

Astronautical News

2 June 2017

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for home-grown
GPS system**

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**NOAA budget
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prioritizes
current satellite
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over future
ones**

**DARPA picks
design for next-
generation
spaceplane**

Collator

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In cooperation with

The British Interplanetary Society

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Japan launches second satellite for home-grown GPS system Japan on Thursday launched a satellite that provides more accurate geolocation information in combination with GPS, making it possible to improve guidance services for the emergence of self-driving cars and delivery drones. The Japan Aerospace Exploration Agency (JAXA) and Mitsubishi Heavy Industries Ltd. launched an H-IIA rocket carrying the Michibiki No. 2 satellite from Tanegashima Space Centre.



Tests done on game changing nanotube material for thruster parts NASA test tiny nanotube material that is being hailed as a game-changer and could one day be used to fly rockets into space.



Ariane 5 conducts dual payload launch Following the interruption of a "social movement" that effectively shut down the Arianespace base of launch operations, the company launched its third mission in the space of less than a month. Liftoff of the Ariane 5 - carrying ViaSat-2 and Eutelsat 172B - took place at the opening of a one hour window at the Kourou spaceport in French Guiana.



ISS demonstrates possibilities Of low-cost Launch By making launch more affordable, SpaceX hopes to open the door to wider experimentation in space.



Iran to launch sensor-operational satellite in 2018 Iran will launch its first sensor-operational satellite in 2018, a top official of Iran Space Research Centre said on Sunday.



NASA spins asteroid robotics out to industry Despite being cut from the budget request by the Trump administration, robotics developed by NASA will still be of great use to the space industry.



IntelSat, OneWeb merger falls apart Efforts to forge consolidation in the space technology industry suffered a setback with the collapse of a proposed merger between OneWeb and IntelSat, two satellite businesses, due to opposition from bondholders.



Dream Chaser spacecraft passes major milestone Sierra Nevada Corporation (SNC) successfully passed the third integration milestone for the Dream Chaser programme under the NASA Commercial Resupply Services (CRS2) programme, bringing it a major step closer to providing resupply services to the International Space Station.



Companies, lawyers argue against changing Outer Space Treaty Commercial space companies and space law experts recommended against any changes in the Outer Space Treaty at a recent hearing, arguing regulatory issues can be better addressed through laws and regulations. The May 23 hearing of the US Senate Commerce Committee's space subcommittee examined whether the 50-year-old treaty, widely considered the foundation of international space law, should be updated to reflect growing commercial space activities, and the potential for conflicts they may generate.



NOAA budget request prioritizes current satellite programmes over future ones The fiscal year 2018 budget request for the National Oceanic and Atmospheric Administration offers full funding for ongoing major weather satellite programs while deferring work on future efforts.



China launches advanced satellite navigation positioning system China has launched a national satellite navigation and positioning system, the largest in the country Li Weisen, deputy director of the National Administration of Surveying, Mapping and Geoinformation, said that the system consists of 2700 base stations, a national database centre and 30 provincial level database centres. The system, featuring faster speed, higher accuracy and wider coverage, will be compatible with other satellite navigation systems, such as BeiDou.



Australian satellite in orbit The first Australian satellite in 15 years, UNSW-ECO, was successfully deployed from the International Space Station, but the UNSW engineers who built it were unable to establish contact when it made its first pass above Sydney.



Colossal rocket-launching plane rolls toward testing A colossal aircraft capable of launching satellite-toting rockets into space is closer to testing, having been rolled out of a hangar in the desert, its creators said. The project backed by billionaire Microsoft co-founder Paul Allen has been proceeding for about six years and was on track for its first launch demonstration as early as 2019, Stratolaunch Systems Corporation said.

Recent Launch Activities

Japan launches second satellite for home-grown GPS system Japan on Thursday launched a satellite that provides more accurate geolocation information in combination with GPS, making it possible to improve guidance services for the emergence of self-driving cars and delivery drones. The Japan Aerospace Exploration Agency (JAXA) and Mitsubishi Heavy Industries Ltd. launched an H-IIA rocket carrying the Michibiki No. 2 satellite from Tanegashima Space Centre. (2 June 2017)

Ariane 5 conducts dual payload launch Following the interruption of a "social movement" that effectively shut down the Arianespace base of launch operations, the company launched its third mission in the space of less than a month. Liftoff of the Ariane 5 - carrying ViaSat-2 and Eutelsat 172B - took place at the opening of a one hour window at the Kourou spaceport in French Guiana. (2 June 2017)

Russian early warning satellite launched The Russian Defense Ministry said the flight went normally and delivered the early warning satellite to its intended orbit. (26 May 2017)

New Zealand space launch is first from a private site An American company has launched a rocket into space from New Zealand, the first from a private launch facility. Rocket Lab's 17m (56ft) Electron rocket took off from the Mahia Peninsula, in North Island, the firm said. The test flight was the first launch from New Zealand and is a major first step in an emerging market; launching cheap disposable rockets to carry small satellites and other cargo. (25 May 2017)

Development Activities

NASA mission into sun's atmosphere named after astrophysicist The Parker Solar Probe will go closer to the surface of the sun than any previous probe, in order to discover more about the physics of stars and the origins of the solar wind (1 June 2017)

NASA moves up launch of Psyche mission to a metal asteroid Psyche, NASA's Discovery Mission to a unique metal asteroid, has been moved up one year with launch in the summer of 2022, and with a planned arrival at the main belt asteroid in 2026 - four years earlier than the original timeline. (27 May 2017)

Russia to create new Super-Heavy Class rocket after 2025 Russian Deputy Prime Minister Dmitry Rogozin stated that Russian President Vladimir Putin posed the task before Roscosmos to speed up creating a super-heavy class rocket. President Vladimir Putin has asked the Roscosmos state space corporation to speed up the work to build a super-heavy class rocket, this type will appear after 2025 and will make it possible to fly around the moon, (26 May 2017)

NASA-ISRO satellite to be put in space by Indian GSLV rocket in 2021 NISAR is the first big collaboration between NASA and ISRO, certainly on RADAR but just in general as well. This is two frequency RADAR, it is an L-band 24 centimetre RADAR and S-band 13 centimetre. S-band is being built by ISRO and L-band by NASA. It is a major collaboration both in terms of the technical building of the satellite as well as working together across the Pacific between India and US. (24 May 2017)

NASA asks science community for Europa Lander Instruments ideas NASA is asking scientists to consider what would be the best instruments to include on a mission to land on Jupiter's icy moon, Europa. NASA informed the science community to prepare for a planned competition to select science instruments for a potential Europa lander. (19 May 2017)

Testing prepares Space Launch System for liftoff The world's most powerful rocket - NASA's Space Launch System (SLS) - may experience ground wind gusts of up to 70 mph as it sits on the launch pad before and during lift off for future missions. Understanding how environmental factors affect the rocket will help calculate a safe and reliable distance away from the launch tower during launch. (14 May 2017)

Winning plans for CubeSats to the Moon If you could fly a CubeSat to the Moon, what could such a tiny satellite do there? ESA posed this question - and now four proposals will be studied in more detail for possible flight over the coming decade. (14 May 2017)

NASA's Mars plans include a one-year mission to the Moon Before sending a manned mission to Mars in the 2030s, NASA may have a group of astronauts spend a year in orbit around the moon, officials from the space agency's Human Exploration and Operations Mission Directorate revealed earlier this week at an event in Washington DC. (13 May 2017)

ISS Activities

Russia thinks microorganisms may be living outside the space station Officials with Russia's space agency, Rosmoscos, say their scientists have identified plankton and other microorganisms among dust samples collected from the outside of the International Space Station. "The micrometeorites and comet dust that settle on the ISS surface may contain biogenic substance of extra-terrestrial origin in its natural form," Roscosmos officials said in a news release. (29 May 2017)

Astronauts restore Space Station to full health in quick repair spacewalk NASA astronauts sped through an urgent spacewalk May 23 to replace a malfunctioning computer relay box outside the International Space Station. (25 May 2017)

SpaceX Dragon to deliver research payloads to Space Station SpaceX is scheduled to launch its Dragon spacecraft for its eleventh commercial resupply mission to the International Space Station June 1 from NASA's Kennedy Space Center's historic pad 39A. Dragon will lift into orbit atop the Falcon 9 rocket carrying crew supplies, equipment and scientific research to crewmembers living aboard the station. (22 May 2017)

NASA plans emergency spacewalk on International Space Station A pair of astronauts will venture outside the International Space Station on Tuesday for an emergency spacewalk to replace a failed computer, one of two that control major U.S. systems aboard the orbiting outpost, NASA said. The primary device failed on 20 May, leaving the \$100 billion orbiting laboratory to depend on a backup system to route commands to its solar power system, radiators, cooling loops and other equipment. (22 May 2017)

Landmark 200th Space Station spacewalk starts with glitch but ends in 'awesomesauce' Astronauts sped through the landmark 200th spacewalk at the International Space Station, after a glitch in preparations left them looking at a shortened trip outside. (13 May 2017)

Space Tourism

Virgin Galactic Aims to Fly Space Tourists in 2018, CEO Says Richard Branson's Virgin Galactic is on track to begin commercial passenger spaceflights before the end of 2018, the company's chief executive said. (1 May 2017)

China launches advanced satellite navigation positioning system China has launched a national satellite navigation and positioning system, the largest in the country Li Weisen, deputy director of the National Administration of Surveying, Mapping and Geoinformation, said that the system consists of 2700 base stations, a national database centre and 30 provincial level database centres. The system, featuring faster speed, higher accuracy and wider coverage, will be compatible with other satellite navigation systems, such as BeiDou.

(29 May 2017)

Russia aims for 15 remote sensing satellites in orbit by 2020 Russian President Vladimir Putin stated that the remote sensing technologies must be used to boost the Russian defense and security, develop the economy and social sphere, and increase the quality of the state's governance. The number of operating Russian remote sensing satellites orbiting the Earth will reach 15 by 2020, Russian President Vladimir Putin said.

(25 May 2017)

New nano-satellite fleet starts launch in June

An Australian-backed company is to launch the first three of a planned fleet of 200 new nano-satellites in the third week of June. Sky and Space Global (SAS) says the satellites will provide affordable communication services to those who are currently underserved across the equatorial belt.

(18 May 2017)

Novel use of satnav saves precious water

Water conservation is a growing concern globally, and particularly for farmers in the USA, where decades of irrigating huge fields has depleted vital resources of fresh surface water and groundwater. An ESA spin-off that can help to preserve water supplies while guaranteeing crop irrigation is now undergoing final testing.

(15 May 2017)

Iridium deploys first 10 Next satellites Iridium Communications has integrated the first set of its Next satellites into the existing operational constellation to improve communications for shipping. This followed a rigorous testing and validation process of the 10 satellites in orbit.

(11 May 2017)

New look at satellite data questions scale of China's afforestation success

China has invested more resources than any other country in reversing deforestation and planting trees. However, given the large scale of these programmes it has been difficult to quantify their impact on forest cover. A new study shows that much of China's new tree cover consists of sparse, low plantations as opposed to large areas of dense, high tree cover.

(8 May 2017)

Satellites track Antarctic ice loss over decades

Over two decades of observations by five radar satellites show the acceleration of ice loss of 30 glaciers in Western Palmer Land in the southwest Antarctic Peninsula.

(3 May 2017)

Space debris problem getting worse, say scientists

Scientists sounded the alarm over the problems posed to space missions from orbital junk - the accumulating debris from mankind's six-decade exploration of the cosmos. In less than a quarter of a century, the number of orbiting fragments large enough to destroy a spacecraft has more than doubled, a conference in Germany heard.

(19 April 2017)

ESA helps faster cleaner shipping With around 90% of world trade carried by ships, making sure a vessel follows the fastest route has clear economic benefits. By merging measurements from different satellites, ESA is providing key information on ocean currents, which is not only making shipping more efficient but is also helping to reduce carbon dioxide emissions.

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(15 April 2017)

China considering cooperation with Russia on space debris China is contemplating developing cooperation with Russia with respect to space debris, China's National Space Administration Secretary-General Yulong Tian told Sputnik.

(12 April 2017)

China's BeiDou system to expand cooperation to SE Asia China's home-grown BeiDou Navigation Satellite System (BDS) will expand its cooperation to Thailand and Sri Lanka, and then to the entire Southeast Asia, in a bid to go global, the system's operator has said.

(1 April 2017)

Decommissioned Earth Science satellite to remain in orbit for decades A NASA Earth science satellite whose mission is ending this week will remain in orbit through the middle of the century, far longer than the limit set by orbital debris mitigation guidelines.

(30 March 2017)

Satellites shed new light on earthquakes

Satellite radar scans of last year's earthquake in New Zealand are changing the way we are thinking about earthquake hazards in regions where our planet's tectonic plates meet.

(25 March 2017)

ICESat-2 to provide more depth to sea ice forecasts In March, the Arctic sea ice pack is supposed to reach its greatest extent - but this year it's far below average, off by an area about the size of Texas and New Mexico combined. Satellite observations currently reveal how much of the ocean surface is covered by ice, but there is another critical measurement to make.

(23 March 2017)

30 years of deforestation While the world marks the International Day of Forests, satellites continue to monitor the long-term effects of human activities on our planet's precious resources

(22 March 2017)

Copernicus Sentinel-2B delivers its first images

Just over a week after being lofted into orbit, the European Union's Sentinel-2B satellite delivered its first images of Earth, offering a glimpse of the 'colour vision' it will provide for the Copernicus environmental monitoring programme.

(16 March 2017)

NASA studies growing Louisiana deltas The Louisiana coastline is sinking under the Gulf of Mexico at the rate of about one football field of land every hour (about 18 square miles of land lost in a year). But within this sinking region, two river deltas are growing. The Atchafalaya River and its diversion channel, Wax Lake Outlet, are gaining about one football field of new land every 11 and 8 hours, respectively.

(28 February 2017)

Using high-resolution satellites to measure African farm yields

Stanford researchers have developed a new way to estimate crop yields from space, using high-res photos snapped by a new wave of compact satellites. The approach, detailed in the February 13 issue of the journal of the Proceedings of the National Academy of Sciences, could be used to estimate agricultural productivity and test intervention strategies in poor regions of the world.

(25 February 2017)

Turn satellites into sparkling fireworks to burn up space junk

Satellite debris that falls to Earth could be deadly, but pellets made of a heat-generating mixture could help them burn up safely in the atmosphere

(19 February 2017)

100 Earth-shattering remote-sensing applications and uses

This list may change the way you feel about how this industry is changing our world and the way we think.

(13 February 2017)

A whole new Jupiter: First science results from NASA's Juno mission Early science results from NASA's Juno mission to Jupiter portray the largest planet in our solar system as a complex, gigantic, turbulent world, with Earth-sized polar cyclones, plunging storm systems that travel deep into the heart of the gas giant.

(26 May 2017)

Juno spacecraft has close encounter with Jupiter's cloud tops in sixth flyby Juno skimmed the cloud tops of Jupiter at a range of just 3,500 kilometres during its close approach, NASA officials said. The manoeuvre marked the sixth time the Juno probe's orbit has brought it up close with Jupiter.

(21 May 2017)

LIGO could detect gravitational waves' permanent space-time warp When gravitational waves permanently distort space-time, it causes a 'memory signal' which may help LIGO find some of the universe's most exotic objects

(20 May 2017)

Fermi satellite observes billionth gamma ray with LAT instrument On April 12, one of the spacecraft's instruments - the Large Area Telescope (LAT), which was conceived of and assembled at the Department of Energy's SLAC National Accelerator Laboratory - detected its billionth extraterrestrial gamma ray.

(15 May 2017)

Astrophysicists find that planetary harmonies around TRAPPIST-1 save it from destruction When NASA announced its discovery of the TRAPPIST-1 system back in February it caused quite a stir, and with good reason. Three of its seven Earth-sized planets lay in the star's habitable zone, meaning they may harbour suitable conditions for life. But one of the major puzzles from the original research describing the system was that it seemed to be unstable.

(14 May 2017)

First results from Jupiter probe show huge magnetism and storms Observations from the Juno spacecraft are confounding astronomers with revelations about the weather and magnetism of our solar system's biggest planet

(5 May 2017)

Cassini radio signal from Saturn picked up after dive The Cassini spacecraft is sending data back to Earth after diving in between Saturn's rings and cloudtops. The probe executed the daredevil manoeuvre on Wednesday - the first of 22 plunges planned over the next five months - while out of radio contact.

(27 April 2017)

NASA's Cassini, Voyager missions suggest new picture of Sun's interaction with galaxy

New data from NASA's Cassini mission, combined with measurements from the two Voyager spacecraft and NASA's Interstellar Boundary Explorer, or IBEX, suggests that our sun and planets are surrounded by a giant, rounded system of magnetic field from the sun - calling into question the alternate view of the solar magnetic fields trailing behind the sun in the shape of a long comet tail.

(26 April 2017)

China's first cargo spacecraft docks with space lab China's first cargo spacecraft, Tianzhou-1, successfully completed docking with an orbiting space lab, the Beijing Aerospace Control Center said.

(24 April 2017)

Gaia's snapshot of another galaxy While compiling an unprecedented census of one billion stars in our Galaxy, ESA's Gaia mission is also surveying stars beyond our Milky Way. A new image of M33, also known as the Triangulum galaxy, shows tens of thousands of stars detected by Gaia, including a small stellar census in its star-forming region NGC 604.

(24 April 2017)

Cassini probe heads towards Saturn 'grand finale' Cassini has used a gravitational slingshot around Saturn's moon Titan to put it on a path towards destruction. The flyby swept the probe into an orbit that takes it in between the planet's rings and its atmosphere. This gap-run gives the satellite the chance finally to work out the length of a day on Saturn, and to determine the age of its stunning rings. But the manoeuvre means also that it cannot escape a fiery plunge into Saturn's clouds in September.

(22 April 2017)

NASA and partners survey space weather science NASA scientists worked with scientists and engineers from research institutions and industry during a pair of intensive week-long workshops in order to assess the state of science surrounding this type of space weather.

(22 April 2017)

Saturn moon 'able to support life' Saturn's ice-crusted moon Enceladus may now be the single best place to go to look for life beyond Earth. The assessment comes on the heels of new observations at the 500km-wide world made by the Cassini probe. It has flown through and sampled the waters from a subsurface ocean that is being jetted into space. Cassini's chemistry analysis strongly suggests the Enceladean seafloor has hot fluid vents - places that on Earth are known to teem with life.

(14 April 2017)

New Horizons spacecraft enters hibernation

The New Horizons spacecraft has entered hibernation, reported by Johns Hopkins University Applied Physics Laboratory.

(13 April 2017)

Milky Way stars on the move - satellite data used to see into the future The motion of 2 million stars over the course of 5 million years into the future is depicted in this new animation from the European Space Agency. Data from their Gaia Mission was used to create it.

(13 April 2017)

Metal detected in Mars' Atmosphere NASA's MAVEN spacecraft has spotted iron, magnesium and sodium ions ?? electrically charged atoms - high up in the Red Planet's atmosphere over the past two years, a new study reports.

(12 April 2017)

Cassini prepares for last plunge NASA's unmanned Cassini spacecraft is preparing for its final plunge into Saturn later this year, after two decades of helping Earth-bound scientists make new discoveries about the sixth planet from the Sun and its mysterious rings.

(8 April 2017)

NASA observations reshape basic plasma wave physics When NASA's Magnetospheric Multiscale - or MMS - mission was launched, the scientists knew it would answer questions fundamental to the nature of our universe - and MMS hasn't disappointed. A new finding, presented in a paper in Nature Communications, provides observational proof of a 50-year-old theory and reshapes the basic understanding of a type of wave in space.

(6 April 2017)

Prolific Mars Orbiter Completes 50,000 Orbits

The most data-productive spacecraft yet at Mars swept past its 50,000th orbit this week, continuing to compile the most sharp-eyed global coverage ever accomplished by a camera at the Red Planet. In addition, the spacecraft - NASA's Mars Reconnaissance Orbiter (MRO) - recently aided preparations for NASA's next mission to Mars, the InSight lander.

(3 April 2017)

NASA orbiter shows Mars lost 90 per cent of its CO2 to space The MAVEN spacecraft has completed the key part of its mission: to track down how much argon Mars's atmosphere is giving up as a proxy for carbon dioxide loss

(2 April 2017)

ExoMars: Rover scientists to study Mawrth Vallis option Scientists are going to investigate a second site on Mars as a possible destination to send ESA's 2021 rover. Scientists spent two days considering the options and plumped in the end for Mawrth Vallis - an area rich in clay minerals that must have formed during prolonged rock interactions with water. Mawrth joins Oxia Planum, which was selected for study in 2015.

(29 March 2017)

New treasures from Juno: Jupiter dazzles during fourth close approach

Image processor Björn Jónsson shares some of his latest stunning images of Jupiter, created using data from NASA's Juno spacecraft.

(28 March 2017)

NASA's SDO sees a stretch of spotless Sun

For 15 days starting on March 7, 2017, NASA's Solar Dynamics Observatory, or SDO, returned visible light images of a yolk-like spotless sun. This is the longest stretch of spotlessness since the last solar minimum in April 2010, indicating the solar cycle is marching on toward the next minimum, which scientists predict will occur between 2019- 2020.

(26 March 2017)

China's first cargo spacecraft to make three rendezvous with Tiangong-2

China's first cargo spacecraft Tianzhou-1 is expected to dock with the orbiting Tiangong-2 space lab three times after its planned launch in April, sources said. Tianzhou-1 will be sent into space from the Wenchang Space Launch Center in south China's Hainan Province aboard a Long March-7 Y2 carrier rocket.

(9 March 2017)

Orbiter steers clear of Mars moon Phobos

NASA's MAVEN spacecraft performed a previously unscheduled manoeuvre to avoid a collision in the near future with Mars' moon Phobos. The Mars Atmosphere and Volatile Evolution (MAVEN) spacecraft has been orbiting Mars for just over two years, studying the Red Planet's upper atmosphere, ionosphere and interactions with the sun and solar wind.

(4 March 2017)

Increasing the sensitivity of next-generation gravitational wave detectors

Nearly one year ago the LIGO Collaboration announced the detection of gravitational waves, once again confirming Einstein's theory of General Relativity. This important discovery by the Advanced Laser Interferometer Gravitational-Wave Observatory (aLIGO) has spurred great interest in improving these advanced optical detectors.

(27 February 2017)

Kepler's 'second life' - DLR researchers find six planets

In 2009, NASA's Kepler space probe was launched, embarking on a mission to hunt for exoplanets. In 2013, due to the failure of two of its reaction wheels, the mission had to be modified. Mission control managed to change the operational modus and manoeuvre the telescope orbiter into a different position in its orbit around the Sun that enabled the mission to continue.

(24 February 2017)



NOAA budget request prioritizes current satellite programmes over future ones The fiscal year 2018 budget request for the National Oceanic and Atmospheric Administration offers full funding for ongoing major weather satellite programs while deferring work on future efforts.

(2 June 2017)



Iran to launch sensor-operational satellite in 2018 Iran will launch its first sensor-operational satellite in 2018, a top official of Iran Space Research Centre said on Sunday.

(31 May 2017)



Ireland will be launching its first satellite into space The EIRSAT-1 satellite will be launched from the International Space Station and will orbit the earth for 12 months, gathering data on Gamma Ray Bursts and testing innovative space technologies. Researchers and students from University College Dublin and Queen's University in Belfast are leading the project, which is being developed under the European Space Agency's (ESA) 'Fly Your Satellite! 2017' programme.

(30 May 2017)



Australian satellite in orbit The first Australian satellite in 15 years, UNSW-ECO, was successfully deployed from the International Space Station, but the UNSW engineers who built it were unable to establish contact when it made its first pass above Sydney.

(28 May 2017)



Cruz to hold hearing on updating the Outer Space Treaty The chairman of the US Senate's space subcommittee said May 16 that his committee will hold a hearing to hear testimony on possible updates to a 50-year-old treaty that is the cornerstone of international space law.

(25 May 2017)



SA space agency, Airbus launch challenge to find new uses for satellite data The South African National Space Agency (Sansa) and Airbus Defence and Space has launched an open innovation challenge to entrepreneurs, universities and other interested parties seeking homegrown and novel uses for earth observation data obtained by satellites.

(23 May 2017)



Brazil starts satellite trials The Brazilian government has started the testing procedures for its first own satellite, built to boost broadband capacity in the country as well as security of critical defence information.

(21 May 2017)



Could Brexit blow a hole in UK's space ambitions? There are possible effects on the long-established cooperation of the UK and ESA.

(19 May 2017)



US military satellites in crisis as foreign weapons advance and proliferate The U.S. military's satellite communications are facing a crisis, threatened by a growing array of foreign weapons, including cyberattack capabilities, lasers, electronic jammers and anti-satellite weapons, according to a Pentagon study. An executive summary of the report by the Defense Science Board warns that military satellite communications used for global operations "will be contested by a myriad of effects ranging from reversible to destructive."

(18 May 2017)



Washington still has no engine to replace Russian-made RD-180 US aerospace company Blue Origin suffered a setback while testing its Blue Engine 4 (BE-4), a staged-combustion rocket engine designed to replace Russian-made RD-180s, meaning that Washington still does not have an indigenously built version of a key piece of equipment needed to propel its Atlas V launch vehicles or its analogues into space.

(17 May 2017)



Bulgarian satellite to launch on reused SpaceX Falcon 9 rocket in June A communications satellite built for a Bulgarian operator will be the second payload to launch on a previously-flown Falcon 9, that operator announced.

(11 May 2017)



NOAA cuts target future polar weather satellites While the National Oceanic and Atmospheric Administration received full funding for its ongoing weather satellite programmes, the agency is looking at options after a cut to a programme for future polar-orbiting weather satellites.

(10 May 2017)



Thales launches communications satellite for Brazil Thales Alenia Space launched two telecommunications satellites, among them the Geostationary Defence and Strategic Communications Satellite (SGDC), into orbit using an Ariane 5 launcher from the Kourou base in French Guiana on Thursday, May 04.

(9 May 2017)



Air Force's X-37B Space Plane Lands in Florida After Record-Breaking Secret Mission The record-breaking, hush-hush mission of the U.S. Air Force's robotic X-37B space plane is finally over.

(8 May 2017)



California plans for collecting taxes on spaceflight The earthly convention of paying taxes may soon extend into outer space, if California regulators have anything to say about it. The state's Franchise Tax Board is seeking public comment on its proposal for computing taxes on commercial space transportation companies.

(7 May 2017)



NASA examines effects of 2017 spending bill on science As members of Congress took credit for NASA funding levels in a fiscal year 2017 omnibus spending bill, the agency's science leadership is examining how those funds will affect its programmes.

(7 May 2017)



US Air Force lines up space launch vehicle investments Orbital ATK, SpaceX and United Launch Alliance are key contenders for the Air Force's EELV launch service investments.

(5 May 2017)



India's Space Agency saves over US\$2 billion per year for the country The Indian Space Research Organisation (ISRO) is not just building satellites or driving innovation by sharing its Lithium-ion batteries for powering vehicles, the space agency is helping fishermen locate better catchment areas. By doing this, ISRO is helping India save over \$ 2 billion per year, said the ISRO chairman.

(2 May 2017)



Spaceport Prestwick to join forces with Newquay UK bid To win grant funding, Orbital Access will have to show how they will "develop spaceflight capabilities, such as building spaceport infrastructure or adapting launch vehicle technology for use in the UK".

(30 April 2017)



Myanmar plans to set up own satellite system Myanmar is planning to set up a satellite system of its own and to form a steering committee for the purpose, the official Global New Light of Myanmar reported.

(30 April 2017)



MUOS-5 Navy satellite online after engine failure A Navy communications satellite launched from Cape Canaveral Air Force Station last June is now online after a post-launch engine failure, according to builder Lockheed Martin.

(30 April 2017)



China courts international coalition set up to promote space cooperation A coalition was established Sunday in northwest China's Shaanxi Province to promote innovation and cooperation on space exploration under the Belt and Road Initiative. The coalition, set up in the provincial capital of Xi'an, encompasses 48 universities, research institutes and academic organisations at home and abroad.

(28 April 2017)

Opportunities

NASA AFRC Internship - NASA (United States)

previous work. Students are given an opportunity to interact with NASA researchers, engineers, and technicians in design, construction, implementation, verification

NASA History Division Internship - NASA (United States)

As part of NASA 's Office of Communications, student interns will assist the NASA History Division by writing our social media posts; writing features for our Web

NASA Journalism and Multimedia Fall Internship - NASA (United States)

INTRODUCTION: NASA invites students working towards degrees in journalism, communications, media relations, science writing, interactive journalism, or broadcast

NASA LaRC: Crew Systems and Aviation Operations - NASA (United States)

NASA is conducting research in the areas of intelligent flight systems, autonomous systems, aviation operations, flight deck systems, and crew

NASA LaRC: Flight Deck Technologies - NASA (United States)

NASA is conducting research into Increasingly Autonomous Systems (IAS) for the flight deck. This work involves computer programming, machine learning, and human in

Business Student Trainee - NASA Pathways Intern - Goddard Space Flight Center (United States)

Tuesday 4/11/2017 (4 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Data Management Analyst - NASA Open Data Project - Qualified Technical Services, Inc (United States)

Work Location: NASA Ames Research Center (Mountain View, CA) Minimum Citizenship: US Citizen Clearance: US Government JOB DESCRIPTION Interested in improving the

Data Management Analyst/technical Writer, *Nasa* Project Open Data - Sgt Incorporated (United States)

Data Management Analyst/Technical Writer, NASA Project Open Data Information Technology Moffett Field, California Job ID: 20308 I'm Interested! Description

Development of Advanced Optical Diagnostics for NASA Ground Test Facilities - NASA (United States)

of several non-intrusive, advanced optical measurement techniques for use in NASA wind tunnel facilities in support of several strategic thrusts identified

Engineering internship with SOFIA at NASA Armstrong - NASA (United States)

Provide potential experience in leadership, engineering, and astronomy. The student will assist the SOFIA Program in the development and integration of various

Engineering Student Trainee - NASA Pathways Intern - Goddard Space Flight Center (United States)

Tuesday 4/11/2017 (4 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Field Support Technician

Job Description Full details on application. Relocation assistance provided if applicable. Job Introduction Serco is a specialist at delivering vital services on behalf of European, National and Local Governments. Serco Europe employs a large workforce in Belgium, Luxembourg, France, Switzerland, Germany, Holland, Spain, Italy and the UK. Our European operations have ca. 2,000 employees delivering critical services to public institutions throughout Europe. Main Responsibilities For our activities in ESOC, we are currently looking for a Field Support Technician to provide

support to a permanent user community of around 1000 users. The support to be provided will be varied and will include DellHP and Windows operating systems Apple MacBook Pro and OS X IBM Notes Microsoft Office Mobile and smart phones Network and local printer support Local Service Desk support Third party liaison 1st line networking Imaging computers with SCCM Erasing computers and preparing them for disposal. Tasks a...

Full Stack Developer - NASA Open Data Project - Qualified Technical Services, Inc (United States)

Work Location: NASA Ames Research Center (Mountain View, CA) Minimum Citizenship: US Citizen Clearance: US Government REQUIREMENTS Education: BS Discipline(s):

Galileo Ground Segment AIV Engineer

About us HI Iberia, mostly composed of highly skilled engineers, has been providing ICT solutions and outsourcing for our clients for more than 20 years, contributing with flexibility, rapid response to the market and new business models. All this is possible thanks to our speed in detecting new opportunities and adapting our services. Our commitment to innovation and quality is our best recommendation. This is an exciting opportunity for a versatile system engineer to support our customer based near Munich for the Galileo project, the European space flagship programme, to work as a Galileo Ground Segment AIV Engineer Tasks and Responsibilities Experience in AIV engineering Experience in Linux Experience in space projects Experience in requirements verification and testing Definition of test plans and execution of test procedures Anomaly Investigation Provide recommendations for workarounds Support Galileo operations Essential qualifications and experience University degree i...

Maritime Implementation Support Engineer

A vacancy for a Maritime Implementation Support Engineer has arisen within the Airbus Defence and Space in Newport The Maritime Implementation Engineer provides engineering implementation, support, and delivery capabilities to the Maritime element of the Defence Information Infrastructure within ATLAS, from delivery into live service, providing all aspects of continued management of the live infrastructure though to close down. The role of the Maritime Implementation Engineer is to manage the installation design requirements, engineering teams and 3rd parties in conjunction with the role of a senior network engineer. You need to ensure that Manage Installation engineers working within the Maritime environment. Provide the lead role in coordinating resource to ensure engineers are on sitieships to meet delivery and installation schedules. Apply Engineering governance to deliveries from the project design phase to ensure they accurately reflect the live environment, are appropriately str...

Mirror Integration Development for NASA 's Next Generation X-ray Optics (NGXO) Effort - NASA (United States)

black holes, galaxy clusters, and the evolution of matter and energy. But first, NASA needs to develop a mirror technology up to the challenge. The Next Generation

Postdoctoral Fellow Signal Processing

UNSW Canberra Space Research Full timeFixed term 36 months Salary Level A 71,437 95,248 pa 17 super UNSW Canberra Space sits within the School of Engineering and Information Technology and is becoming the trusted Australian goto partner for agile Research and Development, Education and Thought leadership in local and global space transformation. It is achieving this by building the capability to rapidly develop and operate game changing space mission concepts and spacecraft payloads. The portfolio of missions in development is rapidly expanding in application areas such as Intelligence, Surveillance and Reconnaissance, Quantum communication, Atmospheric tracegas measurement and Remote Sensing. This spaceflight capability is underpinned and driven by a programme of academic spacescience research and technology development. The successful applicants will be located at the University of New South Wales, Canberra, at the Australian Defence Force Academy. About the Role The positions will...

Postdoctoral Fellow Space Surveillance

UNSW Canberra Space Research Full timeFixed term 36 months Salary Level A 71,437 95,248 pa 17 super UNSW Canberra Space sits within the School of Engineering and Information Technology and is becoming the trusted Australian goto partner for agile Research and Development, Education and Thought leadership in local and global space transformation. It is achieving this by building the capability to rapidly develop and operate game changing space mission concepts and spacecraft payloads. The portfolio of missions in development is rapidly expanding in application areas such as Intelligence, Surveillance and Reconnaissance, Quantum communication, Atmospheric tracegas measurement and Remote Sensing. This spaceflight capability is underpinned and driven by a programme of academic spacescience research and technology development. The successful applicant will be located at the University of New South Wales, Canberra, at the Australian Defence Force Academy. About the RoleThe positions will c...

Postdoctoral Fellow Space Weather Modelling

UNSW Canberra Space Research Full timeFixed term 36 months Salary Level A 71,437 95,248 pa 17 super UNSW Canberra Space sits within the School of Engineering and Information Technology and is becoming the trusted Australian goto partner for agile Research and Development, Education and Thought leadership in local and global space transformation. It is achieving this by building the capability to rapidly develop and operate game changing space mission concepts and spacecraft payloads. The portfolio of missions in development is rapidly expanding in application areas such as Intelligence, Surveillance and Reconnaissance, Quantum communication, Atmospheric tracegas measurement and Remote Sensing. This spaceflight capability is underpinned and driven by a programme of academic spacescience research and technology development. The successful applicants will be located at the University of New South Wales, Canberra, at the Australian Defence Force Academy. About the Role The position will ...

Postdoctoral Fellow Surrogate Modelling

UNSW Canberra Space Research Full timeFixed term 36 months Salary Level A 71,437 95,248 pa 17 super UNSW Canberra Space sits within the School of Engineering and Information Technology and is becoming the trusted Australian goto partner for agile Research and Development, Education and Thought leadership in local and global space transformation. It is achieving this by building the capability to rapidly develop and

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Prandtl-m: NASA Flight Scholar-Science/Avionics Lead - NASA (United States)

This will include identifying and integrating relevant components and systems to fulfill both aircraft and science requirements. Typical work will include programming

Project Support on X57 Maxwell electric vehicle and other NASA UAV sponsored projects - NASA (United States)

Vision: A global transportation system which allows routine access for all classes of Unmanned Aircraft Systems. 1) Support the Integrated Systems Research Program to

Research Fellowships

One of Australia's leading research teaching universities Vibrant campus life with a strong sense of community inclusion Enjoy a career that makes a difference by collaborating learning from the best At UNSW, we pride ourselves on being a workplace where the best people come to do their best work. UNSW is already at the cutting edge of academia with a strong and growing international reputation. A global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world. The announcement of our largest ever academic recruitment initiative is a key step in augmenting our existing world leading research capabilities. About the role Appointment level will be negotiable at either academic levels A, B C or D prior to appointment The UNSW Scientia Fellowship Program is one of the cornerstones of UNSW's 2025 Strategy. The projects aim is to attract and retain the best and brightest people, with ou...

Senior System Engineering Manager fm

SRON's mission is to bring about breakthroughs in international space research. Therefore the institute develops pioneering technology and advanced space instruments, and uses them to pursue fundamental astrophysical research, Earth science and exoplanetary research. As national expertise institute SRON gives counsel to the Dutch government and coordinates national contributions to international space missions. SRON stimulates the implementation of space science in our society. The expertise group Instrument Science has a vacancy for a Senior System Engineering manager fm Sr. Instrument scientist Vac. nr. 1257 As senior system engineering manager at SRON you will be part of the Instrument Science Group. You have the responsibility to translate the science goals into an instrument that performs in space. You will lead a group of instrument scientists and engineers through all phases of a project lifecycle from concept to manufacturing and test to in-orbit operations. You will be responsi...

Senior/Senior Advanced Quality Engineer (NASA) - KBRwyle (United States)

Title: Senior/Senior Advanced Quality Engineer (NASA) Location: US-US-MD-GREENBELT Job Number: 00336429 KBRwyle seeks an experienced Quality Engineer to provide

Student Trainee (Engineering Technician) - NASA Pathways Intern Employment Program - Armstrong Flight Research Center (United States)

4/12/2017 (5 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Student Trainee (Engineering) - NASA Pathways Intern Employment Program - Armstrong Flight Research Center (United States)

4/12/2017 (5 day(s) away) ## Job Overview Summary About the Agency The NASA Pathways Intern Program provides students with the opportunity to explore NASA

Systems Level Assessment of NASA Advanced Technologies for Space Missions and Aerospace Concepts - NASA (United States)

NASA Langley Research Directorate is developing a range of advanced technologies intended for use in space missions and aeronautics applications. The purpose of this

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