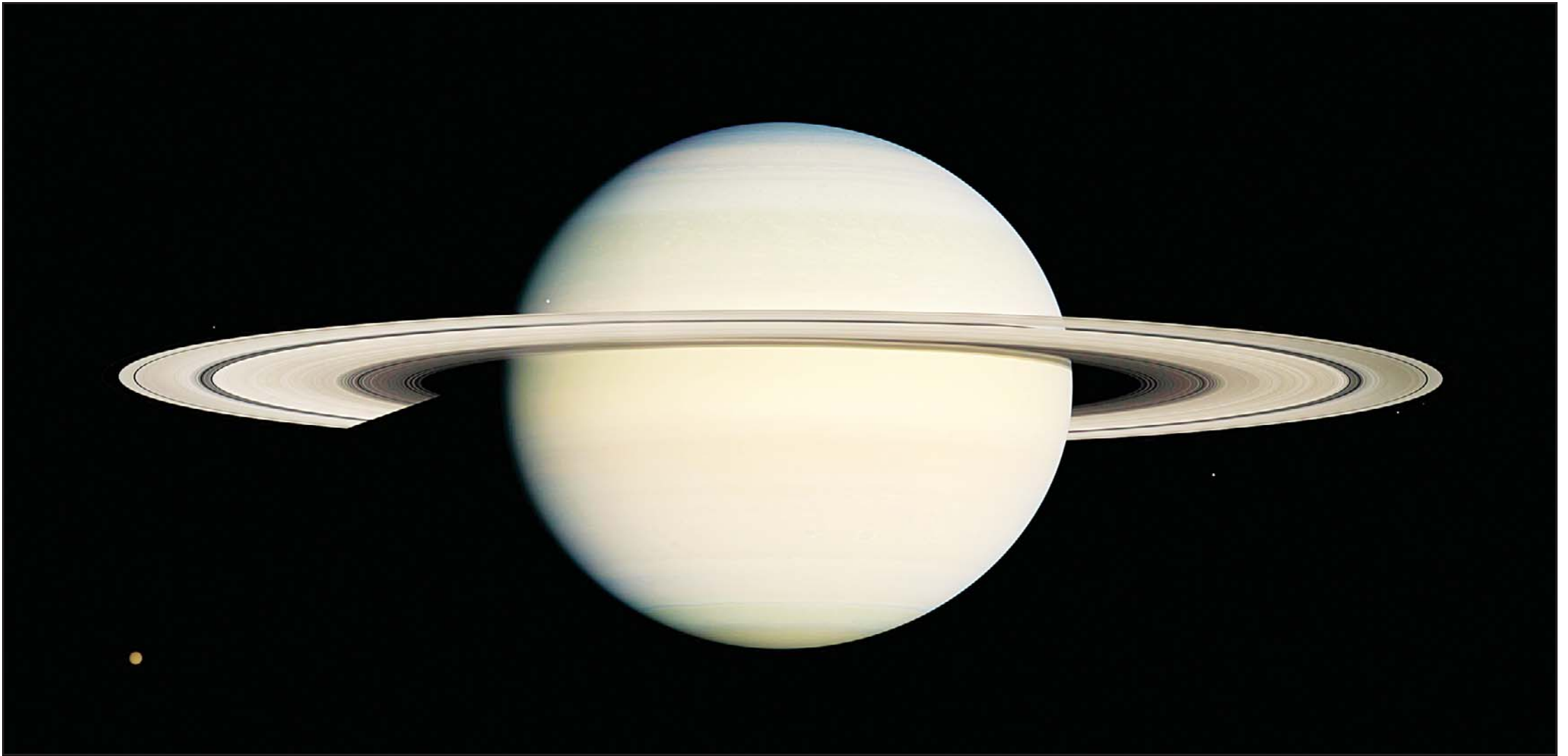


World News Roundup



This July 23, 2008 image made available by NASA shows the planet Saturn, as seen from the Cassini spacecraft. (AP)

Architecture

New 'Spaceship' HQ

'Apple Park' nestled in the Earthly Oasis

CUPERTINO, United States, Sept 13, (AFP): Apple's new "spaceship" headquarters peeked above a nearby hillside as the sun shined gloriously through towering glass walls of the entryway to Steve Jobs Theater.

The smell of freshly turned soil was heavy in the warming air even as the site was inaugurated with the unveiling of a 10th anniversary iPhone at Apple Park in Silicon Valley.

"Apple Park has been built to reflect Apple's values for technology and the environment," chief executive **Tim Cook** said after paying tribute to late Apple co-founder Steve Jobs at the first-ever media event at the new campus Tuesday.

"The park itself was converted from a sea of asphalt to a green space with more than 9,000 trees; designed to be transparent with nature and bring the outside in." Glass walls give the feeling of remaining in nature even after stepping inside.

Plants and trees taking root throughout the grand campus are native to California, and drought-resistant. All the electricity needed to run the campus comes from an on-site solar power system, one of the largest in the world. Light streams down onto a curved stairway made of gold-toned stone leading down to Steve Jobs Theater built into the hill.

"Steve Jobs was an incredibly detail-oriented person, and this was his baby," said Creative Strategies analyst and Silicon Valley veteran **Tim Bajarin**.

"This should be a crown jewel in the sense of design." Apple Park was created with "extraordinary attention to detail and materials," according to Cook.

A visitors center that will open to the public later this year features an augmented reality experience to virtually explore the campus.

About six months ago, workers began boarding the futuristic new campus, fulfilling a vision set out by Jobs, the company's late founder.

The process of moving more than 12,000 people to a new campus that Jobs envisioned as a "center for creativity and collaboration" was expected to continue late into the year.

A theater on the new Apple Park campus was named in honor of Jobs, who died six years ago after a battle with pancreatic cancer.

Vision

"Steve's vision for Apple stretched far beyond his time with us," Cook said in a release earlier this year. "He intended Apple Park to be the home of innovation for generations to come."

The 175-acre (70-hectare) campus with a ring-shaped main building clad in giant panels of curved glass blends workspaces and parkland.

"I was amazed at the landscape," Bajarin said after leaving Apple Park.

"It was staggering how huge the campus is." The ring design is aimed at fostering better collaboration among those working inside.

"It is a unique design; very different than what you think of with a Silicon Valley campus," analyst Bajarin said.

"We are used to campuses where there are multi-story buildings close together – Apple broke with convention."

Campus features include a fitness center, foot paths, research labs and an orchard.

"We have approached the design, engineering and making of our new campus with the same enthusiasm and design principles that characterize our products," Apple chief design officer **Jony Ive** said in a statement.

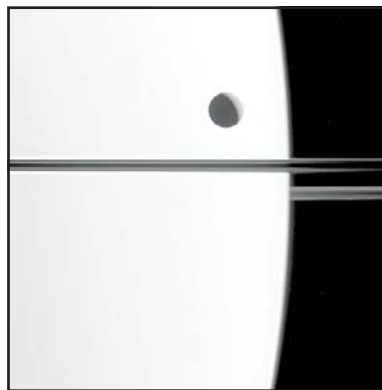
Apple celebrated its 40th anniversary last year. The Silicon Valley legend sprang out of Jobs's garage to reshape modern life with trend-setting gadgets.

Jobs, a tech-savvy marketing genius, and Steve Wozniak, who invented the Apple computer, formed what would become the world's largest corporation with eye-popping annual profits.

The two college dropouts created the company that has changed the way people use computers, listen to music, communicate on the go, and made people at home in a world of "apps" tailored for work, play, education, health and more.

Apple's hit products command a cult-like following, long after the company's humble beginning in Jobs's Cupertino, California garage on April 1, 1976.

The new campus is in Cupertino as well, with the Jobs Theater on a hilltop overlooking meadows and the main building.



This May 21, 2015 image made available by NASA shows Saturn's moon Dione crossing the face of the gas giant, in a phenomenon astronomers call a transit. Transits play an important role in astronomy and can be used to study the orbits of planets and their atmospheres, both in our solar system and in others. (AP)



Kouroubilis

Pruitt

Discovery

Blame game in Greece oil spill: Greek officials traded accusations Wednesday after an oil spill from a sunken tanker spread to the Athens port of Piraeus.

The 45-year-old vessel *Agia Zoni II* sank on Sunday near the island of Salamis while under anchor but the cause is still not known.

"This is a major environmental disaster," said Salamis mayor **Isidora Namou-Papathanassiou**, whose island is suffering the brunt of the damage from the slick.

"Clearly the danger (of pollution) was not estimated correctly," **Nannou-Papathanassiou** told state television ERT. "The currents moved the oil spill."

The Greek-flagged tanker was carrying around 2,500 tonnes of fuel, some of which quickly covered beaches and coves on the southeastern side of the island, opposite Athens and Piraeus, the country's biggest port.

Merchant Marine Minister **Panagiotis Kouroubilis** insisted this week that all necessary action had been taken, and that the ship's hull had been secured against further leakage.

"There is no risk of further seepage. The oil leaked as the ship was sinking. All necessary steps have been taken," **Kouroubilis** told Real FM radio. (AFP)

Firms calculate carbon footprints: Microsoft, Walt Disney Co. and General Motors are among hundreds of companies calculating how much they spend on carbon emissions to show investors they are concerned about global warming, a study said on Tuesday.

More than 700 other businesses around the world plan by 2018 to introduce so-called carbon pricing, said the report by the US-based Center for Climate and Energy Solutions (CZES).

The findings come amid efforts by U.S. President Donald Trump to scale back climate change-related regulations on grounds they are burdensome to the economy.

Putting a monetary value on carbon dioxide emissions helps limit the burning of fossil fuel, which contributes to global warming, and signals to investors that companies are aware of the financial risks posed by global warming, the study said.

Some 500 companies, including 80 in the United States, reported using carbon pricing, it said, drawing on an array of previous research.

Many oil and gas companies such as British energy company BP use an internal, or "shadow," accounting method to track their carbon emissions, it said. (RTRS)

EPA probes Arkema: US environmental regulators are investigating whether the Arkema chemical plant in Texas followed safety rules ahead of explosions last month

Space

3 astronauts reach ISS for 5-month mission

Cassini faces fiery finish

CAPE CANAVERAL, Florida, Sept 13, (AP): After a 20-year voyage, NASA's Cassini spacecraft is poised to dive into Saturn this week to become forever one with the exquisite planet.

There's no turning back: Friday it careens through the atmosphere and burns up like a meteor in the sky over Saturn.

NASA is hoping for scientific dividends up until the end. Every tidbit of data radioed back from Cassini will help astronomers better understand the entire Saturnian system – rings, moons and all.

The only spacecraft ever to orbit Saturn, Cassini spent the past five months exploring the uncharted territory between the gaseous planet and its dazzling rings. It's darted 22 times between that gap, sending back ever more wondrous photos.

On Monday, Cassini flew past jumbo moon Titan one last time for a gravity assist – a final kiss goodbye, as NASA calls it, nudging the spacecraft into a deliberate, no-way-out path.

During its final plunge early Friday morning, Cassini will keep sampling Saturn's atmosphere and beaming back data, until the spacecraft loses control and its antenna no longer points toward Earth. Descending at a scorching 76,000 mph (122,000 kph), Cassini will melt and then vaporize. It should be all over in a minute.

"The mission has been insanely, wildly, beautifully successful, and it's coming to an end," said NASA program scientist **Curt Niebur**. "I find great comfort in the fact that Cassini will continue teaching us up to the very last second."

Telescopes on Earth will watch for Cassini's burnout nearly a billion miles (1.6 billion kilometers) away. But any flashes will be hard to see given the time – close to high noon at Saturn – and Cassini's minuscule size against the solar system's second largest planet.

The plutonium on board will be the last thing to go. The dangerous substance was encased in super-dense

iridium as a safeguard for Cassini's 1997 launch and has been used for electric power to run its instruments. Project officials said once the iridium melts, the plutonium will be dispersed into the atmosphere. Nothing – not even traces of plutonium – should escape Saturn's deep gravity well.

The whole point of this one last exercise – dubbed the Grand Finale – is to prevent the spacecraft from crashing into the moons of Enceladus (eh-NEHL-uh-duhs) or Titan. NASA wants future robotic explorers to find pristine worlds where life might possibly exist, free of Earthly contamination.

It's inevitable that the \$3.9 billion US-European mission is winding down. Cassini's fuel tank is almost empty, and its objectives have been accomplished many times over since its 2004 arrival at Saturn following a seven-year journey.

The leader of Cassini's imaging team, planetary scientist **Carolyn Porco**, already feels the loss.

Successful

"There's another part of me that's just, 'It's time. We did it.' Cassini was so profoundly, scientifically successful," said Porco, a visiting scholar at the University of California, Berkeley. "It's amazing to me even, what we were able to do right up until the end."

Until Cassini, only three spacecraft had ventured into Saturn's neighborhood: NASA's Pioneer 11 in 1979 and Voyager 1 and 2 in the early 1980s. Those were just flybys, though, and offered fleeting glimpses. And so Cassini and its traveling companion, the Huygens (HOY-jens) lander, actually provided the first hard look at Saturn, its rings and moons. They are named for 17th-century astronomers, Italian Giovanni Domenico Cassini and Dutch Christiaan Huygens, who spotted Saturn's first moon, Titan. The current count is 62.

Cassini discovered six moons – some barely a mile or two across – as well as swarms of moonlets that are

still part of Saturn's rings.

All told, Cassini has traveled 4.9 billion miles (7.9 billion kilometers) since launch, orbited Saturn nearly 300 times and collected more than 453,000 pictures and 635 gigabytes of scientific data.

The European Space Agency's Huygens lander – which hitchhiked all the way to Saturn aboard Cassini – still rests on Titan. It parachuted down in 2005, about six months after Cassini arrived at Saturn, and relayed data for more than an hour from the moon's frigid surface.

Still believed intact, Huygens remains the only spacecraft to actually land in one of our outer planetary systems.

Other than Titan's size – about as big as Mercury – little was known about Saturn's biggest and haze-covered moon before Cassini and Huygens showed up. They revealed seas and lakes of methane and ethane at Titan – the result of rainfall – and provided evidence of an underground ocean, quite possibly a brew of water and ammonia.

Over at the little moon Enceladus, Cassini unveiled plumes of water vapor spewing from cracks at the south pole.

Also:

BAIKONUR, Kazakhstan: Two US astronauts and a Russian cosmonaut docked at the International Space Station for a five month mission on Wednesday following a night-time launch from the Baikonur cosmodrome in Kazakhstan.

Russia's Roscosmos space agency said that the Soyuz MS-06 spacecraft "successfully docked" at the ISS at 0255 GMT in a statement on its website.

The Soyuz rocket carrying **Alexander Misurkin** of Roscosmos, NASA first-time flyer **Mark Vande Hei** and his veteran colleague **Joe Acaba** launched as scheduled from Baikonur at 3:17 am (21:17 GMT).

The trio will now join **Paolo Nespoli** of Italy, **Sergey Riazanski** of Russia and **Randy Bresnik** of the US aboard the orbital lab.

caused by flooding from Hurricane Harvey, according to media reports.

The Environmental Protection Agency has asked the company whether it followed risk management plans submitted to the government ahead of the explosions at the plant, which began on August 31, EPA Administrator **Scott Pruitt** told the Washington Examiner.

Unprecedented flooding from Hur-

ricane Harvey, which made landfall in southeast Texas on August 26, cut power and knocked out backup generators at the plant – disabling the refrigeration required to prevent volatile organic peroxides from exploding.

Authorities had already evacuated an area within a 1.5 mile (2.4 kms) radius of the plant. But emergency workers who responded to the explosions have since sued

the plant's operators for exposing them to smoke.

"There is some question about whether the RMP that was in place was actually complied with," Pruitt told Washington Examiner, referring to a risk management plan. The September 7 letter gave Arkema 10 days to answer to EPA queries.

The EPA wants to determine what quantity of chemical substances were stored at the plant and what safety measures had been taken in advance of possible flooding and power loss. (AFP)

'Monster fatberg' clogs sewer:

Sewage workers have found a 130-tonne ball of congealed fat – dubbed a "monster fatberg" – clogging a Victorian-era sewer in London, utility company Thames Water said Tuesday.

Engineers expect it will take up to three-weeks to remove the rock-solid mass of festering food fat mixed with sanitary wipes found in drains under a major road in Whitechapel, east London.

"This fatberg is up there with the biggest we've ever seen. It's a total monster and taking a lot of manpower and machinery to remove as it's set hard," **Matt Rimmer**, Thames Water's head of waste, said in a statement.

"It's basically like trying to break up concrete. It's frustrating as these situations are totally avoidable and caused by fat, oil and grease being washed down sinks and wipes flushed down the loo," he added.

Images show that the sewer totally blocked by the 250-metre (273-yard) long fatberg. (Agencies)



Members of the International Space Station (ISS) expedition 53/54, US astronaut Jozseph Akaba (left), Mark Vande Hel (right), and Russia's cosmonaut Alexander Misurkin (center), attend a sending-off ceremony in the Russian-leased Baikonur cosmodrome in Kazakhstan early on Sept 13. (AFP)