

Astronautical News

6 January 2017

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satellites
raising orbits
after launch
anomaly**

**The biggest
space missions
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**China to
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launchers**

**Mars Odyssey
rebounds from
Safe Mode**

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This year in spaceflight

2017 looks to be an exciting year in spaceflight. Notable activities this year will include the maiden flights of both Boeing CST-100 Starliner and SpaceX Dragon 2 capsules, with a goal to restore capabilities for human spaceflight from the USA, as mandated by NASA's Commercial Crew Development programme. U.S. crewed flights have been halted since the Space Shuttle retirement in 2011. However, the first test flights with astronauts on board the new vessels have been pushed to 2018.



The much-delayed Falcon Heavy rocket is scheduled to launch from the refurbished Launch Complex 39 pad A at Kennedy Space Center in the second quarter. The Chinese small-lift Naga-L and Japanese SS-520, a sounding rocket modified for orbital flight, are also scheduled for their maiden flights, whereas the venerable Russian Soyuz-U is slated for retirement after its 786th mission in February. Two American Delta IV M+ variants will conduct their last flights too.

China will launch its Chang'e 5 sample return mission in the second half of the year from its newly inaugurated Wenchang launch facility on Hainan Island, on top of its new heavy lifting Long March 5. The mission will be the first lunar sample return in over 40 years, since Luna 24 by the USSR in 1976.

After a record-breaking 13-year mission observing Saturn, its rings and moons, the Cassini space probe will be deliberately destroyed by plunging into Saturn's atmosphere, a manoeuvre currently scheduled for 15 September 2017.



Brazilian satellite manufacturer seeks new business as it completes its first satellite Brazil's emerging domestic satellite manufacturer Visiona Tecnologia Espacial is building up a remote sensing business and weighing a small satellite project in order to gain more experience.



Mystery of Russia's doomed Progress spacecraft may delay next ISS crew launch More than a month after a Progress spacecraft bound for the International Space Station plunged to the ground during a botched launch attempt, investigators are still unable to clear its rocket to carry future ISS crews.



Plans to build the world's first private space station Axiom Space, a recently formed company headed by former ISS program manager Mike Suffredini, plans to send an astronaut to the ISS in 2019 and connect a large multipurpose habitat there in 2020.



How 2016 heralded a new kind of race into the final frontier This time, it's not one country against another as much as one enterprise against another, trying to capture the commercial value that space exploration brings along.



China launches telecommunication technology test satellite China has successfully launched a telecommunication technology test satellite from the Xichang Satellite Launch Centre.



China to research heavy launchers China is researching heavy-lift launchers and plans to send a probe to Mars in 2020, according to a new government white paper.



Mars Odyssey rebounds from Safe Mode Mars Odyssey is resuming science observations this week, following a Dec. 26 safe mode incident.



Franco-Chinese satellite to detect gamma-ray bursts The board of French space agency CNES green-lighted its contribution to the Franco-Chinese Space-based Variable Objects Monitor (SVOM) mission to study gamma-ray bursts.



Japan's new small satellite deployer debuts Japan's STAR-C tethered CubeSat duo departed the International Space Station as 2016 drew to a close.



Commercial space player wants clarity on NASA's role An emerging U.S. commercial space sector stands to benefit if the Trump administration can decide sooner rather than later whether NASA is to continue with efforts to transition its human spaceflight pursuits from low Earth orbit to deep space.



China launches new weather satellite Fengyun-4 China launched a new-generation meteorological satellite, the country's first quantitative remote-sensing satellite in high orbit. The satellite was taken into orbit by a Long March-3B carrier rocket, Xinhua news agency reported. Fengyun-4 is capable of monitoring atmosphere continuously, helping to improve the quality of weather forecasts and prevent catastrophic consequences of natural disasters. China has sent 14 meteorological satellites into space, of which seven are still active.



Looking ahead: Space exploration in 2017 An exciting year lies ahead for science and planetary spaceflight - by NASA and by other spacefaring nations.



Chinese satellites raising orbits after launch anomaly Two Chinese remote sensing satellites placed into a low orbit after an apparent problem with their launch vehicle are gradually raising their orbits and may still be able to carry out their missions.

Recent Launch Activities

China launches new weather satellite Fengyun-4 China launched a new-generation meteorological satellite, the country's first quantitative remote-sensing satellite in high orbit. The satellite was taken into orbit by a Long March-3B carrier rocket, Xinhua news agency reported. Fengyun-4 is capable of monitoring atmosphere continuously, helping to improve the quality of weather forecasts and prevent catastrophic consequences of natural disasters. China has sent 14 meteorological satellites into space, of which seven are still active.
(1 January 2017)

China launches SuperView-1 hi-res satellites from Taiyuan China launched two high-resolution remote sensing satellites from the Taiyuan Satellite Launch Centre in North China. The SuperView-1 (01) and (02) satellites were launched by a Long March 2D rocket.
(29 December 2016)

Arianespace Caps Year With Ariane 5 Launch of Star One D1 and JCSat-15 European launch provider Arianespace completed its 11th and final launch of the year Dec. 21, putting satellites for Asia's and South America's largest regional operators on their way to the geostationary arc.
(26 December 2016)

Ariane 5's seventh launch this year An Ariane 5 lifted off to deliver two telecom satellites, Star One-D1 and JCSat-15, into their planned orbits.
(23 December 2016)

Development Activities

Franco-Chinese satellite to detect gamma-ray bursts The board of French space agency CNES green-lighted its contribution to the Franco-Chinese Space-based Variable Objects Monitor (SVOM) mission to study gamma-ray bursts.
(5 January 2017)

NASA selects mission to study black holes, cosmic X-ray mysteries NASA has selected a science mission that will allow astronomers to explore, for the first time, the hidden details of some of the most extreme and exotic astronomical objects, such as stellar and supermassive black holes, neutron stars and pulsars.
(4 January 2017)

Plans to build the world's first private space station Axiom Space, a recently formed company headed by former ISS program manager Mike Suffredini, plans to send an astronaut to the ISS in 2019 and connect a large multipurpose habitat there in 2020.
(4 January 2017)

China announces plans to reach Mars by the end of the decade Wu Yanhua, deputy chief of the National Space Administration, said Beijing aims to launch its first Mars probe around 2020 to carry out orbiting and roving exploration, followed by a second mission that would include collection of surface samples from the Red Planet.
(31 December 2016)

Three Iranian satellites to be launched by 2018 In what appears to be another schedule slippage in the Iranian space programme, the Iranian Minister for Communication and Information Technology, Mahmoud Vaezi, announced that three domestically built satellites will be launched by 2018.
(27 December 2016)

PANIC lander to revolutionise asteroid research A US-German team of researchers has proposed to develop a micro-scale low-cost surface lander for the in situ characterization of an asteroid. The tiny spacecraft, called the Pico Autonomous Near-Earth Asteroid In Situ Characterizer (PANIC), could be a breakthrough for the scientific community, offering simple and cheap solutions for asteroid research.
(23 December 2016)

Two NASA satellites slated for 2017 launch will focus on edge of space Scientists at UC Berkeley's Space Sciences Laboratory are preparing for the 2017 launch of an Earth-orbiting satellite to discover how storms in the atmosphere affect storms in the ionosphere. The NASA-funded satellite, called the Ionospheric Connection Explorer, or ICON, will complement observations from a sister satellite also scheduled for launch in 2017: the Global Observations of the Limb and Disk, or GOLD.
(16 December 2016)

NASA announces first geostationary vegetation, atmospheric carbon mission NASA has selected a first-of-its-kind Earth science mission - GeoCARB - that will extend the nation's lead in measuring key greenhouse gases and vegetation health from space to advance our understanding of Earth's natural exchanges of carbon between the land, atmosphere and ocean.
(11 December 2016)

Launch Failures and Investigations

Mystery of Russia's doomed Progress spacecraft may delay next ISS crew launch More than a month after a Progress spacecraft bound for the International Space Station plunged to the ground during a botched launch attempt, investigators are still unable to clear its rocket to carry future ISS crews.

ISS Activities

Japan's new small satellite deployer debuts Japan's STAR-C tethered CubeSat duo departed the International Space Station as 2016 drew to a close.
(4 January 2017)

SpaceX mission delay could cost NASA hundreds of millions of dollars It looked like Boeing and SpaceX would give NASA what it paid for: a means of putting American astronauts back into space, under our own power, by late 2017, or early 2018 at the latest. In succeeding, they'd save NASA from the necessity of paying Roscosmos another \$490 million (or more, given the steep price increase of the last contract) to continue ferrying astronauts to space. This aim may have slipped.
(27 December 2016)

Space Network upgrade to double data rates on ISS The Space Network, the wireless communication system connecting astronauts inside the International Space Station to their colleagues on the ground, is getting an upgrade. The boost will double data rates.
(16 December 2016)

NASA Communications Network to Double Space Station Data Rates Life aboard the International Space Station depends upon massive amounts of data, used for everything from commanding the station to providing real-time high-definition video and data on hundreds of science and technology experiments, to giving live TV interviews with astronauts.
(14 December 2016)

SpaceX delays first crewed Dragon flights SpaceX says the demonstration flight to the International Space Station with two crewmembers has been delayed to give engineers more time to complete their investigation into a Sept. 1 pad explosion.
(13 December 2016)

Space Tourism

Weightless tourism just four years away Out-of-this-world experiences will be possible, according to the plans of China's newly established commercial space company, which expects to start providing high-atmosphere and space journeys for people with enough cash as early as 2020.
(13 November 2016)

China to offer global satellite navigation service by 2020 China plans to form a BeiDou network consisting of 35 satellites for global navigation services by 2020, said a white paper released by the State Council Information Office. The country plans to start providing basic services to countries along the Silk Road Economic Belt and 21st-century Maritime Silk Road in 2018, said the document titled "China's Space Activities in 2016." (2 January 2017)

NASA releases new Greenland glacier data NASA's Oceans Melting Greenland (OMG) mission has released preliminary data on the heights of Greenland coastal glaciers from its first airborne campaign in March 2016. The new data show the dramatic increase in coverage that the mission provides to scientists and other interested users. Finalized data on glacier surface heights, accurate within three feet (one meter) or less vertically, will be available by Feb. 1, 2017. (27 December 2016)

Preparing for air traffic control via satellite ESA recently completed its first flight trials using satellites to help bring Europe closer to its goal of modernising air traffic control. (21 December 2016)

Galileo begins serving the globe Europe's own Galileo satellite navigation system has begun operating, with the satellites in space delivering positioning, navigation and timing information to users around the globe. (17 December 2016)

Lockheed Martin and USAF move ahead with GPS backup ground system upgrade The U.S. Air Force approved Lockheed Martin's design to upgrade the current GPS satellite ground control system with new capabilities that will enable it to operate more powerful and accurate GPS III satellites. (15 December 2016)

Europe's own satnav, Galileo, due to go live Seventeen years and more than 10 billion euros (\$11 billion) later, Europe's Galileo satnav system is set to go live Thursday, promising to outperform US and Russian rivals while boosting regional self-reliance. (14 December 2016)

High-precision system for real-time navigation data of GLONASS ready for service A global high-precision system for obtaining the real-time navigation data has passed state tests and is ready to be put into operation as part of the GLONASS navigation system, Russia's Roscosmos state space corporation said in a statement. (26 November 2016)

ESA expands space weather services A major expansion in the space weather information and services provided by ESA will help satellites in space and networks like power grids on Earth to cope with solar eruptions. Scientists, engineers and researchers across Europe are working with ESA to develop a space weather warning system as part of the Agency's Space Situational Awareness programme. (23 November 2016)

Optical clock technology tested in space for first time For the first time, an optical clock has traveled to space, surviving harsh rocket launch conditions and successfully operating under the microgravity that would be experienced on a satellite. This demonstration brings optical clock technology much closer to implementation in space, where it could eventually allow GPS-based navigation with centimeter-level location precision. (22 November 2016)

Russian space agency may launch up to 4 Glonass navigation satellites in 2017 Russia's Roscosmos space agency may launch up to four Glonass navigation satellites in 2017, Deputy Director General for Automatic Space Complexes Mikhail Khailov said. According to him, the launches will be carried out if operating satellites are out of order. (12 November 2016)

Italy on the move Scientists are analysing Sentinel-1 radar images from before and after the 30 October earthquake that struck central Italy to reveal just how much the ground has shifted. (3 November 2016)

Indian government unveils satellite surveillance to curb illegal mining The mining surveillance system (MSS), a pan-India surveillance network using latest satellite technology, to check illegal mining. (1 November 2016)

The future of radar - scientific benefits and potential of TerraSAR-X and TanDEM-X The German satellite duo TerraSAR-X and TanDEM-X have consistently delivered one-of-a-kind Earth observation data since 2007 and 2010, hence shaping the international research landscape. Now, scientific users from across the globe have gathered for the TerraSAR-X and TanDEM-X Science Meeting at the German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt; DLR) in Oberpfaffenhofen, where they will discuss the results obtained from the data and define requirements for future remote sensing technology. (19 October 2016)

Sky and Space Global, GomSpace partner on nano-satellite assembly Sky and Space Global is partnering with Denmark's GomSpace to assemble its three initial nano-satellites and get them ready for launch in the first half of next year. (18 October 2016)

Smallsat Constellations Seen Adding Debris Risk As the number of smallsat constellations grows, international satellite tracking bodies see increased risk of space debris problems unless mitigations measures are adopted. (8 October 2016)

US, China will meet this year to talk space debris A senior U.S. State Department official said China and the United States plan to hold a second set of talks later this year to discuss how their militaries operate in space. (1 October 2016)

Do not put all your ships in one satellite network It is a risky business putting all future satellite communications in one basket – thankfully not many shipowners and managers do. Incidents on one US rocket launch pad and an issue with a key high throughput satellite highlight the problems that constellation operators face. It also demonstrates the risks ship operators face with choosing providers of satellite communications. (30 September 2016)

Lockheed gets \$395 million GPS III Space Vehicle contract modification Lockheed Martin Space Systems has been awarded a \$395 million U.S. Air Force contract modification for work on the GPS III Space Vehicle programme. The deal covers space vehicles 9 and 10. Work will be performed in Colorado. The expected completion date is August 2022. (27 September 2016)

Tracking the world's boats by satellite to catch illegal fishing from space Global Fishing Watch, a tool launched publicly on September 15, maps out broadcast data that tracks ships using satellites. The tool can track the path of ships over time, and identify suspicious patterns that indicate either overfishing or illegal fishing. (24 September 2016)

China researches high resolution imaging from high orbit Chinese researchers are confident of making technological breakthroughs over the next four years in developing high resolution imaging that can see car-sized objects on the earth from high orbit. (6 September 2016)

China hi-res SAR imaging satellite sends back pictures China published the first pictures transmitted back to earth from Gaofen-3, the country's first C-band high-resolution Synthetic Aperture Radar (SAR) satellite with a resolution of one meter. (3 September 2016)

Mars Odyssey rebounds from Safe Mode Mars Odyssey is resuming science observations this week, following a Dec. 26 safe mode incident. (5 January 2017)

Odyssey recovering from precautionary pause in activity NASA's Mars Odyssey orbiter, which has been in service at Mars since October 2001, put itself into safe mode - a protective standby status - on Dec. 26, while remaining in communication with Earth. The Odyssey project team has diagnosed the cause - an uncertainty aboard the spacecraft about its orientation with regard to Earth and the sun - and is restoring the orbiter to full operations. (2 January 2017)

Looking ahead: Space exploration in 2017 An exciting year lies ahead for science and planetary spaceflight - by NASA and by other spacefaring nations. (1 January 2017)

Russia plans early February Progress return to flight Russia has tentatively scheduled the next Progress launch for early February, pending the outcome of an ongoing investigation. (31 December 2016)

Researchers dial in to 'thermostat' in Earth's upper atmosphere Scientists have known that solar flares and coronal mass ejections (CMEs) - which release electrically charged plasma from the sun - can damage satellites, cause power outages on Earth and disrupt GPS service. Now it has been determined that when such powerful CMEs come off the sun and speed toward Earth, they create shock waves much like supersonic aircraft create sonic booms. While the shock waves from CMEs pour energy into Earth's upper atmosphere, puffing it up and heating it, they also cause the formation of the trace chemical nitric oxide, which then rapidly cools and shrinks it. (19 December 2016)

Cassini Probe Will Have Busy Final Year at Titan Saturn's moon Titan is being used by scientists to better understand the Earth's atmosphere. One day, it could give scientist a clue about the likelihood of non-Earthlike lifeforms evolving in the universe. (6 December 2016)

ESA's new Mars orbiter prepares for first science The ExoMars orbiter is preparing to make its first scientific observations at Mars during two orbits of the planet. The Trace Gas Orbiter, or TGO, a joint endeavour between ESA and Roscosmos, arrived at Mars on 19 October. It entered orbit, as planned, on a highly elliptical path that takes it from between 230 and 310 km above the surface to around 98 000 km every 4.2 days. (22 November 2016)

The Universe has ten times more galaxies than scientists thought More than a trillion galaxies are lurking in the depths of space, a new census of galaxies in the observable universe has found ?? 10 times more galaxies than were previously thought to exist. (31 October 2016)

ExoMars mission continues to thrive despite loss of lander Despite the apparent loss of the Schiaparelli lander, the other half of the ExoMars 2016 mission, the Trace Gas Orbiter (TGO), has successfully entered the Red Planet's orbit and will continue to function as expected, officials from the European Space Agency (ESA) have confirmed. (28 October 2016)

Tracking waves from sunspots gives new solar insight While it often seems unvarying from our viewpoint on Earth, the sun is constantly changing. Material courses through not only the star itself, but throughout its expansive atmosphere. Understanding the dance of this charged gas is a key part of better understanding our Sun. (26 October 2016)

Going out in a blaze of glory: Cassini's Grand Finale With the conclusion of the international Cassini mission set for 15 September 2017, the spacecraft is poised to soon begin a thrilling two-part endgame. Cassini enters the first part of this denouement on 30 November 2016, when the spacecraft begins a series of 20 passes just beyond the outer edge of the main rings. (23 October 2016)

Schiaparelli Mars probe's parachute 'jettisoned too early' ESA's Schiaparelli lander did not behave as expected as it headed down to the surface of Mars. Telemetry data recovered from the probe during its descent indicates that its parachute was jettisoned too early. The rockets it was supposed to use to bring itself to a standstill just above the ground also appeared to fire for too short a time. The European Space Agency has not yet conceded that the lander crashed but the mood is not positive. (20 October 2016)

Giant telescope in China joins international hunt for extraterrestrial life China's newest radio telescope, the largest in the world, will work with the privately-funded Breakthrough Initiatives organization to hunt for signs of intelligent life beyond Earth. (16 October 2016)

MinXSS CubeSat brings new information to study of solar flares Along with the visible light and warmth constantly emitted by our sun comes a whole spectrum of X-ray and ultraviolet radiation that streams toward Earth. A new CubeSat - a miniature satellite that provides a low-cost platform for missions - is now in space observing a particular class of X-ray light that has rarely been studied. (12 October 2016)

Schiaparelli readied for Mars landing The commands that will govern the Schiaparelli lander's descent and touchdown on Mars were uploaded to ESA's ExoMars spacecraft, enroute to the Red Planet. (9 October 2016)

Cassini data reveal subsurface ocean on Saturn's moon Dione Subsurface oceans are all the rage. Titan and Enceladus have one. Europa and Pluto probably have one. Ceres might have one. Now, Saturn's moon Dione is getting in on the action. In a new study in the journal *Geophysical Research Letters*, scientists argue gravity data collected by Cassini reveal the presence of an underground ocean. (7 October 2016)

More evidence for an ocean inside Pluto A simulation of Sputnik Planum's formation supports the idea of a deep, salty ocean. (3 October 2016)

Mission complete: Rosetta's journey ends in daring descent to comet ESA's historic Rosetta mission concluded as planned, with the controlled impact onto the comet it had been investigating for more than two years. (30 September 2016)

Chandra detects low-energy X-rays from Pluto NASA's Chandra X-ray Observatory has detected low-energy X-rays coming from Pluto. (28 September 2016)

THEMIS sees Auroras move to the rhythm of Earth's magnetic field The majestic auroras have captivated humans for thousands of years, but their nature - the fact that the lights are electromagnetic and respond to solar activity - was only realized in the last 150 years. Thanks to coordinated multi-satellite observations and a worldwide network of magnetic sensors and cameras, close study of auroras has become possible over recent decades. (27 September 2016)

Europa moon 'spewing water jets' Further evidence has been obtained to show that Jupiter's icy moon Europa throws jets of water out into space. Scientists first reported the behaviour in 2013 using the Hubble telescope, but have now made a follow-up sighting. It is significant because Europa, with its huge subsurface ocean of liquid water, is one of the most likely places to find microbial life beyond Earth. (27 September 2016)

New Horizons discovery raises solar wind riddle around Pluto The spacecraft's observations of the dwarf planet's atmosphere have raised questions over existing models of the solar wind (15 September 2016)

Gaia space telescope plots a billion stars Astronomers working on ESA's Gaia space telescope have released a first tranche of data recording the position and brightness of over a billion stars. And for some two million of these objects, their distance and sideways motion across the heavens has also been accurately plotted. (14 September 2016)

DLR fire detection satellite BIROS successfully releases BEESAT-4 picosatellite into space The BIROS (Bi-Spectral Infrared Optical System) fire detection satellite developed and built by DLR released BEESAT-4 (Berlin Educational and Experimental Picosatellite) into space 515 kilometres above the Norwegian Svalbard archipelago. (10 September 2016)

Rosetta's descent towards region of active pits Squeezing out unique scientific observations until the very end, Rosetta's thrilling mission will culminate with a descent on 30 September towards a region of active pits on the comet's 'head'. (10 September 2016)

Dawn starts manoeuvre to stretch astrobiological mission NASA's nine-year-old Dawn mission spacecraft began a spiraling, five-week climb above the dwarf planet Ceres on Sept. 2, a maneuver intended to conserve hydrazine fuel and allow for extended science observations at one of the Solar System's most intriguing astrobiological prospects. (8 September 2016)

Dawn spacecraft at Ceres: Craters, cracks, and cryovolcanos Six studies highlight new and unexpected insights into Ceres, a dwarf planet and the largest object in the asteroid belt (between Mars and Jupiter). The results, derived from data from the Dawn spacecraft in orbit around Ceres, reveal that it has craters, cracks, cryovolcanos and other markers of geological processes. Together, these studies provide a much-improved understanding of Ceres, a world (5 September 2016)



Commercial space player wants clarity on NASA's role An emerging U.S. commercial space sector stands to benefit if the Trump administration can decide sooner rather than later whether NASA is to continue with efforts to transition its human spaceflight pursuits from low Earth orbit to deep space.

(3 January 2017)



Russia to double number of space launches in 2017 Director-General Igor Komarov said that Russia's state space corporation Roscosmos plans to launch twice as many rockets into space in 2017 as in the outgoing year. Russia's state space corporation Roscosmos plans to launch twice as many rockets into space in 2017 as in the outgoing year, its Director-General said.

(2 January 2017)



Brazilian satellite manufacturer seeks new business as it completes its first satellite Brazil's emerging domestic satellite manufacturer Visiona Tecnologia Espacial is building up a remote sensing business and weighing a small satellite project in order to gain more experience.

(1 January 2017)



exactEarth to study Small Vessel Tracking exactEarth has been awarded a 1.1 million pound grant from the UK Space Agency (UKSA) under its 'International Partnerships Programme' (IPP). The IPP funding will support the operational deployment of exactEarth's Satellite AIS-based small vessel tracking technology "exactTrax" to improve safety of life at sea (SOLAS) for South Africa's small boat owners and operators.

(29 December 2016)



ISRO to launch three rovers to the Moon on a single rocket in 2017 For the first time in the history of space exploration, the Indian Space Research Organisation will launch three rovers to the Moon placed on a single rocket. The three rovers, one of which is India's first private mission to the moon by Team Indus, will be sent into space using ISRO's Polar Satellite Launch Vehicle-XI (PSLV-XI). The other two rovers will be from Japan.

(28 December 2016)



China outlines its space exploration ambitions China released a new white paper on its policy and activities in space, outlining ambitious deep space exploration, human spaceflight and space science projects as major priorities for the years up to 2020 and beyond.

(28 December 2016)



Russia prioritizing space exploration with maiden launches, new projects Russia is planning to orbit 44 satellites by 2025. It will increase the constellation of the Russian spacecraft to 73 in 2025. Roscosmos intends to develop a new medium-class carrier rocket, Phoenix before 2025. Financing of its development is scheduled to begin in 2018. Cargo capacity of the carrier rocket will reach up to 15 metric tons. Also, Russia plans to launch the development of a super-heavy carrier rocket. The new carrier rocket will allow Russia to launch a manned spaceflight to explore deep space.

(21 December 2016)



India Inc joins hands to bid for moon mission An Indian aerospace start-ups's plans to send a mission to moon as part of the Google's Lunar XPRIZE challenge has received a major boost in funding from local corporate houses and entrepreneurs. A Bengaluru-based start-up has found the surprise backing of India's leading corporate houses and entrepreneurs to fulfill its dream of sending a rover to the moon.

(11 December 2016)



UAE launches national space policy The UAE Space Agency issued the Arab world's first national space policy - the first step to formulating laws for the industry.

"The policy is just like a torch guiding us to where we have to go," said Dr Mohammed Al Ahbabi, the agency's director general.

(10 December 2016)



UAE to facilitate sending tourists to space in future The UAE is trying to create an environment in the space sector to facilitate sending tourists to space in future, a senior official told journalists.

(8 December 2016)



Chinese space exploration plans unveiled The Chinese Academy of Sciences' National Space Science Center has officially unveiled five space exploration plans to be accomplished during the 13th Five Year Plan period (2016- 20).

(7 December 2016)



Indian X Prize team secures launch contract with ISRO TeamIndus, an Indian team competing in the Google Lunar X Prize, announced that it has a launch contract for its lunar lander mission with the Indian Space Research Organisation (ISRO).

(4 December 2016)



UK commits to European collaboration on science and exploration, satellite technology and services UK Space Agency allocates more than £1.4 billion over the next five years to European Space Agency programmes at the Council of Ministers in Lucerne, Switzerland.

(3 December 2016)



Russia to launch fewer spacecraft in 2016 than US, China for first time The United States and China are on course to surpass Russia in the number of space launches for the first time this year, Roscosmos said. "This year we will for the first time have fewer launches than the United States and China," First Deputy Director General Alexander Ivanov said.

(2 December 2016)



DARPA creating US industry government group for safe operation of space robotics Recent technological advances have made the longstanding dream of on-orbit robotic servicing of satellites a near-term possibility. The potential advantages of that unprecedented capability are enormous. Instead of designing their satellites to accommodate the harsh reality that, once launched, their investments could never be repaired or upgraded, satellite owners could use robotic vehicles.

(2 December 2016)



Brazil to pursue satellite projects: minister Ambitious projects such as satellites that could bring the internet to the remote Amazon and construction of Brazil's first nuclear submarine will proceed despite a deep economic downturn, the defense minister told AFP. Raul Jungmann said he is in France to take delivery of the first of three communications and defense satellites built by France's Thales.

(30 November 2016)



Russian space sector overcomes failures The Russian space industry has overcome a series of failures and made a considerable breakthrough in space technology, Deputy Prime Minister Dmitry Rogozin said. One of the key projects in the Russian space industry is the construction of a super-heavy class rocket, which will make it possible to create a manned lunar base, the Russian deputy prime minister added.

(30 November 2016)



Belgium to get interfederal space agency The federal council of ministers has approved a new Interfederal Space Agency of Belgium (Isab), which will unite all federal funding and staff concerning space activities. All three regions will be involved in the federal agency, which the government hopes will make decision-making processes more flexible and improve co-operation.

(30 November 2016)



ISRO is seeking scientific proposals for Mars Orbiter Mission-2 to expand inter-planetary research To expand inter-planetary research, the Indian Space Research Organisation is seeking scientific proposals for Mars Orbiter Mission-2, the government said. In a written response to a question, Union Minister of State in the Prime Minister's Office that looks after the Department of Space, said the configuration, objectives and scientific experiments of MoM- 2 is yet to be formulated.

(27 November 2016)



New NZ Regional Research Institute announced Science and Innovation Minister Steven Joyce announced that the Centre for Space Science Technology (CSST) has been selected to become New Zealand's second Regional Research Institute.

(22 November 2016)



Commercial space industry seeks regulatory reforms in the Trump administration The commercial space industry hopes the administration of President-elect Donald Trump pursues regulatory reforms and continues existing efforts to support its growth.

(21 November 2016)



Putin calls on Roscosmos to take part in more commercial projects Russia must retain and strengthen its positions in the space sector, including through more active participation in commercial projects, Russian President Vladimir Putin said on Tuesday at a government meeting dedicated to the strategy of development of Russia's state space corporation Roscosmos till the year 2030.

(21 November 2016)

Opportunities

NASA Earth Science Social Video Producer [Fellowship] - Universities Space Research Association (United States)

producers, science writers, data visualizers, animators, and social media professionals at NASA 's Goddard Space Flight Center in Greenbelt, Maryland. Goddard is home

NASA Engineering and Logistics Business Development Director - PAE, Inc (United States)

****Supporting the Most Exciting and Meaningful Missions in the World**** NASA Engineering and Logistics Business Development Director NASA Engineering and Logistics

Application Developer Ntts - NASA - QTS (United States)

Work Location: NASA Ames Research Center (Mountain View, CA) Minimum Citizenship: US Citizen or Permanent Resident Status Clearance : This position requires

Astrophysics Program Scientists at NASA Headquarters - Astrophysics Division, NASA Headquarters (United States)

NASA seeks one or more visiting Ph.D.-level scientists to serve as Program Scientists in the Astrophysics Division at NASA Headquarters in Washington, DC. With a

Branch Customer Services Associate/ NASA HQ - NASA Federal Credit Union (United States)

largest credit unions in the region and top performing in the nation, NASA Federal Credit Union members enjoy banking with an organization that's well established,

Career Opportunities with NASA NASA Independent Verification and Validation (IV&V) Program - West - SAIC (United States)

Career Opportunities with NASA NASA Independent Verification and Validation (IV&V) Program - West Virginia (Job Number:422408) Description: SAIC is pursuing the

Career Opportunities with NASA NASA Independent Verification and Validation (IV&V) Program - West Job - SAIC (United States)

Career Opportunities with NASA NASA Independent Verification and Validation (IV&V) Program - West Virginia (Job Number:422408) *Description:* SAIC is pursuing

Configuration and Document Management Engineer Freelancer Part Time

Work as a Configuration and Document Management Engineer at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID2944 ROLEFUNCTION Configuration and Document Management Engineer in DarmstadtGermany GENERAL CONDITIONS START April 2017 LOCATION Darmstadt TYPE OF BUSINESSAerospace CONTRACT FullTime employment Freelancer PartTime Job WORKING LANGUAGE English, French is considered an advantage DEADLINE 20th Jan 2017 MUSTHAVE SKILLSMANDATORY University degree or equivalent professional experience. Demonstrated knowledge and proven experience in Configuration and Change Management and Documentation Management in a formalised ISO 9000 ce...

Controller, Spacecraft Operations

Where others see barriers, we see opportunities. Do you enjoy supporting customers realizing breakthrough value? Do you stay attuned to your customers needs and visions? Do you like to work openly and supportively together with your colleagues and customers? Our work involves many different minds and skills, it cant be done alone. Its a great time being SES. SES is the worldleading satellite operator providing endtoend communication solutions. SES leads across new technologies in video, enterprise, mobility and government We are a team of people coming from all across the globe who work together to make a real difference in the world. We help to bridge the digital divide by connecting millions of people on the African continent. We make it possible for people to stay connected while flying 10km up on a commercial airplane. We provide extensive satellite coverage of all of the worlds seas and ocean regions via our dedicated mobility beams We distribute 7,400 channels to more than 1 bil...

Environmental Protection Specialist (NASA Ames) - Leidos (United States)

opening for an Environmental Protection Specialist to support its contract at NASA Ames Research Center, Moffett Field, CA. The Environmental Protection Specialist

Fire Protection Engineer - NASA - Chenega Corporation (United States)

CHENEGA INFINITY, LLC **Company Job Title:** Fire Protection Engineer, NASA **Chenega Job Title:** Fire Protection Engineer **Clearance:** Must be able to obtain and

Ground Station Software and Monitoring and Control Consultant

Work as a Ground Station Software and Monitoring and Control Consultant at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID 2946 ROLEFUNCTION Ground Station Software and Monitoring and Control Consultant in DarmstadtGermany GENERAL CONDITIONS START 01 April 2017 LOCATION Darmstadt TYPE OF BUSINESS Aerospace CONTRACT FullTime employment WORKING LANGUAGE English, French is considered an advantage DEADLINE 31th Jan 2017 MUSTHAVE SKILLSMANDATORY The Key person shall have a university degree or equivalent in an engineering discipline relevant to the job profile together with the experience and capability to fulfil the assigned tas...

Legal Officer

Looking for a new career in an exciting industry providing legal advice within a dynamic international organisation? If you have experience in international civil service law and institutional law and have previous experience working in a legal function in an international environment then Europes Meteorological Satellite Agency EUMETSAT would love to hear from you! This is a varied and rewarding role reporting directly to the Head of the Division. Amongst other key tasks you will participate in the drafting and negotiating of legal arrangements with international partners of EUMETSAT. Along with a University degree, preferably with a qualification or specialisation in Labour Law, European Law or Public International Law, you shall ideally have skillsexperience in each of the following areas Proven experience in the area of international civil service law and institutional law, extensive experience of working in a legal function in an international organisation Ability to draft lega...

MechanicalEnvironment Engineer

Vacancy in the Directorate of Launchers ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged. POST MechanicalEnvironment Engineer in the Ariane 6 Launcher Project, Launchers Development Department, Directorate of Launchers. This post is classified in the A2A4 grade band on the Coordinated Organisations salary scale. LOCATION ESA Headquarters, Paris France. DUTIES Under the authority of the Ariane 6 Launcher System Project Manager, reporting to the Projects Technical Officer and within the technical coordination of the Embedded Team Focal Point, the postholder will be assigned to the Ariane 6 Embedded Team. This involves being located 3 to 4 days per week in industry Ariane 6 Launcher System Prime Contractor, i.e. Airbus Safran Launchers site at les Mureaux, and the rest of the time at HQ Daumesnil in the Launchers Directorate with the Ariane 6 Launcher System te...

Meteosat Third Generation Ground Segment AIV Team Leader

A new year, a new career? If you are a space professional, with experience in running Assembly, Integration and Verification AIV projects, looking to take the next step in your career then take advantage of this fantastic opening and join Europes Meteorological Satellite Agency EUMETSAT. EUMETSAT is currently developing the exciting Meteosat Third Generation MTG meteorological satellite system in cooperation with the European Space Agency ESA. You will implement the plan for the Ground Segment integration and verification, making decisions and modifying schedules where necessary. You will also be responsible for defining the test tools and data, ensuring that these are available in a timely manner to verify the ground segment design, assembly and integration. This is an excellent opportunity to manage and deliver a high profile AIV programme whilst leading a growing team of multicultural engineers. This role will potentially offer a long term career with progression opportunities to t...

Mission Control and Spacecraft Operation Engineer

Work as a Mission Control and Spacecraft Operation Engineering at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID 2948 ROLEFUNCTION Mission Control and Spacecraft Operation Engineering in DarmstadtGermany GENERAL CONDITIONS START 01 February 2017 LOCATION Darmstadt TYPE OF BUSINESS Aerospace CONTRACT FullTime Employment WORKING LANGUAGE English, French is considered an advantage DEADLINE 27 January 2017 MUSTHAVE SKILLSMANDATORY In addition to having a university degree or equivalent in a relevant technical discipline, the Key Person shall have the following mandatory attributes At least five years experience of flight operat...

Mission Control System Integration Verification Eng. Consultancy

Job description For one of our main customers, EUMETSAT, we are currently looking for a Mission Control System Integration and Verification Engineering Consultant within the Mission Control Ground Segment Applications. The key person will provide consultancy to the Mission Control Applications and Tools Team. The key person will provide consultancy for integration and verification testing of the Mission Control System, but will also provide consultancy for integration and verification testing activities for the rest of Mission Control Applications and Tools of the Ground Segment including Flight Dynamics and Mission Planning Systems. The Contractor via its key person shall provide consultancy to both EUMETSAT LEO Missions under routine operations EUMETSAT LEO new Programmes under development. Tasks and responsibilities The tasks of the Contractor to be performed via its key person will typically include Integration Verification activities o Integration of the various components of a M...

Mission Control System Integration and Verification Engineer

Work as a Mission Control System Integration and Verification Engineer at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID2953 ROLEFUNCTION Mission Control System Integration and Verification Engineering Consultant in DarmstadtGermany GENERAL CONDITIONS STARTAsap LOCATIONDarmstadt TYPE OF BUSINESSAerospace CONTRACT FullTime employment WORKING LANGUAGEEnglish, French is considered an advantage DEADLINE 05th January 2017 MUSTHAVE

SKILLSMANDATORY In addition to having a University degree in a relevant engineering discipline, the key person shall demonstrate significant knowledge and experience in the area of integration and veri...

National Aeronautic Space Administration (NASA) Protective Services Security Officer - Excalibur Associates, Inc. (United States)
control, when necessary. Provide traffic control at intersections and during major NASA or MAF events. Conduct lock and unlocks of critical facilities. Establish

Optical Sensor Calibration Expert

Work as an Optical Sensor Calibration at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID C02887 ROLEFUNCTION Optical Sensor Calibration Expert in Darmstadt Germany GENERAL CONDITIONS START April 2017 LOCATION Darmstadt TYPE OF BUSINESS Aerospace CONTRACT fulltime employment WORKING LANGUAGE English, French is considered an advantage DEADLINE 08. February 2017 MUSTHAVE SKILLSMANDATORY The consultant shall have the following background A university degree or equivalent in Physics, Remote Sensing, Instrument engineering, or similar And the following specific technical skills and experience At least 5 years experience in the pr...

Oracle WebCenter Content, Liferay, Wordpress Support for Intranet Website

Work as an Oracle WebCenter Content, Liferay, Wordpress Support for Intranet Website at a renowned company based in Darmstadt, Germany that offers great opportunities to advance and learn alongside accomplished leaders. Our Company Profiler is a leading provider of expertise through corporate consulting, staffing solutions and HR services. We form the link between experts and companies from a wide range of industries. Our focus is in the IT, Communications Design and Aerospace Sectors. POSITION ID2951 ROLEFUNCTION Oracle WebCenter Content, Liferay, Wordpress Support for Intranet Website in DarmstadtGermany GENERAL CONDITIONS START 18 May 2017 LOCATION Darmstadt TYPE OF BUSINESS Aerospace CONTRACT FullTime employment WORKING LANGUAGE English, French is considered an advantage DEADLINE 31 Jan 2017 MUSTHAVE SKILLSMANDATORY The key person shall have the following mandatory skills experience A university degree in computer science, software engineering or equivalent Oracle WebCenter Conte...

Pressure Systems Engineer - NASA Programs - The Aerospace Corporation (United States)

ID: 5083 All Locations: Houston, TX (Texas) Responsibilities Provide expertise to NASA Programs in the area of structural integrity and operational capability of

Subject Matter Expert - NASA (Atemp) - Vectrus (United States)

SUMMARY: Vectrus needs a senior subject matter expert (SME) to support the NASA Kennedy Space Center (KSC) Institutional Services Contract (ISC) and other

User Interface Software Developer for NASA 's Technology Transfer System - SGT Inc (United States)

Join a team working to bring " NASA 's Technology Down to Earth" on NASA 's Technology Transfer System (NTTS) on leading User Interface and User Experience (UI/UX)

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