SPACE

How these two brothers became go-to experts on America's "mystery drone" invasion

Two Long Island UFO hunters have been called upon by some domestic law enforcement to investigate unexplained phenomena.

John (left) and Gerry Tedesco are photographed from inside their equipment-

by
Matthew Phelan
August 26, 2025

laden RV, using one of their own cameras.
MARCO GIANNAVOLA

On a Friday evening last December, every tier of US law enforcement—federal, state, and local—was dispatched to the US Army Natick Soldier Systems Center, a military research installation outside Boston. A squadron of about 15 to 20 drones had been spotted violating the base's restricted airspace. The culprits could not be found.

One retired major with the Massachusetts State Police, who had been dispatched to help investigate that night, called these unidentified aircraft "the strangest thing he's ever seen," according to Brian Lauzon, deputy chief of Natick's municipal police department. When Lauzon arrived on base later that weekend, he says, he saw drones that were larger than traditional consumer models (most of which are pre-programmed to respect US military airspace these days anyway). By the end of this weekend-long breach, base police not only had called in local law enforcement for backup but were coordinating with the FBI and US Army commanders as well.

The event, which barely made local news, was only the latest in a series of purported drone sightings along the US East Coast that November and December. Most of these happened in New Jersey, where military police confirmed

at least 11 unauthorized drone incursions over an Army research and arms-manufacturing facility, Picatinny Arsenal. Further sightings, including cases above Donald Trump's golf course in nearby Bedminster, prompted an FBI investigation and a flurry of new FAA-issued flight bans over sensitive sites, including critical infrastructure. But official answers were less forthcoming.

The Tedescos' roving aerial surveillance unit, which they've dubbed "the Nightcrawler," is an old RV equipped with an array of homemade signals collection equipment.

"It created a lot of hysteria in the general public," Lauzon recalls. "I was talking to old ladies who're telling me that there's this ship in the ocean that's launching hundreds of these at a time across the United States." One Republican

congressman from New Jersey did, in fact, claim that a militarized drone ship from Iran had launched the invaders, despite Pentagon denials. Lauzon remembers fielding myriad calls from civilians who had misidentified passenger jets as hostile drones. He recalls attending one presentation by an FBI expert in uncrewed aircraft systems who showed police unhelpful scare videos of improvised drone strikes in Ukraine, in which tiny aircraft rained grenades down on bloodied soldiers.

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By late January, the incoming Trump administration would assert that the entirety of the New Jersey drone wave had been benign, with each and every UAS "authorized to be flown by the FAA for research and various other reasons." Their surety, however, stood in stark contrast to the warnings from top military brass, including the Air Force general at the head of NORAD, Gregory Guillot. In February, he testified to the Senate that approximately 350 drone incursions had been reported over a hundred different US military installations in 2024 alone, stating that many of these cases were unsolved, albeit with "evidence of a foreign intelligence nexus in some of these incidents."

Lacking better coordination, or much clarity from the White House, the Pentagon, or the US intelligence community, some in domestic law enforcement—including members of the FBI's counterintelligence and counterterrorism divisions—have turned to an unlikely source for help cracking the case of these mystery drones: two UFO hunters out on Long Island in New York, John and Gerald Tedesco.

The Tedescos, twin brothers, each spent about three decades in the private sector working in electrical engineering and instrumentation design before they decided to kit out an old RV with an array of homemade signals collection equipment. Their aim was to create a mobile field lab for investigating UFO hot spots. Intrigued by their efforts, members of Harvard's alien-hunting Galileo Project began talking with the Tedescos in 2021 and asked them to join as research affiliates. Since then, aviation safety advocates, astronomers, physicists and other researchers, and at least one journalist (I, myself) have made the trek out to Long Island's South Shore to kick the tires on the roving aerial surveillance unit they've dubbed "the Nightcrawler."

John uses a homemade millimeter-wave radar device.

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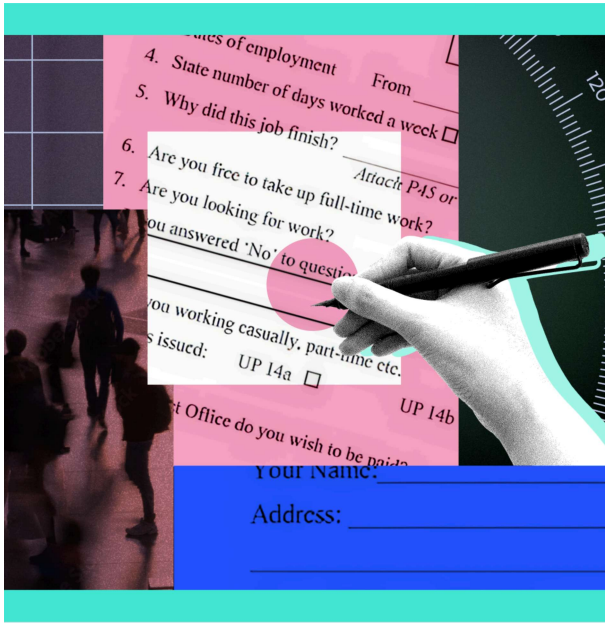
Chris Grooms, an Iraq and Afghanistan war veteran who was a deputy sheriff in Nebraska during an earlier multistate wave of mystery drone sightings from December 2019 to January 2020, gushed when I asked him about the Tedescos: “I don’t know how much you’ve talked to those guys. They’re freaking awesome.”



Grooms joined the Tedescos last January, when the brothers publicly shared some of their findings from training the Nightcrawler’s sensors on a few of these unidentified drones. “They do look like commercial air traffic for the most part,” John said during the virtual town

hall, moderated by a former Illinois state police lieutenant, "but they also exhibit unexplained or unusual phenomena."

As an example, the Tedescos described some cases they had documented and passed along to law enforcement, in which they caught a mystery drone appearing to go dark to evade closer observation (a common complaint from New Jersey police during the wave). Using their suite of cameras and sensors, which can handle light well outside the visible spectrum, the Tedescos discovered that these craft weren't so much switching off their lights as switching the frequency of their lights.
"It wasn't actually disappearing," Gerald (who goes by Gerry) explained. "It was actually changing its spectral signature—it was drifting into an infrared range."

John likened it to "signature management," a military term for the ability to tailor anything from radio emissions to light sources so that they remain detectable to one's allies but undetectable to one's foes. The clue, which likely would have been lost to police without the Tedescos' broad range of infrared sensors, was not unlike the kind of citizen-science fieldwork that had gotten them on the radar of academia's UFO hunters in the first place.

Why all this attention? As people have repeatedly learned and forgotten ever since airborne enigmas like the flying saucer first entered into the American public consciousness in 1947, simple photos and video are frustratingly inconclusive evidence in isolation. Even heat-sensing infrared footage of UFOs—like those taken by US Navy pilots training off the Pacific and Atlantic coasts—has failed to prove that anything truly unusual is in our skies.

What the Tedescos appear to have done, in their effort to bring a fully maximalist approach to the sensors directed at these suspected alien spacecraft, is independently engineer the kind of aerial surveillance capability rarely seen outside the classified world.

For domestic law enforcement and the general public, two communities lacking the requisite national security clearances, the Tedescos' work promises a transparent, open-source solution to the past several years' worth of bizarre and troubling drone incursions into US airspace. For academics hunting for UFOs and other aerial anomalies, the Tedescos have become informal collaborators and a font of new ideas for novel data collection equipment. But for better or worse, some of the secrets they might be revealing may be the government's own.

Inside the Nightcrawler

The term “UFO” has officially gone out of fashion. Nowadays, many policymakers and scientists—and even plenty of old-school “ufologists”—favor the term “unidentified anomalous phenomenon,” or UAP. It’s an intentionally pedantic step backward; an acknowledgment from today’s more disciplined cadre of scientists that a given witness to a strange thing in the sky might not actually be seeing a solid “object,” per se, much less anything “flying” in the strict aerodynamic sense. It could be a poorly understood atmospheric event, like ball lightning, for example; and even if a UAP proves to be an interstellar craft, its propulsion system could involve physics and engineering that render the concept of “flight” quaint.

Ryan Graves, a former US Navy lieutenant and F/A-18F fighter pilot who testified before Congress on the safety and security risks that UAPs posed to his own squadron, now heads a committee on the issue for the American Institute of Aeronautics and Astronautics, the nation’s premier society for aerospace engineers. He went out with his AIAA colleagues to see the Nightcrawler in September 2024.

John drained most of his 401(k) to make the Nightcrawler project a reality, in a five-year labor of love.

“It’s incredible what they’ve been able to put together,” Graves says, praising the Tedescos’ ability to collect “very actionable data.”

Gerry once held a security clearance to develop reconnaissance, surveillance, and target acquisition sensors for a Pentagon contractor. John has helped conceive and construct analytical test hardware for Underwriters Laboratories, a federally approved safety, testing, and certification firm, and served for a time as the product safety chair for the Long Island branch of the Institute of Electrical and Electronics Engineers. John drained most of his 401(k) to make the Nightcrawler project a reality, in a five-year labor of love; Gerry has pitched in what he could. Both men, now sliding through their early 60s, have been fascinated with the possibility of

intelligent life elsewhere in the universe since their youth ingesting midcentury sci-fi staples like *Star Trek, Chiller Theatre*, and *Lost in Space*.


UVB
UVC
NV CAM
MWIR
PULSED IR
SWIR
MILLIMETER
RADAR

A homemade multispectral camera.

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I got my first tour of their rig during an overnight expedition just off the beach at Robert Moses State Park in Babylon, New York, the weekend before the AIAA's trip last fall. A klatch of camping chairs and cameras on tripods flanked one side of the Nightcrawler like a tailgate party. Inside, the lived-in kitchenette, the wood paneling, and the hum of over half a dozen monitors—including radar, night-vision, and radio-frequency (RF) scanners—made it feel like the cabin of a cramped marine research vessel.

The RV includes tech that is otherwise hard to find outside defense applications, including RF spectrum analyzers from a firm that specializes in elite anti-drone countermeasures and a UV-C sensor capable of detecting the subtle ultraviolet light emitted when missile plumes and other heat sources turn air into plasma. On the Nightcrawler's roof, two X-band marine radar systems have been mounted perpendicularly to one another in hopes of collecting three-dimensional radar returns from truly otherworldly UAPs. ("To our knowledge," as the Tedescos put it in an engineering journal article last year, "no other organizations use active radar for this purpose.")

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concerns over "harmful interference" with core systems like air traffic control. But in January 2023, the duo got a rare license from the Federal Communications Commission that permits them to beam radar from Robert Moses.

One prototype I saw, a multispectral camera mounted on a sturdy yellow DeWalt surveyor's tripod, looked like a Gatling gun of multiple cameras and electromagnetic frequency (EMF) sensors. This jerry-rigged device spans the entire visible spectrum and beyond, from deep invisible ultraviolet all the way up to long-wave infrared. They've used the UV-C sensor to detect aerial plasmas produced by lightning or those novelty arc-welder cigarette lighters. "We've done this as far as a half a mile, but if you had a campfire, they could detect campfires from 28,000 feet," John told me over the noise coming from the Nightcrawler's gas-powered electric generator. They've also been able to use this device to detect, at least provisionally, telltale UV-C emissions from some weird things off the coast they can't explain.

“We had two blue orbs out on the water,” John told me of their UAP cases, “and they triggered it, what, three times?” (“Three times,” Gerry replied.)


Great South Bay
FIRE ISLAND PINES
Fire Island
Saltaire
Oak Beach
3mi
4mi

Mapping out mile markers on a screen where sightings are compared with commercial air traffic data.

MARCO GIANNAVOLA

The Tedescos are pretty bullish on the hypothesis that otherworldly spacecraft might be here—suggesting in their latest journal article, for example, that radar delays they detected near UAPs appear to resemble the bending of electromagnetic waves around black holes. But the implication that the Nightcrawler has caught "gravitational lensing" off some warp-drive craft has rankled a few Galileo Project collaborators. The Harvard-led effort to search for extraterrestrial life or technology within our solar system emphasizes its excruciatingly methodical work of late: calibrating, validating, and recalibrating UAP detection hardware before researchers even try to hunt for true anomalies. Although Galileo scientists have visited and conferred with the Tedescos on UAP-hunting instruments, the brothers' more rough-and-courtroom-ready "forensic science" approach has caused turbulence in the relationship.

In an email, Mitch Randall, a technologist and entrepreneur who has spearheaded Galileo efforts to produce passive radar detectors for UAPs, described the Tedescos' "gravitational lensing" paper as rife with "too many assumptions."
But he did praise their Nightcrawler as "an ideal tool" for aiding law enforcement. "They could drive around with that and almost chase down drones," Randall said.

On the hunt

Ultimately, the Tedescos didn't have to drive the Nightcrawler far to train their equipment on a prime mystery drone case: Westhampton Beach's Francis S. Gabreski Airport, less than an hour from their homes and home itself to the New York Air National Guard's 106th Rescue Wing, was inundated with at least 28 unauthorized drone flights from late December into January 2025.

"We are talking about over the airport, over taxiways, over runways," Suffolk County's chief deputy sheriff, Chris Brockmeyer, told local news. "That's a serious safety concern. It's impacted air operations, and we're not going to stand for it." On Christmas Day alone, the airport was besieged by 17 drone incidents, according to the Suffolk County sheriff, who has staff that collaborate informally

with the Tedescos. Some of these drones, Suffolk County executive Ed Romaine asserted at a press conference, were “as large as a car.”

Gerry looks through a night-vision scope at the horizon.

MARCO GIANNAVOLA

The Tedescos couldn't use their powerful active radar system so close to an airport, so they deployed their handheld millimeter-wave radar, a more sensitive version of the radar guns that police use to catch speeders. Through the cloud cover and the snowfall, the Tedescos said, they were able to track about two or three objects with this device.

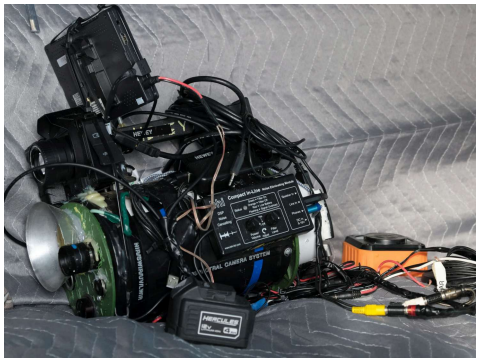
But the truly interesting find came from their radio frequency scanners, which detected spikes three times the strength of what they've picked up from ordinary hobbyist quadcopters.

I later learned that the two frequencies where those spikes occurred are within a band (1780 to 1850 megahertz) that has been reserved for US government communications. It's used for military tactical radio relay, precision-guided munitions, drones, and other Defense Department systems, including electronic warfare, software-defined radio, and tactical targeting networking technology, according to the FCC.

Granted, many portions of this band are devoted to less cloak-and-dagger agencies, like the Department of

Agriculture and the Tennessee Valley Authority. But the signals suggested that whatever the Tedescos were tracking above Gabreski Airport, they were likely not from hobbyists. Instead, they might have been from a government project or from something, like an enemy surveillance drone, hoping to pass off its signals as just another heavily siloed “top secret” broadcast.

“For operations security reasons, we do not provide information on frequencies which our Air National Guard units use,” a spokesperson said via email, adding: “We could not comment on use of the electromagnetic spectrum by other government agencies.” The FCC did not respond to requests for comment.



Another homemade multispectral camera.

MARCO GIANNAVOLA

Gerry says he and his brother passed their information on this case, including the observations of unusual radio frequency spikes, along to the FBI. “We’re working closely with the FBI,” John says. Gerry adds, “We gauge it by their interest level in what we’re doing.”

“When they get more enthusiastic,” he continues, before John finishes his thought: “… we know we’re closer and closer to something.”

It’s hard to know exactly what the FBI does with the information that the Tedescos submit; one Freedom of Information Act request that I filed on their work was returned with 24 out of 28 total pages redacted in their entirety. A consistent justification was the FOIA statute’s b(7)E exemption, which permits withholding sensitive FBI “techniques and procedures” that could help criminals circumvent the law.

Nevertheless, one senior-level law enforcement official, who has worked with the FBI on counterterrorism cases, did tell me that “the FBI is genuinely interested in the Tedescos’ work.” The official, whose current police role bars them from speaking publicly without prior approval, recalls speaking to an FBI agent who “alluded to the help that the Tedescos have been.” But the problem, the official continued, is that “for the relationship to work, it has to be very low-key.”

When I did briefly manage to get one of the Tedescos’ FBI collaborators on the phone, the agent seemed to confirm their shared efforts, at least tacitly, but asked not to be identified. “As much as I’d like to, we’re kept to pretty

strict guidelines," they said, before alluding to the new Trump administration's pervasive personnel cuts. "We're not allowed to talk to media—and with how things are right now, I'm not going to take any risks."

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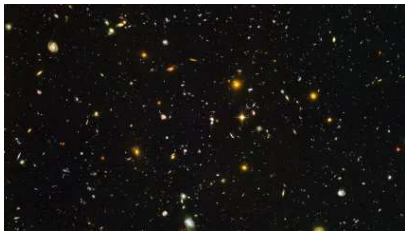

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At least one former Pentagon intelligence official did offer me some indication that the brothers' Gabreski airport discoveries were on the right track. "From what I've seen, these incidents are just that: drones," said this source, who requested anonymity as a current defense contractor and to protect their own active FBI sources, including UAP and drone incursion investigators who have consulted the Tedescos. "The origin of many is likely known, and I'd say some are certainly ours."

As to the mystery of why the FBI would even want investigative assistance from two civilians in an RV over partners within the executive branch, it comes down to conflicting priorities—as well as over a dozen or so laws that restrict domestic intelligence collection on drones by either the Pentagon or the US intelligence community. "It's one of those irreconcilable problems that just doesn't go away," says Fred Manget, a former deputy general counsel for the CIA, who watched problems of coordination between agencies persist even after policy changes were implemented post-9/11 to address the situation.

The desire of the NSA or some other agency to spy on foreign powers, Manget says, might override the desire to share pertinent information with police—information that

could lead to jail time for the drones' operators. Better to quietly monitor the drones and maybe even give out false data. "Signals intelligence a lot of times can be closed off if the target finds out they're being surveilled electronically," Manget says. "There's things they can do that will end NSA's ability to collect."

The Tedescos say the straight lines in these anomalous radar readings indicate that something could have been jamming their radar signal.

MARCO GIANNAVOLA

On my short call with my FBI source, I did my best to explain this working hypothesis about the Bureau's collaboration with the Tedescos. "I wouldn't say that's wrong," the source replied. "That's about as far as I could go." By this past June, however, even the recent head of the Pentagon's dedicated UAP-hunting group, the All-domain Anomaly Resolution Office (AARO), was admitting publicly that the Defense Department itself has cribbed notes from the Tedescos.

"We read their book," Tim Phillips, AARO's former acting director, told a UAP podcast, referring to an account of the Nightcrawler project that the Tedescos self-published in 2024. "We thought it was a great plan. We actually looked at the sensors in that book."
On another podcast, Phillips said AARO's own plan to make its UAP-hunting hardware mobile was borrowed from the brothers. "We thought that was brilliant."

Tools for law enforcement

Earlier this year, partially in a concession to the economic toll their side project has taken, the Tedescos started offering versions of some of their devices for sale on the Nightcrawler's charmingly GeoCities-esque home page. One of them, a handheld multispectral detector, is

effectively the consumer model of that EMF Gatling gun they showed me.

Domestic law enforcement is genuinely grasping for solutions like this. Local police in the Natick case, according to one report I obtained via an open records request, were so desperate for any kind of new intel on these unidentified drones that they borrowed a thermal imaging camera from their town's fire department. But the device, which was not purpose-built for imaging distant aerial objects, failed to collect anything useful.

When I broached the idea of law enforcement using something like the Tedescos' equipment, the answer from police who had witnessed these mystery drones, as well as from scientists, was that further design, product testing, and training would be required first. "I could see it helping law enforcement," said the AIAA UAP team's consulting physicist, Rex Groves, "but not without training. Absolutely not. Just like they have to be trained with a radar gun, they'd have to be trained with these other tools."

Gerry naps and John looks at readings from the multispectral camera at about 5 a.m., with the moon and Venus visible overhead.

MARCO GIANNAVOLA

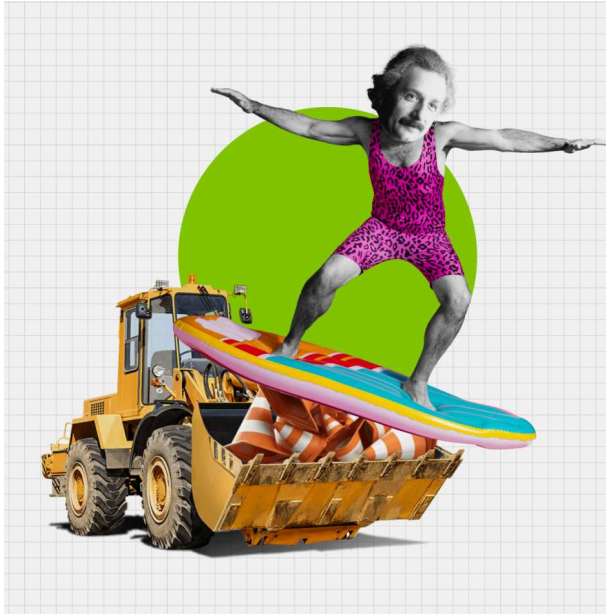
Lauzon, Natick's deputy chief of police, told me that while he thought equipment like the Tedescos' "could be useful to identifying a drone, particularly at night," the real problem is that police "don't have a lot of authority when it comes to these drones." Unless they manage to find operators on the ground, Lauzon said, all they can do is report the case, sending it into a black hole at the FAA.

But Michael Lembeck, an aerospace engineering professor and member of the AIAA team, emphasizes that the worst thing law enforcement can do with these drone incursions right now is nothing at all.

"We're seeing anomalies in our airspace and we're just normalizing that, because it happens so often and nothing bad has happened yet," Lembeck told me. "Eventually, something is going to come home to roost—and then we're going to regret the fact that we didn't look deeper and try to understand what was going on."

Matthew Phelan is a reporter and former chemical engineer based in upstate New York.

by Matthew Phelan



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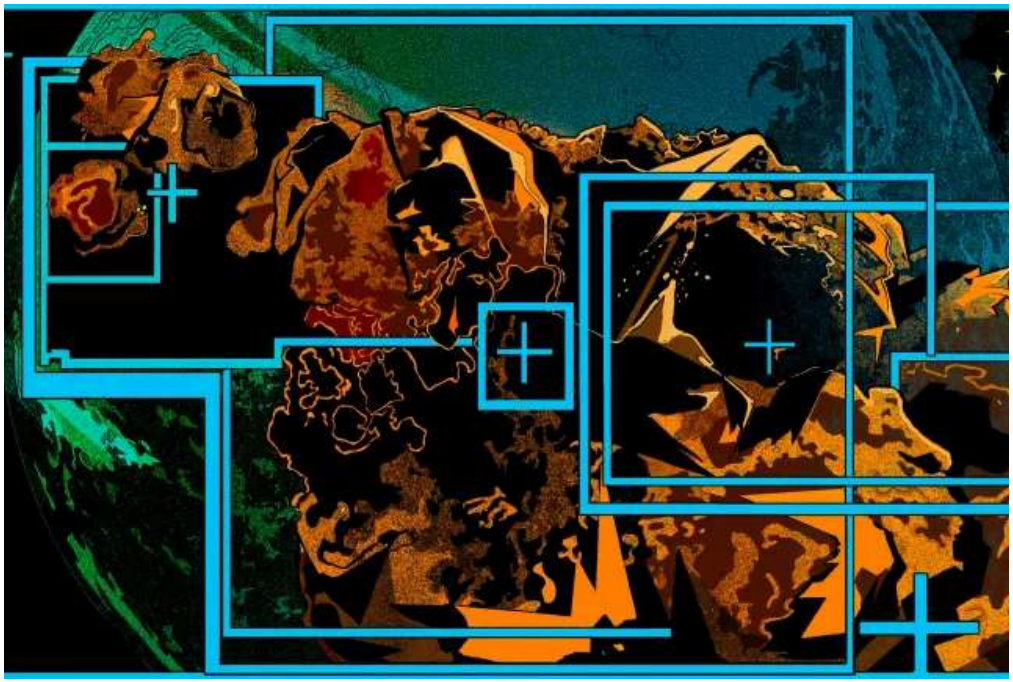

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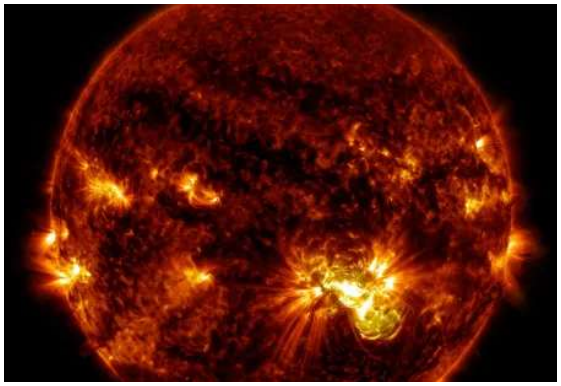

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