

House panel schedules Big Tech CEO hearing for Wednesday



WASHINGTON: A congressional hearing on digital marketplace competition featuring the chief executives of four of the largest American tech companies has been rescheduled for Wednesday, a House subcommittee said.

The CEOs of Facebook, Amazon.com, Alphabet's Google and Apple were to have testified on Monday before the House Antitrust Subcommittee. But the hearing was postponed for the lying in state at the Capitol Building of the late Representative John Lewis, an icon of the civil rights movement. A subcommittee announcement issued on Saturday said the session now would be held on Wednesday and that witnesses and members could appear in person or virtually.

All four tech company CEOs - Jeff Bezos of Amazon, Tim Cook of Apple, Sundar Pichai of Alphabet and Mark Zuckerberg of Facebook - are to appear virtually, the announcement said. The subcommittee of the Democratic-led House Judiciary Committee is investigating whether the companies actively seek to harm and eliminate smaller rivals. "Given the central role these corporations play in the lives of the American people, it is critical that their CEOs are forth-

coming," Judiciary Committee Chairman Jerrold Nadler and David Cecilline, the subcommittee chairman, said in a joint statement. The CEOs are expected to deflect criticism of their use of market power to damage rivals by saying they themselves face competition and by debunking claims that they are so dominant.

HSBC denies Chinese media reports that it 'framed' Huawei: HSBC denied Chinese media reports that it had "framed" Huawei Technologies and played a role in the arrest of the chief financial officer (CFO) of the world's biggest telecoms equipment maker. In a statement posted on the bank's Chinese WeChat messaging service account, the London-headquartered lender said it did not participate in the decision of the US Department of Justice to investigate Huawei.

The HSBC statement comes a day after China's official People's Daily newspaper published a report accusing HSBC of being an accomplice of the United States and lying about Huawei, resulting in the arrest of its CFO Meng Wanzhou. Meng was arrested in December 2018 at Vancouver International Airport on a warrant from the United States. She is accused by US

authorities of bank fraud for misleading HSBC about Huawei's relationship with a company operating in Iran, putting HSBC at risk of fines and penalties for breaking US sanctions on Tehran. "The context of the development of the Huawei incident clearly shows that the US investigation of Huawei was not triggered by HSBC," the bank said in its WeChat post, without directly referring to the People's Daily report. "HSBC has no malice against Huawei, nor has it 'framed' Huawei," it said.

"In response to information requests from the US Department of Justice, HSBC only provided factual information. HSBC has not 'fabricated' evidence or 'concealed' facts, nor will it distort facts or harm any customers for our own benefit." The People's Daily report on Friday alleged HSBC was well aware of Huawei's business in Iran, and had been "setting traps" for the company since 2012.

Other Chinese media, including the China Global Television Network, have made similar allegations against HSBC. Meng is fighting extradition to the United States and has said she is innocent. She has been in house arrest in Vancouver since her detention.

Mumbai banks on 'smart helmets' in fight against COVID-19



MUMBAI: India's worst-hit coronavirus city Mumbai has turned to "smart helmets" to speed up screenings and identify suspected COVID-19 cases, especially in the city's densely-populated slums. The portable thermoscanners — previously deployed in Dubai, Italy and China — enable health workers to record the temperatures of dozens of residents per minute and could emerge as a key weapon in Mumbai's quest to eradicate the virus from the city of 18 million. "Traditional screening methods take a lot of time. You go to a slum with 20,000 people and it takes you three hours to screen 300 people," said Neelu Jain, a medical volunteer affiliated with the non-profit group Bharatiya Jain Sanghatana. "But when you use these helmets, all you have to do is ask people to come out of their homes, face them and you can screen 6,000 people in two-and-a-half hours," she told AFP. The helmets were donated to authorities in Mumbai and the nearby city of Pune, which have both been locked in a months-long battle against the pandemic, with cases across India soaring past one million on Friday. But with just two helmets in use in each city, the push to identify and isolate infected residents will take a long time. The imported helmets — which cost around 600,000 rupees (\$8,045) — are also in high demand in places like Dubai, said Jain, making it very difficult to expand capacity. —Reuters

Scientists identify 37 recently active volcanic structures on Venus

WASHINGTON: Scientists have identified 37 volcanic structures on Venus that appear to be recently active - and probably still are today - painting the picture of a geologically dynamic planet and not a dormant world as long thought. The research focused on ring-like structures called coronae, caused by an upwelling of hot rock from deep within the planet's interior, and provided compelling evidence of widespread recent tectonic and magma activity on Venus's surface, researchers said. Many scientists long had thought Venus, lacking the plate tectonics that gradually reshape Earth's surface, was essentially dormant geologically for the past half billion years. "Our work shows that some of that interior heat is still able to reach the surface even today. Venus is clearly not so geologically dead or dormant as previously thought," said Earth and planetary scientist Anna Gülcher of the Institute of Geophysics in Zurich, lead author of the research published in the journal *Nature Geoscience*. The researchers determined the type of geological features that could exist only in a recently active corona - a telltale trench surrounding the structure. Then they scoured radar images of Venus from NASA's Magellan spacecraft in the 1990s to find coronae that fit the bill. Of 133 coronae examined, 37 appear to have been active in the past 2 million to 3 million years, a blink of the eye in geological time. —Reuters

Mexican cave artifacts show earlier arrival of humans in North America

WASHINGTON: Stone tools unearthed in a cave in central Mexico and other evidence from 42 far-flung archeological sites indicate people arrived in North America - a milestone in human history - earlier than previously known, upwards of 30,000 years ago. Scientists said on Wednesday they had found 1,930 limestone tools, including small flakes and fine blades that may have been used for cutting meat and small points that may have been used as spear tips, indicating human presence at the Chiquihuite Cave in a mountainous region of Mexico's Zacatecas state.

The tools spanned from 31,000 to 12,500 years old, said archaeologist Ciprian Ardelean of Universidad Autónoma de Zacatecas in Mexico, lead author of one of two studies published in the journal *Nature*. The site was occupied periodically for millennia by nomadic hunter-gatherers. In the second study, evidence from 42 sites around North America and the location of a land bridge that connected Siberia to Alaska during the last Ice Age indicated human presence dating to at least a time called the Last Glacial Maximum, when ice sheets blanketed much of the continent, about 26,000 to 19,000 years ago and immediately thereafter. The research also implicated humans in the extinctions of many large Ice Age mammals such as mammoths and camels.

Our species first appeared about 300,000 years ago in Africa, later spreading worldwide. The new findings contradict the conventional view that the first people arrived in the Americas around 13,000 years ago, crossing the land bridge, and were associated with the "Clovis culture," known for distinctive stone tools. The findings suggest low numbers



of people entered the continent earlier than previously understood - some perhaps by boat along a Pacific coastal route rather than crossing the land bridge - and some died out without leaving descendants. Archaeological scientist Lorena Becerra-Valdivia of the University of Oxford in England and the University of New South Wales in Australia said the

continent's populations then expanded significantly beginning around 14,700 years ago. "The peopling of America was a complicated, complex and diverse process," Ardelean said. "These are paradigm-shifting results that shape our understanding of the initial dispersal of modern humans into the Americas," Becerra-Valdivia added. —Reuters

Good vibrations? COVID quiet time soothes Earth's seismic shakes

LONDON: COVID-19 lockdowns worldwide led to the longest and most pronounced reduction in human-linked seismic vibrations ever recorded, sharpening scientists' ability to hear earth's natural signals and detect earthquakes, a study found. Vibrations travel through the earth like waves, creating seismic noise from earthquakes, volcanoes, wind and rivers as well as human actions such as travel and industry.

In the study, published in the journal *Science* and conducted using international seismometer networks, scientists found that human-linked earth vibrations dropped by an average of 50% between March and May this year. "The 2020 seismic noise quiet period is the longest and most prominent global anthropogenic seismic noise reduction on record," they wrote. The work was co-led by the Royal Observatory of Belgium and five other institutions



using data from 268 monitoring stations in 117 countries. Beginning in China in late January, and followed by Europe and the rest of the world in March to April, researchers saw "a wave of quietening" as worldwide lockdown measures to slow the coron-

avirus pandemic took hold. Travel and tourism were all but halted, millions of schools and industries closed, and many people were confined to their homes. The relative quiet allowed scientists to "listen in" in more detail on the earth's natural vibrations, said Stephen Hicks, a seismologist at Imperial College London who co-led the work.

"It has yielded a new window on the natural seismic signals, and could let us see more clearly than ever what differentiates human and natural noise," he said. The study said its findings also showed that seismologists can help establish how long people take to react to the imposition and lifting of lockdown measures. The largest drops in human-induced vibrations were seen in densely populated areas like Singapore and New York City, but drops were also seen in remote areas like Germany's Black Forest and Rundu in Namibia. —Reuters

China launches its first unmanned mission to Mars

WENCHANG: China successfully launched an unmanned probe to Mars on Thursday in its first independent mission to another planet, in a display of its technological prowess and ambition to join an elite club of space-faring nations.

China's largest carrier rocket, the Long March 5 Y-4, blasted off with the probe at 12:41 p.m. (0441 GMT) from Wenchang Space Launch Centre on the southern island of Hainan.

In 2020, Mars is at its closest to Earth, at a distance of about 55 million km (34 million miles), in a window of about a month that opens once every 26 months.

The probe is expected to reach Mars in February where it will try to land in Utopia Planitia, a plain in the northern hemisphere, and deploy a rover to explore for 90 days. If successful, the Tianwen-1, or "Questions to Heaven", the name of a poem written two millennia ago, will make China the first country to orbit, land and deploy a rover in its inaugural mission.

Since 1960, half of all the 50-plus missions to Mars including flybys had failed, due to technical problems. Only a handful attempted to land on the planet.

Challenges multiply for those attempting a landing - from ensuring a precise deceleration of the spacecraft to navigating the planet's sometimes violent atmosphere.

"The mission must necessarily be challenging, and not be following in the footsteps of others completely," Liu Tongjie, mission spokesman, told Reuters after the launch in an interview. "This is an exploration project, so there will be no 100% assurance of success. If the mission is unsuccessful, or if there are problems, we will continue to push ahead, re-establish the project, and re-commit." China previously made a Mars bid in 2011



with Russia, but the Russian spacecraft carrying the probe failed to exit the Earth's orbit and disintegrated

over the Pacific Ocean. Eight spacecraft - American, European and Indian - are currently either orbiting Mars

or on its surface, with other missions underway or planned. The United Arab Emirates launched a \$200 million mission to Mars on Monday, an orbiter that will study the planet's atmosphere. The United States' upcoming 2020 mission costs more than \$2 billion.

Liu declined to give a cost estimate for China's mission, but said expenses have been "very economical" when spread out over the six years since research and development began in 2014.

NEW SINO-U.S. FRICTIONS? The next U.S. mission may be launched as soon as end-July. The probe will deploy a rover called Perseverance, the biggest, heaviest, most advanced vehicle sent to the Red Planet by the National Aeronautics and Space Administration (NASA).

NASA's InSight is currently probing the interior of Mars on a plain called Elysium Planitia. Curiosity, a car-sized rover deployed by NASA, is studying soil and rocks in Gale Crater, searching for the building blocks of life. Asked if Tianwen-1 would present new frictions with the United States, Liu told Reuters the Chinese mission is a scientific exploration project not to compete with anyone but cooperate with each other.

"From our point of view, Mars is large enough for multiple countries to explore and carry out missions," Liu said in an interview, when asked if there was a chance the Chinese rover would meet with Curiosity and InSight. China's probe will carry 13 scientific instruments to observe the planet's atmosphere and surface, searching for signs of water and ice. "Scientists believe there was an ancient ocean in the southern Utopia Planitia. At a place where an ancient ocean and land meet, scientists hope to make a lot of discoveries," Liu said. —Reuters