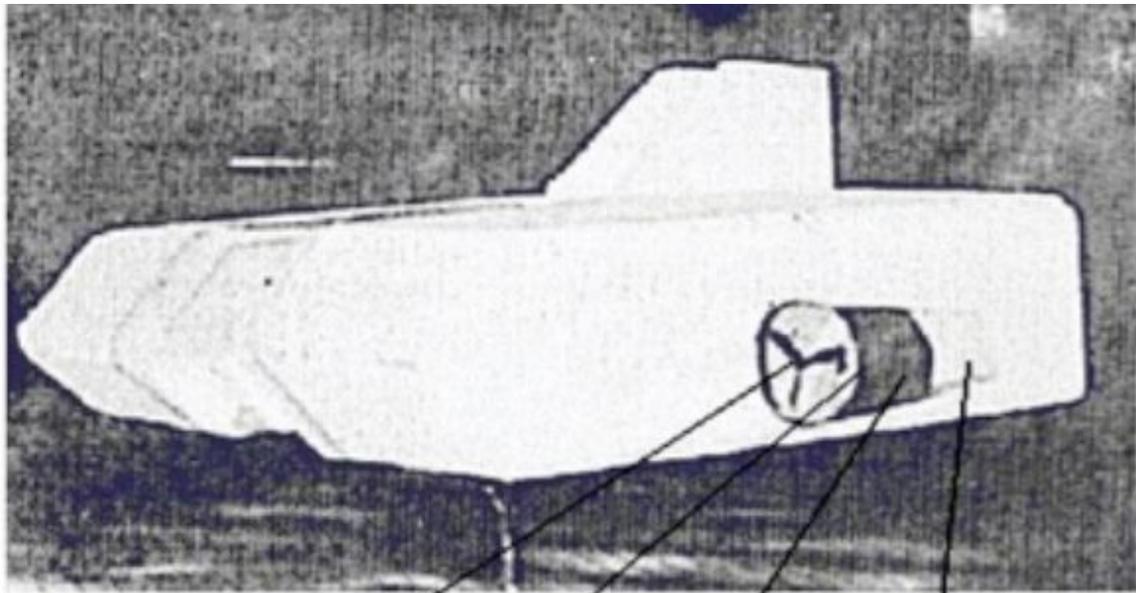
I've done posts in the past explaining how this type of propulsion is possible and it fits the description of many UFO's. Obviously this proof of concept isn't as advanced, but I've explained in other posts how the use of more energy dense fuels/batteries such as nuclear batteries or even nuclear fusion would allow for this type of propulsion to be way more feasible. I've also touched on how vacuum aerogel is being researched and could create lighter than air craft that would work exceptionally well using this propulsion technology. It's also been pointed out that such craft could also utilize power beaming

technology as well. The point is that it's both theoretically and technologically feasible.

"But that's not practical," you might say. My response is that it would make for great stealth aircraft so it's definitely practical. It explains no wings, propellers, noise or signature of any kind. It explains perfect hovering, stopping on a dime and quick alterations. It even explains the lack of sonic boom. It can also be used to become invisible to radar, but not IR which is another one of the observations. It sounds like a very practical stealth craft to me. In fact, it's conceivable if you equipped such a craft with radar deflectors for spoofing you could essentially make a craft that can spoof and go invisible at the same time, which would be insanely confusing if it was used to swarm.

Lighter Than Air Solar (LTAS) of Nevada and Walden Aerospace

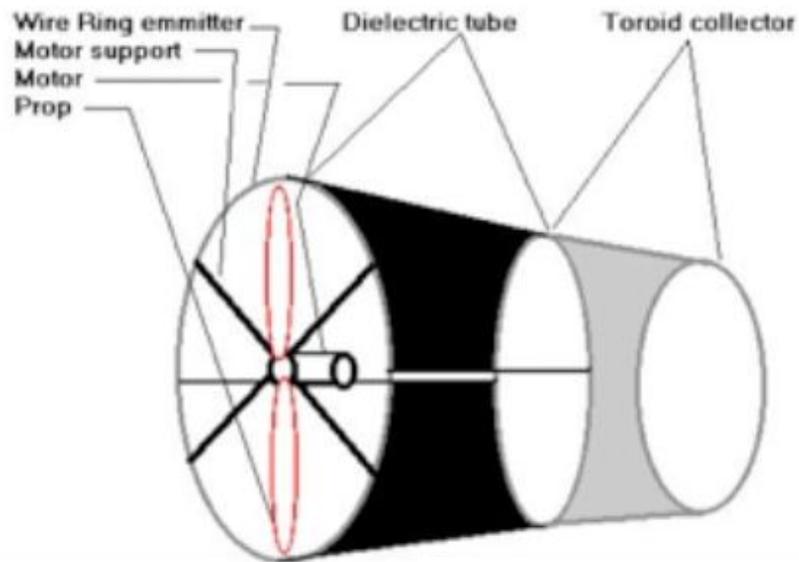
It turns out this kind of propulsion technology was demonstrated to DOD and DOE in 1977 at Nellis AFB by Micheal K. Walden.



LTAS XEM-1
Rigid hulled
1978

Prop Emmitter Dielectric Collector
Hybrid electric power system

Source: Walden Aerospace.



The subscale XEM-1 proof-of-concept demonstrator.

After leaving LTAS in 2005, Michael Walden founded Walden Aerospace. In the 1990's he was still apparently experimenting with

using EHD/MHD on large lighter than air craft that he called The Big Black Delta. It was presumably shaped like a triangle.



Remind anybody of anything?

"Walden Aerospace Electro Kinetic (EK) omnidirectional thrust drive and drag reduction system. This propulsive system allows for the near silent operation of the BBD type craft and reduces or eliminates the sonic pressure shockwave of such a craft operating at supersonic / hypersonic speeds. When operating at lower speeds or when hovering, the Walden EK drive allows the BBD to maneuver without the need for external aerodynamic surfaces or moving parts. Drag reduction and boundary layer control due to the EK drive field allow the Walden BBD design to quickly accelerate and stop silently."

http://walden-aerospace.com/Military_Technology.html

Apparently Michael was involved with NIDS and wrote a paper "Hypothesis – Big Black Deltas, DOD not ET" published in 2002. At least according to his website. The links look broken. Below are direct quotes.

It should be noted that the "2004 Phase one Technologies goals" of the DARPA HULA/WALRUS program exactly match the technological systems as outlined in the 2002 NIDS / Walden paper.

DARPA said advances in envelope and hull materials, buoyancy and lift control, drag reduction and propulsion combined to make this concept feasible. Technologies to be investigated in the initial study phase included vacuum/air buoyancy compensator tanks, which provide buoyancy control without ballast, and electrostatic atmospheric ion propulsion.

While "Aerospace experts" at the time of the 2002 NIDS paper publication said that they did not think the Walden EK drive was possible, It should be noted that Mr. Walden had not only built and flown a self powered rigid composite aero shelled airship with such a drive a quarter century before he wrote the NIDS article, he built and flew another newer EK technologies flight test airship model with FULLY skin integrated (electronically steered with no external aero surfaces and no moving parts) EK propulsion in 2003 and let members of the NIDS board of directors fly it as proof of the concept in his paper in august of 2003.

He goes on to say he wasn't awarded the contract but Lockheed Martin and Aeros Aeronautical Systems Corp was instead then claims they violated some of his patents. I can't really speak to the veracity of those claims, but I find it interesting. I guess it's an unexpected part of searching for "UFO patents."

Phonons: Negative Mass and Negative Gravity

News of the creation of the All-domain Anomaly Resolution Office (AARO) hit the other day and it was announced Dr. Kirkpatrick will be the lead. **It is not unreasonable to assume the appointment of Dr. Kirkpatrick may be because he is a subject matter expert and best fit for the position. It therefore is logical to look at what his body of work is to see if we can glean some insight into the matter.**

Because this is based on assumption and is speculative in nature I have labeled this post as speculation. However, **the work Dr. Kirkpatrick has done is real and the theoretical predictions of phonons are that of other PhD's and not my own.** I'm simply speculating that there may be a connection.

The topic on space-time metric engineering is known to most in the UFO subject. It's the idea that space-time can be manipulated in the same way as Maxwell's equations of electromagnetism. In this way, gravity fields could be produced and harnessed just like we currently do with electromagnetic fields. This allows for things like Alcubierre warp drives for faster than light travel (FTL) as well as wormholes and potentially even energy production and time travel as well as other exotic sci-fi sounding ideas. Some people speculate it's how some UAP's may work.

Phonons

A Phonon is the sound version of a photon. It's a quantized sound wave. It's very interesting because it's a way to get macroscale matter to behave in ways normally associated with light and small particles in order to exhibit quantum effects such as particle-wave duality, superposition and quantum tunneling. Their study seems to be related to crystals and has electromagnetic interactions.

<https://en.wikipedia.org/wiki/Phonon>

Dr. Kirkpatrick wrote his PhD thesis on them titled, Nonlinear and Nonequilibrium Phonon Dynamics of Rare Earth Doped Fluoride Crystals. I'm not focusing specifically on the fluoride crystals as the bigger picture of the thesis is demonstrating an understanding of phonon dynamics, specifically nonlinear and nonequilibrium.

It appears their nonlinearity creates "parametric down conversion" and "squeezed states" which have applications in precision measurements and quantum computing. There's some correlation to the Unruh effect which has been theorized for FTL travel with some funding and claims made of demonstration. **I've done a post on Unruh effect and claims of FTL demonstrated by a DARPA funded company in 2022.**

https://www.reddit.com/r/observingtheanomaly/comments/toji8d/darpa_a_funded_company_announces_new_propulsion/

Negative Mass and Negative Gravity Predictions

There are predictions that phonons may have a non-negligible mass and be affected by gravity just as standard particles are. In particular, phonons are predicted to have a kind of negative mass and negative gravity. They are also predicted to play a key role in superconductivity. Three separate papers published in 2018-19 on this work can be found on wiki in the sources. They are highly technical. One in particular stands out to me.

It states, "We show that the commonly accepted statement that sound waves do not transport mass is only true at linear order. Using effective field theory techniques, we confirm the result found in [1] for zero-temperature superfluids, and extend it to the case of solids and ordinary fluids. We show that, in fact, sound waves do carry mass---in particular, gravitational mass. This implies that a sound wave not only is affected by gravity but also generates a tiny gravitational field, an aspect not appreciated thus far. Our findings are valid for non-relativistic media as well, and could have intriguing experimental implications."

<https://arxiv.org/abs/1807.08771>

Notice they say that it's only true at *linear order*. **That implies it's untrue at nonlinear order (what Kirkpatrick wrote his thesis on.)** I personally find the idea of sound waves having mass very intriguing because I have also written about the work of a little known Harvard physicist that has theorized an information-mass-energy equivalency. He has published several papers on the subject since 2019.
https://www.reddit.com/r/science/comments/tp46xr/a_physicist_has_designed_an_experiment_which_if/

Perhaps the work is not related, but it appears so to me. If information has mass there are a host of implications to many fields of science. I plan to do a post on this subject and Vopson's work at a later date. The predictions of negative mass and negative energy from phonons is very interesting and it appears that it comes from its nonlinear order, which is what the new lead of AARO wrote his PhD thesis on. Coincidence? Perhaps. Negative mass and negative energy have been the subject of what would be required for space-time metric engineering. Puthoff covers this in one of the DIRDs. It's also not a unique idea to him as others have explained the physics of what sounds like sci-fi if one could control negative mass.

[NASA Report On Advanced Propulsion](#)

"Separating Propulsive Mass and Energy for Space Applications" is a less than 10 page report worth reading. It covers magnetohydrodynamics and electrohydrodynamic propulsion and nuclear thermionic avalanche cells (NTAC) which are basically the newest "nuclear batteries" that can be as small as a button. The same report discusses LENR in a very serious manner and acknowledges it's worthy of study with credible results although not fully understood. The report has 25 references.

<https://ntrs.nasa.gov/api/citations/20220002207/downloads/NASA-TM-20220002207.pdf>

I did some digging into the new batteries and found this from the NASA website.

<https://technology.nasa.gov/patent/LAR-TOPS-294>

They may have licensed the technology to Black Rock Energy.

<https://insideunmannedsystems.com/nasa-plans-to-license-patents-for-new-power-cell-suitable-for-uas/>

They licensed the patents to this company apparently after it appears considering Black Rock, however, it's possible they licensed to both.

<https://www.tamerspace.com/our-team>

The report links this as a LENR source.

<https://lenr-canr.org>

Happy researching!