**NASA’s new rocket would be the most powerful ever. But it’s the software that has some officials worried.**

*NASA’s newest moon rocket is powered not only by four RS-25 engines that, combined,* ***unleash*** *2 million pounds of thrust, but by two solid fuel side boosters that burn six tons of propellant a second at such enormous temperatures that during a recent test fire in the Utah desert, the [flames turned sand to glass.](https://www.youtube.com/watch?v=EOyBNUJ5bA8" \t "_blank)*

When it launches, NASA’s Space Launch System rocket, a towering 322-foot behemoth — taller than the Statue of Liberty — would be the most powerful rocket ever flown, eclipsing both the Saturn V that flew astronauts to the moon and SpaceX’s Falcon Heavy, which has launched commercial and national security satellites as well as founder Elon Musk’s Tesla Roadster on a trip to Mars.

But as NASA moves toward the SLS’s first flight, putting the Orion **spacecraft** in orbit around the moon, it’s not the rocket’s engines that concern officials but the software that will control everything the rocket does, from setting its trajectory to opening individual valves to open and close.

*Computing power has become as critical to rockets as the brute force that lifts them out of Earth’s atmosphere, especially rockets like the SLS, which is really an* ***amalgamation*** *of parts built by a variety of manufacturers*

All of those components need to work together for a mission to be successful. But NASA’s Aerospace Safety Advisory Panel (ASAP) recently said it was concerned about the **disjointed** way the complicated system was being developed and tested.

Also troubling to the safety panel was that NASA and its contractors appeared not to have taken “advantage of the lessons learned” from the botched flight last year of Boeing’s Starliner spacecraft, which suffered a pair of software errors that prevented it from docking with the International Space Station as planned and forced controllers to cut the mission short.

NASA has since said that it did a poor job of overseeing Boeing on the Starliner program and has since vowed to have more rigorous reviews of its work, especially its software testing.

*The SLS software concerns are the latest red flags for a program that has struggled to overcome cost overruns and setbacks. A slew of government watchdog reports over the years have painted a troubling picture of mismanagement.*

The report chided Boeing, the main contractor, which it said “consistently underestimated the scope of the work to be performed and thus the size and skills of the workforce required.”

There was **perhaps** no better illustration of the significant role software plays in space flight, and how flaws in the coding can have severe consequences, than Starliner’s test flight.

NASA officials in charge of the SLS program said they are confident the testing protocols for the SLS rocket and Orion spacecraft are far more robust. For starters, the program is set up differently. Boeing owns and operates the Starliner spacecraft and uses it to perform a service for NASA — namely flying its astronauts to the space station.

**Opinión:**

The software has taken great importance in our lives and even more when people's lives depend on it, I believe that the most rigorous quality standards should be followed to ensure that no failure occurs since if so, people could suffer serious consequences. Quality standards must be improved and authorities must act precisely to ensure that these protocols are met.

TRADUCCIÓN

El cohete lunar más nuevo de la NASA está propulsado no solo por cuatro motores RS-25 que, combinados, liberan 2 millones de libras de empuje, sino por dos impulsores laterales de combustible sólido que queman seis toneladas de propulsor por segundo a temperaturas tan enormes que durante una prueba de fuego reciente en el desierto de Utah, las llamas convirtieron la arena en cristal.

Cuando se lance, el cohete Space Launch System de la NASA, un gigantesco gigante de 322 pies, más alto que la Estatua de la Libertad, sería el cohete más poderoso jamás volado, eclipsando tanto al Saturno V que llevó a los astronautas a la luna como al Falcon Heavy de SpaceX, que ha lanzado satélites comerciales y de seguridad nacional, así como el Tesla Roadster del fundador Elon Musk en un viaje a Marte.

Pero a medida que la NASA avanza hacia el primer vuelo del SLS, poniendo la nave espacial Orion en órbita alrededor de la luna, no son los motores del cohete lo que preocupa a los funcionarios, sino el software que controlará todo lo que hace el cohete, desde establecer su trayectoria hasta abrir válvulas individuales para abrir y cerrar. cerrar.

La potencia informática se ha vuelto tan crítica para los cohetes como la fuerza bruta que los saca de la atmósfera terrestre, especialmente cohetes como el SLS, que en realidad es una amalgama de piezas construidas por una variedad de fabricantes.

Todos esos componentes deben trabajar juntos para que una misión tenga éxito. Pero el Panel Asesor de Seguridad Aeroespacial de la NASA (ASAP) dijo recientemente que estaba preocupado por la forma inconexa en que se estaba desarrollando y probando el complicado sistema.

También fue preocupante para el panel de seguridad que la NASA y sus contratistas parecían no haber "aprovechado las lecciones aprendidas" del vuelo fallido el año pasado de la nave espacial Starliner de Boeing, que sufrió un par de errores de software que le impidieron acoplarse con el International. La Estación Espacial según lo planeado y obligó a los controladores a interrumpir la misión.

Desde entonces, la NASA ha dicho que no hizo un buen trabajo supervisando a Boeing en el programa Starliner y desde entonces ha prometido tener revisiones más rigurosas de su trabajo, especialmente sus pruebas de software.

Las preocupaciones sobre el software SLS son las últimas señales de alerta para un programa que ha luchado por superar los sobrecostos y los reveses. Una gran cantidad de informes de los organismos de control del gobierno a lo largo de los años han pintado un cuadro preocupante de mala gestión.

El informe reprendió a Boeing, el contratista principal, que dijo que "subestimó constantemente el alcance del trabajo a realizar y, por lo tanto, el tamaño y las habilidades de la fuerza laboral requerida".

Quizás no haya mejor ilustración del importante papel que desempeña el software en los vuelos espaciales y de cómo las fallas en la codificación pueden tener graves consecuencias que el vuelo de prueba de Starliner.

Los funcionarios de la NASA a cargo del programa SLS dijeron que confían en que los protocolos de prueba para el cohete SLS y la nave espacial Orion son mucho más sólidos. Para empezar, el programa está configurado de manera diferente. Boeing posee y opera la nave espacial Starliner y la usa para realizar un servicio para la NASA, es decir, llevar a sus astronautas a la estación espacial.

Opinión:

El software ha tomado gran importancia en nuestras vidas y más aún cuando la vida de las personas depende de él, creo que se deben seguir los más rigurosos estándares de calidad para asegurar que no ocurra ningún fallo ya que de ser así, las personas podrían sufrir graves consecuencias. Se deben mejorar los estándares de calidad y las autoridades deben actuar con precisión para garantizar que se cumplan estos protocolos.

# Waymo to launch fully driverless service to the public — a first just in time for the pandemic

*Waymo is launching fully driverless vehicles to the public, a milestone achievement for Silicon Valley’s self-driving car industry that comes during a global pandemic in which efforts to limit person-to-person contact have found a welcoming audience.*

The company, a part of Google parent Alphabet, said Thursday it is opening up its driverless ride-hailing service to riders in the Phoenix metro area, enabling anyone in the region to download its app and hail a ride without a driver in the front seat. It follows an extended public trial for the company’s ride-hailing service in which riders were able to use it for commutes, grocery runs and routine tasks, such as bringing their kids to school. *During that launch period, Waymo said, it gradually expanded its service and the capabilities of its vehicles — the vast majority of which were monitored by human drivers. Waymo spokeswoman Katherine Barna said the company was giving between 1,000 and 2,000 weekly rides before the coronavirus pandemic, 5 to 10 percent of which were fully driverless.*

So far, progress has been slow as companies have delayed their rollouts and extended their timelines, confronted by the challenge of programming cars to respond to the near-infinite stream of scenarios a driver could face. The pandemic threw a further wrench into the companies’ plans.

Waymo has long been seen as the industry leader in the space, trailed by competitors such as ride-hailing services Uber and Lyft, Amazon-acquired Zoox, General Motors’ Cruise and automakers pursuing autonomy, such as Tesla.

But the experiments have not been without incident. In 2018, a self-driving Uber fatally struck a pedestrian crossing a darkly lit street with her bicycle in Tempe, Ariz. The driver monitoring the car was looking at her phone, authorities said.

Waymo relied on a process including a “rigorous review of our safety readiness” before making the decision to launch driverless cars to the public, Barna said. The company informed the state’s transportation department of its testing plans before the announcement, she said.

**Opinion:**

Technological advances are more amazing every day and autonomous cars are becoming a reality, without a doubt they are a great technological advance but as in everything, with great power, comes great responsability (Uncle ben). Before they are released to the public, they must undergo rigorous tests to ensure that they will not put people at risk and that they will respond appropriately to the adversities of the cities.

<https://www.washingtonpost.com/technology/2020/10/08/waymo-driverless-rides/>

TADUCCION

Waymo está lanzando al público vehículos totalmente autónomos, un logro histórico para la industria de los vehículos autónomos de Silicon Valley que se produce durante una pandemia mundial en la que los esfuerzos por limitar el contacto de persona a persona han encontrado una audiencia acogedora.

La compañía, que forma parte de Alphabet, matriz de Google, dijo el jueves que está abriendo su servicio de transporte sin conductor a los pasajeros en el área metropolitana de Phoenix, lo que permite a cualquier persona en la región descargar su aplicación y pedir un viaje sin un conductor en el asiento delantero. . Sigue a una prueba pública extendida para el servicio de transporte compartido de la compañía en el que los pasajeros pudieron usarlo para viajes diarios, compras de comestibles y tareas de rutina, como llevar a sus hijos a la escuela. Durante ese período de lanzamiento, dijo Waymo, expandió gradualmente su servicio y las capacidades de sus vehículos, la gran mayoría de los cuales fueron monitoreados por conductores humanos. La portavoz de Waymo, Katherine Barna, dijo que la compañía ofrecía entre 1.000 y 2.000 viajes semanales antes de la pandemia del coronavirus, de los cuales entre el 5 y el 10 por ciento eran sin conductor.

Hasta ahora, el progreso ha sido lento ya que las empresas han retrasado sus lanzamientos y ampliado sus cronogramas, enfrentando el desafío de programar automóviles para responder a la corriente casi infinita de escenarios que un conductor podría enfrentar. La pandemia arrojó un nuevo giro a los planes de las empresas.

Waymo ha sido visto durante mucho tiempo como el líder de la industria en el espacio, seguido por competidores como los servicios de transporte privado Uber y Lyft, Zoox adquirido por Amazon, Cruise de General Motors y fabricantes de automóviles que buscan la autonomía, como Tesla.

Pero los experimentos no han estado exentos de incidentes. En 2018, un Uber autónomo golpeó fatalmente a un peatón que cruzaba una calle oscuramente iluminada con su bicicleta en Tempe, Arizona. El conductor que monitoreaba el automóvil estaba mirando su teléfono, dijeron las autoridades.

Waymo se basó en un proceso que incluía una “revisión rigurosa de nuestra preparación en materia de seguridad” antes de tomar la decisión de lanzar al público los vehículos sin conductor, dijo Barna. La compañía informó al departamento de transporte del estado de sus planes de prueba antes del anuncio, dijo.

Opinión:

Los avances tecnológicos son cada día más asombrosos y los autos autónomos se están convirtiendo en una realidad, sin duda son un gran avance tecnológico pero como en todo, con gran potencia, viene una gran responsabilidad (Tío ben). Antes de que sean entregados al público, deben someterse a rigurosas pruebas para garantizar que no pondrán a las personas en riesgo y que responderán de manera adecuada a las adversidades de las ciudades.

**International**

In a world as globalized as ours is today, it is important to stay abreast of the latest events worldwide. Don't miss out on the latest events, stay informed with us. We have the latest international news for you. In this section you can find the latest news from around the world.

# U.S. agrees to drop charges against former Mexican defense minister

Weeks after arresting Mexico's former defense minister on drug trafficking charges, the United States has agreed to return Gen. Salvador Cienfuegos Zepeda to Mexico, a retreat from incendiary charges that sent a shock through U.S.-Mexico relations.

The extraordinary decision to release Cienfuegos after a long-term, top-secret U.S. investigation allegedly revealed his ties to Mexico’s criminal underworld is an unexpected twist in one of the highest-profile drug-trafficking cases in recent decades. U.S. Justice Department officials depicted Cienfuegos’s arrest as a window into dramatic institutional corruption in Mexico. Mexican officials have not committed to trying him upon his return.

The decision is sure to be greeted as a triumph in Mexico, where the government considered Cienfuegos’s arrest a violation of sovereignty. But it raises questions about the trade-off between U.S. investigations into Mexican drug trafficking and attempts to maintain a delicate bilateral relationship.

“In recognition of the strong law enforcement partnership between Mexico and the United States, and in the interests of demonstrating our united front against all forms of criminality, the United States Department of Justice has made the decision to seek dismissal of the U.S. criminal charges against former Secretary Cienfuegos, so that he may be investigated and, if appropriate, charged, under Mexican law,” Attorney General William P. Barr and Alejandro Gertz Manero, his Mexican counterpart, said in a news release.

U.S. prosecutors asked to dismiss the case in such a way that it could be filed again, and they asserted, as they have previously, that the evidence against him is “strong.” They requested the judge not formally grant their request until Cienfuegos could be transported to Mexico by U.S. Marshals.

The decision appeared to be an attempt to repair a growing breach in relations over Cienfuegos’s arrest. Mexican President Andrés Manuel López Obrador suggested the arrest might have been made “for political or other reasons” and accused the Drug Enforcement Administration of “meddling.”

López Obrador has relied heavily on the military — a revered institution across much of the country — for a wide range of tasks, including fighting drug trafficking, building hospitals and more. In arresting Cienfuegos, the United States upset a relationship that has been battered and patched up several times during the course of the Trump administration.

Mexican Foreign Minister Marcelo Ebrard told a news conference Tuesday that he had spoken with Barr twice in recent weeks to express Mexico’s “surprise and unhappiness” that it wasn’t notified in advance of the investigation. Ebrard said the deal to investigate Cienfuegos in Mexico did not imply impunity but “respect for Mexico and its armed forces.” He said cooperation on drugs “will be maintained” but added “that can only exist if there is respect for Mexico’s sovereignty.”

The Justice Department has shared evidence with Mexican prosecutors. But there’s a possibility that Cienfuegos will remain free, at least for some time, a symbol to some of the Mexican government’s ability to play hardball with the United States — and win. Ebrard said Cienfuegos would arrive “as a Mexican citizen” not facing any criminal charges.

For decades, the United States relied on extradition to try Mexican drug traffickers in U.S. courtrooms, believing that they would never be held to justice in Mexico. Then last year the Justice Department arrested Genaro García Luna, the former public security secretary, in Miami for allegedly accepting millions in bribes from the Sinaloa cartel. And this year, the department moved against Cienfuegos.

Both indictments were brought by prosecutors in the Eastern District of New York. But U.S. investigators did not inform the Mexican government of the cases until after the arrests, leading to mistrust. Some current and former U.S. officials believed that Cienfuegos’s arrest in particular might not have been worth upsetting the delicate but important relationship between the countries.

It’s not clear that Mexico has done much to probe possible ties between Cienfuegos and drug traffickers. On Oct. 21, López Obrador indicated growing concern in Mexico about the Cienfuegos case. “Show us those operations of complicity if they have the proof,” he said. He said Mexico would open its own investigation only if it received credible evidence of wrongdoing. “We can’t allow someone to be judged only for political or other reasons if there is no proof.”

**Opinion:**

This issue is quite delicate, I consider that the arrest of General Cienfuegos was appropriated by the US government but I understand the response that the Mexican government gives of feeling excluded from the operation, I think that the best thing would be for both countries to collaborate in order to catch the criminals and bring them to justice, regardless of the country they are, I hope that General Cienfuegos carries out an adequate legal process and takes responsibility for the crimes committed and that he does not go unpunished as on previous occasions.

<https://www.washingtonpost.com/world/the_americas/mexico-cienfuegos-drug-charges-dropped/2020/11/17/430bd056-291f-11eb-92b7-6ef17b3fe3b4_story.html>

TRADUCCION

Semanas después de arrestar al exministro de Defensa de México por cargos de tráfico de drogas, Estados Unidos acordó devolver al general Salvador Cienfuegos Zepeda a México, una retirada de los cargos incendiarios que causaron conmoción en las relaciones entre Estados Unidos y México.

La extraordinaria decisión de poner en libertad a Cienfuegos después de que una investigación estadounidense de alto secreto a largo plazo supuestamente reveló sus vínculos con el hampa criminal de México es un giro inesperado en uno de los casos de tráfico de drogas de más alto perfil en las últimas décadas. Los funcionarios del Departamento de Justicia de Estados Unidos describieron el arresto de Cienfuegos como una ventana a la dramática corrupción institucional en México. Los funcionarios mexicanos no se han comprometido a juzgarlo a su regreso.

La decisión seguramente será recibida como un triunfo en México, donde el gobierno consideró el arresto de Cienfuegos como una violación de la soberanía. Pero plantea dudas sobre el equilibrio entre las investigaciones estadounidenses sobre el tráfico de drogas en México y los intentos de mantener una delicada relación bilateral.

“En reconocimiento de la sólida asociación policial entre México y Estados Unidos, y con el interés de demostrar nuestro frente unido contra todas las formas de criminalidad, el Departamento de Justicia de los Estados Unidos ha tomado la decisión de solicitar la desestimación de los cargos penales estadounidenses contra exsecretario Cienfuegos, para que sea investigado y, en su caso, imputado, conforme a la ley mexicana ”, dijeron en un comunicado de prensa el Fiscal General William P. Barr y Alejandro Gertz Manero, su homólogo mexicano.

Los fiscales estadounidenses pidieron que se desestimara el caso de tal manera que pudiera volver a presentarse, y afirmaron, como lo han hecho anteriormente, que las pruebas en su contra son “sólidas”. Solicitaron al juez que no concediera formalmente su solicitud hasta que Cienfuegos pudiera ser transportado a México por los alguaciles estadounidenses.

La decisión pareció ser un intento de reparar una creciente brecha en las relaciones por el arresto de Cienfuegos. El presidente de México, Andrés Manuel López Obrador, sugirió que el arresto podría haberse realizado "por razones políticas o de otro tipo" y acusó a la Administración de Control de Drogas de "entrometerse".

López Obrador ha dependido en gran medida del ejército, una institución venerada en gran parte del país, para una amplia gama de tareas, incluida la lucha contra el tráfico de drogas, la construcción de hospitales y más. Al arrestar a Cienfuegos, Estados Unidos rompió una relación que ha sido maltratada y remendada varias veces durante el curso de la administración Trump.

El canciller mexicano, Marcelo Ebrard, dijo en una conferencia de prensa el martes que había hablado con Barr dos veces en las últimas semanas para expresar la "sorpresa e infelicidad" de México por no haber sido notificado antes de la investigación. Ebrard dijo que el acuerdo para investigar a Cienfuegos en México no implicaba impunidad sino "respeto por México y sus fuerzas armadas". Dijo que la cooperación en materia de drogas "se mantendrá" pero agregó que "eso solo puede existir si hay respeto a la soberanía de México".

El Departamento de Justicia ha compartido pruebas con los fiscales mexicanos. Pero existe la posibilidad de que Cienfuegos permanezca libre, al menos por algún tiempo, un símbolo de la capacidad del gobierno mexicano para jugar duro con Estados Unidos y ganar. Ebrard dijo que Cienfuegos llegaría “como ciudadano mexicano” sin enfrentar cargos criminales.

Durante décadas, Estados Unidos se basó en la extradición para juzgar a los narcotraficantes mexicanos en los tribunales estadounidenses, creyendo que nunca serían llevados ante la justicia en México. Luego, el año pasado, el Departamento de Justicia arrestó a Genaro García Luna, exsecretario de seguridad pública, en Miami por presuntamente aceptar millones en sobornos del cartel de Sinaloa. Y este año, el departamento se movió contra Cienfuegos.

Ambas acusaciones fueron presentadas por fiscales del Distrito Este de Nueva York. Pero los investigadores estadounidenses no informaron al gobierno mexicano de los casos hasta después de los arrestos, lo que generó desconfianza. Algunos funcionarios estadounidenses actuales y anteriores creían que el arresto de Cienfuegos en particular podría no haber valido la pena para alterar la delicada pero importante relación entre los países.

No está claro que México haya hecho mucho para investigar los posibles vínculos entre Cienfuegos y los narcotraficantes. El 21 de octubre, López Obrador manifestó una creciente preocupación en México por el caso de Cienfuegos. “Muéstranos esas operaciones de complicidad si tienen la prueba”, dijo. Dijo que México abriría su propia investigación solo si recibiera evidencia creíble de irregularidades. "No podemos permitir que alguien sea juzgado solo por razones políticas o de otro tipo si no hay pruebas".

# Protests turn to celebrations as Peru’s interim president offers resignation

Facing furious nationwide protests and growing international pressure, interim President Manuel Merino resigned on Sunday, less than a week after he was inaugurated to replace ousted popular president Martín Vizcarra.

The resignation set Peruvians up for their fifth president in five years, as the South American nation faced its worst constitutional crisis since the fall of Alberto Fujimori’s tainted presidency two decades ago.

For millions of Peruvians, particularly the young, Merino had become the face of a corrupt political class that has entrenched itself in Congress and sought to stop Vizcarra’s attempts to end their careers through sweeping changes. The mass protests that forced Merino to step down were less about defending Vizcarra than expressing public outrage at the political forces that had removed him.

In a brief televised speech, Merino said his de facto cabinet would continue while Congress worked to name a new president. But it was unclear who he was talking about; at least 11 ministers, including the heads of the ministries of interior, justice, trade, and energy and mines, announced their resignations, some on Twitter, overnight.

Peru has been in turmoil since the scandal-racked Congress removed Vizcarra on Nov. 9 over unproven claims that he accepted bribes when he was a regional governor. Vizcarra is widely seen here as a reformer; he has denied wrongdoing and has said consistently that he will cooperate fully with prosecutors. On Saturday, a judge ordered him not to leave the country.

Two demonstrators were killed and scores were injured Saturday night as officers in riot gear used tear gas and other means to attempt to quell largely peaceful protests in Lima, the capital, and other cities across the Andean nation

Nobel laureate Mario Vargas Llosa added his voice to the storm of criticism of the Merino administration’s tactics, accusing the police of “absurdly, stupidly, unjustly” attacking protesters. “It’s indispensable that this repression stops, this repression which is against all of Peru because all of Peru is protesting,” he said in a video tweeted by his daughter.

The political chaos has unfolded as Peru struggles against one of the world’s most lethal coronavirus outbreaks. The country has reported more than 934,000 cases and 35,000 deaths from covid-19.

“Merino’s brazen power play was doomed from the start,” said Michael Shifter, president of the Washington-based Inter-American Dialogue. “In the end, the streets forced his ouster. Peruvians, especially the young, wouldn’t tolerate the shenanigans and corruption that resulted in the congressional coup against Vizcarra.”

Like his cabinet, made up largely of aging far-right politicians, Merino had appeared incapable of comprehending the fury of the protesters — many of them millennials or younger in a country where the median age is just 31 — or their chant of “They messed with the wrong generation.”

Merino had vowed to remain in office. But as protests mounted, he relented on Sunday. Before his resignation speech, his whereabouts had been a mystery amid a growing power vacuum.

It was unclear Sunday who would replace him. Next in line would be the new speaker of Congress, Luis Valdez, who took that position from Merino when Merino became president. But there was talk Sunday of the new president being one of the lawmakers who opposed the ouster, including from the small, progressive Purple Party, whose nine members voted as a bloc against removing Vizcarra.

Vizcarra, speaking to journalists outside his Lima home on Sunday, called Merino a “wannabe dictator” and welcomed his departure. “The generation who the traditional politicians have looked down on, it is they who have generated the real change,” he said.

Vizcarra remains popular for his anti-corruption crusading. Polls show that 4 out of 5 Peruvians opposed his ouster. A similar majority favored prosecutors investigating him, but only once he left office. He was due to step down at the end of his term next July.

Vizcarra’s ouster has been widely interpreted as an attempt by a corrupt political class to stop his policy changes that threatened their grip on power — and their ability to monetize that power through kickbacks, influence-peddling and populist legislation that favored shadowy economic interests including illegal mining and the informal taxis and minibuses that help make Peru’s roads so ­lethal.

Laws that Vizcarra passed in the teeth of congressional resistance included banning candidates with convictions from running for office and ending consecutive reelection for members of Congress. He was trying to curb the parliamentary immunity that has allowed 68 of the 130 lawmakers to hang on to their jobs despite being the targets of criminal investigations for ­offenses ranging from asset-laundering to homicide.

“The members of Congress had a short window to save their corrupt interests, including reversing the education reforms,” Maldonado said. “They miscalculated that the pandemic would mean that people would only protest online and not take to the streets. Obviously, they made a mistake.”