Ode to E Pluribus Unum for Sunday March 23 2025



Perijove 11: Passing Jupiter



https://youtu.be/OfM7VIonD5c

Video Credit & License: NASA, Juno, SwRI, MSSS, Gerald Eichstadt Music: Moonlight Sonata (Ludwig van Beethoven)

Here comes Jupiter.

NASA's robotic spacecraft Juno is continuing on its highly elongated orbits around our Solar System's largest planet. The featured video is from perijove 11 in early 2018, the eleventh time Juno passed near Jupiter since it arrived in mid-2016.

This time-lapse, color-enhanced movie covers about four hours and morphs between 36 JunoCam images. The video begins with Jupiter rising as Juno approaches from the north. As Juno reaches its closest view -- from about 3,500 kilometers over Jupiter's cloud tops -- the spacecraft captures the great planet in tremendous detail. Juno passes

light zones and dark belts of clouds that circle the planet, as well as numerous swirling circular storms, many of which are larger than hurricanes on Earth.

After the perijove, Jupiter recedes into the distance, then displaying the unusual clouds that appear over Jupiter's south. To get desired science data, Juno swoops so close to Jupiter that its instruments are exposed to very high levels of radiation.

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A Brilliantly Detailed Map of Medieval Trade Routes & Networks



Map created by reedit user martinjanmansson,

Incredibly detailed maps of Medieval Trade Routes & Networks in Eurasia an Africa during the 11th-12th century. https://bit.ly/4hHhzjz

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Age and Migration Influence Bird Groups' Song Repertoires

Researchers used 20,000 hours of recordings of great tits in Oxford to see how culture changes among populations



The researchers studied the songs of male great tits in Wytham Woods in Oxford. Photograph: Jacky Parker Photography/Getty Images

Which songs birds sing can – as with human music – be influenced by age, social interactions and migration, researchers have found.

Not all birds learn songs, but among those that do, individuals, neighbourhoods and populations can produce different collections of tunes, akin to different music albums.

Now researchers have found that changes in the makeup of a group of birds can influence factors including which songs they learn, how similar those songs are to each other and how quickly songs are replaced.

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Is There Really a Difference Between Male and Female Brains?

Brain scans, postmortem dissections, artificial intelligence and lab mice reveal differences in the brain that are linked to sex. Do we know what they mean?



(Image credit: Jack Hudson)

Humanity has been hunting for sex-based differences in the brain since at least the time of the ancient Greeks, and it has largely been an exercise in futility. That's partly because human brains do not come in two distinct forms, said Dr. Armin Raznahan, chief of the National Institute of Mental Health's Section on Developmental Neurogenomics.

"I'm not aware of any measure you can make of the human brain where the male and female distributions don't overlap," Raznahan told Live Science.

But the question of how male and female brains differ may still matter, because brain diseases and psychiatric disorders manifest differently between the sexes. Disentangling how much of that difference is rooted in biology versus the environment could lead to better treatments, experts argue.

https://bit.ly/4hk9wIU

"Silent" X Chromosome Insight into How the Female Brain Ages



You've probably heard the stat before:
Women, on average, live longer than men —
and keep their cognitive abilities longer.
Researchers at the University of California
San Francisco recently delved into why that
may be, and discovered that a chromosome
could have something to do with it.

Because females carry two X chromosomes, one finds itself in a corner of cells, where scientists previously believed it didn't do

much (it's often called the "silent X"). But it may not be so silent after all, as the study found that this X started expressing genes that bolstered the brain's connections and increased cognition in female mice when they reached the equivalent of 65 human years.

"These results show that the silent X in females actually reawakens late in life, probably helping to slow cognitive decline," senior author Dena Dubal said in a news release. She added: "Aging had awakened the sleeping X." Older female mice also had more PLP1, a gene that plays a role in how the brain transmits signals, thanks to the second X chromosome.

Researchers are still investigating whether this extra X definitively explains why women's brains are more resilient amid aging compared to men's. If so, it could have implications for both sexes. "Are there interventions that can amplify genes like PLP1 from the X chromosome to slow the decline — for both women and men — as we age?" Dubal wondered.

BlackJack3D/ iStock

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How the Human Brain Contends With the Strangeness of Zero

Zero, which was invented late in history, is special among numbers. New studies are uncovering how the brain creates something out of nothing.



In some ways, zero is just like any other number on a number line. But a new study suggests

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Want a Quick Fix for Hair Loss and Instead Get Sick?

Hims and other telehealth firms make finasteride easy to get and don't have to disclose side effects



Mark Millich said he suffered serious side effects after taking finasteride pills from Hims. Photo: Greg Kahn for WSJ

Finasteride, the generic name for Propecia, is a popular hair-loss treatment that has been on the market for three decades with potential side effects including sexual dysfunction and depression. But a new generation of young men are discovering the medicine—and its potential risks.

That is largely because they are peppered with ads on social media pitching hair-loss medications from telehealth companies, which unlike drugmakers aren't required to disclose side effects and other risks in advertisements.

It is a loophole telehealth companies have long exploited to sell medicines. More Americans became aware of it during this year's Super Bowl when Hims & Hers Health HIMS 5.07%increase; green up pointing triangle ran an ad that promoted a weight-loss drug without noting side effects. Two U.S. senators, one of them a physician, protested to the Food and Drug Administration. Telehealth companies say they disclose side effects and other risks on their websites.

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What Is the Gold Standard? History and Collapse



sigoco.com

The gold standard is a monetary system in which the value of a country's currency is directly linked to gold. With the gold standard, countries agree to convert paper money into a fixed amount of gold. A country that uses the gold standard sets a price for gold, and it buys and sells gold at that price.

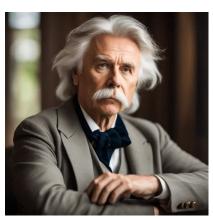
That fixed price is in turn used to determine the value of its currency. For example, if the U.S. hypothetically set the price of gold at \$500 an ounce, the value of the dollar would be 1/500th of an ounce of gold.

The appeal of a gold standard is that it arrests control of the issuance of money out of the hands of imperfect human beings. With the physical quantity of gold acting as a limit to issuance, a society can potentially avoid the perils of inflation.

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Chords & Riffs

Edvard Grieg (1847-1903)



deepat.org

Rooted in the national folk tradition of Norway, Grieg's music is noted for a refined lyrical sense. Between 1867 and 1901 he wrote ten collections of Lyric Pieces (Lyriske Stykker) for piano. His spirited rhythms often have a folk song association.

From the age of six Grieg received piano lessons from his mother, and in 1858, at the recommendation of the violin virtuoso Ole Bull, he entered the Leipzig Conservatory, where he was influenced by the tradition of Mendelssohn and Schumann.

In 1863 he went to Copenhagen, where his development came from his association in 1864 with the young Norwegian nationalist composer Rikard Nordraak. "Through him," said Grieg, "I first learned to know the northern folk tunes and my own nature."

Among his most popular works are his incidental music to Peer Gynt, Opus 23, and the suite Holberg, Opus 40. His arrangements of Norwegian dances and songs, Opus 17 and Opus 66, and especially his Slåtter, Norwegian Peasant Dances, Opus 72, show his characteristic sense of rhythm and harmony. His vocal works include the songs on texts of A.O. Vinje, Opus 33; and the Haugtussa cycle, Opus 67. Intuitively, he identified himself with the poet's imagery in these songs and discovered its musical equivalent.

Grieg's music for Peer Gynt is usually heard in the form of two orchestral suites (Op. 46 and Op. 55), each featuring four movements selected from his score. The best-known movements include "Morning Mood," in which a serene melody for flute and oboe depicts a calm dawn; "Anitra's Dance," a nimble and seductive dance for strings; and "In the Hall of the Mountain King," in which a short, mysterious theme gains speed and volume as it is (1922-1979)

Piano Concerto in Aminor,op.16 / Julia Fischer https://youtu.be/Kjx-AxpZUxQ Anitra's Dance from Peer Gynt Suite https://youtu.be/0UjPVi8AdsM

In the Hall of the Mountain King https://youtu.be/OqvHWUZZdP0
Peer Gynt Suite No 1 https://youtu.be/nkBti3oSdlA

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This Year's Burning Man Temple.

2025 Burning Man Temple draws from Kintsugi and volcanic rock to mix strength and fragility



By Regina Sienra

Every year, Burning Man reaches its emotional conclusion when the Temple, the structure at the spiritual and geographical center of the festival, is set on fire. For the 2025 edition of Burning Man, this sweeping shelter will be designed by Spanish architect Miguel Arraiz, who found inspiration in the natural elements of the Black Rock Desert for his creation.

The monumental sculpture, titled Temple of the Deep is described as a bold evolution from recent Temple designs. It will stand 44 feet tall with a 105-foot diameter, and its assembly process is expected to take 15 days. The design aims to bring together the concepts of strength and fragility, serving as a space for shared reflection and healing.

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Earth's Inner Core Is Less Solid Than Expected

The new research could help us better understand our planet's thermal and magnetic fields.



(Image credit: Shutterstock)

Scientists assumed the Earth's inner core was a solid ball of metal, sort of like a planet within a planet that sits some 3,000 miles (4,828 kilometers) below the surface.

However, researchers from the University of Southern Carolina (USC) now say they discovered — almost by accident — that the Earth's inner core may be much more malleable.

John Vidale, Dean's Professor of Earth Sciences at the USC Dornsife College of Letters, Arts and Sciences, who was the new study's principal investigator, said <u>in a statement</u> that the researchers "didn't set out to define the physical nature of the inner core."

"What we ended up discovering is evidence that the near surface of Earth's inner core undergoes structural change," Vidale said. The finding sheds light on the role topographical activity plays in rotational changes in the inner core — including changes that have minutely altered the length of a day — and may also relate to the inner core's ongoing slowing.

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FLASHMOB CENTRAL

Party Rock Anthem



https://youtu.be/WIG2xN4ef3Y

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Nature inFocus Photography Awards 2024

Leopards, sharks and spiders



Roman Willi

Each year, the contest showcases a stunning array of imaginative and artistic images, while raising awareness of the environment.

Winners are selected according to a series of categories: Animal Behaviour, Animal Portraits, Conservation Focus, Creative Nature Photography, Wildscape & Animals in Their Habitat and Photographer of the Year - Portfolio.

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Konnichiwa, Woven City!

Toyota Completes Phase 1 of Ultra-Futuristic Town



Toyota

As if there weren't enough to see in Japan already, the country will soon be home to an entirely new city. Japanese automaker Toyota is building a town called "Woven City" on the site of a former car factory.

But this isn't just any city. The town will be a "test course for mobility," Daisuke Toyoda, an executive in charge of the \$10 billion project and the great-grandson of the company's founder, told the Associated Press. The idea is that residents (aka "weavers") will experience what everyday living is like with the techiest of tools. We're talking interactive pet robots, flying cars, drone guides, and autonomous zero-emission vehicles. The cherry on top? The buildings will be connected via underground passageways.

"Woven City is a place where people can invent and develop all kinds of new products and ideas," Toyoda said during a recent press conference. "It's a living laboratory where the residents are willing participants, giving inventors the opportunity to freely test their ideas in a secure, real-life setting."

No one currently lives at the site, which will be 3.1 million square feet when finished, but Toyota recently celebrated the <u>completion of its first building phase</u>. The first 100 residents, who will all be workers at Toyota and its partner companies, are set to move in later this year.

So You'd Like to Go into Space? Consider These Things First.

What is the Kessler Syndrome? 10 serious threats astronauts face in space



Credit: NASA Hubble Space Telescope

Space is the final frontier, but that hasn't stopped humans from pushing beyond its boundaries. Space exploration, however, is fraught with danger. On Earth, we're shielded from the cosmic hazards and extreme conditions that dominate the universe, but beyond our atmosphere, astronauts face a multitude of threats. From handling microgravity's impact on the body to navigating the deadly vacuum, survival in space requires precision and discipline. Here are 10 essential things astronauts must do to stay alive—and continue their quest to explore the cosmos.

Suiting Up

A space suit is essential for survival beyond Earth's atmosphere, providing protection from various hazards such as extreme temperatures, radiation, vacuum, and even space debris. The suit contains several layers, including thermal control and micrometeoroid shields, ensuring astronauts don't freeze in the shadow of space or burn in direct sunlight. It also prevents depressurization effects by maintaining a stable internal atmosphere.

The suit also contains communication systems and a supply of oxygen, allowing astronauts to breathe and stay connected with their team during spacewalks. Without a suit, exposure to space would cause an astronaut to lose consciousness within seconds due to the lack of atmospheric pressure and oxygen deprivation.

Maintaining Oxygen Levels

As most people know, space lacks breathable oxygen. While oxygen is technically present beyond our atmosphere and elsewhere—ranking as the third most abundant element in the universe—its concentration in the vastness of space is so low that, for all practical purposes, it is equal to 0%. Thus, maintaining a sufficient oxygen supply is one of the greatest challenges astronauts face.

Fortunately, there are effective methods for generating oxygen to support long-duration missions. On the International Space Station (ISS), oxygen is produced through electrolysis, a process that splits water into oxygen and hydrogen. In the case of a system failure, astronauts can rely on emergency oxygen tanks, although these supplies are limited. Equally important is managing carbon dioxide levels. A process called carbon dioxide scrubbing is used to eliminate CO2, preventing suffocation.

Handling Zero Gravity

While there is no such thing as "zero gravity," the effects of Earth's gravity diminish the farther we travel from its sphere of influence. This near-weightless condition, known as microgravity, triggers immediate physiological changes in the human body. Without the gravitational pull that typically draws blood toward the legs, fluids shift upward, causing facial swelling and increased pressure behind the eyes. This can lead to a range of health issues, including impaired vision.

Over time, astronauts also face muscle atrophy and bone density loss, as their bodies no longer have to bear their own weight. To counteract this, astronauts must exercise daily with resistance machines, treadmills, and bikes. However, even with strict exercise regimens, muscle and bone recovery can take months once they return to Earth.

Protection from Radiation

While we may not always be aware of it, Earth's atmosphere and magnetic field provide essential protection against a range of invisible dangers found in deep space, with radiation being one of the most concerning. Even during a flight, passengers are exposed to elevated levels of radiation, roughly equivalent to a chest X-ray for every 10 hours spent in the air.

Astronauts, however, often operate beyond the protective layers of our planet, exposing them to even greater radiation levels. Spacecraft are equipped with radiation shields, but they can't block all radiation. Astronauts can receive up to 10 times the radiation dosage they would on Earth, increasing their cancer risk in the long term. But the most dangerous radiation threat comes from solar flares. During these solar events, astronauts must take cover in specially shielded areas of their spacecraft.

Rationing Food

In space, every ounce of food and water must be carefully rationed. Thus, astronauts survive eating pre-packaged, freeze-dried meals that are both lightweight and rich in nutrients. They simply add water to rehydrate the meals before eating, ensuring they get enough calories to maintain energy levels. While it might not sound very appealing to live out of freeze-dried meals for months, astronauts also experience a noticeable reduction in taste due to the lack of gravity.

Drinking water presents its own set of challenges. Nothing can be wasted, so space stations designed for long-term habitation, like the International Space Station (ISS), often employ advanced filtration systems to recycle water from condensation, sweat, and even urine! Astronaut life isn't all it's cracked up to be, huh?

Monitoring Mental Health

Even with all their training, the deep isolation and confinement of space can significantly impact an astronaut's mental health. Long missions far from Earth can lead to feelings of loneliness, anxiety, and depression. To deal with that, astronauts are encouraged to maintain a daily routine, exercise, and engage in team activities. Communication with loved ones back on Earth is also crucial for their emotional wellbeing.

Space agencies take mental health very seriously, conducting regular psychological assessments during missions. Studies have shown that astronauts on extended missions may experience a decline in cognitive abilities and an increase in stress levels—factors that can be critical in such a delicate environment, where mental clarity and emotional stability can be a matter of life or death.

Controlling Temperature

Despite the popular belief that it's unforgivingly cold, space doesn't have a temperature in the traditional sense—after all, it's a vacuum. Instead, temperatures can shift dramatically, ranging from boiling hot to freezing cold, depending on exposure to the Sun. Astronauts rely on their suits and spacecraft systems to maintain a stable internal temperature. The suit's liquid cooling garment, which contains a network of water-filled tubes, helps astronauts regulate their body temperature during spacewalks.

Inside the spacecraft, temperature control systems work to prevent the interior from becoming unbearably hot or cold. However, there have been instances where astronauts had to repair these systems themselves to avoid the dangers posed by extreme temperatures, which can fluctuate rapidly from 250°F to -250°F.

Preventing Muscle Loss

Ever wondered why most astronauts struggle to walk by themselves after returning to Earth from long missions? As we pointed out before, without the constant pull of gravity, muscles weaken very rapidly. In fact, astronauts can lose up to 20% of their muscle mass in just two weeks without exercise.

While it would be technically possible to maintain proper muscle mass through rigorous exercise, doing so would require significantly more time than it does on Earth.

Astronauts lead extremely busy lives—every minute counts up there—leaving little time

for anything beyond essential tasks. So, if you were thinking about heading to space to hit the gym, you might want to reconsider and stick to your local fitness center instead!

Watching Out for Space Debris

Space debris, which includes everything from tiny meteoroids to fragments of defunct satellites and spent rocket parts, can travel at astonishing speeds of up to 17,500 mph! These high-speed projectiles can easily puncture spacecraft or damage equipment, putting astronauts' lives at serious risk.

The ISS is equipped with monitoring systems that detect nearby debris, allowing the station to perform evasive maneuvers when needed. However, this is far from a solved issue. Many scientists warn that if space pollution, much of which is produced by improper satellite disposal, is not addressed soon, it could lead to a cascading effect of collisions that would generate even more debris, and thus more collisions... you get the idea. This alarming scenario is known as Kessler Syndrome, and if left unchecked, it could threaten the safety and feasibility of future space exploration.

Weakened Immune System

As if astronauts didn't have enough going on already, space weakens the immune system, making astronauts more vulnerable to infections. This immunosuppression is caused by a mix of stress, microgravity, and increased radiation exposure. Studies have shown that astronauts' white blood cells, which help fight infections, are less effective in space.

To make things worse, bacteria and viruses seem to behave differently out there, often becoming way more virulent than on Earth. Astronauts must be extra vigilant about hygiene, regularly disinfecting their living spaces and monitoring their health—not an easy task in the often cramped spaces where they must carry out their missions.



Where Did the 150-Year-Old QUERTY Design Come From?

The invention's true origin story has long been the subject of debate. Some argue it was created to prevent typewriter jams, while others insist it's linked to the telegraph



An early Remington typewriter featuring the QWERTY keyboard SSPL / Getty Images

Why has the QWERTY layout endured for so many years? It turns out that lots of myths and misinformation surround its origins, but most theories seem to agree that it was developed along with, and inextricably linked to, early typewriters.

In the 1860s, a politician, printer, newspaper man and amateur inventor in Milwaukee by the name of Christopher Latham Sholes spent his free time developing various machines to make his businesses more efficient. One such invention was an early typewriter, which he and several of his colleagues patented in 1868. Their keyboard resembled a piano and was built with an alphabetical arrangement of about two dozen keys.

The 1873 prototype used to demonstrate the technology to Remington Public domain via Wikimedia Commons

In theory, then, the QWERTY system should maximize the separation of many common letter pairings. However, the "e" and "r" keys are right next to each other, even though "er" is the fourth most common letter pairing in the English language.

https://bit.ly/3DdyKec

Bad Eyesight Before Glasses: What Did People Do?



livescience.com

Somewhere in the vicinity of Pisa, Italy, around 1286, an unknown craftsman fastened two glass lenses to a frame likely made of wood or bone to create the first eyeglasses.

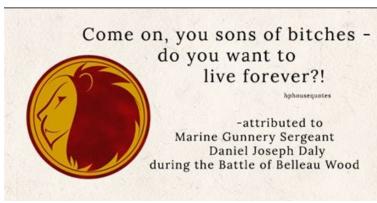
https://youtu.be/uuC3WE23tpI

Perhaps that was the end of the Dark Ages.

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Inside The Scientific Quest to Reverse Human Aging

For those hoping to cure death, and they are legion, a 2016 experiment at the Salk Institute for Biological Studies in San Diego has become liminal — the moment that changed everything. The experiment involved mice born to live fast and die young, bred with a rodent version of progeria, a condition that causes premature aging. Left alone, the animals grow gray and frail and then die about seven months later, compared to a lifespan of about two years for typical lab mice.



harrypotterhousequotes.com

But the Salk scientists had a plan to change the aging animals' fate. They injected them with a virus carrying four genes that can reshape DNA and, in effect, make every cell in the rodents' bodies young again. The scientists could even control the genes from outside the mice, turning them on and off to manage the safety and potency of the genetic changes.

The experiment worked: The animals lived 30 percent longer afterward, a marked improvement, if not quite a normal mouse lifespan.

And, with that, the longevity gold rush entered a new era. Tech titans and venture capitalists started throwing billions of dollars at labs exploring the technique, called cellular reprogramming. Experiments began on other mice, as well as worms and monkeys.

Cellular reprogramming is now hailed by its supporters as the most promising scientific approach to improving human healthspans and lifespans. Proponents claim it has the potential to reshape how — and whether — we grow old. And later this year, a biotech company called Life Biosciences expects to file an application with the Food and Drug Administration to get approval for the first human trial of a version of the technique, according to Sharon Rosenzweig-Lipson, the company's chief scientific officer.

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I wonder what Jonas Salk would say about this.

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Call Center Using AI to 'Neutralize' Indian Employees' Accents



The world's biggest call center company is using AI to mask employees' accents. Credit: PeopleImages via Getty Images

Teleperformance SE, the largest call center operator on the planet, has come up with a way to mask the fact it operates in India for customers calling for support with their latest iPhone or Galaxy device.

In a new report from Bloomberg, Teleperformance shared that it invested \$13 million in Sanas, an AI startup. Sanas has created technology that focuses on "reducing accent-

based discrimination." As Teleperformance puts it, the technology can "neutralize" accents.

"When you have an Indian agent on the line, sometimes it's hard to hear, to understand," Teleperformance Deputy Chief Executive Officer Thomas Mackenbrock told Bloomberg in an interview. Mackenbrock said that the AI technology can "neutralize the accent of the Indian speaker with zero latency."

Sanas' accent-neutralizing technology currently works on Indian and Filipino accents. The company says that it's working on deploying it for other accents, such as those found in Latin America.

The AI startup also provides a background noise removal feature in order to further mask any sort of ambient noise emanating from the call center employees' location that may give away where they are based.

Teleperformance said that it's also using AI tools for more common AI tasks, such as transcribing calls and coaching new employees. The company announced it would invest a further \$104 million in AI during an investor call.

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How a Materials Revolution Will Transform Future Electronics

In the latest episode of The Future of Everything podcast, engineer-scientist Eric Pop tells host Russ Altman that we're on the precipice of tremendous innovation in the materials we use to make semiconductor electronics and...nearly everything.



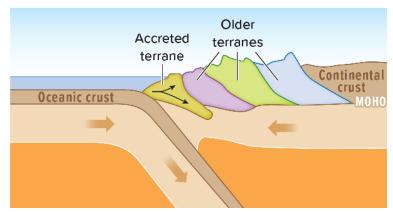
Russ Altman and Eric Pop | Rod Searcey
Stanford Engineering

We are on the cusp of a materials revolution – in electronics, health care, and avionics – says guest engineer-scientist <u>Eric Pop</u>.

https://youtu.be/pHPD9bSSs_M

How Did Eastern North America Form?

With many collisions and much crumpling of rock, down the ages. The story holds lessons for how the edges of continents are built and change over time.



How slivers of crust can build a continent knowable magazine

Connecticut — along with much of the rest of eastern North America — holds important clues about Earth's history. This region, which geologists call the eastern North American margin, essentially spans the US eastern seaboard and a little farther north into Atlantic Canada. It was created over hundreds of millions of years as slivers of Earth's crust collided and merged. Mountains rose, volcanoes erupted and the Atlantic Ocean was born.

The bulk of North America today is made of several different parts. To the west are relatively young and mighty mountain ranges like the Sierra Nevada and the Rockies. In the middle is the ancient heart of the continent, the oldest and stablest rocks around. And in the east is the long coastal stretch of the eastern North American margin. Each of these has its own geological history, but it is the story of the eastern bit that has recently come into sharper focus.

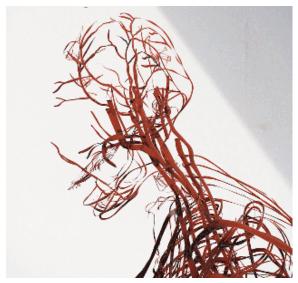
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Ganatian shoes

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Viewing the Human Circulatory System on its Own

In these highly detailed and unique renderings, we see the human body in only circulatory form, stripped of its skin and muscle to reveal the intricate web of veins and arteries that sustain life.



moss and fog

https://mossandfog.com/viewing-the-human-circulatory-system-on-its-own/

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Bulldog Refuses to Sleep Without His Skateboard

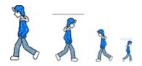
Chowder takes his passion very seriously. Check out his reaction to his new board



rumble.com

https://youtu.be/3SHrU_mjlcM

My Walking Thoughts



For Sunday March 23 2025

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Four Plane Formation Highlights

After licking our wounds in the solace of our rooms that evening, I and my companions for the remainder of the Stage—MARCAD Rummel and NAVCAD Dickson—arrived for our next day's adventure thoroughly chastened but determined to recover our pride in future hops. And indeed we did... at least in the somewhat limited terms of our bush league experience.

Yeah, we had our share of screwed up rendezvous, and there was little chance that our amateurish attempts at tight parade formation alignments would elicit any oohs and aahs from even the most recently arrived groundcrew men, but by the final hop, we received 'above average' marks from Marine Captain Morton, our flight leader throughout the rest of the stage.

Actually, the only notable happening I can recall was the time the tower cleared our flight to break for landing, failing to notice arrival of an Air Force T-33 that had waved off from an instrument approach, entering the downwind intent of making a normal landing. As Captain Morton peeled off, MARCAD Rummel, flying as Number Two saw the developing situation and called a warning. The catastrophe averted, the three of us followed the leader out of the pattern to regroup and return for another try.

It was Rummel's quick thinking that earned us all an attaboy and a modicum of fame in the squadron readyroom.

With formation Stage in the rearview mirror, it was time for the real fun stuff to begin... bombs, rockets, air combat maneuvering, and a chance to punch so 20 millimeter holes in a target banner, activities we'll explore in the next several episodes.

Are You Ready for Another Outtake from Phantoms from Vietnam?

How Gordon Arrived in Arvin

Back on March 16th, 1939--a rainy Thursday afternoon to put a finer point on it--Gordon arrived at his Uncle Joe's farm with nothing but the clothes he'd worn to school in Huntington Beach that day. Gordon's swift relocation was the result of his father's, unanticipated return after only a week from a voyage that was supposed to have taken several months.

The light cruiser Savannah, of which Commander William Gordon Talbott III – "Trey" as he was known to his Academy peers -- was Captain, put to sea following upgrades to its armament and a host of modifications to its propulsion system. The voyage had barely begun, however, when one of its brand new boilers exploded. Nine sailors died, a dozen more injured, and the ship sustained a ten-foot tear on the port side aft on the bridge below the waterline. Before counter-flooding brought the ship back onto an even keel, four more sailors were lost overboard, their bodies never recovered despite the efforts of an accompanying destroyer that searched the area for a day and a half without success.

The crippled ship put about and made for San Diego where repairs to the hull and engineering spaces were estimated to take at least four months before she would once again be ready for sea, so for all intents and purposes he was out of a job save answering charges of incompetence to a review board.

In limbo until the board was convened, Trey caught the midnight Greyhound Bus to Long Beach and from there by a taxi to his home, arriving just as the a church carillon tolled the hour of ten. The timing turned out to be unfortunate for the charming Mrs. Patricia Talbott who was at the time entertaining Mr. Fleming, a purveyor of stocks and bonds when not satisfying the needs navy wives whose husbands were somewhere out there on the bounding main. Worse still, both she and Mr. Fleming were blissfully unaware that their frolicking had an audience, or that the audience was accompanied by a 45 caliber pistol as well as an attitude shaped by the knowledge that Trey's naval career was finished.

Following four squeezes on the automatic's sensitive trigger -- two for each including 'make-sures' — Trey retired to his bedroom where he solemnly placed his cherished blue uniform in the closet, changed into civvies, and walked out on the front porch to make certain Mrs. Campos, the Talbott's neighbor across the street, was watching.

Mrs. Campos had long since branded Tricia a slut so when she heard what she thought was hammering coming from the back of the house, the thought whisked through her mind that perhaps it was Commander Talbott ridding the world of his tramp and her friend. Still she was horrified when the Commander appeared brandishing a pistol. After pitching her a smart salute, Trey put the muzzle of the deadly instrument to his temple, adding a staccato exclamation point to his morning's activities.

Chief Arnold Harrison arrived ten minutes later to take charge, though there was not much for him or anyone else to see or do. After poking around for no more than two minutes, he came across the street to see what Mrs. Campos might know. After relating the meager details she had of the episode, she went on to explain that the son, William

Gordon Talbott, IV, was just starting kindergarten at the Harbor City Primary School, adding that the boy's maternal uncle and his wife, Joe and Claire Graves, were the only relatives she'd heard of and that they had a farm near Bakersfield.

As the bell announced the end of the school day, plans for young Gordon's immediate future had been made. Principal Irene Nelson popped her head into the classroom, collected the boy, and led him to her office where Chief Harrison was waiting.

"Your Uncle Joe is on the way down from Bakersfield," Harrison explained in the reassuring manner that people in his profession mastered early in their careers. You'll be going home with him."