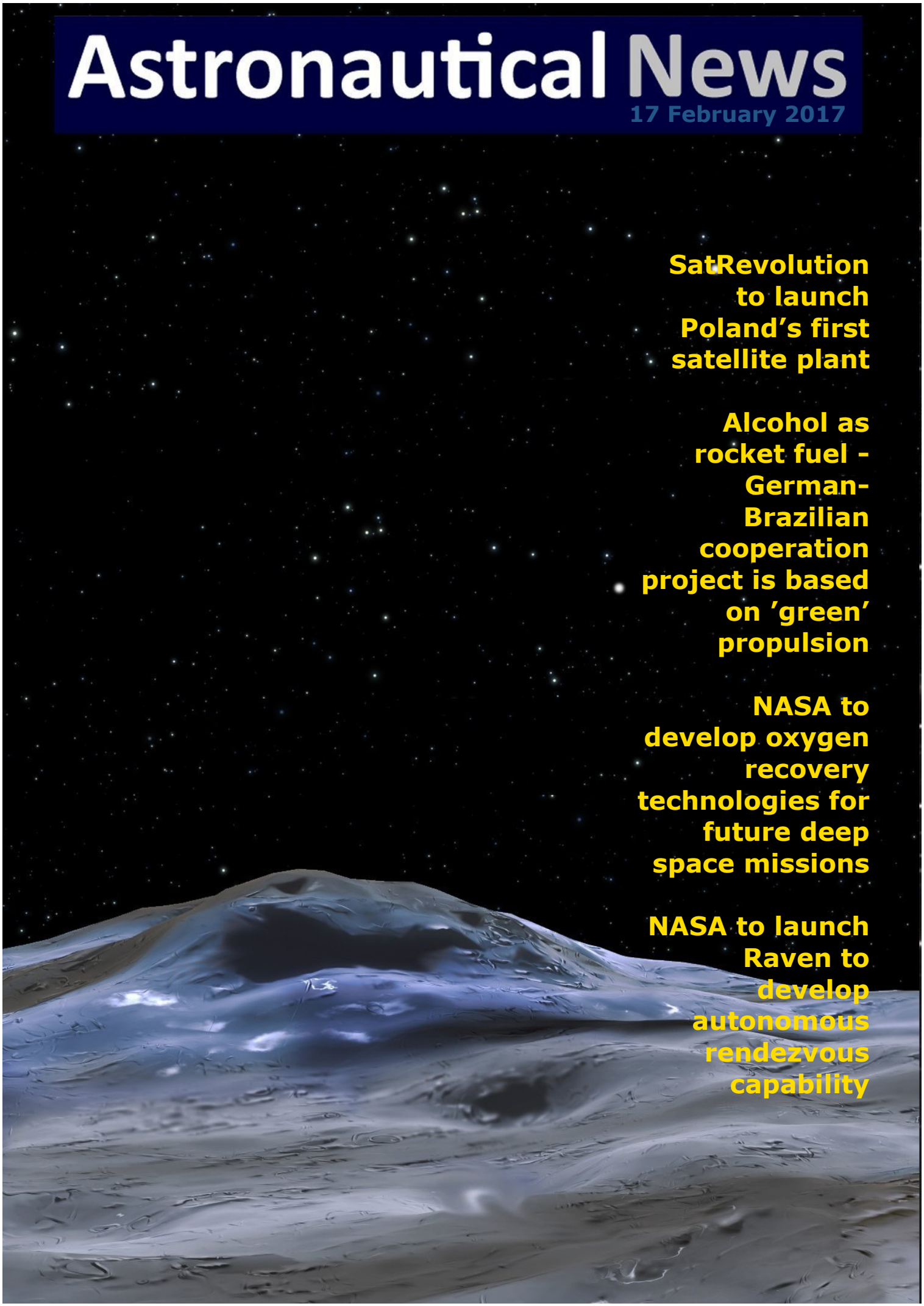
Astronautical News

17 February 2017



SatRevolution to launch Poland's first satellite plant

Alcohol as rocket fuel - German-Brazilian cooperation project is based on 'green' propulsion

NASA to develop oxygen recovery technologies for future deep space missions

NASA to launch Raven to develop autonomous rendezvous capability

Astronautical News
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In cooperation with
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Progress of space projects around the world reviewed at UN-COPUOS

The space race is on with both public and private enterprises sprinting ahead towards new celestial destinations with different agendas and a quick glance at the progress of space projects around the world was afforded at the annual session of the Scientific and Technical Subcommittee of the UN Committee on the Peaceful Uses of Outer Space in early February. ESA detailed a number of ESA launches and mitigation efforts in 2016, including Sentinel-3A launched to monitor ocean and land temperature and color; Exomars to trace gases in the Martian atmosphere; Sentinel-1B to monitor land and sea; Galileo 13,14,15,16,17,18 satellites were launched in May and November. China has been setting records with its independent manned flight capability: the LM-2F of China and Soyuz of Russia became the only two launch vehicles that can conduct manned space missions, and China's intensive launch capabilities - 18 launches per year - equaled NASA's count in 2016. Japan's recent developments in space were presented. Among the many milestones: an H3 launch planned for 2020; a Hayabusa-2 launch to reach target asteroid "Ryugu" in 2018 and return to Earth in 2020; a small lunar-lander (SLIM), which boasts autonomous obstacle detection, robust pin-point guidance, landing shock absorber, and high-performance propulsion - a precursor of full-scale lunar or planetary missions; and BepiColombo -a joint mission between ESA and JAXA, planned to reach Mercury in 2024. The UAE told the progress of the Arab world's first mission to explore Mars, with the probe called Amal (Hope). Space debris was the focus of experts from various countries. The UK Space Agency provided some updates on the safety recommendations for nuclear power source applications in space.

More...

Small satellite rocket booster arrives at New Zealand's first launch site Rocket Lab is one among dozens of companies around the world building rockets to handle an expected boom in demand for small satellite launches.

German-French climate mission enters its implementation phase DLR and Airbus DS signed a contract for the design and construction phases of the German-French climate satellite MERLIN (Methane Remote Sensing LIDAR Mission). From 2021, this small satellite mission will measure the methane concentration in Earth's atmosphere to an unprecedented level of accuracy and thus contribute to research into the causes of climate change.

SatRevolution to launch Poland's first satellite plant Polish company SatRevolution S.A. has unveiled plans to set up the country's first satellite production facility that is to make small spacecraft in cooperation with foreign space industry players.

Orbital ATK sues Darpa over space satellite robots Private space technology company Orbital ATK has sued the Pentagon's Defense Advanced Research Projects Agency (DARPA) over plans to give a rival firm a contract to build satellite-repairing robots for a government-funded mission.

Satellite location boosts EU emergency services The single European emergency number, 112, can now pinpoint the location of callers, thanks to technological advances funded by the European Union.

Aviation leaders collaborate to tackle satellite capacity crunch Key aviation stakeholders gathered at the European Parliament to discuss ways to tackle the airspace and airport capacity crunch in Europe, at the occasion of the European Business Aviation Association's (EBAA) annual debate. Panelists from the European Parliament, European Commission, Global Navigation Satellite Systems Agency and the Business Aviation Operators community, stressed the urgent need to foster the development of satellite-based solutions.

China to launch night light observing satellite China is set to launch its first remote-sensing satellite capable of detecting large lighted structures on the ground at night. The Luojia-1A, a 10-kilogramme mini satellite, is being developed by scientists at Wuhan University in Hubei province and will carry a highly sensitive night light camera with a 100-meter ground image resolution. The satellite will be capable of detecting large lighted structures on the ground within its designated observation area, such as bridges over the Yangtze River.

NASA to study launching astronauts on first SLS mission NASA plans to study putting astronauts on the first launch of its Space Launch System heavy-lift rocket, a move that could introduce new delays and other complications into the vehicle's development.

NASA's Kepler mission could detect exomoons formed by giant impacts The hunt is on for moons orbiting distant exoplanets - but only the most massive "exomoons" may be detectable.

China to launch robotic cargo ship for space lab in April The country's first cargo-carrying spacecraft, known as Tianzhou-1, arrived at a launch site in Wenchang City in southern Hainan Province on Monday (Feb. 13), according to Chinese media reports.

Think you can find planet 9? Think you can find Planet 9? A new citizen-science project lets participants search for hidden objects beyond the orbit of Neptune, where a possible ninth planet may lie.

Alcohol as rocket fuel - German-Brazilian cooperation project is based on 'green' propulsion The German Aerospace Center (DLR) and the Brazilian aerospace agency Agência Espacial Brasileira (AEB) have taken a big step forward in the development of a new rocket that is fuelled with oxygen and alcohol.

Indonesia sees long but possible path to developing own satellites Indonesia is taking steps to reduce its dependence on foreign telecommunications satellites through technology-transfer arrangements and micro-satellite development.

Recent Launch Activities

India launches record 104 satellites in single mission India has created history by successfully launching 104 satellites on a single mission, overtaking the previous record of 37 satellites launched by Russia in 2014. All but three of the satellites are from foreign countries, most of them from the United States. Observers say it is a sign that India is emerging as a major player in the multi-billion dollar space market.
(15 February 2017)

Ariane 5's first launch this year An Ariane 5, operated by Arianespace, has delivered the Sky Brasil-1 and Telkom-3S telecom satellites into their planned orbits.
(15 February 2017)

Liftoff for SmallGEO ESA's new small telecom platform, SmallGEO, was launched on its first mission at 01:03 GMT on 28 January from Europe's Spaceport.
(29 January 2017)

Japan launches satellite to modernise military communications Japan on Tuesday launched a satellite to modernise its military communications and reportedly to better monitor North Korean missile launches. The Kirameki-2 will enable ground, sea and air units of the military - known as the Self-Defense Forces - to communicate directly with each other, a defence ministry official said.
(26 January 2017)

Development Activities

Mars landing sites for 2020 NASA mission down to the final three At a meeting in California, NASA scientists whittled down the landing sites for its next rover which will search for signs of life
(15 February 2017)

NASA wants to put a lander on Europa's surface to look for life If it goes ahead, the proposed lander mission would be NASA's first search for life on the surface of another planet since the Mars Viking missions in the late seventies.
(12 February 2017)

China to launch night light observing satellite China is set to launch its first remote-sensing satellite capable of detecting large lighted structures on the ground at night. The Luojia-1A, a 10-kilogramme mini satellite, is being developed by scientists at Wuhan University in Hubei province and will carry a highly sensitive night light camera with a 100-meter ground image resolution. The satellite will be capable of detecting large lighted structures on the ground within its designated observation area, such as bridges over the Yangtze River.
(12 February 2017)

China looks to Mars, Jupiter exploration China's plans for deep-space exploration included two Mars missions and one Jupiter probe. China plans its first Mars probe by 2020, said Wu Yanhua, vice director of the China National Space Administration. A second Mars probe will bring back samples and conduct research on the planet's structure, composition and environment, Wu said.
(1 February 2017)

China's Moon-sampling mission targeted for November China is working to launch a sample-return mission to the moon before the end of 2017.
(30 January 2017)

China set to launch Moon-sampling mission in November Two years after placing its very first rover on the surface of the moon, China has announced it would launch a mission to return lunar samples to Earth later in 2017. As it develops that mission, China's space agency is also getting ready to launch a different trip to the moon's far side.
(25 January 2017)

eROSITA X-ray telescope travels to Russia for launch in 2018 On 20 January 2017, the completed eROSITA X-ray telescope boarded a cargo plane and was transported from Munich, where it had been built at the Max Planck Institute for Extraterrestrial Physics, to Moscow. It is expect to arrive at the premises of Lavochkin Association, in the Moscow suburb of Khimki on 25 January.
(24 January 2017)

China to launch electromagnetic monitoring satellite for earthquake study China will launch a satellite this year to gather electromagnetic data that may be used in monitoring and forecasting earthquakes. According to China's earthquake administrative agencies, the satellite will be launched in the latter half of 2017.
(20 January 2017)

ISS Activities

Progress underway for first commercial airlock on Space Station Deployment of cubesats and other small satellite payloads from the orbiting laboratory by commercial customers and NASA has increased in recent years. To support demand, NASA has accepted a proposal from NanoRacks to develop the first commercially funded airlock on the space station.
(9 February 2017)

Japanese craft leaves Space Station to conduct space-junk experiment A Japanese cargo ship undocked from the International Space Station and will spend the next week doing a science experiment in orbit before burning up in Earth's atmosphere on Super Bowl Sunday (Feb. 5).
(29 January 2017)

NASA considering Boeing offer for additional Soyuz seats NASA is proposing to purchase, through Boeing, additional Soyuz seats for International Space Station missions to both take advantage of Russian plans to decrease the size of its crew and as insurance against potential additional commercial crew delays.
(23 January 2017)

NASA to rely on Soyuz for ISS missions until 2019 If NASA intends to continue sending astronauts to the International Space Station or the Moon, the space agency has little choice but to rely on Roscosmos' Soyuz spacecraft, at least until 2019. NASA filed a "presolicitation" requesting that private firms reach out to NASA if they can transport astronauts to and from the orbital research platform.
(21 January 2017)

Space Station astronauts take spacewalk to upgrade power system On Jan. 6, 2017, NASA astronauts Shane Kimbrough and Peggy Whitson spent more than six hours spacewalking outside the International Space Station to upgrade the outpost's power system. See photos from the spacewalk here.
(9 January 2017)

Space Tourism

Russia's first private space tourism craft flight test set for 2020 First flight tests of Russia's reusable suborbital space tourism craft are slated for 2020, the head of the company that is spearheading the effort told Sputnik. Pavel Pushkin, director of CosmoCourse company, said the spacecraft's production is funded by a private investor. It is expected to be launched from a Russian cosmodrome and conduct space tours at an altitude of 100 kilometres.
(16 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)

CryoSat reveals lake outbursts beneath Antarctic ice A novel way of using ESA's CryoSat mission has revealed how lakes beneath Thwaites Glacier drained into the Amundsen Sea - potentially the largest such outflow ever reported in this region of West Antarctica.
(11 February 2017)

Keeping space communications reliable for an "always on" world So many of the services we all depend on today are powered by space communications. Without space the world economy, in many ways, turns back half a century in time. For some time now, we have been hearing from the Pentagon that space is no longer the sanctuary it once was.
(7 February 2017)

Sea ice cover in 2016 is lowest ever recorded Latest data from ISRO's weather monitoring satellite SCATSAT-1 has revealed changes in the sea ice cover over the Arctic and the Antarctic. According to ISRO, the changes in the Arctic summer minimum sea ice cover were observed using SCATSAT-1 data collected on October 02, 2016, and compared it with OSCAT data collected on October 02, 2011. It was observed that sea ice cover during 2016 is lower than that observed in 2011, which was earlier lowest sea ice record.
(6 February 2017)

Satellites counting whales from space revolutionising monitoring techniques for researchers A research team in Perth is becoming familiar with what whales look like from space. They have commissioned two satellite images to be taken from 600 kilometres above Earth in order to do an accurate headcount of humpbacks migrating up the WA coast.
(5 February 2017)

Time to make sure Europe's troubled satnav system really flies Europe's costly Galileo satnav network has been branded a vanity project. In an isolationist world, it now seems a wise insurance policy, says Paul Marks
(4 February 2017)

ISRO to launch backup satellite to replace IRNSS-1A India will launch one of its back up navigation satellites this year as a replacement to IRNSS-1A satellite, whose three atomic clocks have failed, ISRO said. The agency denied the existence of similar problems with the rubidium atomic clocks in another navigation satellite.
(4 February 2017)

African villagers use satellite data to help save wild chimpanzees Given that chimpanzees are a keystone species and the closest extant relative to humans, their rapid decline in the wild has sparked widespread concern. In response, NASA and the Jane Goodall Institute partnered on a project that aims to use space-down views of chimpanzee habitats to guide local activists involved in conservation.
(31 January 2017)

Tiny satellites to make big contributions to science CubeSats were designed as educational tools and technological proofs-of-concept, demonstrating their ability to fly and perform needed operations in the harsh space environment. As the capabilities of these nanosatellites increase and their possible contributions grow, they've earned their own place in space.
(30 January 2017)

Europe's new geostationary satellite platform for the telecommunications market The Hispasat 36W-1 telecommunications satellite, the first in a new satellite platform called SmallGEO, developed and built in Germany, was launched to space on 28 January 2017 at 02:03 CET (27 January, 22:03 local time).
(29 January 2017)

NOAA's GOES-16 satellite sends first images to Earth GOES-16, the first spacecraft in NOAA's next-generation of geostationary satellites, has sent the first high-resolution images from its Advanced Baseline Imager (ABI) instrument. Included among them are a composite color full-disk visible image of the Western Hemisphere captured on January 15, 2017.
(25 January 2017)

NASA's Earth Observatory reveals Cambodia's incredibly shrinking forests Scientists from the University of Maryland and the World Resources Institute's Global Forest Watch have been using Landsat satellite data to track the rate of forest loss on a global scale. Though other countries have lost more acres in recent years, Cambodia stands out for how rapidly its forests are being cleared.
(23 January 2017)

Clocks 'failed' onboard Europe's navigation satellites Europe's beleaguered Galileo satnav has suffered another setback, with clocks failing onboard a number of satellites in space, the European Space Agency said Wednesday. Designed to render Europe independent from America's GPS, the 10 billion-euro ($11 billion) project may experience further delays as the cause of the failure is investigated, ESA director general Jan Woerner told journalists in Paris.
(19 January 2017)

Cubesat testbeds trim risk and save millions Tom and Jerry are more than an old-school cartoon, they are now an important cubesat experiment.
(13 January 2017)

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)

Big data for the universe Astronomers at Lomonosov Moscow State University in cooperation with their French colleagues and with the help of citizen scientists have released "The Reference Catalog of galaxy SEDs" (RCSED), which contains value-added information about 800,000 galaxies.
(13 February 2017)

Who will get first dibs on the powerful James Webb Space Telescope? NASA has issued solicitation for science projects using the long-awaited and incredibly powerful successor to Hubble, which is scheduled to launch next year.
(10 February 2017)

Angling up for Mars science ESA's latest Mars orbiter has moved itself into a new path on its way to achieving the final orbit for probing the Red Planet.
(9 February 2017)

Gravitational wave detector prepares to peer into bizarre stars It has already made the discovery of the decade ?? next LIGO aims to model weird events so we can recognise them when they arrive
(8 February 2017)

WorldView-4, DigitalGlobe's newest satellite, enters service DigitalGlobe's WorldView-4 high-resolution-imaging satellite entered service this week, following nearly three months of in-orbit testing and calibration.
(7 February 2017)

NASA spacecraft to hunt for Earth's asteroid 'ghosts' NASA's asteroid-sampling Osiris-Rex mission will search for possible Trojan asteroids that could be travelling along with Earth around the sun.
(5 February 2017)

Galactic X-rays could point way to dark matter A small but distinctive signal in X-rays from the Milky Way could be key to proving the existence of dark matter. That is the claim of US scientists who analysed the energy spectrum of X-rays gathered by NASA's Chandra satellite. They found more X-ray photons with a particular energy than would be expected if they were produced only by familiar processes. Those photons could in fact have been generated by the decay of dark matter particles, say the researchers.
(2 February 2017)

Fermi sees gamma rays from 'hidden' solar flares An international science team says NASA's Fermi Gamma-ray Space Telescope has observed high-energy light from solar eruptions located on the far side of the sun, which should block direct light from these events.
(1 February 2017)

Close views show Saturn's Rings in unprecedented detail Newly released images showcase the incredible closeness with which NASA's Cassini spacecraft, now in its "Ring-Grazing" orbits phase, is observing Saturn's dazzling rings of icy debris. The views are some of the closest-ever images of the outer parts of the main rings, giving scientists an eagerly awaited opportunity to observe features with names like "straw" and "propellers."
(31 January 2017)

Spacecraft sees water at Rosetta's comet while stranded in solar orbit The Japanese PROCYON spacecraft may have gotten stuck in orbit after launch, but it's been able to do some impressive observations of 67P/Churyumov-Gerasimenko from afar.
(30 January 2017)

China's hi-res SAR imaging satellite put into use China's first high-resolution Synthetic Aperture Radar (SAR) satellite has passed all its in- orbit tests and is now operational, according to the State Administration of Science, Technology and Industry for National Defense. The Gaofen-3 satellite, which is accurate to one meter in distance, was launched in August 2016.
(27 January 2017)

Gaia turns its eyes to asteroid hunting Whilst best known for its surveys of the stars and mapping the Milky Way in three dimensions, ESA's Gaia has many more strings to its bow. Among them, its contribution to our understanding of the asteroids that litter the Solar System. Now, for the first time, Gaia is not only providing information crucial to understanding known asteroids, it has also started to look for new ones.
(26 January 2017)

ISRO realigns orbit of Mars mission spacecraft 'Mangalyaan Indian Space Research Organization has successfully realigned the orbit of its Mars Orbiter Mission 'Mangalyaan' so it is not affected by a long-duration eclipse, ISRO chairman A S Kiran Kumar said.
(23 January 2017)

China's quantum science satellite begins experiments The world's first quantum science and communications satellite has been handed over to Chinese scientists for the official start of experiments to test the phenomena of quantum entanglement and 'unhackable' quantum communication.
(19 January 2017)

Breakthrough surveying other galaxies for planets to visit A private plan to visit Alpha Centauri is boosting science on Earth today. Breakthrough's Starshot plan is looking for exoplanets in the 'Goldlocks Zone' of the Alpha Centauri binary system that might support life.
(18 January 2017)

Curiosity finds Mars rock that may be a meteorite made from iron NASA's Curiosity rover took a picture that appears to show a new iron-nickel meteorite on Mars, one of only eight that have been discovered by rovers there so far
(18 January 2017)

Eutelsat America's all-electric satellite enters service after seven-month journey The second of two all-electric satellites fleet operator Eutelsat gained through its acquisition of Satmex began service Jan. 16 after finishing a seven-month journey to its orbital location. Eutelsat 117 West B launched last June on a SpaceX Falcon 9 rocket with ABS-2A, a similar all-electric satellite Boeing built for Bermuda-based ABS. Both satellites formed the second set in a four-satellite order paired with Falcon 9 dual launches.
(17 January 2017)

Chinese imaging satellites reach orbit after botched launch China has received images from a pair of 0.5-meter high-resolution remote sensing satellites launched in late December last year. According to the China Aerospace Science and Technology Corporation (CASC), the satellites have reached their operational orbit after a partial launch failure.
(15 January 2017)

Thousands of cosmic distances now catalogued The universe just got an address book. A new NASA catalogue of objects will help scientists identify the distance of tens of thousands of objects that are so far away they date back to the beginning of the universe.
(9 January 2017)

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)

SatRevolution to launch Poland's first satellite plant Polish company SatRevolution S.A. has unveiled plans to set up the country's first satellite production facility that is to make small spacecraft in cooperation with foreign space industry players.
(17 February 2017)

Indonesia sees long but possible path to developing own satellites Indonesia is taking steps to reduce its dependence on foreign telecommunications satellites through technology-transfer arrangements and micro-satellite development.
(14 February 2017)

UK may lose access to EU Galileo GPS system after Brexit The United Kingdom may be cut off the new EU global positioning system (GPS) Galileo, which has been developed with active participation of British companies, and will have to hold separate negotiations to obtain access to the system after London leaves the European Union, media reported.
(14 February 2017)

North Korea plans to continue satellite launches despite UN objections North Korea intends to continue launching satellites, despite UN Security Council sanctions and resolutions. According to the newspaper Rodong Sinmun, the country will continue to launch satellites when and where its leadership determines.
(11 February 2017)

Minister inaugurating Greek space agency The agency will be a public limited company called National Centre for Space Applications (EKDE in Greek), aimed at "making up for the country's huge deficit in this area," the ministry said. "The launch of the Hellas Sat satellite this year will create important commercial opportunities, which will be developed by a space policy agency along European lines," the announcement said.
(8 February 2017)

UAE aims to launch its first ever Mars mission in 2020 The United Arab Emirates has set an ambitious goal of sending nation's first mission to Mars in 2020, launching its unmanned orbiter from Japan's space centre.
(7 February 2017)

UK spaceport developments at Cambeltown UK Space science and technology firms QinetiQ and Telespazio VEGA UK have agreed Memorandum's of Understanding (MoU) to work with Discover Space UK on investigating the potential for a horizontal launch spaceport at the Campbeltown site on the West Coast of Scotland.
(29 January 2017)

Russia's Proton rocket grounded by poor quality control Russia's workhorse Proton rocket may be grounded until June or July, dealing another blow to the country's launch infrastructure.
(28 January 2017)

Russia to construct Glonass satellite navigation station in Nicaragua Experts from the Russian Central Research Institute of Machine Building (TsNIIMash) will construct a ground Glonass satellite navigation tracking station in Nicaragua, the TsNIIMash's press service said. "The TsNIIMash's specialists will construct a station for tracking data of the Glonass and other global satellite navigation systems in Nicaragua," the press release reads.
(27 January 2017)

Space: Where we've been, where we're going President Obama shook up space policy when he took office, and President Trump may be about to do the same.
(25 January 2017)

Joint space projects to yield results soon: Iranian official Iran's joint projects with other countries in the space field will yield results in the near future, Head of Iran's National Space Center Manouchehr Manteqi said. Iran has begun international cooperation in space projects, Manteqi said, adding that there was no such cooperation in the past.
(23 January 2017)

US Air Force pursues strategy to defend anti-satellite attacks While several countries are known to be making investments in the development of space weaponry, Chinese activities have engendered a particular concern among Pentagon leaders, analysts and threat assessment professionals.
(22 January 2017)

From school to space: satellite built by Brazilian students launched into orbit A satellite built by students of a Brazilian middle school was launched into space from aboard the International Space Station on January 16. The Tancredo-1 satellite, developed by the students of Tancredo de Almeida Neves Municipal School in the city of Ubatuba, measures only 13 centimeters in diameter and weighs about 700 grams.
(21 January 2017)

Russia-China joint space studies centre may be created in southeastern Russia A joint-working space centre of Russian and Chinese specialists could be built in Russia's southeastern Zabaikalsky Territory, the press service of the region's head said in a statement. A centre for joint work of Russian and Chinese specialists in the sphere of space studies could be built in Russia's southeastern Zabaikalsky Territory as a part of the comprehensive plan.
(19 January 2017)

First Singapore satellite launched from the International Space Station The first Singapore satellite launched from the International Space Station took place successfully. Called AOBA VELOX-III, it is a joint project between Nanyang Technological University (NTU) and Japan's Kyushu Institute of Technology (Kyutech). It will be conducting tests to evaluate the durability of commercial off-the-shelf microprocessors in space while orbiting at 400km above sea level.
(17 January 2017)

Lightfoot, Radzanowski will head NASA temporarily Associate NASA Administrator Robert Lightfoot will take over as acting administrator on 20 January.
(14 January 2017)

Trump and space: panel forecasts changes to come As Trump's "landing team" touches down at NASA, science community members mull ways to interact with politics.
(11 January 2017)

ISRO encourages Indian startups. The Indian Space Research Organisation is luring young entrepreneurs to utilise massive amounts of geo-spatial data procured through its series of earth-mapping satellites to launch start-ups and earn in millions in the years to come via consultative services to respective users.
(7 January 2017)

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)

Opportunities

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

NASA Miro Center for Applied Atmospheric Research and Education (CAARE) - Urban Sustainability and Climate-UAH - NASA (United States)
Space Science Technology Center (NSSTC) in Huntsville, Alabama working with NASA -affiliated researchers, Drs. Maury Estes, Robert Griffin, and Sue Estes (Earth

NASA Moo-Howard University: Energetic Radiation Environment at Mars and Phobos - NASA (United States)
radiation environment will be assessed using data system resources of the NASA Space Physics Data Facility (SPDF), the Virtual Energetic Particle Observatory (VEPO),

NASA Office of Education: Educator Intern - NASA (United States)
Student will support NASA Armstrong Flight Research Center's Office of Education programs using NASA STEM content to inspire and engage students and educators.

NASA Office of Education: Robotics Intern - NASA (United States)
Student will support NASA Armstrong Flight Research Center's Office of Education programs using NASA STEM content to inspire and engage students and educators.

NASA Student Airborne Research Program (Sarp) - NASA (United States)
The NASA Airborne Science Program invites highly motivated advanced undergraduates who will be rising seniors in summer 2017 to apply for participation in the 9th

AITAIV Engineer with ICS engineering background
AITAIV Engineer with ICS engineering background Ref 1611603 Terma The hightech and innovative Terma Group develops products and systems for defense, nondefense and security applications, including command and control systems, radar systems, selfprotection systems for aircraft and vessels, space technology, and aerostructures for the aircraft industry. Terma is headquartered at Aarhus, Denmark. Internationally, Terma has subsidiaries and operations in The Netherlands, Germany, United Kingdom, United Arab Emirates, India, Singapore and the U.S. The Space Business Area contributes with missioncustomized software and hardware products including power systems and star trackers as well as services to support a number of inorbit pioneering European scientific and Earth observation satellite missions. Additionally, Terma is contracted for the development and delivery of software and hardware systems and services for numerous ongoing and future European, and international missions. Terma Space...

Data Handling System Engineer
Solenix is specialized in the provision of highquality software engineering, technical consulting and operations services in the aerospace domain. This vacancy note concerns an onsite consulting position at ESOC in Darmstadt, Germany. Data Handling System Engineer 1723017 Job Description We are looking for a Spacecraft Operations Engineer, for our client ESOC. You are a specialist in the Data Handling system, including the preparation and validation of the FOP, inputs for LEOP and commissioning timeline, preparation of the remaining SVT, and contribution to the OBSM setup and testing. You will be requested to assume the responsibility and perform activities for additional subsystems or systems within the scope of general SOE services, including crossvalidation of procedures, test, validation and operation of the Mission Control System, Mission Planning System and Simulator. The current Aeolus launch window is from end of November 2017 to end of January 2018. This service will accordin...

Data Processing and Applications System Engineer
A great opportunity has arisen for a Data Processing and Applications Systems Engineer to work at our customers premises, in Darmstadt. The key candidate will provide consultancy to the Meteosat Third Generation Ground Segment Data processing team in the SEP Division of the TSS Department , consulting in the engineering to the MTG Ground Segment Data processing team in the frame of the MTG Program. The key candidate shall provide consultancy to activities related to the initially Phase CD which is followed by phase E of the MTG Program in the area of data processing engineering. The tasks will be carried out mainly in Darmstadt. Main tasks will include but will not be limited to The procurement of data processing elements by advising on technical solutions proposed by the contractor and by reviewing documentation to confirm its compliance with the requirements Management of the requirements baseline for data processing elements Refinement of ICDs Testing, integration and acceptance o...

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

Development of CERS Using the NASA CADRe - NASA (United States)
develop predictive cost estimating relationships (CERS) using data contained in NASA 's online cost data repository (CADRE-Cost Analysis Data Requirement) and through

End to End Ground Systems Integration and Testing Engineer
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. Package description Full details on application. Relocation assistance provided if applicable. Main responsibilities You shall support the EDLab project by providing integration and test services for ground s systems in the End to End Ground Segment Reference Facility. The main tasks to be accomplished according to applicable standards and guidelines by the candidate are Test Environment Definition of test environment and test data Support to the definition and deployment of the different test assemblies and configuration Support the investigation of test failures Troubleshooting of identified problems Verification of problem resolution a...

Engineer, Ground Systems
SES is the worldleading satellite operator with a fleet of more than 50 geostationary satellites. The company provides satellite communications services to broadcasters, content and internet service providers, mobile and fixed network operators and business and governmental organizations worldwide. SES stands for longlasting business relationships, highquality service and excellence in the satellite industry. The culturally diverse regional teams of SES are located around the globe and work closely with customers to meet their specific satellite bandwidth and service requirements. SES holds a participation in O3b Networks, a next generation satellite network combining the reach of satellite with the speed of fiber. 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 involv...

EPSSG Programme Support Scientist
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. Package description Full details on application. Relocation assistance provided if applicable. Main responsibilities The activities for the candidate will include scientific aspects related to the development of the product processing functions of the optical imaging missions in the EPSSG ground segment. The candidate will provide support to the Remote Sensing and Products Division of the Technical and Science Support Department. The candidate will work at EUMETSAT Headquarters, located in Darmstadt, Germany, as required. The tasks of the candidate will include Refinement of product generation specifications for the product processing fac...

EPSSG Scientist
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. Package description Full details on application. Relocation assistance provided if applicable. Main responsibilities The activities for this position will include scientific aspects related to the development of the product processing facilities of the EPSSG ground segment. The candidate will work at EUMETSAT Headquarters, located in Darmstadt, Germany as required. The tasks and responsibilities will include Preparation and maintenance of algorithm theoretical basis documents for the generation of level 1 products Preparation and maintenance of product generation specifications for the product processing facilities Prototyping of product ...

Ground Operations Engineer
WHO ARE WE? GMV Insyen AG is a supplier of aerospace system engineering, operations services and products. The company is part of the GMV Group and headquartered in Oberpfaffenhofen, Germany with offices in Darmstadt. We have around 120 employees from 15 nations whose expertise spans from design, development, integration and testing to operation and maintenance of complex ground and space systems. GMV INSYEN also specializes in software and hardware systems for simulation, emulation, 3D visualization and operations support. We recruit and hire motivated engineers, and encourage innovation, technical excellence and continuing education. This striving for excellence, innovation and flexibility is a major part of our culture. We provide competitive compensation, attractive benefits, and a great work environment with many opportunities for professional growth. We are currently looking for a GROUND OPERATIONS ENGINEER JOB DESCRIPTION Responsibilities Duties Tasks Monitoring of the compu...

Ground Stations Maintenance and Engineering Consultancy
Thorn Satellite Data Services Thorn SDS is looking to fill a position on our customers site based in Darmstadt. With offices in both the UK and Germany, Thorn SDS is able to offer firstclass support and guidance throughout the application process from start to finish, developing long lasting relationships with each and every one of our candidates. The position as Ground Stations Maintenance and Engineering Consultant is focused on acquire and maintain a Systemwide view of the Ground Segment, particularly in the areas of spacecraft TTC and payload data transfer Main tasks will include Investigation and rectification of anomalies reported by the operationsmaintenance team Interface with the maintenance services providers at technical level Reporting on the performance of the Ground Stations and associated systems together with a status report of any ongoing activities Provision of Ground Stations support to operations during critical mission phases, pre and post launch i.e. SVT, LEOP, I...

Intellectual Property Right and Licensing Facilitating support
Closing date 28th February 2017 Our customer, ESOC, provides IPR and Licensing management services to ESA. Since 2008, ESOC has been

developing skills and capabilities in that domain and now benefits from technical and legal services under different frame contracts. Technical services run Blackduck screening of ESA source code as well as license analysis of the involved third party products. These services consolidate the analysis report that then supports the ESA internal approval cycle in order to declare SW licensable. PROFILE Mandatory skillsexperience Software engineering background experience Technical Project Management experience Analysis and selection OSS including licensing scope for potential use in different projects Analysis and selection of COTS if no OSS meet the requirements Code audit, analysis of functionality and licensing review of SW in compliance with requirements Agreements with different stakeholder to establish licensing scopes related to third party products...

Opportunity Title: NASA Miro Center for Applied Atmospheric Research and Education (CAARE) - Air Quality and Climate Effects on Public Health - USRA - NASA (United States)
This internship opportunity is part of a NASA -funded project entitled "Center for Applied Atmospheric Research and Education (CAARE)" that is led by San Jose State

Power Systems Engineer
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. Package description Full details on application. Relocation assistance provided if applicable. Main responsibilities The candidate will be responsible for providing electrical power system and conditioning technical support, to ESA projects and technology development contracts and shall thus perform the following activities The design, development and test of spacecraft power systems for onboard applications. This work encompasses the definition of centralised power systems having overall power levels up to 25 kilowatts, together with their interfaces with respect to solar arrays and batteries, the attendant power distributionprotection e...

Precision Development Facility Technician Machinist
Precision Development Facility Technician Machinist IRC239881 STFC Rutherford Appleton Laboratory, Harwell, Oxfordshire Salary 18,661 19,238 Band B, 24,029 25,294 Band C or 29,900 31,808 Band D dependent upon qualifications and experience Full Time About Us The Science and Technology Facilities Council STFC is one of Europes largest research organisations. Were trusted to support, enable and undertake pioneering projects in an amazing diversity of fields. Through worldclass facilities and people, were driving groundbreaking advances in science and engineering. STFCs RAL Space department carries out an exciting range of worldclass space research and technology development. Weve had significant involvement in over 200 space missions and operate are at the forefront of UK Space Research. About The Role The RAL Space Millimetrewave Technology Group MMTG Precision Development Facility PDF is seeking a juniortrainee and experienced CNC technician to support the production of high toleran...

Project Manager Spacecraft Equipments
Airbus GroupA requirement for a Project Manager Spacecraft Equipments has arisen within Airbus Defence Endorses Project goals and defines Development Plan Drives budgets, schedule, dependency analysis, risk management, and risk mitigation strategy Responsible for overall internal and contractual compliance to the product Drives development Sets Team individual Project objectives Details WB StructuresPackages Triggers internal main Design Reviews Drives change control management and impact reviews including ECOs Coordinates stakeholder management Centralises customer interface proposal, Reporting, Provides Project reporting Liaises on cross project shared resources and facility conflicts Triggers and coordinates Phase Reviews Provides input to functional managers for Team Members performance evaluation Coordinate interface to selected extended project team members Configuration management of project and manufacturing documents Ensure that proposals are supported and that lessons lea...

Propulsion Test Engineer
Explore New Horizons An exciting opportunity has arisen for you to join Airbus Defence Space in Stevenage as the Key Product Owner for Satellite AIT. In this role you will fully manage, drive, and continually improve the performance of the endtoend process for the execution and delivery of the product whilst in the MAIT phase, through to launch of the satellite. The successful candidate will be subject to UK National Security Clearance in order to undertake related work in accordance with business needs. Install setup and perform test on system subsystem to ensure their behaviour are according to the specifications. Perform troubleshooting and first level Quality inspection. Inputs Specimen to be tested, test procedures, test facilities and, when needed, calibrated sensors and installation procedures. Outputs Test completion and associated documentation test report delivery, anomalies reports. Tasks Responsible and accountable for carrying out all aspects of Propulsion Test and Laun...

Software Validation Engineer
Specific Tasks The contractor will be assigned to the Flight Software Systems Section of the Software Systems Division and shall function as an integrated team member of the development team, in charge of the following initial tasks Project support related to all technical aspects development and qualification of flight software. General Support to Software Validation Facilities and Avionics Test Bench infrastructure activities. Requirements Masters degree or equivalent qualification in Electronic Engineering, Space Systems Engineering, Computer Science, Mathematics or a related discipline. In particular experience with Software engineering and objectoriented programming Space systems and Space Systems engineering Programming languages CC andor others Embedded Real Time Systems and Real Time Kernels Microprocessors such as SPARC LEON, ARM, multicores etc Communication protocols Mil1553, SpaceWire, CAN Software Engineering tools Software Engineering Standards such as the ECSSEST40C T...

Software Validation Engineer OnBoard Ground
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. Package description Full details on application. Relocation assistance provided if applicable. Main responsibilities The candidate will be assigned to the Flight Software Systems Section of the Software Systems Division and shall function as an integrated team member of the development team, in charge of the following initial tasks Project support related to all technical aspects development and qualification of flight software. General Support to Software Validation Facilities and Avionics Test Bench

infrastructure activities. Ideal candidate The candidate should have a Masters degree or equivalent qualification in Electronic Engineering...

Software Build and Deployment Engineer
A great opportunity has arisen for a Software Build and Deployment Engineer to work at our customers premises, in Darmstadt. As support to the CSM Software Librarian team, the key candidate shall do maintenance of all current and future operational ground segments. The main duty is the maintenance of the asbuilt software build environments and the building, packaging and distribution of any software that can be built onsite. Furthermore the duties include a range of tasks, from support to the operation of the UNIX and Windowsbased ground segment facilities, to the analysis, evolution, testing and maintenance of software items. They also include the settingup and implementation of maintenance policies and procedures as well as the coordination with external providers of maintenance services. Main tasks will include but will not be limited to Maintenance and development of the asbuilt software build environments Building, packaging and distribution of software releases and patches Suppo...

Space Software Developer
Ideally, the candidate should have at least 1 year of relevant experience. Nonetheless, applications from recent graduates with excellent academic results are welcome. We are looking for engineers of any nationality wishing to work for us in Romania, with a university degree in any the following fields Software engineering Mathematics Physics Telecommunications engineering or similar university degree. The following skills are strictly mandatory Good command of English. University degree in the above mentioned fields Availability for short term travels Capability to work in Romania Knowledge of the following technologies CC andor Java over UnixLinux The following skills are desirable Experience in any of the above mentioned fields, preferable in an industrial setup Experience in the implementation of mathematical algorithms Experience working in an international setup, preferably in the Space Domain. Availability for longer term collocations Knowledge of any of the following technolog...

Spacecraft Database Engineer
RHEA Group is currently recruiting a Spacecraft Database Engineer to support the Exomars Rover project at our clients premises in Stevenage, UK. Tasks and Activities The scope of work will include To investigate, record, correct validate the fix for Database Tool Data problems as provided by the project DB Architect. Working with engineering data at functional level the function of the data down to bit level knowledge of data types, endian etc. Corrections using script writing in Java code Checking and recording the problems that have been fixed. Creating DB related test specification procedures for Database improvements, organise a review with DB for feedback, update accordingly and to get peer signoff, execute test and record results in test reports, reexecuterereport when any bug fixes have been made by the DB tool developer Creating DB related training specifications from an existing DB Training Module Framework, create draft training material including Trainer Notes, organise a r...

Technology Transfer Program - Bringing NASA Technology Down to Earth - NASA (United States)
NASA ’s Kennedy Space Center (KSC) conducts a wide...across a broad spectrum of technical disciplines to help NASA meet its mission goals and objectives. As a

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