Ode to E Pluribus Unum for Sunday January 12 2025



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Peter Brock's 2025 RestoMod Stingray Corvette

The way it was meant to be 60+ years ago, but with state-of-the-art powertrain and running gear .



BRE, Gayle Brockl

As many of you know, while still a teenager Peter went to work at GM's Styling Department and among his efforts was the classic 1963 Split window Stingray.

Now at the age of 88, and with iconic examples of his prodigious talent in such diverse fields as hang gliding and sport aviation, a Buck Rogers race car hauling trailer, and a plethora of world class racecar designs, perhaps the most famous of which is the Shelby Daytona Coupe, Peter has done it all--- and done it again, designing and overseeing the production of the 2025 Stingray introduced at the SEMA (Speed Equipment Manufacturers' Association) in Las Vegas.

If I have a complaint to wage against Peter and his wife Gayle, it's that not only do they go through life at full throttle, but get younger (and younger-looking) in the process, as you'll see in this video.



https://youtu.be/vVBUxLv93x4 (Let this one roll through the next two videos). https://youtu.be/2e7-O7nnAWE (Peter <u>describes the history of the Stingray</u>) PS. Peter's book on the Stingray is itself a classic, but copies (like mine) don't come cheap.

Chords & Riffs

10 Great Adagio Classical Music You Should Know



facebook.com

Adagio is a tempo mark directing that a passage is to be played rather slowly and stately (literally, "at ease") (55–65 BPM). The passage having this mark is often the second movement of sonatas and symphonies in classical music, but it can be a standalone music piece. Here, A generous selection of the best adagios in the world, Some melodies are instantly recognizable ones, because they was used in many tv series, movies and songs...

This exceptional collection of delightful and serene adagio music will help you do just that. It is great for relieving bad stress, to soothe the soul and calm the mind. It will take you on slow waves of soothing melodies to a world of pure sound and tranquility.

https://bit.ly/3VUKMiB

While each of these strikes beautiful chords in my soul, Ravel's Adagio Assai from his Piano Concerto in G is my personal favorite... paced by this particular recording by Helene Grimaud and Vladimir Jurowski. It's what I turn to after a tough day.

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Watch Kilauea Volcano Erupt LIVE

Kilauea volcano in Hawaii is erupting with fountains of lava. Check out a USGS livestream from within the Halema'uma'u crater.



express.co.uk

Kilauea volcano began erupting at 2.20 a.m. Hawaii standard time (7:20 a.m. EST) on Monday (Dec. 23), according to an update on the USGS website. Soon after the eruption began, Kilauea started blasting out lava and other materials.

Kilauea volcano is one of the world's most active volcanoes and has erupted almost continuously for more than 30 years. Located on Hawaii's Big Island, the volcano makes up about 14% of the island's land area and rises 4,190 feet (1,227 meters) above sea level, Live Science previously reported.

https://youtu.be/w0KulR_3wQk

How Obesity Shapes the Immune Response to Cancer

Bagchi, S et al. The acid-sensing receptor GPR65 on tumor macrophages drives tumor growth in obesity. Science Immunology 9 (2024). <u>10.1126/sciimmunol.adq6453</u>



blogcrownbio.com

Obesity is a complex disease that typically worsens over time and increases the risk of developing many other concerns, including cancer. There are at least 13 types of cancer associated with obesity, from colorectal cancer to liver cancer and even breast cancer, but how obesity contributes to the development of these cancers remains poorly understood.

Using a mouse model of colon cancer, Bagchi et al. found that obesity drives the recruitment

of tumor macrophages—immune cells responsible for digesting pathogens and dying tumor cells— but also reprograms them to be less effective at controlling tumor growth. Obesity was associated with elevated levels oleic acid in tumors, a kind of fatty acid, which influenced macrophages via an acid-sensing receptor called GPR65.

Deleting GPR65 slowed the growth of colorectal and liver tumors in obese mice, suggesting that this pathway could represent a therapeutic target for obesity-associated cancers.

While obesity has been declared a global epidemic, we still do not understand very much about how this disease influences the immune system, particularly in cancer. Many preclinical cancer studies are conducted in otherwise healthy animals, but humans are much more complex.

Understanding how the immune system integrates its response to multiple diseases will likely be important for developing personalized immunotherapies to prevent and treat cancer.

15 Stunning Nature Photos from 2024

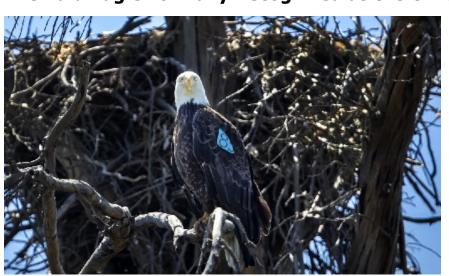
Collected from some of the best-known photography competitions around the world, here are the most captivating nature photos of 2024.



Eyes of green crab spider (Diaea dorsata). (*Image credit: Paweł Błachowicz/Nikon Small World 2024*)

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https://bit.ly/3VZg9su



The Bald Eagle Formally Recognized as the Official National Bird

A tagged bald eagle near a nest in Orange County, California, in May 2020. Photo: Allen J. Schaben/Los Angeles Times via Getty Images

The bald eagle (Haliaeetus leucocephalus) has been featured on the <u>US Great Seal</u> since 1782, a mark used by the State Department and printed on the dollar bill (see here). The bird is the only eagle indigenous to North America and is considered sacred by many Native American tribes. The bird of prey became endangered in the 1900s amid hunting and pesticide use, with nesting pairs dropping from an estimated hundreds of thousands in the 1800s to fewer than 500 in 1963. Hunting bans and conservation efforts returned their <u>numbers</u> to 19th-century levels.

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Are 40% of Alzheimer's Cases Preventable?

How You Can Reduce Your Risk



Akinbostanci/ iStock

Previous research has shown that nearly 40% of Alzheimer's disease and related dementia cases may be preventable or delayed. And last year, a team of U.K. researchers published a world-first study identifying risk factors that specifically apply to young-onset, or early-onset, dementia cases, meaning those diagnosed in people under age 65.

Some of the 15 factors are genetic, but others, like vitamin D deficiency, are modifiable and within individuals' power to change. There are also some, such as lower formal education and lower socioeconomic status, that could inform public health policies.

Back in February, Nice News chatted with neurologist Richard Isaacson, an Alzheimer's expert who was not involved in this study, to learn more about what the research

results mean for preventing Alzheimer's at any age. The gist? It's never too late to work on reducing your risk.

Isaacson, who serves as a health advisor for the Alzheimer's organization Hilarity for Charity, said people should feel "empowered" by the study's findings. "When it comes to early-onset or young-onset, people used to say, 'There's nothing you can do, it's genetic.' But the real clincher here is that this study shows that there is something [you can do] — anyone, at any age, can take control of their brain health today." <u>Read some of his tips</u>.

2024 Watershed Moments in Science that Will Shape the Future

From oceans found on distant planets to a detailed map of a fly's brain, these findings deepened our understanding of the world.

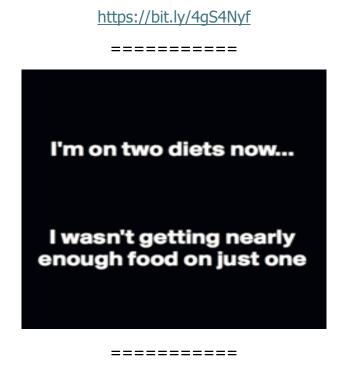


In October, a study comprehensively mapped out the brains of fruit flies, Drosophila melanogaster, for the first time. That was only one of the many major scientific discoveries in 2024. Micrograph by Dennis Kunkel Microscopy/Science Photo Library

It's easy to reflect on 2024 as a tumultuous year, but there is some comfort in knowing that humanity can now claim to know more about the universe than ever before. As a

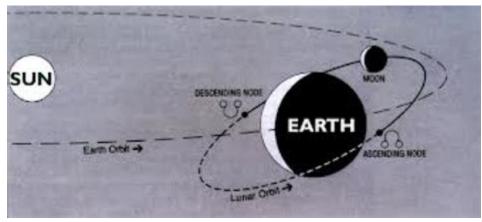
species, we have never been more enlightened, because scientists are always learning more, and because science is always unfinished.

In National Geographic's estimation, these are the most astonishing scientific discoveries of 2024.



The Longest-Running Science Experiment in History: Eclipses

Eclipses and the Saros Fred Espenak. The periodicity and recurrence of eclipses is governed by the Saros cycle, a period of approximately 6,585.3 days (18 years 11 days 8 hours)



The Urban Astronomer: Solar Eclipses and the Saros Cycle urbanastronomer.blogspot.com

Nearly 3,000 years ago, ancient Babylonians began one of the longest-running science experiments in history. The goal: to predict eclipses. This singular aim has driven innovation across the history of science and mathematics, from the Saros cycle to Greek geometry to Newton's calculus to the three-body problem. Today, eclipse prediction is a precise science; NASA scientists predict eclipses hundreds of years into the future.

https://youtu.be/Gjbee3Bx_xs

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Unprecedented Rise in Homelessness

The latest federal homelessness survey finds an 18 percent annual rise in the number of people living without permanent shelter.



(Vadreams/Dreamstime.com)

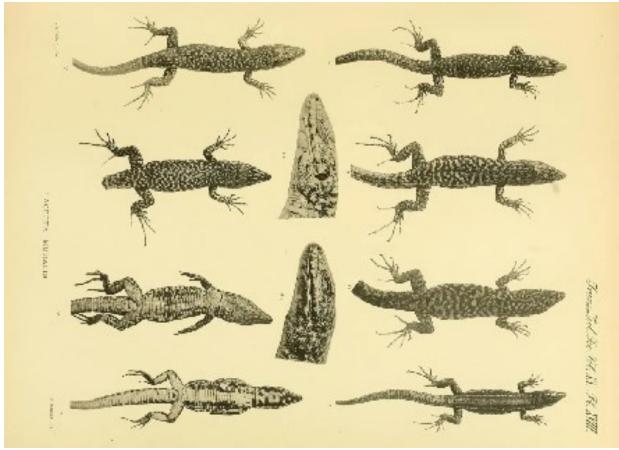
According to the HUD survey, 771,480 people were homeless in January 2024. Of those, 497,256 were "sheltered" homeless, meaning they were sleeping in an emergency shelter or transitional housing. Another 274,224 people were "unsheltered" homeless who slept outside, in vehicles, abandoned buildings, or other areas not fit for human habitation.

The top-line figure represents a remarkable 18 percent increase in the country's homeless population. That increase is even more shocking when one considers that the country's homeless population grew by 19 percent between 2007 and 2024. Near two decades' worth of growth in the homeless population occurred between 2023 and 2024.

https://bit.ly/3Pix5X1

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Historical Nature Imagery from the Biodiversity Heritage Library



moss & fogg

The Biodiversity Heritage Library (BHL), the world's largest open-access digital archive dedicated to life on Earth, offers over 150,000 high-resolution botanical and zoological illustrations for free download.

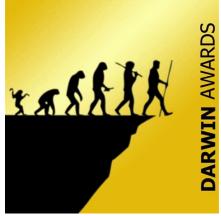
Spanning literature from the 15th century onwards, BHL's collection encompasses more than 55 million pages, including:

• Joseph Wolf's The Zoological Sketches: Mid-19th-century lithographs of wild animals from London's Regent's Park.

- Hawaiian Flora Watercolors: Detailed paintings of indigenous Hawaiian flowers.
- 1833 Taxidermy Guide: An illustrated manual for do-it-yourself taxidermy.

https://bit.ly/3DGANqX

2024 Darwin Award Winners?



alchetron.com

<u>Eighth Place</u> In Detroit, a 41-year-old man got stuck and drowned in two feet of water after squeezing head-first through an 18-inch-wide sewer grate to retrieve his car keys.

<u>Seventh Place</u> A 49-year-old San Francisco stockbroker, who "totally zoned when he ran", accidentally jogged off a 100-foot-high cliff on his daily run.

<u>Sixth Place</u> While at the beach, Daniel Jones, 21, dug an 8-foot hole for protection from the wind and had been sitting in a beach chair at the bottom, when it collapsed, burying him beneath 5 feet of sand. People on the beach used their hands and shovels trying to get him out but could not reach him. It took rescue workers using heavy equipment almost an hour to free him. Jones was pronounced dead at a hospital.

<u>Fifth Place</u> Santiago Alvarado, 24, was killed as he fell through the ceiling of a bicycle shop, he was burglarizing. Death was caused when the long flashlight he had placed in his mouth to keep his hands free rammed into the base of his skull as he hit the floor.

<u>Fourth Place</u> Sylvester Briddell, Jr., 26, was killed as he won a bet with friends who said he would not put a revolver loaded with four bullets into his mouth and pull the trigger.

<u>Third Place</u> After stepping around a marked police patrol car parked at the front door, a man walked into H&J Leather & Firearms intent on robbing the store The shop was full of customers and a uniformed officer was standing at the counter. Upon seeing the officer, the would-be robber announced a hold-up and fired a few wild shots from a target pistol. The officer and a clerk promptly returned fire, and several customers also drew their guns and fired. The robber was pronounced dead at the scene by Paramedics. Crime scene investigators located 47 expended cartridge cases in the shop. The subsequent autopsy revealed 23 gunshot wounds. Ballistics identified rounds from 7 different weapons. No one else was hurt.

<u>Second Place</u> Paul Stiller, 47, and his wife Bonnie were bored just driving around at 2 A.M. So, they lit a quarter stick of dynamite to toss out the window to see what would happen. Apparently, they failed to notice that the window was closed.

<u>The Winner.</u>.. Zookeeper Friedrich Reinfeldt (Paderborn, Germany) fed his constipated elephant 22 doses of animal laxative and more than a bushel of berries, figs and prunes before the plugged-up pachyderm finally got relief. Investigators say ill-fated Friedrich, 46, was attempting to give the ailing elephant an olive oil enema when the relieved beast unloaded.

The sheer force of the elephant's unexpected defecation knocked Mr. Reinfeldt to the ground where he struck his head on a rock as the elephant continued to evacuate 200 pounds of dung on top of him.

<u>'Honorable Mention</u> Kerry Bingham had been drinking with several friends when one of them said they knew a person who had bungee-jumped from a local bridge in the middle of traffic. The conversation grew more exciting, and at least 10 men trooped along the walkway of the bridge at 4:30 AM. Upon arrival at the midpoint of the bridge, they discovered that no one had brought a bungee rope. Bingham, who had continued drinking, volunteered and pointed out that a coil of lineman's cable lay nearby. They secured one end around Bingham's leg and then tied the other to the bridge. His fall lasted 40 feet before the cable tightened and tore his foot off at the ankle. He miraculously survived his fall into the icy water and was rescued by two nearby fishermen. Bingham's foot was never locted.

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Feynman: Rules of Chess



youtube

Richard Feynman on the rational scientific method; increments and revolutions and castling.

https://youtu.be/o1dgrvIWML4

A wonderful analogy to carry with us into the new year.



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The Oldest Olive Tree in the World is Over 3,000 Years Old



moss & fogg

Located in the small town of Ano Vouves on the island of Crete in Greece, this remarkable tree has seen more in its lifetime than most things on this earth.

Indeed, at an age between 2500-4000 years old, this huge, ancient olive tree is considered the oldest on the planet.

https://bit.ly/3PkiHxF

Advances In Neurobiology: The 2024 Eppendorf & Science Prize

This year's Eppendorf & Science Prize for Neurobiology winner and finalists are advancing our understanding of sensory responses, spinal cord recovery, and nutrient transport in the brain. Their research holds promise for future medical advances in treating airway dysfunctions, spinal cord injuries, and neurological diseases.

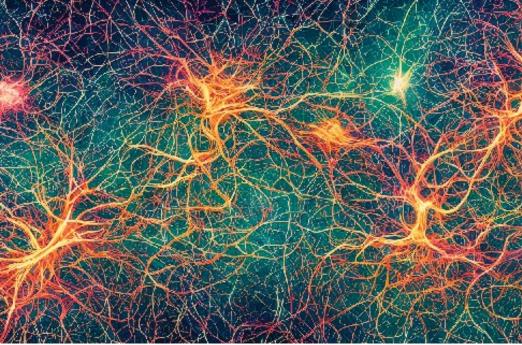


Image: © Bpawesome/Shutterstock.Com

Laura Seeholzer, a postdoctoral fellow at the University of California, San Francisco, received this year's Eppendorf & Science Prize for Neurobiology for her work on understanding the molecular and cellular bases of how our airways sense external threats. Two finalists, Rosemary J. Cater and Claudia Kathe, were also named.

Seeholzer discovered a network of cells lining the throat that, upon detecting water or acid, release the neurotransmitter ATP (adenosine triphosphate). These neuroendocrine cells behave both like neurons and endocrine cells, releasing hormones in response to nervous system stimuli. The released ATP molecules then trigger nearby sensory neurons in the vagus nerve—the longest cranial nerve in the body, which extends from the brainstem through the neck and into the abdomen—delivering the message that it's time to cough.

https://bit.ly/3PcFyLf



You couldn't make this up.

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How Light Helped Shape Our Skin Color, Eyes and Curly Hair

Welcome to our 'Light and health' series, where we look at how light affects our physical and mental health in sometimes surprising ways. Read other articles <u>in the series</u>.



phys.org

For most of our evolutionary history, human activity has been linked to daylight. Technology has liberated us from these ancient sleep-wake cycles, but there is evidence sunlight has left and continues to leave its mark.

Successive improvements in lighting technology have increasingly liberated us from dependence on daylight: fire, candles, oil and gas lamps, and finally electric lighting. So we can theoretically work and play at any time.

However, our cognitive and physical performance deteriorates when our intrinsic daily cycles are disturbed, for instance through sleep deprivation, shift work or jet lag.

https://bit.ly/4gTSVMg

Thanks to J.P. Tristani for passing this along.



Almost All Languages Appear To Follow Zipf's Law. Why

Even the languages we haven't deciphered yet, such as the one in the Voynich Manuscript, appear to follow this rule.



Are humans a lot more predictable than we think? Image credit: lassedesignen/shutterstock.com

Humans like to think we're unpredictable beings, to a certain extent, governed by free will emerging somehow from physical processes. Well, here's one weird thing to send you into a linguistics-based existential crisis: most languages appear to follow an equation known as Zipf's law, and we have no idea why.

https://bit.ly/4iZOL7z

This, my friends, is a total mind blower. Trust me and take the next step... and the next.

How Multitasking Drains Your Brain

Renowned neurologist Richard Cytowic exposes the dangers of multitasking in the digital age.



Image: DK_2020, Adobe Stock

Whether applied to machines or human brains, the term "multitasking" is a misnomer. Despite marketing claims, your computer does not multitask, and neither does your brain. The latter simply cannot, whereas a computer's processor divvies up each clock cycle and apportions a slice of time — 200 milliseconds, say — to each task. Round and round it goes until everything is done. The inherent inefficiency of having to split up processor time is why your computer bogs down the more you ask it to do.

This article is adapted from Richard Cytowic's book "Your Stone Age Brain in the Screen Age."

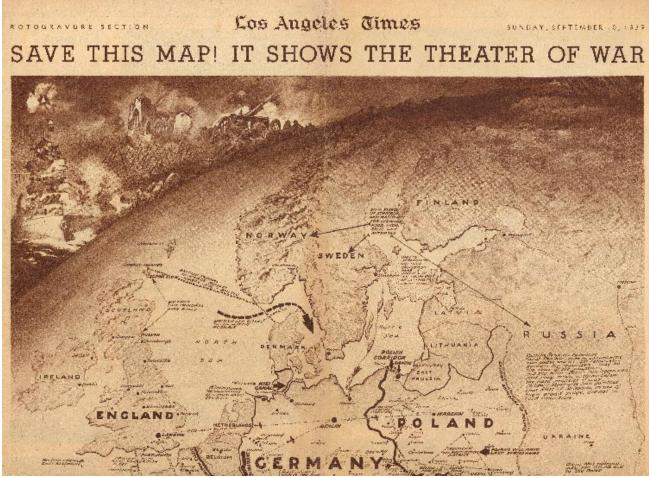
https://bit.ly/3W7VGBS

A good example of how instrument rated pilots maintain situational awareness is through their iterative readings of flight instruments.

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Visualizing the Past (World War II)

This time, Goldwag's Journal on Civilization, looks at WWII through maps that are amazing snapshots of what was going on, minute by minute.



This map, published in the Los Angeles Times on September 10th, 1939, only ten days after Germany's invasion of Poland. This is a wonderful example of what I love about this genre of work-the depth of detail and information that newspapers were attempting to convey to their readers.

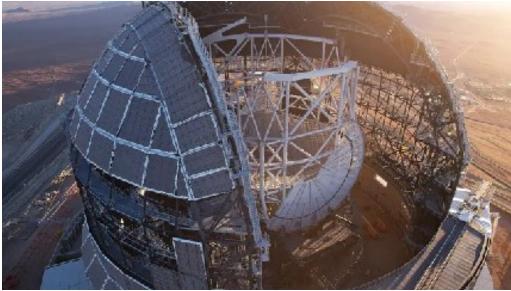
Nathan Goldwag

Maps are such amazing tools, laying out in detail how the world functions, its geography and politics and topography, and the ways in which those change over time. It probably won't surprise you, then, to know that I like historical maps quite a lot. Learning about how someone chooses to depict the world can tell you quite a lot about their point of view, and seeing the way in which people in different times make different choices about how and what to illustrate can show you how our perception of the world has changed. That's what we're going to do today. I have here a small collection of historical maps that I think are really cool, and that I think can teach us something about our shared past.

https://bit.ly/3Vonam3

World's Largest Telescope Comes Together

The Extremely Large Telescope is currently under construction, with the most recent milestones including progress made with building the dome, central structure and the base for the primary mirror.



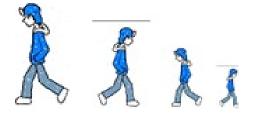
Recent progress photos of the European Southern Observatory's (ESO) Extremely Large Telescope (ELT) reveal its dome, central structure and base of the M1 mirror are taking shape. (Image credit: ESO/G. Vecchia)

The European Southern Observatory's (ESO) Extremely Large Telescope (ELT) — the world's largest visible- and infrared-light telescope — is currently under development on the Cerro Armazones mountain in Chile's Atacama Desert. The mighty telescope is expected to see its "first light" by 2028, with the goal of observing terrestrial exoplanets and their atmospheres, as well as measuring the expansion of the universe.

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https://bit.ly/4itH2hO

My Walking Thoughts



For Sunday January 12 2025

Fun Time in the Cougar

Following my initial flight in the F-9 (detailed in the three preceding Walking Thoughts) I got to enjoy what it was to blow up dust clouds on the King Ranch and carve contrails into South Texas winter skies in Grumman's bent-wing behemoth... both the two-seat trainer version (F9F-8T) and the single-seated F9F-8B fighter. In truth, I couldn't tell the difference between them, but then it should be no surprise as I lacked the experience to do so.

Briefing me before my first flight in the single-seater, Lieutenant Crayton cautioned me against spinning it because unlike the trainer version it had a penchant for entering an unrecoverable mode... but that was all he had to say on the subject... and enough for me to take heed. Years later as an instructor at Kingsville, I purposefully spun the two-seater, but followed Lieutenant Crayton's suggestion regarding the single-seater, so I'll never know whether he and the flight manual were correct.

Alternating times with ground school, I plowed ahead through the Transition and Precision stages getting comfortable with the Cougar's high altitude and swept-wing performance characteristics while developing my anticipation skills... enjoyable and worthwhile talents that would stay with me for the rest of my flying life.

My last VFR flight before starting Instrument Stage was the most memorable I would have as a student at Kingsville... a night flight in which I got airborne just as the sun was at the western horizon.

Climbing out to the northwest, I stayed in daylight all the way up to 40 thousand feet, where bathed in a flood of golden sunlight, I turned back toward the field. Pulling hard into a port turn, I saw I was chased by a contrail streamer, shimmering now against the advancing darkness. At the sight I thought, "There's probably someone looking into the heavens — perhaps hoping to catch the Evening Star — who, spying my event would wish he or she were where I am right now." My heart sang.

Slowly at first then more rapidly, the light in the west faded giving way to a vista of star encrusted loveliness that beckoned me take the Cougar to its ceiling—42 thou and change as I recall--running clear over to the Mexican border at Nuevo Laredo, then around in a wide righthand arc to Corpus Christi before descending along the intercoastal waterway to enter Kingsville's landing pattern from the southeast for a series of touch-and-goes and lamentably a final landing.

I had felt the lure of night flight before in both the T-34 and T-28, but never the majesty I experienced on this special occasion. In years to come I have approached the same rapture, but this flight still stands out in my heart and mind as something special... as if I was a bridegroom entering the marriage bedchamber.

My Walking Thoughts for Sunday January 12 2025

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LA Times

There is something uneasy in the Los Angeles air this afternoon, some unnatural stillness, some tension. What it means is that tonight a Santa Ana will begin to blow, a hot wind from the northeast whining down through the Cajon and San Gorgonio Passes, blowing up sand storms out along Route 66, drying the hills and the nerves to flash point. For a few days now we will see smoke back in the canyons, and hear sirens in the night.

https://bit.ly/40xdl8I

Sound familiar? Joan Didion wrote this about the Santa Ana winds in 1967. Her essay first appeared in The <u>Saturday Evening Post</u> and was later published as part of "Los Angeles Notebook" in her book <u>Slouching Towards Bethlehem</u>. Since then we've watched housing tracts march resolutely up those canyons, elevating the risks to new heights.

Except for my time in the Marine Corps I've spent the bulk of my 88 years in one part or another of the Santa Anas' target areas, coming to know with unwanted familiarity their ominous tidings. Thus, when I awoke last Sunday night to the determined sighing of my roof ventilators, I hopped out of bed and marshalled my escape gear by the door, ready to scoot if fires seemed headed in my direction.

Perhaps because our area was in the lea of the recent spate of Malibu fires, his time they weren't, so things had calmed here in the Ojai Valley by the next morning, leading me to believe the danger was past. Well, for me and my neighbors maybe, but... You don't need me to tell of the horrendous devastation still taking place less than an hour away to the southeast, or speculate on what the consequences not just to people in Southern California but throughout the nation might be. Suffice it to say I will keep my evacuation pack ready to head for somewhere—anywhere--"where them Santa Anas don't blow."
