

*The August 16, 2017 Edition of THE REVENGE HUMP DAY!*

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Welcome to the August 16, 2017 Edition of THE REVENGE HUMP DAY!

Last weekend there was a tragedy that happened in Charlottesville, Virginia, and I was terribly saddened by the death of the young woman. When I was a young boy, my mother told me a story about when she was a young girl. She and my Aunt Elizabeth were staying with her Aunt Nodda and Uncle Jim Conway when they were woken up by a cross burning in their front yard. You see, this was the late 20's or early 30's and my family are Catholics and the KKK never really like us. The story has stuck with me my entire life and it help to shape who I have become. I am a child of the 60's and wish we could all get along. But, I am also a child of the south and a history lover. The civil war happened and 500,000 Americans lost their lives for their ideals. Good or bad, that's history and something we have to live with.

From what I can tell everyone in the left leaning media is jumping to condemn those on the far right for causing all the problems in Charlottesville. But from what I have been able to determine from reading a number of sources is that both sides with the radical fringe elements came out with clubs, helmets and shields to put the hurt on the other side. Here is a New York Times article that will explain what I am talking about.

<https://www.nytimes.com/2017/08/13/us/charlottesville-protests-white-nationalists.html>

I think what has bothered me the most is how the left wing media and some of the right wing media have jumped on the president for condemning both sides for fermenting violence and not just the neonazi skinheads on the right. It finally occurred to me what was bothering me. Many years ago in TVA when I alerted management of a problem that was going to blow up, and it did, they tried to blame it on me when "I didn't protest enough". I told them then to get a life because they were warned and if they didn't listen the first time, then they didn't want to listen the second. The same is apparently happening with the president and the media. "He didn't protest enough and scream loudly enough about one side over the other." No matter what he does, there are people out there are going to find wrong with what he does.

So on that "thoughtful note", why don't y'all sit back and relax because here's the best in gossip, jokes and science for your reading pleasure!

*Uncle Timmy*

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DUBLIN, IRELAND WINS THE WORLD SF CONVENTION

From: "Andrew Porter" a55porter

Dublin 2019 - An Irish Worldcon - August 15- 19, 2019 <dublin2019.com>

The 77th Annual World Science Fiction Convention will be held in Dublin, Ireland.

For the first time in the history of the World Science Fiction Convention (Worldcon), the convention will take place in Dublin, Ireland. Dublin was confirmed as the location at

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Worldcon 75 currently taking place in Helsinki Finland. 1227 votes were received; Dublin was the sole bidder for 2019.

Dublin 2019 will take place at the Convention Centre Dublin from August 15 - 19, 2019. The Guests of Honour range from writers to scientists and beyond.

About the guests:

- **Bill and Mary Burns (New York):** Avid readers who have attended Worldcon since 1967. Bill was the recipient of the Doc Weir Award in 2003 and both were Fan Guests of Honour at Eastercon LX.
- **Diane Duane (Wicklow):** Diane's first novel was published in 1979 and she has sold more than fifty other novels during her career. She has won numerous awards and has also written extensively for tv and film.
- **Ginjer Buchanan (New York):** Ginjer has over fifty years in fandom and over 30 years as professional editor. She has been nominated for the Best Editor- Long Form Hugo six times and won in 2014.
- **Ian McDonald (Belfast):** Is a writer who has over written over 20 novels and numerous short stories. In addition he has also worked in programme development in Ireland. He has won awards for his short fiction as well as novels.
- **Jocelyn Bell Burnell (Lurgan Co Armagh):** Jocelyn is a Northern Irish astrophysicist who as a postgraduate student discovered the first radio pulsars.
- **Steve Jackson (Texas):** Steve is a game designer by trade who owns Steve Jackson Games. He has received 12 Origin Awards as well as various other honours for game design.

Dublin 2019 chair James Bacon said, "The whole team are delighted to be bringing the Worldcon to Ireland for the first time. It's a huge achievement and we are very proud to be able to welcome thousands of fans to this beautiful country that is steeped in storytelling. We have fantastic guests and we will building an exciting programme covering all aspects of science fiction, fantasy and horror in all media, including prose, comics, art, film, cosplay, science, TV to name a few in what will be a fabulous celebration here in Dublin."

The World Science Fiction Convention (Worldcon) is a five-day event that has been held annually since 1939 (apart from a four-year break during the Second World War). It is held in a different city every year and usually has around 5,000 attendees from around the globe. Some of the highlights of the five day event include the Hugo Awards, the Masquerade, and programming that runs all five days with over a thousand items including panels, talks, workshops, films, autograph sessions and more.

"World Science Fiction Society," "WSFS," "World Science Fiction Convention," "Worldcon," "NASFiC," "Hugo Award," and the distinctive design of the Hugo Award Rocket are service marks of the World Science Fiction Society, an unincorporated literary society.

Membership are not yet available, but when they are, will be:

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Supporting €40; Attending Adult (26+ years old) €160; First Worldcon Membership €100; Young Adult (13-25 years old) €100; Child (6-12 years old) €60; Infant (5 and under) €5.

Our mailing address is:

[info@dublin2019.com](mailto:info@dublin2019.com)

Dublin 2019

Whitetorn  
Leopardstown Rd  
Sandyford, Dublin D18  
Ireland

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Slightly edited and forwarded by -- Andrew Porter

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2017 HUGO AWARDS ANNOUNCED

From: <http://www.thehugoawards.org/>

Posted on August 11, 2017 by Kevin

The 75th World Science Fiction Convention announced the winners of the 2017 Hugo Awards at a ceremony on the evening of Friday, August 11, 2017 in Helsinki, Finland. The ceremony was hosted by Toastmistress Karen Lord

**BEST NOVEL**

The Obelisk Gate, by N. K. Jemisin (Orbit Books)

**BEST NOVELLA**

Every Heart a Doorway, by Seanan McGuire (Tor.com publishing)

**BEST NOVELETTE**

“The Tomato Thief”, by Ursula Vernon (Apex Magazine, January 2016)

**BEST SHORT STORY**

“Seasons of Glass and Iron”, by Amal El-Mohtar (The Starlit Wood: New Fairy Tales, Saga Press)

**BEST RELATED WORK**

Words Are My Matter: Writings About Life and Books, 2000-2016, by Ursula K. Le Guin (Small Beer)

**BEST GRAPHIC STORY**

Monstress, Volume 1: Awakening, written by Marjorie Liu, illustrated by Sana Takeda (Image)

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**BEST DRAMATIC PRESENTATION, LONG FORM**

Arrival, screenplay by Eric Heisserer based on a short story by Ted Chiang, directed by Denis Villeneuve (21 Laps Entertainment/FilmNation Entertainment/Lava Bear Films)

**BEST DRAMATIC PRESENTATION, SHORT FORM**

The Expanse: "Leviathan Wakes", written by Mark Fergus and Hawk Ostby, directed by Terry McDonough (SyFy)

**BEST EDITOR, SHORT FORM**

Ellen Datlow

**BEST EDITOR, LONG FORM**

Liz Gorinsky

**BEST PROFESSIONAL ARTIST**

Julie Dillon

**BEST SEMIPROZINE**

Uncanny Magazine, edited by Lynne M. Thomas & Michael Damian Thomas, Michi Trota, Julia Rios, and podcast produced by Erika Ensign & Steven Schapansky

**BEST FANZINE**

Lady Business, edited by Clare, Ira, Jodie, KJ, Renay, and Susan

**BEST FANCAST**

Tea and Jeopardy, presented by Emma Newman with Peter Newman

**BEST FAN WRITER**

Abigail Nussbaum

**BEST FAN ARTIST**

Elizabeth Leggett

**BEST SERIES**

(Special Category added by option of Worldcon 75)

The Vorkosigan Saga, by Lois McMaster Bujold (Baen)

**THE JOHN W. CAMPBELL AWARD FOR BEST NEW WRITER (Not a Hugo Award, but administered along with the Hugo Awards)**

Ada Palmer

<L>~<I>~<B>~<E>~<R>~<T>~<Y>~<C>~<O>~<N>

**STARSHIP TROOPERS: TRAITOR OF MARS**

From: "Jim Woosley" [Jimwoosley@aol.com](mailto:Jimwoosley@aol.com)

[https://www.fathomevents.com/events/starship-troopers-traitor-of-mars?utm\\_source=t.co&utm\\_medium=referral](https://www.fathomevents.com/events/starship-troopers-traitor-of-mars?utm_source=t.co&utm_medium=referral)

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This is a CGI combination of the original book and the execrable movie, saving the best of both (I hope)

August 21st one night show.

That said, it appears that it's not scheduled for either of the affiliated theaters in Huntsville - Nashville, Chattanooga, or Birmingham.

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Re: Voter Fraud

From: "Adam Grim" [Grimaf23@hotmail.com](mailto:Grimaf23@hotmail.com)

Thank you for dispelling the myth of widespread voter fraud. The ease and readiness with which you share information on voter registration problems clearly demonstrates that if widespread voter fraud existed, we'd be buried in proof of it by now.

<U><T><'><s><\*><C><O><M><M><E><N><T>

*That is a very interesting reply Adam. I honestly believe that there is some voter fraud out there and I believe that in some places it has changed election results. That is why I appreciate the laws in Tennessee so much because you have to show a valid picture ID to vote.*

*Jim Woosley just sent in a very interesting article about voter fraud in 11 districts in California that I thought was interesting. Check it out in the "YOU JUST CAN'T MAKE THIS STUFF UP!" of this week's Revenge. UT*

<T>~<H>~<E>~<J>~<O>~<K>~<E>~<S>~<S>~<T>~<A>~<R>~<T>~<H>~<E>~<R>~<E>

From: "Tim Bolgeo" [tbolgeo@epbfi.com](mailto:tbolgeo@epbfi.com)



You got to have a sense of humor when it comes to politics in this country. UT



<J>~<O>~<K>~<E>~<S>~<of>~<the>~<W>~<E>~<E>~<K>

From: "Mike Waldrip" [waldripk@gmail.com](mailto:waldripk@gmail.com)

### The Rules

For thousands of years, men have tried to understand the rules when dealing with women. Finally, this merit/demerit guide will help you to understand just how it works. Remember, in the world of romance one single rule applies: Make the woman happy. Do something she likes and you get points. Do something she dislikes and points are subtracted. You don't get any points for doing something she expects. Sorry, that's the way the game is played. Here is a guide to the points system:

#### SIMPLE DUTIES

You make the bed.....	+1
You make the bed, but forget to add the decorative pillows.....	0
You throw the bedspread over ruffled sheets.....	-1
You leave the toilet seat up.....	-5
You replace the toilet paper roll when it is empty.....	0
When the toilet paper roll is barren, you resort to Kleenex.....	-1
When the Kleenex runs out you use the next bathroom.....	-2
You go out to buy her extra-light panty liners with wings.....	+5
in the snow.....	+8
but return with beer.....	-5
and no liners.....	-25
You check out a suspicious noise at night.....	0
You check out a suspicious noise and it is nothing.....	0
You check out a suspicious noise and it is something.....	+5
You pummel it with a six iron.....	+10
It's her cat.....	-40

#### AT THE PARTY

You stay by her side the entire party.....	+20
You stay by her side for a while, then leave to chat with College drinking buddy.....	-2
Named Tiffany.....	-4
Tiffany works at Hooters.....	-10
With breast implants.....	-18

#### HER BIRTHDAY

You remember her birthday.....	0
You buy a card and flowers.....	0
You take her out to dinner.....	0
You take her out to dinner and it's not a sports bar.....	+1
Okay, it is a sports bar.....	-2
And it's all-you-can-eat night.....	-3
It's a sports bar, it's all-you-can-eat night, and your face is painted the colors of your favorite team.....	-10

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**A NIGHT OUT WITH THE BOYS**

- Go with a pal.....0
- The pal is happily married.....+1
- The pal is single.....-7
- He drives a Ferrari.....-10
- With a personalized license plate (GR8 NBED).....-15

**A NIGHT OUT WITH HER**

- You take her to a movie.....+2
- You take her to a movie she likes.....+4
- You take her to a movie you hate.....+6
- You take her to a movie you like.....-2
- It's called Death Cop III.....-3
- Which features Cyborgs that eat humans.....-9
- You lied and said it was a foreign film about orphans.....-15

**YOUR PHYSIQUE**

- You develop a noticeable pot belly.....-15
- You develop a noticeable pot and exercise to get rid of it...+10
- You develop a noticeable pot belly and resort to loose jeans and baggy Hawaiian shirts.....-30
- You say, "It doesn't matter, you have one too." .....-800

**THE BIG QUESTION**

- She asks, "Does this dress make me look fat?" You hesitate in responding.....-10
- You reply, "Where?".....-35
- You reply, "No, I think it's your ass".....-100
- Any other response.....-20

**COMMUNICATION**

When she wants to talk about a problem:

- You listen, displaying a concerned expression.....0
- You listen, for over 30 minutes.....+5
- You relate to her problem and share a similar experience.....+50
- You're mind wanders to sports and you suddenly hear her saying "Well, what do you think I should do".....-50

<J>~<O>~<K>~<E>~<S>

**Driving in Phoenix**

Most of this also applies to Atlanta but all the road names changes are replaced by 73 different Peachtree streets.

Only someone from the Phoenix area would understand and the really funny thing is that this is all so true!

1. 'Phoenix' actually consists of Scottsdale, Chandler, Tempe, Mesa, Gilbert, Glendale, Peoria, Tolleson, Avondale, Goodyear, Litchfield Park, Buckeye, Sun City, Sun City

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West, Sun City Grand, Sun Lakes, Surprise, Laveen, Youngtown, Apache Junction, Gold Canyon, and half of the Mexican border.

2. The morning rush hour is from 4:00 am to noon.

The evening rush hour is from noon to 9:00 PM.

Friday's rush hour starts on Thursday morning.

3. The minimum acceptable speed on most freeways is 85 mph. On Loop 101, your speed is expected to match the highway number. Anything less is considered 'wussy'.

4. Forget the traffic rules you learned elsewhere.

For example: cars/trucks with the loudest mufflers go first at a four-way stop; the trucks with the biggest tires go second. However, in the East Valley, SUV-driving cell phone-talking moms ALWAYS have the right of way.

5. If you actually stop at a yellow light, you will be rear ended.

6. Never honk at anyone. Ever. Seriously.

It's an offense that can get you shot.

7. Road construction is permanent in Phoenix.

Detour barrels are moved around for your entertainment during the night to make the next day's driving a bit more exciting.

8. Watch carefully for road hazards such as drunks, dogs, barrels, cones, cats, mattresses, shredded tires, rabbits, vultures, javelinas, roadrunners, and the coyotes feeding on any of these items.

9. Maricopa Freeway, Papago Freeway and the 'I-10' are the same road.

~~SR202 is the same road as The Red Mountain Freeway.

~~Dunlap and Olive are the same street too.

~~Northern and Shea are the same street.

~~Also Glendale Avenue becomes Lincoln Drive.

~~Jefferson becomes Washington, but they are not the same street.

~~I-17 is also called The Black Canyon Freeway as well as The Veterans Memorial Highway.

~~The Superstition Freeway is also known as US 60.

~~The 101, 202 and 303 remain a large mystery to most of us.

~~It is not yet determined if there is a Red Mountain and a San Tan or just a Red/Tan Mountain.

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~~The SR51 has recently been renamed to Piestewa Freeway because Squaw Peak Parkway was too easy to pronounce.

~~SR101 is also the Pima Freeway except west of I-17, where it is known as the Agua Fria Freeway. The I-17 is the Black Canyon Freeway and The Veteran's Memorial Highway.

~~Lastly, Thunderbird Road becomes Cactus Road but, Cactus Road doesn't become Thunderbird Road because it dead ends at a mountain.

10. If someone actually has their turn signal on, it has been 'accidentally activated.'

11. If you are in the left lane and only driving 70 in a 55-65 mph zone,you are considered a road hazard and will be 'flipped off' accordingly. If you return the flip, you'll be shot.

12. For summer driving, it is advisable to wear potholders on your hands.

13. Please note that there are many, MANY more issues to the phenomenon of driving in Phoenix -- like the 4-cars-through-a-red-light rule -- but these will at least get you acquainted with our unique life on the road.

<J>~<O>~<K>~<E>~<S>

If you ever feel a little bit stupid, just dig this up and read it again; you'll begin to think you're a genius..

~~~~~

(On September 17, 1994, Alabama's Heather Whitestone was selected as Miss America 1995.)

Question: If you could live forever, would you and why?

Answer: "I would not live forever, because we should not live forever, because if we were supposed to live forever, then we would live forever, but we cannot live forever, which is why I would not live forever,"

--Miss Alabama in the 1994 Miss USA contest.

~~~~~

"Whenever I watch TV and see those poor starving kids all over the world, I can't help but cry. I mean I'd love to be skinny like that, but not with all those flies and death and stuff."

--Mariah Carey

~~~~~

"Smoking kills. If you're killed, you've lost a very important part of your life,"

-- Brooke Shields, during an interview to become spokesperson for federal anti-smoking campaign

~~~~~

"I've never had major knee surgery on any other part of my body,"

--Winston Bennett, University of Kentucky basketball forward.

~~~~~

"Outside of the killings, Washington has one of the lowest crime rates in the country,"  
--Mayor Marion Barry, Washington , DC

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"That lowdown scoundrel deserves to be kicked to death by a jackass, and I'm just the one to do it,"  
--A congressional candidate in Texas ..

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"Half this game is ninety percent mental."  
--Philadelphia Phillies manager, Danny Ozark

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"It isn't pollution that's harming the environment. It's the impurities in our air and water that are doing it.."  
--Al Gore, Vice President

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"I love California. I practically grew up in Phoenix."  
-- Dan Quayle

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"We've got to pause and ask ourselves: How much clean air do we need?"  
--Lee Iacocca

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"The word 'genius' isn't applicable in football. A genius is a guy like Norman Einstein."  
--Joe Theisman, NFL football quarterback & sports analyst.

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"We don't necessarily discriminate. We simply exclude certain types of people."  
-- Colonel Gerald Wellman, ROTC Instructor.

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"Your food stamps will be stopped effective March 1992 because we received notice that you passed away. May God bless you. You may reapply if there is a change in your circumstances."  
--Department of Social Services, Greenville , South Carolina

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"Traditionally, most of Australia 's imports come from overseas."  
--Keppel Enderbery

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"If somebody has a bad heart, they can plug this jack in at night as they go to bed and it will monitor their heart throughout the night. And the next morning, when they wake up dead, there'll be a record."  
-- Mark S. Fowler, FCC Chairman

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Feeling smarter yet?

<J>~<O>~<K>~<E>~<S>~<of>~<the>~<W>~<E>~<E>~<K>

From: "Ray Beloate" [beerman@rittermail.com](mailto:beerman@rittermail.com)

## CHURCH HUMOR

### WHY GO TO CHURCH?

One Sunday morning, a mother went in to wake her son and tell him it was time to get ready for church, to which he replied, "I'm not going."

"Why not?" she asked.

"I'll give you two good reasons," he said. "(1), they don't like me, and (2), I don't like them."

His mother replied, "I'll give you two good reasons why you SHOULD go to church:

(1) You're 59 years old, and (2) you're the pastor!"

### THE PICNIC

A Rabbi and a Catholic Priest met at the town's annual 4th of July picnic. Old friends, they began their usual banter.

"This baked ham is really delicious," the priest teased the rabbi. "You really ought to try it. I know it's against your religion, but I can't understand why such a wonderful food should be forbidden! You don't know what you'r missing. you're missing. You just haven't lived until you've tried Mrs. Hall's prized Virginia Baked Ham. Tell me, Rabbi, when are you going to break down and try it?"

The rabbi looked at the priest with a big grin, and said, "At your wedding."

### THE USHER

An elderly woman walked into the local country church. The friendly usher greeted her at the door and helped her up the flight of steps.

"Where would you like to sit?" he asked politely.

"The front row, please," she answered.

"You really don't want to do that," the usher said. "The pastor is really boring."

"Do you happen to know who I am?" the woman inquired.

"No," he said.

"I'm the pastor's mother," she replied indignantly.

"Do you know who I am?" he asked.

"No," she said.

"Good," he answered.

### SHOW AND TELL

A kindergarten teacher gave her class a "show and tell" assignment. Each student was instructed to bring in an object that represented their religion to share with the class. The first student got up in front of the class and said, "My name is Benjamin and I am Jewish and this is a Star of David."

The second student got up in front of the class and said, "My name is Mary. I'm a Catholic and this is a Rosary."

The third student got in up front of the class and said, "My name is Tommy. I am Methodist, and this is a casserole."

### THE BEST WAY TO PRAY

A priest, a minister and a guru sat discussing the best positions for prayer, while a telephone repairman worked nearby

"Kneeling is definitely the best way to pray," the priest said.

"No," said the minister. "I get the best results standing with my hands outstretched to Heaven."

"You're both wrong," the guru said. "The most effective prayer position is lying down on the floor."

The repairman could contain himself no longer. "Hey, fellas," he interrupted. "The best prayin' I ever did was when I was hangin' upside down from a telephone pole."

### THE TWENTY AND THE ONE

A well-worn one-dollar bill and a similarly distressed twenty-dollar bill arrived at a Federal Reserve Bank to be retired.

As they moved along the conveyor belt to be burned, they struck up a conversation.

The twenty-dollar bill reminisced about its travels all over the country.

"I've had a pretty good life," the twenty proclaimed. "Why I've been to Las Vegas and Atlantic City, the finest restaurants in New York, performances on Broadway, and even a cruise to the Caribbean"

"Wow!" said the one-dollar bill. "You've really had an exciting life!"

"So, tell me," says the twenty, "where have you been throughout your lifetime?"

The one dollar bill replies, "Oh, I've been to the Methodist Church, the Baptist Church, the Lutheran Church."

The twenty-dollar bill interrupts, "What's a church?"

### GOAT FOR DINNER

The young couple invited their elderly pastor for Sunday dinner. While they were in the kitchen preparing the meal, the minister asked their son what they were having.

"Goat," the little boy replied.

"Goat?" replied the startled man of the cloth, "Are you sure about that?"

"Yep," said the youngster. "I heard Dad say to Mom, 'Today is just as good as any to have the old goat for dinner.'"

<YOU>~<>~<JUST>~<>~<CAN'T>~<>~<MAKE>~<>~<THIS>~<>~<STUFF>~<>~<UP!>

YOU JUST CAN'T MAKE THIS STUFF UP!

YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Jim Woosley" <Jimwoosley@aol.com>

I was taught this in HS school, but that was in the 60's... now I'm not even in my 60's!

G..... writes:

**We should have learned this in high school. At the very least it should have been taught in our mandatory American History classes in college.**

**Things have been going this way since before the great blame placer was elected to our nations highest office, but has mushroomed on his watch. We MUST stop this madness before our country is taken over by these barbarians!**

**Subject: WE WERE NOT TAUGHT THIS IN SCHOOL.**

**DID NOT KNOW THIS**

**Why the Marine Hymn Contains the Verse "To the Shores of Tripoli"**

**Most Americans are unaware of the fact that over two hundred years ago the United States had declared war on Islam and Thomas Jefferson led the charge!**

**At the height of the eighteenth century, Muslim pirates were the terror of the Mediterranean and a large area of the North Atlantic.**

**They attacked every ship in sight, and held the crews for exorbitant ransoms. Those taken hostage were subjected to barbaric treatment and wrote heart-breaking letters home, begging their government and family members to pay whatever their Mohammedan captors demanded.**

**These extortionists of the high seas represented the Islamic nations of Tripoli, Tunis, Morocco, and Algiers – collectively referred to as the Barbary Coast – and presented a dangerous and unprovoked threat to the new American Republic.**

**Before the Revolutionary War, U.S. merchant ships had been under the protection of Great Britain. When the U.S. declared its independence and entered into war, the ships of the United States were protected by France. However, once the war was won, America had to protect its own fleets.**

**Thus, the birth of the U.S. Navy. Beginning in 1784, seventeen years before he would become president, Thomas Jefferson became America's Minister to France. That same year, the U.S. Congress sought to appease its Muslim adversaries by following in the footsteps of European nations who paid bribes to the Barbary States rather than engaging them in war.**

**In July of 1785, Algerian pirates captured American ships, and the Dye of Algiers demanded an unheard-of ransom of \$60,000. It was a plain and simple case of extortion, and Thomas Jefferson was vehemently opposed to any further payments. Instead, he proposed to Congress the formation of a coalition of allied nations who together could force the Islamic states into peace. A disinterested Congress decided to pay the ransom.**

**In 1786, Thomas Jefferson and John Adams met with Tripoli's ambassador to Great Britain to ask by what right his nation attacked American ships and enslaved American citizens, and why Muslims held so much hostility towards America, a nation with which they had no previous contacts.**

**The two future presidents reported that Ambassador Sidi Haji Abdul Rahman Adja had answered that Islam "was founded on the Laws of their Prophet, that it was written in their Quran that all nations who would not have acknowledged their authority were sinners, that**

it was their right and duty to make war upon them wherever they could be found, and to make slaves of all they could take as Prisoners, and that every Musselman (Muslim) who should be slain in Battle was sure to go to Paradise."

Despite this stunning admission of premeditated violence on non-Muslim nations, as well as the objections of many notable American leaders, including George Washington, who warned that caving in was both wrong and would only further embolden the enemy, for the following fifteen years the American government paid the Muslims millions of dollars for the safe passage of American ships or the return of American hostages. The payments in ransom and tribute amounted to over twenty percent of the United States government annual revenues in 1800.

Jefferson was disgusted. Shortly after his being sworn in as the third President of the United States in 1801, the Pasha of Tripoli sent him a note demanding the immediate payment of \$225,000 plus \$25,000 a year for every year forthcoming. That changed everything.

Jefferson let the Pasha know, in no uncertain terms, what he could do with his demand. The Pasha responded by cutting down the flagpole at the American consulate and declared war on the United States. Tunis, Morocco, and Algiers immediately followed suit. Jefferson, until now, had been against America raising a naval force for anything beyond coastal defense, but, having watched his nation be cowed by Islamic thuggery for long enough, decided that it was finally time to meet force with force.

He dispatched a squadron of frigates to the Mediterranean and taught the Muslim nations of the Barbary Coast a lesson he hoped they would never forget. Congress authorized Jefferson to empower U.S. ships to seize all vessels and goods of the Pasha of Tripoli and to "cause to be done all other acts of precaution or hostility as the state of war would justify" .

When Algiers and Tunis, who were both accustomed to American cowardice and acquiescence, saw the newly independent United States had both the will and the right to strike back, they quickly abandoned their allegiance to Tripoli. The war with Tripoli lasted for four more years, and raged up again in 1815. The bravery of the U.S. Marine Corps in these wars led to the line "to the shores of Tripoli" in the Marine Hymn, and they would forever be known as "leathernecks" for the leather collars of their uniforms, designed to prevent their heads from being cut off by the Muslim scimitars when boarding enemy ships.

Islam and what its Barbary followers justified doing in the name of their prophet and their god, disturbed Jefferson quite deeply.

America had a tradition of religious tolerance, the fact that Jefferson, himself, had co-authored the Virginia Statute for Religious Freedom, but fundamentalist Islam was like no other religion the world had ever seen. A religion based on supremacism, whose holy book not only condoned but mandated violence against unbelievers, was unacceptable to him. His greatest fear was that someday this brand of Islam would return and pose an even greater threat to the United States.

This should bother every American. That Muslims have brought about women-only classes and swimming times at taxpayer-funded universities and public pools; that Christians,



The deep blue enclave of California has been a single-party state for decades — ever since the early 1990s, following the Reagan revolution (Ronald Reagan, in fact, once served as the state's governor). With that one-party rule has come one-party corruption.

According to documents recently obtained by legal watchdog organization Judicial Watch, several of California's heavily Democratic counties have a voter registration discrepancy that may have led to the outsized election results that handed Hillary Clinton her popular vote majority in November.

And for that, Judicial Watch may seek legal remedies against 11 California counties demanding that they clean up their voter registration rolls.

As noted in a press release, the organization has sent a notice-of-violation letter to the California state and county officials, and has threatened to file suit in federal court demanding they comply with voter registration statutes aimed at helping to prevent voter fraud.

Under provisions of the National Voter Registration Act, or NVRA, states are required to take a number of steps to ensure voter registration accuracy, but according to data obtained by Judicial Watch, 11 California counties have more registered voters than voting-age adults. They are:

Imperial: 102 percent

Lassen: 102 percent

Los Angeles: 112 percent

Monterey: 104 percent

San Diego: 138 percent

San Francisco: 114 percent

San Mateo: 111 percent

Santa Cruz: 109 percent

Solano: 111 percent

Stanislaus: 102 percent

Yolo: 110 percent

As SHTF Plan observes, 10 of these 11 counties went for Clinton during the last election, and not by any small margin, so this can't just be a coincidence:

Out of California's 58 counties, 25 voted Republican in the last election, and 33 voted for the Democrats. So roughly 56% of California's counties vote Democrat, but only 9% of the counties that have this problem are Republican.

That strongly suggests that this is by design, and not an accident.

It's quite obvious that election officials in those heavily Democratic counties and municipalities are not putting much of an effort into clearing names of people who don't belong on voter registration lists — either because they're dead, they're not real, they're in the country illegally, or for other reasons.

SHTF Plan noted further:

And of course, the only reason anyone would do that is if they intended to stuff the ballot.

Judicial Watch's lawsuit, if it succeeds, may have a dramatic impact on the outcome of the 2020 presidential election, given all of the "alleged" voter fraud in some of the most heavily, and most Democratic, counties. That's not to say that the eventual Democratic Party presidential nominee won't win the state anyway, but it's a safe bet the margin of victory will be much smaller.

As Judicial Watch noted in its press release:

Under Section 8 of the NVRA, states are required to make a reasonable effort to remove the names of ineligible voters from official lists due to "the death of the registrant" or "a change in the residence of the registrant," and requires states to ensure noncitizens are not registered to vote.

The legal watchdog noted that there is "strong circumstantial evidence that California municipalities are not conducting reasonable voter registration list maintenance as mandated under the NVRA," according to the notice letter sent to California Secretary of State Alex Padilla.

"California's voting rolls are an absolute mess that undermines the very idea of clean elections," Judicial Watch President Tom Fitton said. "It is urgent that California take reasonable steps to clean up its rolls. We will sue if state officials fail to act."

California isn't the only state being targeted by the organization to curb voter fraud. Notice-of-violation letters have also been sent to Alabama, Florida, Georgia, Illinois, Iowa, Kentucky, Maryland, New Jersey, New York, North Carolina and Tennessee, according to the press release.

J.D. Heyes is a senior writer for NaturalNews.com and NewsTarget.com, as well as editor of The National Sentinel.

<YOU>~<>~<JUST>~<>~<CAN'T>~<>~<MAKE>~<>~<THIS>~<>~<STUFF>~<>~<UP!>

YOU JUST CAN'T MAKE THIS STUFF UP!

From: "Martin L King" [kingjr\\_martin@yahoo.com](mailto:kingjr_martin@yahoo.com)

HERE'S HOW TO AVOID CLIMATE PANICS

Dennis Avery, Posted: Aug 07, 2017 10:01 AM

[https://townhall.com/columnists/dennisavery/2017/08/07/heres-how-to-avoid-climate-panics-n2365479?utm\\_source=thdaily&utm\\_medium=email&utm\\_campaign=nl&newsletterad=](https://townhall.com/columnists/dennisavery/2017/08/07/heres-how-to-avoid-climate-panics-n2365479?utm_source=thdaily&utm_medium=email&utm_campaign=nl&newsletterad=)



Life in fossil-fuel-free utopia

Americans have suffered needless climate-related panic for the past 40 years—not realizing that, since 1850, our newspapers have given us a climate scare about every 25 years. And none of them was valid.

Fortunately, climate science is now good enough to predict the key abrupt climate cycles that Mother Nature visits upon earth through the millennia. After the cold of the Maunder Sunspot Minimum at 1715, for example, earth's temperature warmed 0.3 degrees in less than 25 years. Then two centuries later, the temperatures dropped equally swiftly into the cold of the Dalton Minimum. These abrupt shifts occurred over decades rather than centuries. Some shifts have been favorable, an equal number were unfavorable – and none involved carbon dioxide.

In 1895, some scientists volunteered that another Ice Age was starting. In 1922, the Washington Post carried a major AP article on Arctic melting! (The paper hasn't reminded us of that one lately.)

Newsweek predicted an Ice Age again in the 1970s. And since 1988 we've had a worldwide media "consensus" that the world will soon be too hot for humans or wildlife to survive. This despite the lack of any significant global warming in the past 20 years! The newswriters, however, are trying to "predict" the climate by extending temperatures from the last five years. In a straight line, though temperatures never move in a straight line.

The ice records and geology tell us Earth is continuing the same erratic climate stability it has shown for millions of years. Earth is ruled by cycles dictated from our massive sun and

its biggest planets. Small orbital changes for these heavenly bodies force major, abrupt climate changes on our relatively small planet – whether we're burning fossil fuels or not. CERN, the world's top particle physics laboratory, recently completed an intensive study of earth's cloud chemistry. CERN noted that the Earth has warmed, persistently but erratically, since 1715 (the coldest part of the Little Ice Age). This 300-year warming is part of the same natural cycle that brought us the Little Ice Age and the Medieval Warming.

Earth may warm somewhat further in the century ahead, but CERN doesn't predict the infamous runaway warming guessed by computerized climate models. In fact, warming surges statistically identical to Al Gore's 1976–1998 event have happened countless times through the ages, most recently between 1860–1880 and 1915–1940.

Here are the five key cycles that we know will impact our Earth in the foreseeable future:

**The 90,000-year Ice Age Cycle.** There's no dispute over this one. It is the biggest cycle, and the biggest danger to humans. The last four Ice Ages averaged 90,000 years each. Interglacials, like ours, last only 10,000–30,000 years, and it has been about 14,000 years since the last glacial maximum began to warm. We can't predict when the next Ice Age will hit, but we know it will come slowly. The Arctic needs thousands of centuries to build the vast ice sheets. We have lots of time for new research and, hopefully, new technologies that can reduce or buffer the harmful-to-disastrous effects.

**The 1,500-year Dansgaard-Oeschger Cycle** is also accepted by both sides in the debate. (Though the alarmists claim that CO<sub>2</sub> took command of our climate in 1976.) We're in a warming phase of the D-O right now, with weather about as good as earth has ever had. Most of humanity's progress comes during such warmings. The warming raises earth's average temperature only 1–2 degrees, but we also get notably stable and helpful weather.

CERN's CLOUD experiment importantly revealed that the Dansgaard-Oeschger Cycle is controlled by cosmic ray strikes. When the sun is active (indicated by more sunspots), fewer cosmic rays hit our atmosphere. Thus fewer clouds are created. Without much cloud-shade, the Earth warms. When the sun is weak, as in the Little Ice Ages, lots of cosmic rays hit the earth. Vastly more clouds appear. (The old masters' paintings from that time typically show heavily overcast skies in the cold.) CERN's findings strongly suggest that the sun is continuing to dominate earth's climate. CO<sub>2</sub> matters, but its extent is probably only about 1 degree C. That's significant, but not dangerous.

The "little ice age" that follows this warming will be dominated by cold and chaotic weather, with short, cloudy growing seasons, untimely frosts, centuries-long droughts and horrendous floods. The temperature gap between the Arctic and the equator will widen by up to 10 degrees C, making the storms perhaps three times worse. (Examples: A giant storm in 1588 sank nearly a hundred of the fine ships of the Spanish Armada; on the Scottish Coast in 1694, a hurricane covered a whole county with sand dunes overnight.)

The "little ice ages" kill off more humans than any other natural disaster. Cultures around the world have failed, again and again, as the chaotic cold prevented farmers from harvesting enough grain to feed their cities. During past "little ice ages," humans also suffered rampant epidemics of diseases such as cholera and bubonic plague.

The cycles always turn. The big question is whether our next abrupt climate shift will bring a desperate Ice Age or a much milder "little ice age." Fortunately, our high-yield modern

farming technology can probably feed most of the world's population through a few centuries of "little ice age" bad crop weather. Especially since birth rates will continue to fall with declining death rates. The additional CO2 in the atmosphere will also keep on "fertilizing" the plants. We'll still need new agricultural research to spare land for nature, and more infrastructure in third world countries. The long droughts will require extensive food relief in stricken regions—or even resettlement. But these are now challenges, not disasters.

**The 60-year Pacific Decadal Oscillation:** All those failed predictions of oncoming climate disasters are mostly due to this single abrupt-but-moderate climate pattern. We didn't recognize the PDO until 1996 when fishery experts realized that, when the salmon became scarce in the Columbia River, there were huge salmon schools in the Gulf of Alaska. And vice-versa. The Pacific Ocean was moving the salmon food, in phases that last about 30 years each. No wonder we have had a climate scare "about every 25 years"!

Today's warming hiatus, though apparently "inexplicable" to alarmists, is only another Pacific cooling. This one started about 2002, and the fishery guys expect it to last until about 2032.

**The 200-year Solar Sunspot Minimums:** Our sun currently has fewer sunspots than at any time in the last 100 years. The Maunder Sunspot Minimum (1645–1710) caused terrible famines during the Little Ice Age, but historians tended to ignore sunspot minimums during global warmings; they didn't cause major famines. A recent re-examination of the sunspot record found that the solar minimums drop Earth's thermometer readings sharply for about 60 years - - every 200 years.

**The Dalton Minimum,** which delivered London's cold misery in the Charles Dickens' novels, ended about 1820. Now we're due again. A broad group of solar experts now predicts a sunspot minimum sometime around 2040.

Between the ongoing Pacific Oscillation and the oncoming Solar Minimum, the Earth will likely go a full century (1998 to 2100) with no global warming. Could James Hansen's 1988 prediction of soaring future earth temperatures have been more radically wrong? Or Al Gore's?

The El Nino Cycle is short, dramatic, and not very important—except it triggered the last two sharp spikes in earth's temperatures (1998 and 2016). El Ninos warm the Pacific about 2 degrees—but cool quickly back down again over the next year. During the recent El Ninos, alarmists claimed the Earth was re-starting its long-predicted drastic warming. They were wrong again.

Knowing what major climate cycles are coming, and roughly when, should enable us to better prepare for inevitable events. That should cut costs and boost survivability. In sharp contrast, the costs of our current public climate panic have been enormous. We've spent many billions of dollars on computer models that don't predict, and on misguided CO2 "research" that found no answers. Trillions are being spent on subsidies for needless giant wind turbines, solar panels made with rare earths, and huge swathes of biofuel crops. The cost of meeting the Paris Accord requirements is estimated at \$1 trillion per year! The alarmist vision of our "Big Brother future" is right out of George Orwell's brilliant and brittle novel, 1984!

Now, armed with the knowledge of the five cycles, we don't need to send our modern lifestyles back to 1850. Or put our futures in the hands of unelected activists and bureaucrats who seem eager to "ration" renewable energy to us commoners. The predicted \$1 trillion annual cost of the Paris "agreement," invested privately in third world infrastructure, could eliminate most poverty in the world. But the Paris Accord won't make even a measurable difference in Earth's temperatures for 2100!

Dennis Avery is an environmental economist who served as a senior analyst for the U.S. State Department. He is the author of *Saving the Planet With Pesticides and Plastic*, and co-author with astrophysicist Fred Singer of *Unstoppable Global Warming: Every 1,500 Years*. His forthcoming book, *Cultures of Collapse: the Deadly "Little Ice Ages,"* examines the human cultures that collapsed during the cold and chaos of the past "little ice ages."

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From: "Tim Bolgeo" [tbolgeo@epbfi.com](mailto:tbolgeo@epbfi.com)

### MAZDA'S CRAFTY NEW ENGINE MAKES MORE MILES FROM LESS FUEL

AUTHOR: JACK STEWART JACK STEWART, 08.09.17

<https://www.wired.com/story/mazda-injection-compression-skyactivx-engine/>



Mazda will debut a compression ignition gasoline engine in 2019. MAZDA

DIESEL CARS, NO longer popular in Europe, are definitely a pariah in the US. Americans never warmed to them, and VW's scheme to dupe millions of customers and pollute the planet didn't help. But diesels provide better fuel economy than gasoline engines, even if they do emit more pollution. The ideal internal combustion engine, then, would combine the efficiency of a diesel with the (relatively) lower emissions of a gasoline engine.

Automotive engineers have spent decades trying to build just such an engine. Mazda just announced it's finally done it.

The Japanese automaker says the Skyactiv-X will be the world's first commercially available compression ignition gasoline engine. I'll explain the tech in a moment, but the big takeaway is Mazda claims the engine is 20 to 30 percent more efficient than its current gas engines, and at least as efficient, if not more so, than its diesel engines.

This Skyactiv-X is part of Mazda's goofily titled "Sustainable Zoom-Zoom 2030" plan that includes a shift toward electric cars beginning in 2019. But Mazda knows EVs won't

dominate the market anytime soon, and this engineering breakthrough suggests the auto industry isn't quite done improving internal combustion.

### **A NEW KIND OF BOOM**

First, a primer for those of you who aren't petrolheads. Internal combustion engines, whether they burn gasoline or diesel fuel, generate power by compressing air in the cylinder, adding fuel, and detonating the mixture. That creates a small explosion, which forces a piston down, turning the crankshaft, and, through the drivetrain, the wheels. Gasoline engines use a spark plug to create the explosion. Diesel engines compress that air to a much greater degree, making the air inside the cylinder hot enough to detonate the fuel without a spark. That higher compression ratio means higher efficiency from the engine, or more miles from the fuel. Advantage: diesel.

In gas engines, the fuel is injected earlier, and the air is kept cooler with a lower compression ratio. That means everything is mixed better, resulting in a cleaner burn that produces fewer particulates (soot, basically) and less nitrogen oxide (which is linked to asthma and other respiratory problems). Advantage: gasoline.

### **VROOM VROOM**

Efficiency-minded automakers constantly strive to elevate the compression ratio in gas engines, but are limited by something called auto-ignition (aka knocking), which is when the heat causes the fuel to detonate at the wrong time. But engineers have also been working on embracing auto-ignition, which would allow them to run an engine at even higher compression, and get that increase in efficiency.

Such an engine is great in theory and usually works in a laboratory. General Motors, Honda, and Hyundai have even demonstrated variations on the theme in prototypes over the last decade. And Formula 1 cars use the technology.

But compression ignition is difficult to control outside of a lab, or the cost-no-object arena of F1 racing. Those explosions happen whenever the fuel and air mix reach a given temperature, so engineers sacrifice the millisecond-precise control of spark plugs. The engines are rough when cold, unpredictable when pushed hard, and too often noisy and rattly. Not exactly market-ready.

Mazda hasn't given full details on how it cracked this conundrum, but computers can help. A sophisticated system can control the temperature and pressure in each cylinder by varying turbo boost or valve timing. It can mix in exhaust gas to change the mixture of fuel and air, and calculate just the right amount of gas to throw in.

Plus, Mazda didn't completely abandon current technology. The Skyactiv-X uses something Mazda calls "spark controlled compression ignition," which means the engine has spark plugs and uses them when necessary, like when the engine is cold. It promises a seamless hand-off between sparking and spark-free driving modes. Just how well it works remains to be seen, but you'll be able to judge for yourself, when the first cars with the new engine go on sale in 2019.

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**MOON HAD MAGNETIC FIELD AT LEAST A BILLION YEARS LONGER THAN THOUGHT – STUDY**

Even small planets could have long-lived magnetic fields, crucial for atmosphere and water, raising fresh possibilities in the hunt for new worlds

Nicola Davis, Wednesday 9 August 2017 14.00 EDT

<https://www.theguardian.com/science/2017/aug/09/moon-had-magnetic-field-at-least-a-billion-years-longer-than-thought-study>



Scientists have long puzzled over when the moon's magnetic field disappeared. Photograph: Jack Guez/AFP/Getty Images

The moon's magnetic field lasted at least a billion years longer than previously thought, researchers have revealed, shedding light on an enduring lunar mystery and expanding the possibilities in the hunt for habitable worlds beyond Earth.

Nowadays, the moon has no global magnetic field, but that was not always the case; between 4.25bn and 3.56bn years ago, the lunar magnetic field was similar to that of the Earth. The field is thought to have been generated by the churning movement of fluids within the moon's molten core – a sort of lunar dynamo.

But scientists have long puzzled over when the magnetic field disappeared, with previous research unable to tell whether the field had disappeared completely by 3.19bn years ago or had lingered on in a weaker form.

“One the question that we were trying to answer was really when did the magnetic field cease, [so] we wanted to study younger lunar samples – rocks that are younger than 3.56bn

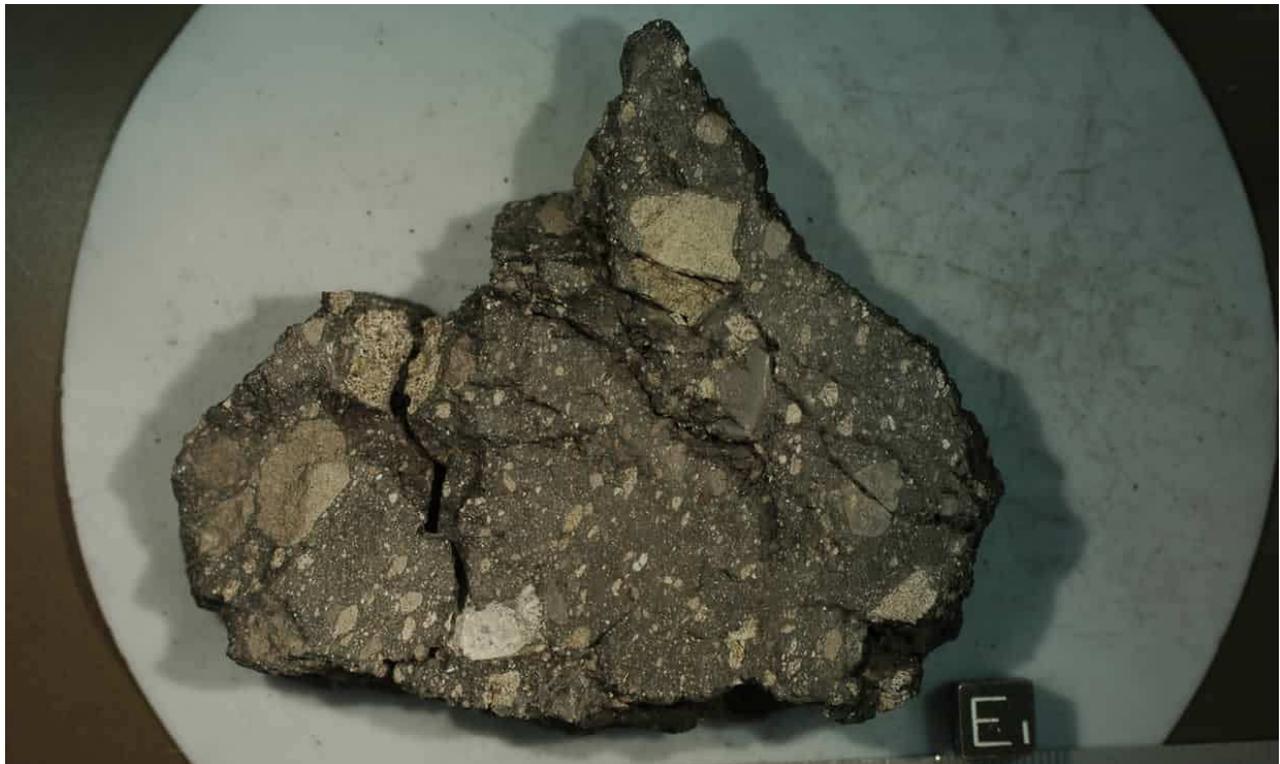
years old,” said Sonia Tikoo, a planetary scientist and co-author of the research from Rutgers University.

Writing in the journal *Science Advances*, Tikoo and colleagues from the University of California, Berkeley and Massachusetts Institute of Technology, describe how they set about unpicking the conundrum by analysing a lunar rock brought back by the Apollo 15 mission in 1971.

The sample contains fragments of basalt that had broken off larger rocks. According to a dating technique based on the ratio of different isotopes of argon, the basalt formed from lava flows about 3.3bn years ago.

These fragments are bound together in the sample by a glassy material, which the team say probably formed when some of the basalt melted following a meteorite impact. The researchers dated the formation of the glassy material to between 1bn and 2.5bn years ago.

Crucially, the impact also melted iron-containing grains within the basalt. These crystallised again within the glassy material as it quickly cooled, capturing a record of the magnetic field of the moon at that time.



The lunar rock sample from the Apollo 15 mission. The rock consists of basalt fragments welded together by a dark glassy matrix produced by melting caused by a meteorite impact. Photograph: Nasa

After a series of experiments at different temperatures, the team found the grains formed when the moon had a magnetic field about a tenth as strong as that of the Earth, at five microtesla.

Such a field is 1,000 times stronger than that measured at the moon's Apollo 15 landing site by astronauts, and far stronger than than would be expected from the influence of the Earth's magnetic field.

"This is not contamination from the Earth's field, it is not from the sun's field, it is not from the galaxy's field – we can rule things out," said Tikoo.

The upshot, says Tikoo, is that the lunar dynamo was still going until somewhere between one billion and 2.5bn years ago.

But questions remain. "What we don't have a good grasp on yet is what generated the lunar magnetic field," said Tikoo.

Tikoo says the longevity of the field rules out the dynamo arising as a result of large impacts – a process that would have only yielded a temporary magnetic field. Impacts large enough to cause even a temporary field tailed off after about 3.7bn years ago. Instead, she says, the new findings suggest multiple mechanisms might have been at play.

The early, strong, magnetic field, she says, is likely to have been generated by the influence of the Earth's gravitational pull on the lunar mantle, with the wobbling of the mantle churning up the moon's liquid core. However, as the moon spiralled away from Earth, and the gravitational pull became weaker, another mechanism could have taken hold, generating a weaker field.

One possibility, she says, is that this weaker field was generated as the moon's core cooled, with energy being released as the iron solidified and lighter elements, such as carbon and sulphur, stirred the core as they buoyantly rose up.

"The combination of these effects can help generate a dynamo that lasts for quite a long time – and this is the mechanism we think is operating the Earth's dynamo right now," said Tikoo.

The findings, she adds, could also cause a stir when it comes to the hunt for extraterrestrial worlds that might host life, suggesting that small planetary bodies should no longer be written off as unlikely to have long-lived magnetic fields, which are important for retaining an atmosphere and water.

Richard Harrison, professor of Earth and planetary materials at the University of Cambridge said the study dramatically expands the timescale for which the moon was generating a magnetic field, helping to shed light on processes deep within it.

"Despite the fact the moon is the one place we have actually visited in person in the solar system ... there are still many unanswered questions," he said.

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**ULTRAFast WI-FI ON HORIZON AS SCIENTISTS SEND DATA AT 100 TIMES CURRENT SPEEDS**

Sarah Knapton, science editor, 10 AUGUST 2017 • 6:00PM

<http://www.telegraph.co.uk/science/2017/08/10/ultrafast-wi-fi-horizon-scientists-send-data-100-times-current/>



The breakthrough could lead to high-speed streaming on the go. CREDIT: GETTY

Ultrafast wi-fi, which is 100 times quicker than today's mobile networks is on the horizon, after scientists proved they could send complex data using high-frequency radiation.

The researchers sent video signals using terahertz, rather than traditional microwaves, at speeds of 50 gigabytes per second. Most wireless networks only operate at top speeds of 500 megabytes a second.

The breakthrough could lead to high-speed streaming on the go.

"We showed that we can transmit separate data streams on terahertz waves at very high speeds and with very low error rates," said Daniel Mittleman, a professor in Brown University's School of Engineering, in Providence, US.

"This is the first time anybody has characterized a terahertz multiplexing system using actual data, and our results show that our approach could be viable in future terahertz wireless networks."

Current voice and data networks use microwaves to carry signals wirelessly, but demand is outstripping capacity so scientists have been looking at new bandwidths.

Terahertz waves have higher frequencies than microwaves and therefore a much larger capacity to carry data.



**Super speeds could make downloading and streaming on the go far quicker, CREDIT: GETTY**

The researchers encoded two high-definition television broadcasts onto terahertz waves of two different frequencies then beamed both frequencies together.

Experiments showed that transmissions were error-free up to 10 gigabits per second, which is much faster than today's standard Wi-Fi speeds.

Error rates increased slightly when the speed was boosted to 50 gigabits per second but were still well within the range that can be fixed using error correction systems which are commonly used in today's communications networks.

The research was published in Nature Communications.

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## **GENETICALLY ENGINEERED PIGS COULD SOON BECOME ORGAN DONORS FOR HUMANS**

Rich Haridy August 10, 2017

<http://newatlas.com/crispr-pig-human-organ-transplants/50863/>

The field of xenotransplantation – implanting organs from one species into another – has accelerated dramatically since the discovery of the CRISPR gene editing tool a few years ago. Hurdles that previously seemed insurmountable are now not so daunting. The latest landmark development in the field comes from a team of scientists who successfully

created genetically modified piglets free of 25 retroviruses that are generally present in pigs but thought to cause harm to humans.



These healthy piglets have been genetically modified to be free of retroviruses, bringing us one step closer to achieving widespread animal/human organ transplants (Credit: eGenesis)

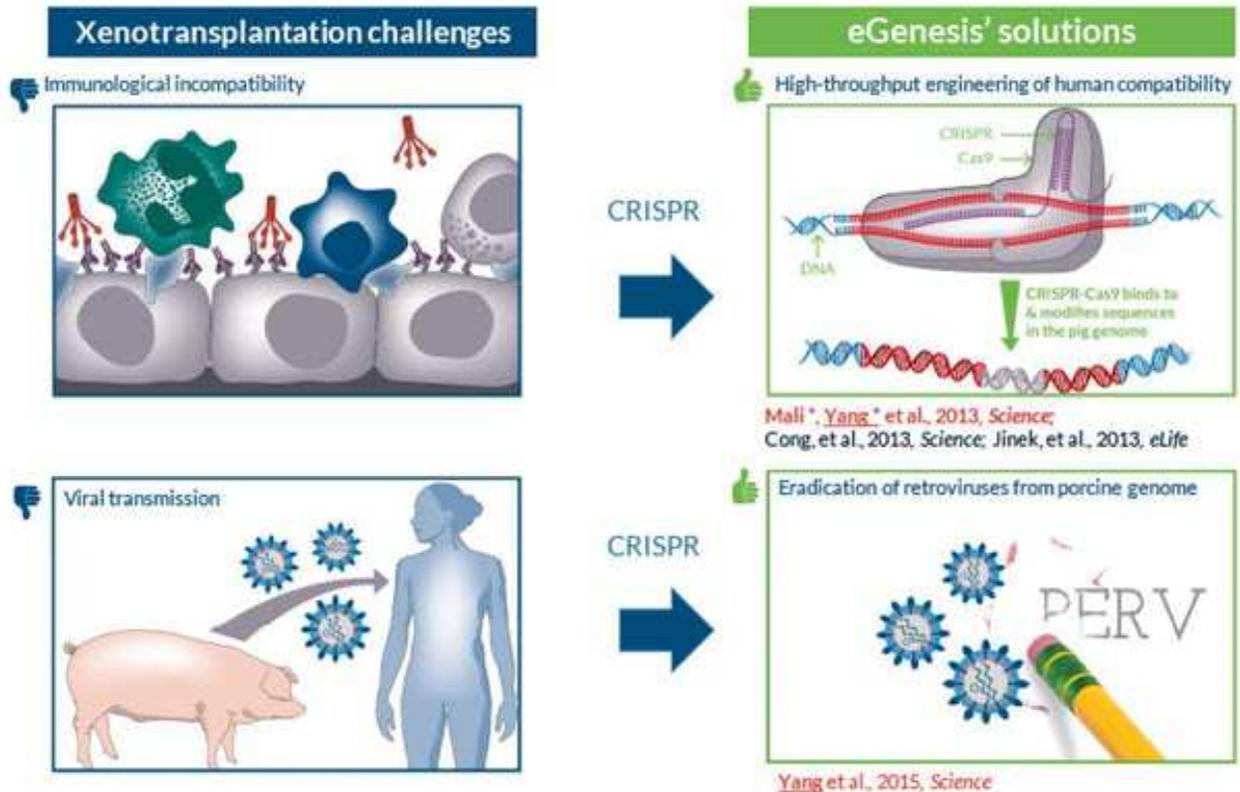
There are several obvious problems scientists must overcome before successfully being able to transplant pig organs into humans. Despite pig organs posing as prime candidates for human transplantation considering their similar size and function, they generally, and unsurprisingly, trigger significant immune rejection responses in humans.

This first problem is being tackled by several scientists including pioneer transplant researchers Joseph Tector and David Cooper, both currently based at the University of Alabama at Birmingham. Both scientists have made major breakthroughs in identifying key genes in pigs that trigger human immune rejections. Using CRISPR they created pigs with those key genes suppressed and believe human trials using these implanted pig organs could begin soon.

The other major problem scientists face in implanting pig organs into humans is the widespread presence of certain retroviruses in the animals. Called Porcine Endogenous Retrovirus (PERV), these viruses are remnants of ancient viral infections and are harmless in pigs but many believe they could pose a threat when transferred to human systems, particularly when considering the immunosuppressed status of a transplant patient.

This latest breakthrough made by researchers from Harvard and Massachusetts-based company eGenesis involves successfully deploying CRISPR to engineer healthy piglets that are entirely free of PERVs. The research identified and deactivated 25 genomic triggers

known to activate PERVs, allowing surrogate sows to then be successfully implanted with PERV-free embryos and giving birth to piglets free of the endogenous viruses.



It's undeniable that CRISPR is accelerating the pace of research in the realm of xenotransplantation. On top of research from earlier this year displaying success in creating a human-pig chimera, it is becoming increasingly clear that we may very well soon crack the challenge of human-animal organ transplantation.

The new PERV-free pig research was published in the journal Science.

Source: eGenesis

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### CALLING THE MOON: STARTUP TO PUT CELLPHONE TOWER ON THE MOON

By Tereza Pultarova, Space.com Contributor | August 10, 2017 03:25pm ET  
<https://www.space.com/37753-calling-the-moon-cell-phone-tower.html>

An astronaut wandering the moon next year could use a smartphone to call home. A German startup is preparing to set up the first telecommunication infrastructure on the lunar surface.

The German company Part Time Scientists, which originally competed for the Google Lunar X Prize race to the moon, plans to send a lander with a rover in late 2018 to visit the landing site of Apollo 17. (Launched in 1972, this was NASA's final Apollo mission to the moon.)

Instead of using a complex dedicated telecommunication system to relay data from the rover to the Earth, the company will rely on LTE technology — the same system used on Earth for mobile phone communications.



**PTScientists' Autonomous Landing and Navigation Module, or ALINA, lunar lander.  
Credit: PT Scientists**

**"We are cooperating with Vodafone in order to provide LTE base stations on the moon," Karsten Becker, who heads embedded electronics development and integration for the startup, told Space.com.**

**"What we are aiming to do is to provide commercial service to bring goods to the moon and also to provide services on the surface of the moon," Becker added.**

**Part Time Scientists has a launch contract for late 2018 with Space X as a secondary payload on the Falcon 9 rocket. Becker said the company believes it will be the first private entity to reach the surface of the moon, suggesting that none of the Google Lunar X Prize participants are likely to meet the December 2017 deadline for the competition. (Part Time Scientists itself withdrew from the Google Lunar X Prize earlier this year due to the time constraints of the competition.)**

**The Falcon 9 will carry the team's spacecraft, Alina, to the geostationary transfer orbit, a highly elliptical Earth orbit whose highest point is 26,000 miles (42,000 kilometers). From there, Alina will continue on its own to the moon.**

"We will soft-land on the moon and disembark our two rovers, the Audi Lunar Quatro rovers, with which we are going to drive up to Apollo 17," Becker said.

"The two rovers are essentially mobile phones that will communicate our video stream to Alina, which serves as an LTE base station, and Alina will communicate the data to us," he said.

The two rovers, which appeared in this year's "Alien: Covenant" film, will examine in detail the Apollo 17 spacecraft to see what has happened to it in its 45 years on the lunar surface.

"Using the LTE modem to transmit our data is much more energy efficient than using direct Earth communication," Becker explained.

The rover gets 90 watts of energy from its solar panel, half of which goes to driving, Becker said; previously, the other half would have to go to the modem for communicating directly to Earth. "With LTE, it's significantly less," he said.

Additionally, relaying data via the base station rather than directly to Earth solves difficulties with pointing the rover's antenna in the rough lunar terrain, Becker said.

He said Part Time Scientists does not expect Alina and the rovers to survive the lunar night because of the extreme low temperatures. However, the experience gained during the first mission will be used in subsequent missions that will aim to establish a permanent telecommunication infrastructure on the moon's surface, he said.

"We are trying to show that you can use the most widespread means of communication, which is the mobile network and particularly the LTE network, on the surface of the moon, to execute missions there," said Becker. "We are aiming to provide cost-effective solutions to problems that are arising in terms of building the lunar village."

According to Becker, Part Time Scientists plans to conduct a second mission around 2020 that would carry LTE terminals designed to survive in the harsh lunar environment for extended periods of time. The company is closely cooperating with the European Space Agency, which has proposed a lunar village concept that would lead to permanent human presence on the surface of the moon. The agency's plan would let all nations and entities contribute to the overall operations with their unique skills and expertise.

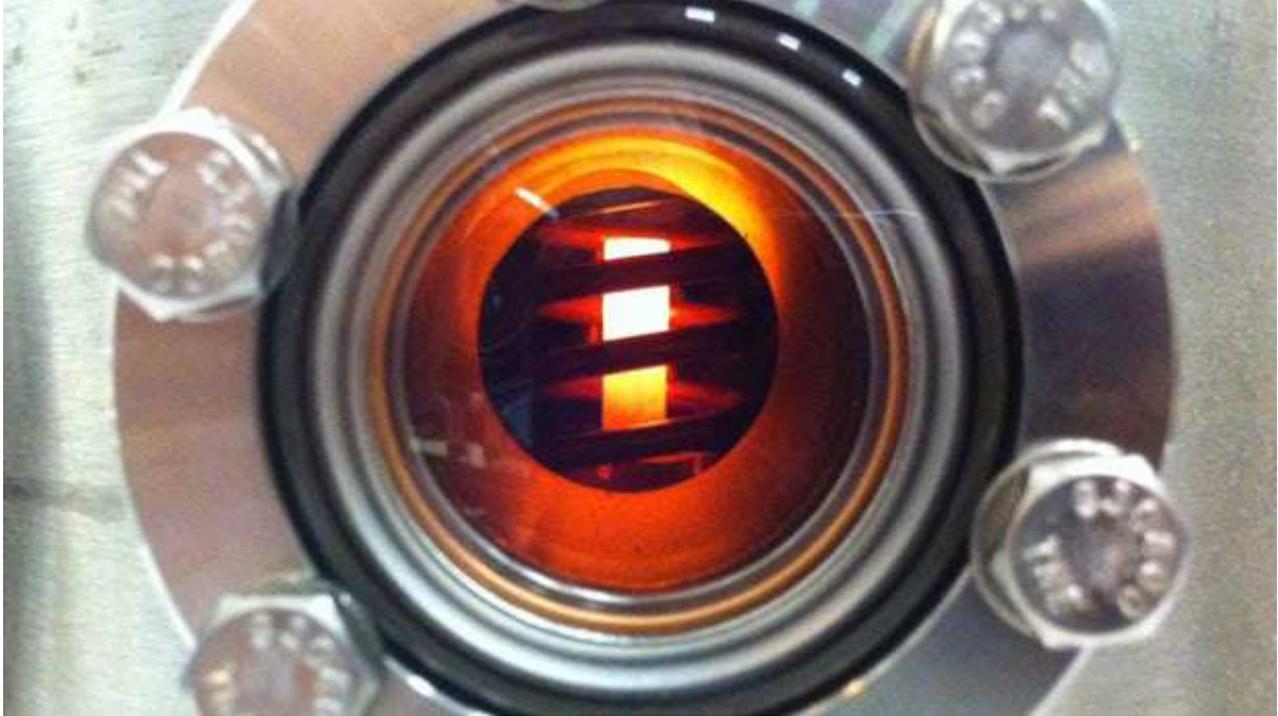
The Alina spacecraft can carry up to 100 kilograms (220 lbs.) of payload. During its first mission, the craft will carry three customer payloads, including an experiment designed by NASA Ames.

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## NASA LOOKS AT REVIVING ATOMIC ROCKET PROGRAM

David Szondy August 10, 2017

[http://newatlas.com/nasa-atomic-rocket/50857/?utm\\_source=Gizmag+Subscribers&utm\\_campaign=5573fe22a6-UA-2235360-4&utm\\_medium=email&utm\\_term=0\\_65b67362bd-5573fe22a6-91374009](http://newatlas.com/nasa-atomic-rocket/50857/?utm_source=Gizmag+Subscribers&utm_campaign=5573fe22a6-UA-2235360-4&utm_medium=email&utm_term=0_65b67362bd-5573fe22a6-91374009)



**A new engine being developed for NASA will use low-enriched uranium Cermets fuel rods(Credit: NASA)**

**When the first manned mission to Mars sets out, it may be on the tail of an atomic rocket engine. The Space Race vintage technology could have a renaissance at NASA after the space agency's Marshall Space Flight Center in Huntsville, Alabama signed a contract with BWXT Nuclear Energy to develop updated Nuclear Thermal Propulsion (NTP) concepts and new fuel elements to power them.**

**The Apollo missions to the Moon demonstrated many things. They showcased human ingenuity, determination, and courage. They proved what American engineering and industry could accomplish in short order when let loose on a goal and demonstrated that humankind need no longer be confined to a single planet.**

**Unfortunately, it also showed the fact that chemical rockets, even at the dawn of the conquest of space, had reached their technical limits. True, they could send astronauts to the Moon, but only by using a disposable rocket the size of a skyscraper of which only a capsule with the roominess of an SUV returned. And even this was in no shape for anything except a museum.**

**What was apparent even in 1969 was that, at the very most, chemical rockets could send an expedition to the planet Mars. However, even this could only be accomplished under the most favorable of conditions and in a configuration that made the voyage little more than a stunt or a protracted suicide mission.**

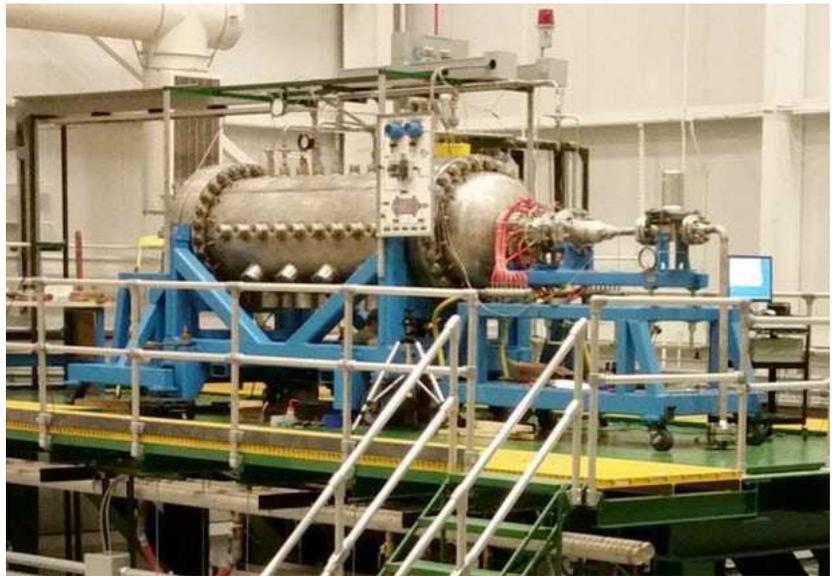
**If humanity was ever going to explore and exploit the Solar System in person, a much more powerful propulsion system was needed: an atomic engine.**

Atomic or nuclear engines for spacecraft were conceived of almost before the ink was dry on Albert Einstein's famous  $E=mc^2$  equation. The exploding of the first fission bomb in 1945 and the development of the first power reactors shortly thereafter made the idea seem feasible, and from 1955 to 1972 the US government pursued a test program to create a practical engine.



Advances in materials technology could lead to the production of LEU NTP fuel elements (Credit: NASA)

impulse, a nuclear rocket could carry larger payloads or smaller payloads at greater speeds. Today, as the hazards of spaceflight are better known, such engines are particularly attractive because they could cut months off a trip to Mars, resulting in less exposure time of astronauts to weightlessness and cosmic rays. In addition, once on Mars, the engine's reactor could provide a round-the-clock, high-density power supply for an outpost.



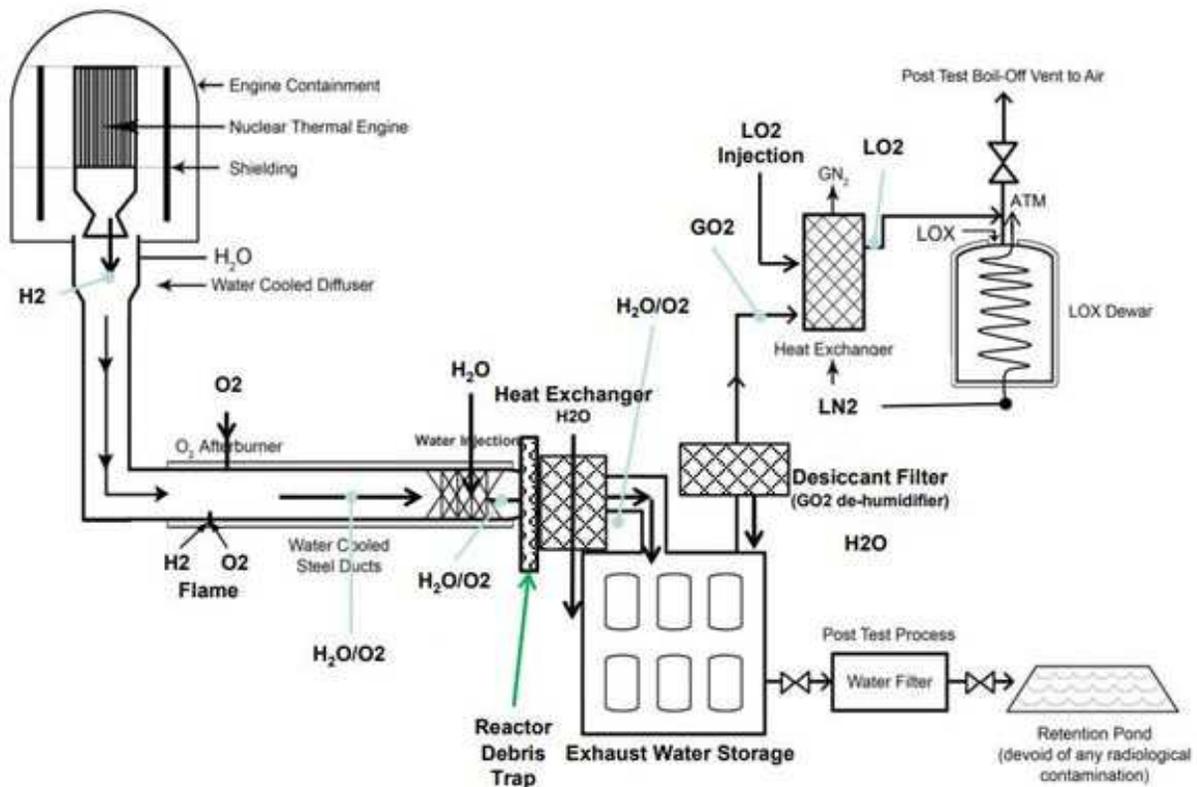
Under the NERVA project, a workable engine was developed, but it was never used on any space mission. Part of the reason was that, though the rocket was twice as efficient as chemical rockets, its need for highly-enriched uranium as fuel, plus its need to operate at temperatures of 3,000 K (2,727° C, 4,940° F), made it the very definition of "risky". Small

wonder then that when the Apollo program wound down and the NASA Mars mission was scratched, so was NERVA.

Today, with NASA once again considering the challenges of sending astronauts to Mars, the nuclear option is back on the table as part of the agency's Game Changing Development program. Under this, NASA has awarded BMXT, which supplies nuclear fuel to the US Navy, a US\$18.8-million contract running through September 30, 2019 to look into the possibility of developing a new engine using a new type of fuel.

Some testing can take place in non-nuclear facilities (Credit: NASA)

The reasons for this were obvious. With its higher exhaust velocities and greater specific



Unlike previous designs using highly enriched uranium, BMXT will study the use of Low-Enriched Uranium (LEU), which has less than 20 percent of fissile uranium 235. This will provide a number of advantages. Not only is it safer than the highly enriched fuel, but the security arrangements are less burdensome, and the handling regulations are the same as those of a university research reactor.

In addition, LEU allows much of the testing of the technology to be done without any fuel at all because the destructive radiation effects are much lower. Also, the initial live engine tests can take place in a single, closed-loop facility that has no outlet to the natural environment.

Key to the concept is the development of an isotopically pure form of tungsten that, mixed with uranium, could be used to create a ceramic-metallic (Cermet) fuel, which would be more stable under the tremendous heat created by the engine.

Under the contract, BMXT and NASA will manufacture and test prototype Cermet fuel elements with 90-percent pure tungsten, as well as look to solve problems in making the fuel, seeing if an LEU engine will have the required thrust, and work on resolving nuclear licensing and regulatory requirements. In addition, BMXT will study the costs of building and operating such an engine.

If NASA determines next month that the LEU engine is feasible, the project will conduct testing and refine the manufacturing process of the Cermet fuel elements over the course of a year, with testing of the full-length Cermet fuel rods to be conducted at Marshall.

The video at the website outlines the new LEU engine concept.

Source: NASA

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## CANADIANS ARE FIRST TO SAMPLE GENETICALLY MODIFIED SALMON

By Nathaniel Scharping | August 10, 2017 4:05 pm

[http://blogs.discovermagazine.com/d-brief/2017/08/10/genetically-modified-salmon/#.WZB\\_w1F95PZ](http://blogs.discovermagazine.com/d-brief/2017/08/10/genetically-modified-salmon/#.WZB_w1F95PZ)

(Credit:  
Aristokrates/Shutterstock)

After a protracted fight, salmon have become the first genetically modified animal to be sold in stores.

The salmon, implanted with genes that boost their growth, come from the U.S.-based biotech firm AquaBounty Technologies, which has been attempting to gain regulatory approval for their product for some 25 years. Last week,

AquaBounty announced it had indeed sold salmon fillets to customers in Canada after receiving regulatory approval in 2016, though it isn't clear where they were sold.



They were approved here by the FDA in 2015 after extensive testing to ensure safety, a move that led almost immediately to a lawsuit against the regulatory agency on behalf of a consumer advocacy group. It has since blocked sales until guidelines for labeling can be established.

## Enhanced Growth

AquaBounty's salmon possess two extra genes. One, from chinook salmon, promotes growth, and another, from ocean pout, acts as a kind of switch to keep the gene active. Salmon normally only grow during certain seasons, but these continue to develop year-round. This allows them to reach maturity in around 18 months, as opposed to 28 or more for normal salmon. Tests by the FDA and Canadian regulatory agencies revealed no potential dangers from ingesting the fish. Nevertheless, two Canadian grocery store chains have pledged not to sell the GMO salmon, and Vigilance OGM, an environmentalist group, protested the use of Canadians as "guinea pigs."

The more salient risks from the fish are those of environmental contamination. Some groups hold that the fish could pose a threat to wild populations of salmon, should they escape and interbreed with native populations. AquaBounty says that all of its fish are bred to be sterile and are raised in indoor vats away from natural habitats, making any crossbreeding extremely unlikely.

## GMO'S ABOUND

Genetically modified products are already common in supermarkets, however, in the form of GMO fruits and vegetables and in many processed foods. Soybean oil, corn starch and other common food ingredients have been genetically engineered for years, mostly to make them more resistant to disease or to pesticides. In addition, papayas, milk, and other common products have also been genetically modified in some way. These crops have quietly become part of our diets, although there is still a push for mandatory labeling of GMO products, and the same could happen for modified animals.

The move could also be a boon for wild salmon, who are dangerously overfished at the moment. Faster-growing salmon from fish farms would take the pressure off of populations in the wild and allow them to recover. How genetically-modified salmon will alter the practice of fish farming remains unclear, however. Aquaculture involves the use of certain toxic chemicals and antibiotics, which can leach into water supplies, and other wild fish are sometimes used as feed, threatening their numbers.

AquaBounty's new salmon are projected to require 25 percent less feed than normal salmon, but the environmental effects of the fish farms they are raised on remain unclear. The genetic modifications won't contribute directly to hazardous runoff, but increases in aquaculture as a whole could pose a problem if not properly managed.

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## MODIFIED X-47B BREAKS COVER AS TESTBED FOR MQ-25 BID

Aug 12, 2017 Guy Norris | Aerospace Daily & Defense Report

[http://aviationweek.com/defense/modified-x-47b-breaks-cover-testbed-mq-25-bid?NL=AW-05&Issue=AW-05\\_20170814\\_AW-05\\_200&sfvc4enews=42&cl=article\\_1&utm\\_rid=CPEN1000001477803&utm\\_campaign=11277&utm\\_medium=email&elq2=15a6702757ad45afaab70da62590721c](http://aviationweek.com/defense/modified-x-47b-breaks-cover-testbed-mq-25-bid?NL=AW-05&Issue=AW-05_20170814_AW-05_200&sfvc4enews=42&cl=article_1&utm_rid=CPEN1000001477803&utm_campaign=11277&utm_medium=email&elq2=15a6702757ad45afaab70da62590721c)

LOS ANGELES—Northrop Grumman is using an X-47B unmanned air vehicle (UAV) as a flying testbed for air refueling systems in support of its proposal for the U.S. Navy's upcoming MQ-25A Stingray unmanned aerial refueling tanker contest.



Anonymous

First details of Northrop Grumman's preparations for the MQ-25A bid have emerged in photographs obtained by Aviation Week of a modified X-47B at the U.S. Air Force's Plant 42 facility in Palmdale, California. The photos appear

to show the UAV configured with a wing air refueling pod (WARP) under the left wing and a drop fuel tank under the right wing.

The aircraft also displays an aerial refueling probe over the right wing, which indicates this particular vehicle is likely AV-2/502, the second of two X-47Bs that flew in the Navy's unmanned carrier air system demonstration (UCAS-D) program that wrapped up in 2015.

Though details are difficult to discern through the heat haze, the WARP appears similar to the Cobham 34-in. series that operates over an air speed range of 200 to 325 kt. The power for the system, which can transfer fuel at 400 gal./min., is provided by a ram-air turbine, which is clearly visible on the nose of the WARP.

The pod under the right wing is thought to be a standard auxiliary fuel tank similar to the 330-gal. FPU-8 or 480-gal. FPU-11 drop tanks used by the F/A-18 Hornet and F/A-18E/F Super Hornet, respectively. One photo also shows what appears to be an open access panel or possible housing for an electro-optical/IR sensor set in the upper fuselage above the centrally located engine inlet.

Little has been seen or heard about the X-47Bs—dubbed "Salty Dogs" by the Navy—since their departure from Naval Air Systems Command's Patuxent River, Maryland, facility back to Palmdale in January and February this year. The aircraft had been in storage since the end of the UCAS-D program, facing an uncertain future, when Northrop took them back with the intention of using the assets as flying testbeds for future development programs.

The appearance of the modified X-47B comes as the Navy prepares to issue a formal request for proposals (RFP) later this year for the MQ-25A, the service's first operational carrier-based unmanned aerial vehicle. The call for proposals follows a draft RFP issued in June for a planned engineering and manufacturing development (EMD) contract award in 2018. The request, which is targeting the ability of UAV tankers to extend the range of

carrier air wings from as early as 2019-2020, was sent directly to Boeing, General Atomics, Lockheed Martin and Northrop Grumman.

Northrop Grumman was contacted for a response to the emergence of these images but declined to comment.

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## SCIENTISTS DISCOVER 91 VOLCANOES BELOW ANTARCTIC ICE SHEET

This is in addition to 47 already known about and eruption would melt more ice in region affected by climate change



Unnamed peaks on the west coast of the Antarctic peninsula tower over the harsh Antarctic coast. Photograph: Alamy Stock Photo

Robin McKie, Monday 14 August 2017 04.08 EDT

<https://www.theguardian.com/world/2017/aug/12/scientists-discover-91-volcanos-antarctica>

Scientists have uncovered the largest volcanic region on Earth – two kilometres below the surface of the vast ice sheet that covers west Antarctica.

The project, by Edinburgh University researchers, has revealed almost 100 volcanoes – with the highest as tall as the Eiger, which stands at almost 4,000 metres in Switzerland.

Geologists say this huge region is likely to dwarf that of east Africa's volcanic ridge, currently rated the densest concentration of volcanoes in the world.



And the activity of this range could have worrying consequences, they have warned. “If one of these volcanoes were to erupt it could further destabilise west Antarctica’s ice sheets,” said glacier expert Robert Bingham, one of the paper’s authors. “Anything that causes the melting of ice – which an eruption certainly would – is likely to speed up the flow of ice into the sea.

The Edinburgh volcano survey, reported in the Geological Society’s special publications series, involved studying the underside of the west Antarctica ice sheet for hidden peaks of basalt rock similar to those produced by the region’s other volcanoes. Their tips actually lie above the ice and have been spotted by polar explorers over the past century.

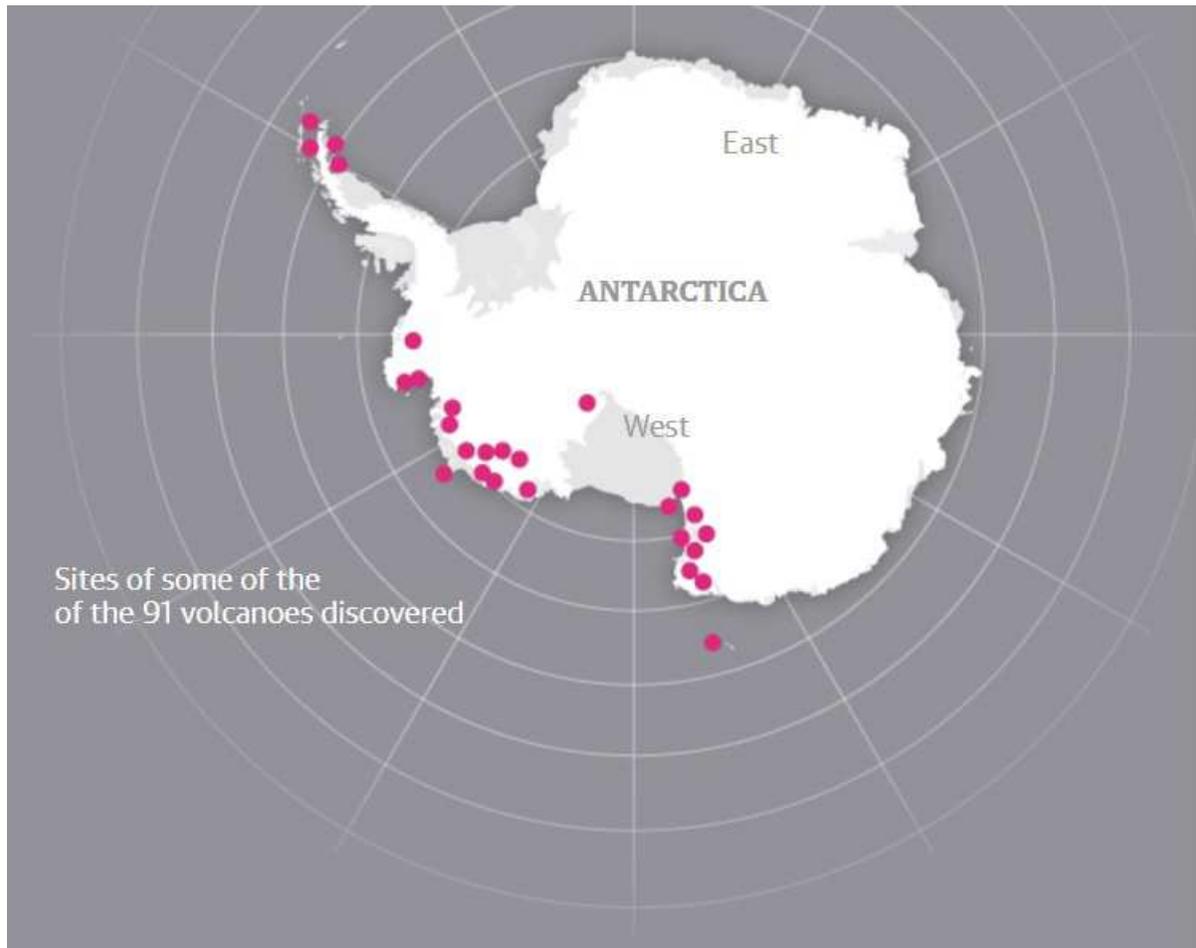
But how many lie below the ice? This question was originally asked by the team’s youngest member, Max Van Wyk de Vries, an undergraduate at the university’s school of geosciences and a self-confessed volcano fanatic. He set up the project with the help of Bingham. Their study involved analysing measurements made by previous surveys, which involved the use of ice-penetrating radar, carried either by planes or land vehicles, to survey strips of the west Antarctic ice.

The results were then compared with satellite and database records and geological information from other aerial surveys. “Essentially, we were looking for evidence of volcanic cones sticking up into the ice,” Bingham said.

After the team had collated the results, it reported a staggering 91 previously unknown volcanoes, adding to the 47 others that had been discovered over the previous century of exploring the region.

These newly discovered volcanoes range in height from 100 to 3,850 metres. All are covered in ice, which sometimes lies in layers that are more than 4km thick in the region.

These active peaks are concentrated in a region known as the west Antarctic rift system, which stretches 3,500km from Antarctica's Ross ice shelf to the Antarctic peninsula.



**“The big question is: how active are these volcanoes? That is something we need to determine as quickly as possible.”**

**“We were amazed,” Bingham said. “We had not expected to find anything like that number. We have almost trebled the number of volcanoes known to exist in west Antarctica. We also suspect there are even more on the bed of the sea that lies under the Ross ice shelf, so that I think it is very likely this region will turn out to be the densest region of volcanoes in the world, greater even than east Africa, where mounts Nyiragongo, Kilimanjaro, Longonot and all the other active volcanoes are concentrated.”**

**The discovery is particularly important because the activity of these volcanoes could have crucial implications for the rest of the planet. If one erupts, it could further destabilise some of the region's ice sheets, which have already been affected by global warming. Meltwater outflows into the Antarctic ocean could trigger sea level rises. “We just don't know about how active these volcanoes have been in the past,” Bingham said.**

**However, he pointed to one alarming trend: “The most volcanism that is going in the world at present is in regions that have only recently lost their glacier covering – after the end of the last ice age. These places include Iceland and Alaska.**

“Theory suggests that this is occurring because, without ice sheets on top of them, there is a release of pressure on the regions’ volcanoes and they become more active.”

And this could happen in west Antarctica, where significant warming in the region caused by climate change has begun to affect its ice sheets. If they are reduced significantly, this could release pressure on the volcanoes that lie below and lead to eruptions that could further destabilise the ice sheets and enhance sea level rises that are already affecting our oceans.

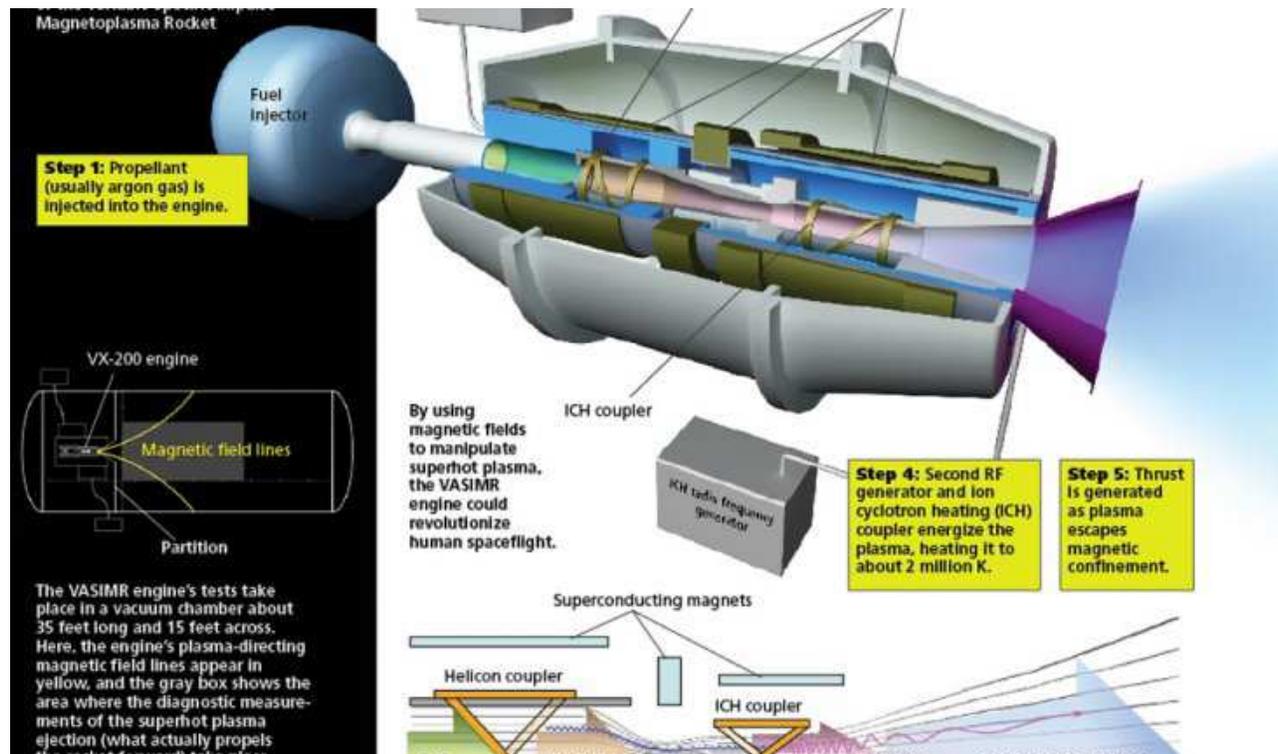
“It is something we will have to watch closely,” Bingham said.

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## PLASMA ROCKET ON TRACK TO 100 HOUR FIRING AT 100 KILOWATTS IN 2018

brian wang | August 10, 2017 |

<https://www.theguardian.com/world/2017/aug/12/scientists-discover-91-volcanos-antarctica>



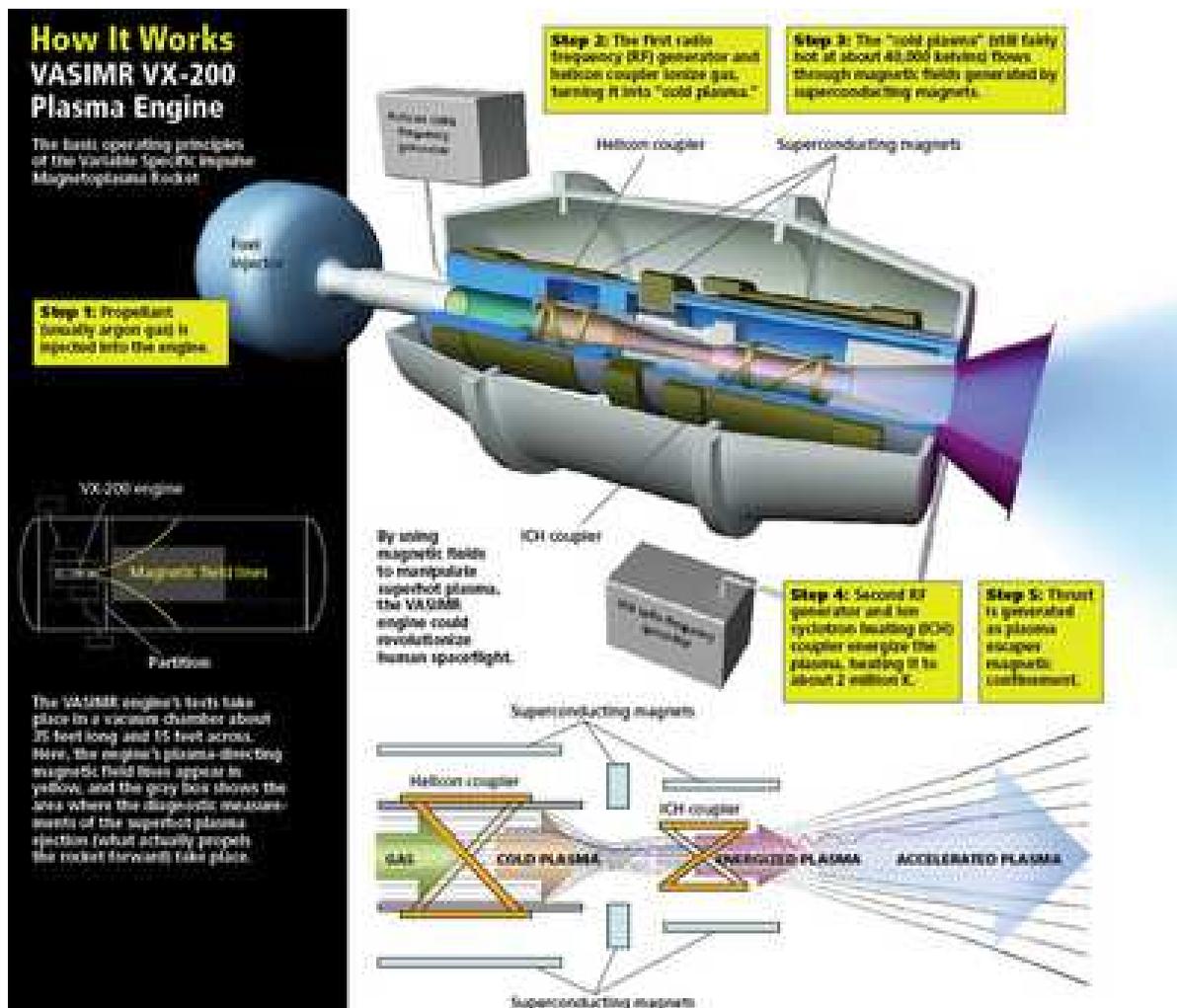
Ad Astra is working to boost the endurance of the Vasimr plasma rocket to 100 hours of continuous firing at a power level of 100 kilowatts, by 2018.

Ad Astra Rocket Company has successfully completed all contract milestones and deliverables for the second of its three-year Next Space Technology Exploration Partnerships (NextSTEP) contract with NASA. The 9 million dollar, fixed-price contract remains on schedule and on budget. After a successful year-two performance review at NASA Headquarters in Washington D.C. on July 24, 2017 and completion of a 10-hour

cumulative test of the 200SSTM rocket at 100kW, Ad Astra received NASA approval to proceed with year-three activities.

The goal of the project is to demonstrate a 100-hour continuous firing of the company's VX-200SSTM VASIMR® prototype, at a power level of 100 kW. The company marches towards this goal on schedule, along a path of interim milestones. These focus on the rocket's new active thermal management system, designed to enable it to operate at full power indefinitely.

This year's major accomplishments include the demonstration of the rocket's new thermal management system and major modifications to Ad Astra's Texas 150 m3 vacuum chamber and laboratory infrastructure. These are needed to handle the unprecedented thermal load from the rocket's 3 million-degree plasma exhaust. These modifications were validated in a series of rocket firings that began in early July. The final year-two milestone of 10 hours of accumulated rocket operation at 100 kW was successfully completed on August 1, 2017.



The team now moves to year-three with high power plasma campaigns of increasing length, with periods of hardware inspection and opportunities to implement system improvements based on lessons learned. Year three will culminate in the late summer of 2018 with the 100-hr continuous test of the VX-200SSTM at 100kW. Ad Astra expects that this test will

bring the VASIMR® engine to a technology readiness level (TRL) of 5, a step just before space flight. Some comments from Ad Astra's team members, directly involved in the recent 10-hr high power test, capture the excitement of the moment.

**THERE IS A VIDEO AT THE WEBSITE THAT SHOWS ONE OF THE EXPERIMENTS OF THE PLASMA ROCKET.**

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From: "Chris Cowan" [cowanc1028@earthlink.net](mailto:cowanc1028@earthlink.net)

**VIDEO: WELL-PRESERVED ARMORED FOSSIL REVEALS CRETACEOUS CAMOUFLAGE**

By Andrew Golden on August 3, 2017

[https://www.scientificamerican.com/video/well-preserved-armored-fossil-reveals-cretaceous-camouflage/?WT.mc\\_id=send-to-friend](https://www.scientificamerican.com/video/well-preserved-armored-fossil-reveals-cretaceous-camouflage/?WT.mc_id=send-to-friend)

The Cretaceous Period was a dangerous time for many animals, even for the "dinosaur equivalent of a tank." Watch how researchers analyzed the pristine remains of a heavily armored nodosaur to discover this dino's additional layer of defense.

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**ICY WORLDS MAY BYPASS HABITABILITY**

New research suggests cold, Mars-like planets will, once warmed, skip over any Earth-like phase to Venus-like conditions

By Charles Q. Choi, SPACE.com on August 9, 2017

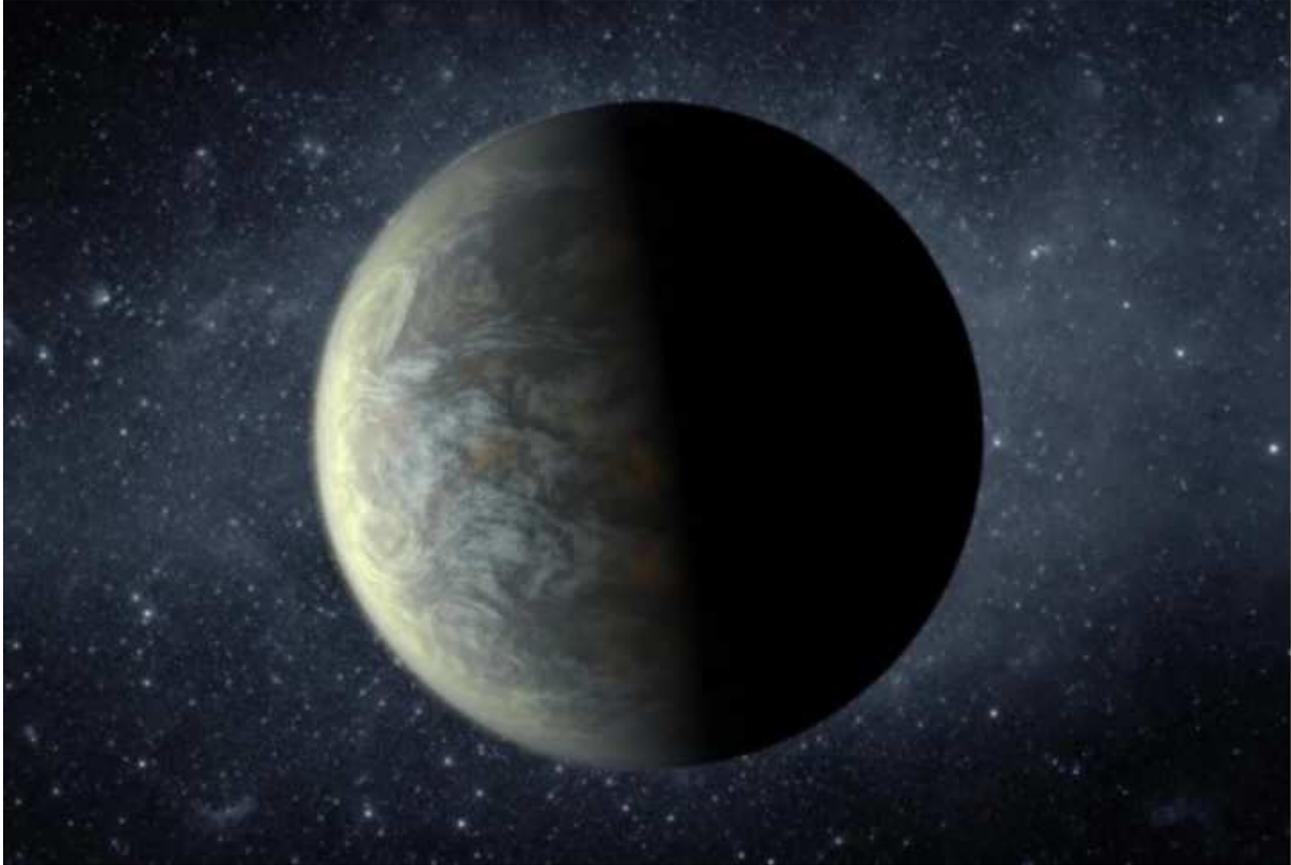
[https://www.scientificamerican.com/article/icy-worlds-may-bypass-habitability/?WT.mc\\_id=send-to-friendShare%20on%20Facebook](https://www.scientificamerican.com/article/icy-worlds-may-bypass-habitability/?WT.mc_id=send-to-friendShare%20on%20Facebook)

Earth's orbit within the sun's habitable zone means its temperatures are just right for life. But icy worlds located within their star's habitable zone may abruptly skip from too cold to too hot without going through a habitable stage, a new study finds.

The finding suggests that there may be fewer potentially habitable worlds than scientists previously thought, the researchers said.

Whereas Venus seems too hot for life and Mars seems too cold, Earth lies between Venus and Mars, where temperatures have the potential to be just right for its surface to possess liquid water. This "Goldilocks" zone is also known as the habitable zone, because on Earth, there is life virtually wherever there is liquid water.

Stars like the sun brighten over time. This raises the possibility that a planet or moon that starts out cold and icy around a young dim star, such as early Earth, may eventually warm to a stable habitable state as the star grows more luminous. [How Habitable Zones for Alien Planets and Stars Work (Infographic)]



**An artist's impression of an exoplanet with broiling, Venus-like surface temperatures. Initially-icy planets subjected to greater levels of sunlight may rapidly transform into such 'hothouse' worlds, skipping over an intermediate Earth-like stage of clement temperatures and habitable conditions. Credit: NASA/Ames/JPL-Caltech**

**However, the new study finds that some planets may go directly from a Mars-like icehouse stage to a Venus-like hothouse phase, bypassing Earth-like habitable conditions.**

**"Previously, studies suggested that icy planets and moons, such as [Jupiter's moon] Europa, will become habitable for life after their surface ice or snow melts," said study lead author Jun Yang, of Peking University in Beijing. "Our work shows that this will not happen."**

**The climate of a water-rich planet depends on at least two factors. One is how much ice covers its surface. Ice has a high albedo, meaning it reflects much of the light that falls onto it back to space before the light can warm the planet's surface. In this way, the ice cools the planet, which leads to the formation of more ice and makes the planet even colder. The second factor is the amount of water vapor in the planet's atmosphere; water vapor is a greenhouse gas that traps heat, warming a planet, which leads more water to evaporate and makes the planet even warmer.**

**The albedo of ice plays a dominant role in the climate of icy planets. A 2004 study suggested that Earth escaped a possible "snowball phase" because the sun brightened over time and because volcanic activity on Earth released carbon dioxide and other greenhouse gases that helped the planet retain heat.**

In contrast, many icy bodies, such as Jupiter's moon Europa and Saturn's moon Enceladus, do not release large amounts of greenhouse gases via volcanoes. As such, researchers wanted to see how these worlds evolved if they had only the light of their stars to help warm them.

In the new study, the scientists developed a global climate model that simulated the evolution of the climate of an icy planet lacking greenhouse gases other than water vapor. This 3D computer model included multiple layers of the atmosphere, as well as winds and their effects on temperatures, clouds, water vapor, snow and ice, according to the study.

The researchers found that, without the presence of greenhouse gases besides water vapor, icy bodies needed a lot of energy from their stars before they started melting — about 10 to 40 percent more than Earth gets from the sun. When the ice finally did melt in simulations, the resulting drop in albedo made these worlds much warmer very quickly. This rapid warming often led to greenhouse stages in which most or all of the water oceans vaporized, rendering these worlds uninhabitable for water-based life as it is known on Earth.

"The finding suggests the number of potentially habitable planets and moons may be less than previously estimated, especially for small icy planets and icy moons," Yang told Space.com.

The paper detailing the new findings was published online July 31 in the journal Nature Geoscience.

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From: "Jim Woosley" [Jimwoosley@aol.com](mailto:Jimwoosley@aol.com)

## **NORTH KOREA NUCLEAR EMP ATTACK: AN EXISTENTIAL THREAT**

**BY: WILLIAM R. GRAHAM, JUNE 2, 2017**

<http://www.38north.org/2017/06/wgraham060217/>

commended for their interest in educating the public about North Korea's missile and nuclear programs and endeavoring to provide their readers with "informed analysis." However, in a series of recent articles, both analysts have written off the possibility of a nuclear electromagnetic pulse (EMP) attack from North Korea as "unlikely" and "science fiction" because they believe the 10 to 20 kiloton nuclear weapons currently possessed by North Korea are incapable of making an effective EMP attack. This dismisses the consensus view of EMP experts who have advanced degrees in physics and electrical engineering along with several decades of experience in the field—with access to classified data throughout that time—and who have conducted EMP tests on a wide variety of electronic systems, beginning in 1963.

By way of background, the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack was established by Congress in 2001 to advise the Congress, the President, the Department of Defense and other departments and agencies of the US Government on the nuclear EMP threat to military systems and civilian critical infrastructures. The EMP Commission was re-established in 2015 with its charter broadened to include natural EMP from solar storms, all manmade EMP threats, cyber-

attack, sabotage and Combined-Arms Cyber Warfare. The EMP Commission charter gives it access to all relevant classified and unclassified data and the power to levy analysis upon the Department of Defense.

In the interest of better informing 38 North readers about the EMP threat, we offer this commentary to correct errors of fact, analysis, and myths about EMP.

### **Primitive and “Super-EMP” Nuclear Weapons are Both EMP Threats**

The EMP Commission finds that even primitive, low-yield nuclear weapons are such a significant EMP threat that rogue states, like North Korea, or terrorists may well prefer using a nuclear weapon for EMP attack instead of destroying a city.[1] In its 2004 report, the Commission cautioned: “Certain types of relatively low-yield nuclear weapons can be employed to generate potentially catastrophic EMP effects over wide geographic areas, and designs for variants of such weapons may have been illicitly trafficked for a quarter-century.”

In 2004, two Russian generals, both EMP experts, warned the EMP Commission that the design for Russia’s super-EMP warhead, capable of generating high intensity EMP fields of 200,000 volts per meter, was “accidentally” transferred to North Korea, and that due to “brain drain,” Russian scientists were in North Korea, helping with their missile and nuclear weapon programs. South Korean military intelligence told their press that Russian scientists are in North Korea helping develop an EMP nuclear weapon. In 2013, a Chinese military commentator stated North Korea has super-EMP nuclear weapons.[2]

Super-EMP weapons are low-yield and designed to produce not a big kinetic explosion, but rather a high level of gamma rays, which generate the high-frequency E1 EMP that is most damaging to the broadest range of electronics. North Korean nuclear tests—including the first in 2006, which was predicted to the EMP Commission two years in advance by the two Russian EMP experts—mostly have yields consistent with the size of a super-EMP weapon. The Russian generals’ accurate prediction of when the North would perform its first nuclear test, and the yield being consistent with a super-EMP weapon, indicates their warning about a North Korean super-EMP weapon should be taken very seriously.

### **EMP THREAT FROM SATELLITES**

While most analysts are fixated on when in the future North Korea will develop highly reliable intercontinental ballistic missiles, guidance systems, and reentry vehicles capable of striking a US city, the present threat from EMP is largely ignored. An EMP attack does not require an accurate guidance system because the area of effect, having a radius of hundreds or thousands of kilometers, is so large. No reentry vehicle is needed because the warhead is detonated at high-altitude, above the atmosphere. Missile reliability matters little because only one missile has to work to make an EMP attack.

For instance, North Korea could make an EMP attack against the United States by launching a short-range missile off a freighter or submarine or by lofting a warhead to 30 kilometers burst height by balloon. While such lower-altitude EMP attacks would not cover the whole US mainland, as would an attack at higher-altitude (300 kilometers), even a balloon-lofted warhead detonated at 30 kilometers altitude could blackout the Eastern Grid that supports most of the population and generates 75 percent of US electricity.

Moreover, an EMP attack could be made by a North Korean satellite. The design of an EMP or even a super-EMP weapon could be relatively small and lightweight, resembling the US W-79 Enhanced Radiation Warhead nuclear artillery shell of the 1980s, designed in the 1950s. Such a device could fit inside North Korea's Kwangmyongsong-3 (KMS-3) and Kwangmyongsong-4 (KMS-4) satellites that presently orbit the Earth. The south polar trajectory of KMS-3 and KMS-4 evades US Ballistic Missile Early Warning Radars and National Missile Defenses, resembling a Russian secret weapon developed during the Cold War, called the Fractional Orbital Bombardment System (FOBS) that would have used a nuclear-armed satellite to make a surprise EMP attack on the United States.[3]

Kim Jong Un has threatened to reduce the United States to "ashes" with "nuclear thunderbolts" and threatened to retaliate for US diplomatic and military pressure by "ordering officials and scientists to complete preparations for a satellite launch as soon as possible" amid "the enemies' harsh sanctions and moves to stifle" the North.[4]

### **ADDRESSING MISINFORMATION**

Recent assessments by Jeffrey Lewis and Jack Liu regarding North Korea's EMP capabilities have some fundamental flaws.[5]

For starters, in his article, Jeffrey Lewis claimed that "just one string of street lights failed in Honolulu" during the 1962 Starfish Prime high-altitude nuclear test, and that this is proof of EMP's harmlessness.[6] In fact, the EMP knocked out 36 strings of street lights, caused a telecommunications microwave relay station to fail, burned out HF (high frequency) radio links (used for long-distance communications), set off burglar alarms, and caused other damage. The Hawaiian Islands also did not experience a catastrophic protracted blackout because they were on the far edge of the EMP field contour, where effects are weakest; are surrounded by an ocean, which mitigates EMP effects; and were still in an age dominated by vacuum tube electronics. In addition, the slow pulse (E3) component of the EMP waveform only couples effectively to very long electric power transmission lines present on large continents, but were in short supply in Hawaii.

Starfish Prime was not the only test of this kind. Russia, in 1961-62, also conducted a series of high-altitude nuclear bursts to test EMP effects over Kazakhstan, an industrialized area nearly as large as Western Europe.[7] That test damaged the Kazakh electric grid.[8] Moreover, modern electronics, in part because they are designed to operate at much lower voltages, are much more vulnerable to EMP than the electronics of 1962 exposed to Starfish Prime and the Kazakh nuclear tests. A similar EMP event over the US today would be an existential threat.[9]

In his article, Lewis also suggested that vehicle transportation would continue after an EMP event based on the fact that only 6 of 55 vehicles were shut down by a single simulated EMP test on vehicles.[10] However, the EMP test protocol limited testing vehicles only to upset, not to damage, because the EMP Commission could not afford to repair damaged cars. Even with this limitation, one vehicle was still damaged, indicating that at least 2 percent of vehicles were severely affected by EMP damage. Over 50 years of EMP testing indicates that full field damage to vehicles would probably be much higher than 2 percent. Modern vehicles are even more susceptible to EMP attack because of their much larger complement of electronics than present in the vehicles tested by the Commission more than a decade ago. Furthermore, vehicles cannot run without fuel and gas stations cannot operate without electricity. Gas pumps could also be damaged in an EMP attack.

In an article by Jack Liu, he asserts in a footnote that because EMP from atmospheric nuclear tests in Nevada did not blackout Las Vegas, therefore EMP is no threat. However, the nuclear tests he describes were all endo-atmospheric tests that do not generate appreciable EMP fields beyond a range of about 5 miles. The high-altitude EMP (HEMP) threat of interest requires exo-atmospheric detonation, at 30 kilometers altitude or above, and produces EMP out to ranges of hundreds to thousands of miles.

Liu also miscalculates that “a 20-kiloton bomb detonated at optimum height would have a maximum EMP damage distance of 20 kilometers” in part, because he assumes “15,000 volts/meter or higher” in the E1 EMP component is necessary for damage. This figure is an extreme overestimation of system damage field thresholds. Damage and upset to electronic systems will happen from E1 EMP field strengths far below Liu’s “15,000 volts/meter or higher.” A one meter wire connected to a semiconductor device, such as a mouse cord or interconnection cable, would place hundreds to thousands of volts on microelectronic devices out to ranges of hundreds of miles for low-yield devices. Based on our experience with many EMP tests, semiconductor junctions operate at a few volts, and will experience breakdown at a few volts over their operating point, allowing their power supply to destroy exposed junctions.

Furthermore, Liu ignores system upset as a vulnerability. Digital electronics can be upset by extraneous pulses of a few volts. For unmanned control systems present within the electric power grid, long-haul communication repeater stations, and gas pipelines, an electronic upset is tantamount to permanent damage. Temporary upset of electronics can also have catastrophic consequences for military operations. No electronics should be considered invulnerable to EMP unless hardened or tested to certify survivability. Some highly-critical unprotected electronics have been upset or damaged in simulated EMP tests, not at “15,000 volts/meter or higher,” but at threat levels far below 1,000 volts/meter.

Therefore, even for a low-yield 10-20 kiloton weapon, the EMP field should be considered dangerous for unprotected US systems. The EMP Commission 2004 Report warned against the US military’s increasing use of commercial-off-the-shelf-technology that is not protected against EMP: “Our increasing dependence on advanced electronics systems results in the potential for an increased EMP vulnerability of our technologically advanced forces, and if unaddressed makes EMP employment by an adversary an attractive asymmetric option.”[11]The North Korean missile test on April 29, which apparently detonated at an altitude of 72 kilometers, the optimum height-of-burst for EMP attack by a 10 KT warhead, would create a potentially damaging EMP field spanning an estimated 930 kilometer radius [kilometers radius = 110 (kilometers burst height to the 0.5 Power)], not Liu’s miscalculated 20 kilometer radius.

## **US VULNERABILITIES TO EMP**

When assessing the potential vulnerability of US military forces and civilian critical infrastructures to EMP, it is necessary to be mindful of the complex interdependencies of these highly-networked systems, because EMP upset and damage of a very small fraction of the total system can cause total system failure.[12]

Real world failures of electric grids from various causes indicate that the Congressional EMP Commission, US Department of Defense, US Federal Energy Regulatory Commission (FERC), US Department of Homeland Security, and US Defense Threat Reduction Agency

are right that a nuclear EMP attack would have catastrophic consequences. Significant and highly-disruptive blackouts have been caused by single-point failures cascading into system-wide failures, originating from damage comprising far less than 1 percent of the total system.[13]

In contrast to blackouts caused by single-point or small-scale failures, a nuclear EMP attack would inflict massive widespread damage to the electric grid, causing millions of failure points. With few exceptions, the US national electric grid is unhardened and untested against nuclear EMP attack. In the event of a nuclear EMP attack on the United States, a widespread protracted blackout is inevitable. This common sense assessment is also supported by the nation's best computer modeling.[14]

Thus, even if North Korea only has primitive, low-yield nuclear weapons, and if other states or terrorists acquire one or a few such weapons as well as the capability to detonate them at an altitude of 30 kilometers or higher over the United States. As, the EMP Commission warned over a decade ago in its 2004 Report, "the damage level could be sufficient to be catastrophic to the Nation, and our current vulnerability invites attack."

[1] John S. Foster, Jr., Earl Gjelde, William R. Graham, Robert J. Hermann, Henry M. Kluepfel, Richard L. Lawson, Gordon K. Soper, Lowell L. Wood, Jr., and Joan B. Woodard, Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, Volume. 1: Executive Report (Washington DC: EMP Commission, 2004), 2.

[2] Peter V. Pry, Statement Before the United States Senate Subcommittee on Terrorism, Technology, and Homeland Security Hearing on Terrorism and the EMP Threat to Homeland Security: "Foreign Views of Electromagnetic Pulse (EMP) Attack," March 8, 2005, <https://www.gpo.gov/fdsys/pkg/CHRG-109shrg21324/pdf/CHRG-109shrg21324.pdf>.; Min-sek Kim and Jee-ho Yoo, "Military Source Warns of North's EMP Bomb" JoonAng Daily, September 2, 2009; Daguang Li, "North Korean Electromagnetic Attack Threatens South Korea's Information Warfare Capabilities" Tzu Chin, June 1, 2012, 44-45.

[3] Miroslav Gy?rösi, "The Soviet Fractional Orbital Bombardment System Program," Air Power Australia, January 27, 2014, <http://www.ausairpower.net/APA-Sov-FOBS-Program.html>.

[4] Alex Lockie, "North Korea threatens 'nuclear thunderbolts' as US And China finally work together," Business Insider, April 14, 2017, <http://www.businessinsider.com/north-korea-us-china-nuclear-thunderbolt-cooperation-war-2017-4>; "US General: North Korea 'will' develop nuclear capabilities to hit America," Fox News, September 20, 2016, [www.foxnews.com/world/2016/09/20/north-korea-says-successfully-ground-tests-new-rocket-engine.html](http://www.foxnews.com/world/2016/09/20/north-korea-says-successfully-ground-tests-new-rocket-engine.html).

[5] Jeffrey Lewis, "Would A North Korean Space Nuke Really Lay Waste to the U.S.?" New Scientist, [www.newscientist.com/article/2129618](http://www.newscientist.com/article/2129618); Lewis quoted in Cheyenne MacDonald, "A North Korean 'Space Nuke' Wouldn't Lay Waste To America" Daily Mail, May 3, 2017, <http://www.dailymail.co.uk/sciencetech/article-4471120/A-North-Korean-space-nuke-WOULDN-T-lay-waste-America.html>.; Lewis interviewed by National Public Radio, "The North Korean Electromagnetic Pulse Threat, Or Lack Thereof," NPR, April 27, 2017, [www.npr.org/2017/04/27/525833275](http://www.npr.org/2017/04/27/525833275).; "NPR hosts laugh hysterically while America remains in the cross hairs of a North Korean nuclear warhead EMP apocalypse," Natural

News, May 1, 2017, [www.naturalnews.com/2017-05-01-npr-laughs-hysterically-north-korean-emp-nuclear-attack.html](http://www.naturalnews.com/2017-05-01-npr-laughs-hysterically-north-korean-emp-nuclear-attack.html).

[6] Lewis, “Would A North Korean Space Nuke Really Lay Waste to the U.S.?”

[7] High-altitude EMP (HEMP), the phenomenon under discussion, results from the detonation of a nuclear weapon at high-altitude, 30 kilometers or higher. All nuclear weapons, even a primitive Hiroshima-type A-bomb, can produce levels of HEMP damaging to modern electronics over large geographic regions.

[8] According to Electric Infrastructure Security Council, Report: USSR Nuclear EMP Upper Atmosphere Kazakhstan Test 184, ([www.eiscouncil.org/APP\\_Data/upload/a4ce4b06-1a77-44d-83eb-842bb2a56fc6.pdf](http://www.eiscouncil.org/APP_Data/upload/a4ce4b06-1a77-44d-83eb-842bb2a56fc6.pdf)), citing research by Oak Ridge National Laboratory, a comparable EMP event over the U.S. today “would likely damage about 365 large transformers in the U.S. power grid, leaving about 40 percent of the U.S. population without electrical power for 4 to 10 years.”

[9] Foster, et al., Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, Volume. 1: Executive Report, 4-8.

[10] Lewis, “Would A North Korean Space Nuke Really Lay Waste to the U.S.?”

[11] *Ibid.*, 47.

[12] John S. Foster, Jr., Earl Gjelde, William R. Graham, Robert J. Hermann, Henry M. Kluepfel, Richard L. Lawson, Gordon K. Soper, Lowell L. Wood, Jr., and Joan B. Woodard, Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack: Critical National Infrastructures (Washington, D.C.: EMP Commission, April 2008), [http://www.empcommission.org/docs/A2473-EMP\\_Commission-7MB.pdf](http://www.empcommission.org/docs/A2473-EMP_Commission-7MB.pdf).

[13] For example, the Great Northeast Blackout of 2003—that put 50 million people in the dark for a day, contributed to at least 11 deaths, and cost an estimated \$6 billion—originated from a single failure point when a powerline contacted a tree branch, damaging less than 0.0000001 (0.00001%) of the total system. The New York City Blackout of 1977, which resulted in the arrest of 4,500 looters and injury of 550 police officers, was caused by a lightning strike on a substation that tripped two circuit breakers. India’s nationwide blackout of 2012—the largest blackout in history, effecting 670 million people, 9% of the world population—was caused by overload of a single high-voltage powerline.

[14] Modeling by the US FERC reportedly assesses that a terrorist attack that destroys just 9 of 2,000 EHV transformers—merely 0.0045 (0.45%) of all EHV transformers in the US national electric grid—would be catastrophic damage, causing a protracted nationwide blackout. Modeling by the Congressional EMP Commission assesses that a terrorist nuclear EMP attack, using a primitive 10-kiloton nuclear weapon, could destroy dozens of EHV transformers, thousands of SCADAS and electronic systems, causing catastrophic collapse and protracted blackout of the US Eastern Grid, putting at risk the lives of millions. For the best unclassified modeling assessment of likely damage to the US national electric grid from nuclear EMP attack see: US Federal Energy Regulatory Commission (FERC) Interagency Report, coordinated with the Department of Defense and Oak Ridge National Laboratory: Electromagnetic Pulse: Effects on the U.S. Power Grid, Executive

Summary (2010); FERC Interagency Report by Edward Savage, James Gilbert and William Radasky, The Early-Time (E1) High-Altitude Electromagnetic Pulse (HEMP) and Its Impact on the U.S. Power Grid (Meta-R-320) Metatech Corporation (January 2010); FERC Interagency Report by James Gilbert, John Kappenman, William Radasky, and Edward Savage, The Late-Time (E3) High-Altitude Electromagnetic Pulse (HEMP) and Its Impact on the U.S. Power Grid (Meta-R-321) Metatech Corporation (January 2010).

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**ABSOLUTELY & TOTALLY POLITICALLY INCORRECT & AS FAR TO THE CENTER AS YOU CAN GO!**

From: "Tim Bolgeo" [tbolgeo@epbf.com](mailto:tbolgeo@epbf.com)

**IS CHANGING THE CONSTITUTION THE ONLY WAY TO FIX WASHINGTON?**

By Sophie Quinton, August 07, 2017

<http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/08/07/is-changing-the-constitution-the-only-way-to-fix-washington>

This story was updated 8/7 to correct the designation of Common Cause. It is a good government group.

Next month delegations of state lawmakers will travel to Phoenix, Arizona, to attend what organizers say will be the first formal convention of states since the Civil War. They'll gather at the capitol, inside the turquoise-carpeted House chamber, and draw up rules for a hoped-for future meeting: a convention to draft an amendment to the U.S. Constitution.

No "amendment convention" has taken place since the Constitution was written over 200 years ago. But the idea is gaining steam now, stoked by groups on the left and right that say amendments drafted and ratified by states are the last, best hope for fixing the nation's broken political system and dysfunctional — some even say tyrannical — federal government.

"We have a Congress in the United States made up of two bodies — House and Senate — that are incapable of restricting their own power," said Texas state Sen. Brian Birdwell, a Republican. With the conventions, he said, states are stepping in to clean up the mess.

The current push for a convention began in the early years of the Obama administration, mostly driven by Republican lawmakers. Ohio Gov. John Kasich and Texas Gov. Greg Abbott are big supporters. So are former presidential candidates Sen. Ted Cruz and Sen. Marco Rubio. Although many amendment topics have been proposed, the most popular would require the federal government to balance its budget.

Twenty-seven states have passed resolutions in favor of a balanced budget amendment since the 1970s, observers say. The Balanced Budget Amendment Task Force, the main group currently pushing the idea, says it could get to 34 states before the next presidential election.

But to get the two-thirds of states required to force Congress to call a convention, the task force and its supporters will need to win over skeptical lawmakers and beat back opposing

groups that say a convention called to discuss a single issue could end up rewriting crucial parts of the Constitution or scrapping the nation's founding document altogether.

The two sides don't even use the same words to discuss what they're fighting over. Those in favor talk about an "amendment convention," implying that only one amendment will be discussed. Those opposed say "Constitutional convention," suggesting that the whole text could be rewritten.

The Arizona planning event, championed by Republicans and the Balanced Budget Amendment Task Force, will focus on the balanced budget proposal that's closest to triggering a convention.

Arizona state Rep. Kelly Townsend, a Republican who heads the committee organizing the event, said she hopes it will reassure people that delegates to a convention won't do anything crazy. "There will not be a quote-unquote runaway convention," she said. "That's not going to happen."

#### THE CONVENTION CURE

David Guldenschuh will be heading to the Arizona meeting this fall as a member of the delegation from Georgia. He's affiliated with the Heartland Institute, a right-wing think tank, and he advises multiple groups calling for a convention of states.

"People are really tired of Washington and don't believe that our government is accomplishing anything," he said. Borrowing an applause line from President Donald Trump, Guldenschuh called the frustration he's seeing the "drain the swamp" concept.

Although the 2016 election delivered the U.S. House, Senate and presidency into Republican hands, one-party control hasn't broken the gridlock. Many conservatives are particularly incensed by Congress' repeated, failed votes to repeal Obamacare.

"The mechanism the founders gave for fixing Washington is Article 5," Guldenschuh said.

Article 5 of the Constitution says Congress "shall call a Convention for proposing Amendments" when two-thirds of states ask it to do so. Proposed amendments would have to be ratified by three-quarters of state legislatures, just like amendments proposed by Congress.

Article 5 doesn't say how delegates would be selected or what they'd be legally empowered to discuss. But supporters say it's possible to infer what the founders meant by looking at their other writings and the political norms of 18th century America. According to Guldenschuh's Heartland Institute colleague, Rob Natelson, early conventions of states discussed a single topic that state legislatures defined ahead of time.

Most recent state resolutions calling for an amendment convention are inspired by four national advocacy campaigns. The resolutions call for an amendment on a particular topic but don't endorse any specific amendment language.

<SNIP>

<http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/08/07/is-changing-the-constitution-the-only-way-to-fix-washington>

TAKE THE TIME TO READ THE REST OF THE ARTICLE, IT IS EXCELLENT. UT

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From: "Carol Donaldson"

The following has been attributed to Lewis Napper, a Jackson, Mississippi, computer programmer. He didn't expect his essay -- a tart 11-point list of "rights" Americans don't have -- to become an Internet legend.

#### NEW PREAMBLE TO THE CONSTITUTION

We the sensible people of the United States, in an attempt to help everyone get along, restore some semblance of justice, avoid more riots, keep our nation safe, promote positive behavior, and secure the blessings of debt-free liberty to ourselves and our great-great-grandchildren, hereby try one more time to ordain and establish some common sense guidelines for the terminally whiny, guilt ridden, delusional. We hold these truths to be self evident: that a whole lot of people are confused by the Bill of Rights and are so dim they require a Bill of NON-Rights.

ARTICLE I: You do not have the right to a new car, big screen TV, or any other form of wealth. More power to you if you can legally acquire them, but no one is guaranteeing anything.

ARTICLE II: You do not have the right to never be offended. This country is based on freedom, and that means freedom for everyone -- not just you! You may leave the room, turn the channel, express a different opinion, etc.; but the world is full of dummies, and probably always will be.

ARTICLE III: You do not have the right to be free from harm. If you stick a screwdriver in your eye, learn to be more careful; do not expect the tool manufacturer to make you and all your relatives independently wealthy.

ARTICLE IV: You do not have the right to free food and housing. Americans are the most charitable people to be found, and will gladly help anyone in need, but we are quickly growing weary of subsidizing generation after generation of professional couch potatoes and freeloaders who achieve nothing more than the creation of another generation of professional couch potatoes and freeloaders.

ARTICLE V: You do not have the right to free health care. That would be nice, but from the looks of public housing, we're just not interested in public health care.

ARTICLE VI: You do not have the right to physically harm other people. If you kidnap, rape, intentionally maim, or kill someone, don't be surprised if the rest of us want to see you get the blue juice.

ARTICLE VII: You do not have the right to the possessions of others. If you rob, cheat, or coerce away the goods or services of other citizens, don't be surprised if the rest of us get together and lock you away in a place where you still won't have the right to a big screen color TV or a life of leisure.

**ARTICLE VIII:** You do not have the right to a job. All of us sure want you to have a job and will gladly help you along in hard times, but we expect you to take advantage of the opportunities of education and vocational training laid before you to make yourself useful.

**ARTICLE IX:** You do not have the right to happiness. Being an American means that you have the right to PURSUE happiness, which by the way, is a lot easier if you are unencumbered by an over abundance of idiotic laws created by those of you who were confused by the Bill of Rights

**ARTICLE X:** This is an English speaking country. We don't care where you came from, English is our language. Learn it!

Lastly

**ARTICLE XI:** You do not have the right to change our country's history or heritage. This country was founded on the belief in one true God. And yet, you are given the freedom to believe in any religion, any faith, or no faith at all; with no fear of persecution. The phrase IN GOD WE TRUST is part of our heritage and history, sorry if you are uncomfortable with it.

**AUTHOR'S FOOTNOTE:** If you agree, share this with a friend. No, you don't have to, and nothing tragic will befall you if you don't. I just think it's about time common sense is allowed to flourish. Sensible people of the United States must speak out because if you do not, who will?

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## **ALL THE TROUBLE IN THE WORLD**

From Sarah Hoyt's Blog [accordingtohoyt](#)

All the Trouble in the World is a great PJ O'Rourke book, which I highly recommend, but that's not important right now.

It occurred to me the reason we've got to this particular state of shambles is that we've given in to the therapeutic/do-gooder notion that we have to solve all the trouble in the world.

This is a relatively new notion. it used to be, when the West was mostly Christian (with a smattering of Jewish) that we assumed the troubles the world is full of would get solved when the redemptive event happened, be it the second coming, or the first, or whatever that will return the world to its perfect state under divine rule. And until then, fortunately, anyone who had it too bad on Earth got rewarded in heaven.

The problem is once you start believing in that, no injustice, no ill, no lack of acceptance, no undeserved hurt could be ignored any longer. It all had to be fixed, right now. Justice had to be brought to every little creature. EVERYONE had to be happy right now, because there as no other time to be happy in. YOLO, am I right?

Except that humans are still humans. You can't make everyone happy and fulfilled. H\*ll, I'm my kids' mother and have known them since they were born, and I can't choose what would make them happy and fulfilled. I'd never have picked the really hard paths they chose. Why Robert thinks bliss is a packed ER room is beyond me.

Imagine me picking professions, payment, etc for total strangers.

And in the end that's what that comes to. People picking in what way strangers are to be happy.

Which means people end up very unhappy indeed.

But even on their own, people can't be happy because not everyone can end up doing what they want/marrying whom they want/living the way they want. A decent respect for the opinions of others might not hold us back but other things will. There are only so many people who can be astronauts after all, say. And no, not everyone can be a billionaire.

This workaday world doesn't not have enough opportunities/rewards to make everyone happy. Most of my friends had instead to make their own happiness, after their first run at careers/marriage/motherhood/whatever turned out quite different from what they wanted. But they coped, they grew, and most of them found another kind of happiness, doing something else that was possible for them.

In most of the world that is called "being a grownup."

The problem is that there are people who think you should be protected from every disappointment, every buffet, every slight. Everyone who wants something must be given it. No one can be told no, ever.

The problem is that when you do that to people they are not happy. Sometimes what you want is not what you need. BUT more importantly, you never learn to cope, with even minor set backs. So they have no give. The most minor issue will break them. It's no surprise they feel micro aggressions. The princess can feel the pea under forty mattresses, after all. People who've never been cut will howl at a pinprick.

But it corrupts the do-gooders too. Their lack of success stings them. Understand, most of them start doing this out of genuine good intentions. And then it fails. Someone else must be doing this. It must be them, the haters, the wreckers, the saboteurs.

Because it can't be human nature.

It all starts with good intentions. And it will destroy us unless we rub their noses in the fact they're paving the way to hell.

accordingtohoht | August 12, 2017 at 2:36 pm

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*I personally think Sarah hit it out the park with this posting. UT*

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If you would like to unsubscribe From: THE REVENGE OF HUMP DAY, please send an email message to Tim Bolgeo [tbolgeo@epbfi.com](mailto:tbolgeo@epbfi.com) and say, "QUIT SENDING ME THIS STUPID RAG!"

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