Microsat-R: A 100-kg-class

military imaging

■ PHOTO: ISRO



DRI arrests businessman for smuggling gold

NEW DELHI The Directorate of Revenue Intelligence (DRI) has arrested Govind Bharwani, an Indian origin businessman operating from Dubai, for allegedly financing an international syndicate that smuggled 70 kg of gold into India and took away foreign currency worth ₹21 crore in May-August last year.

Monkey fever case confirmed in Wayanad

A case of Kyasanur Forest Disease, a viral disease transmitted to humans through a species of ticks usually found on monkeys, has been reported from the Aranappara hamlet Wayanad district after an interval of two years. A 36-year-old natient, who is at the district hospital, is reportedly out of critical condition.

Meghalaya: trapped miner's body out of reach

The body of one of the 15 trapped miners, spotted last week, has disintegrated and slipped to the bottom of the mine in the course of the Navv's efforts to pull it out. officials said. PTI

Farmer killed

CHIKKAMAGALURU

A wild elephant trampled to death a farmer at Arain Chikkamagaluru taluk on Tuesday night. The incident occurred at a place close to the Kamenahalli elephants.

Officer, told The Hindu.

23,000 Railway posts for the poor

Goyal plans huge recruitment drive

SPECIAL CORRESPONDENT NEW DELHI

Almost four months ahead of the 2019 general election, the government-owned Railways on Wednesday announced a massive recruitment drive to hire about 2.30 lakh people in the next two years.

Following the 103rd Constitutional Amendment, 10% of the vacancies, i.e. around 23,000 vacancies will be reserved for candidates from economically weaker sections, Railway Minister Piyush Goyal said.

The 2.30 lakh people to be hired, is in addition to the hiring of 1.5 lakh employees now under way, and is expected to be completed by April.

"These recruitment drives will fix long-standing issues. With the increase in investment in Railways, recruitment needs have also Mr. Goyal increased," added.

Currently, Indian Railways has a sanctioned strength of 15,06,598 employees, of which 12,23,622 personnel are on the rolls, leaving 2,82,976 vacant posts. With the current drive to recruit 1,51,548 peo-



Railway Minister Piyush Goyal said the drive will fix long-standing issues.

ple, 1,31,428 posts will still be vacant. It is estimated that about 53,000 and 46,000 employees will retire in 2019-20 and 2020-21 respectively, creating about additional 99,000 vacancies

The recruitment will take place in two phases. The first will be initiated in February-March, 2019, while the second cycle is targeted to be completed by April-May, 2020. Of the total 2,30,000 vacancies, about 34,000 posts will be reserved for SC candidates, 17.000 for ST candidates. 62,000 for OBC candidates and 23,000 for candidates from economically weaker sections.

ISRO to launch military satellite tonight

Microsat-R put together by a handful of DRDO laboratories; PSLV-C44 will lift off from Sriharikota

MADHUMATHI D.S.

Just before midnight on Thursday, Indian Space Research Organisation's first mission of 2019 will put into space a 130-kg military imaging satellite, Microsat-R.

ISRO has shied away from sharing details of the spacecraft or its uses as it does routinely each time during its missions; except to say the satellite would be placed within 15 minutes after takeoff in a polar orbit 274 km away from Earth.

This is much lower than any of its civil Earth observation spacecraft, which fly pole to pole over the globe at between 400 km and 700

According to information obtained from different sources Microsat-R and its payload come assembled from a handful of laboratories of the Defence Research and Development Organisation (DRDO) and is meant for military use. The satellite was "assembled outside and ISRO only interfaced it" with its own systems and the launch vehicle, just as it treats any customer satellite.

PSLV-C44 will be launched around 11.30 p.m. from the older First Launch Pad at the Satish Dhawan Space Centre,

The PSLV-C44 will launch the military grade Microsat-R and In PSLV-C44. Kalamsat, a nano satellite which would be the first to use the fourth stage the rocket's fourth stage as an orbital platform aunched into a vehicle will be 277-km polar orbit, MISSION DESCRIPTION moved to a highe where the PSLV has ever released a orbital platform for carrying out satellite weighing 1.2kg with a life

Height: 12.8m | Diameter: 2.8m | Propellant: UH25 & N₂O₄ HTPB: Hydroxyl-terminated polybutadiene | MMH: Monomethylhydrazine | UH25: A mixture of 75% dimethylhydrazine and 25% hydrazine hydrate | MON3: Mixed oxides of

Sriharikota in Andhra Pradesh. For its part, ISRO is experimenting on two aspects of the vehicle. One is to reuse

nitrogen | N2O4: Dinitrogen tetroxide

Height: 20m

Diameter:

Pride of place

a waste stage. "For us, the excitement is about reusing the spent fourth stage [PS4] of the rocket as an orbiting platform for future experiments," an official said. Kalamsat, a small student

payload, will be the first to use PS4 as an orbital platform.

Amid the 28-hour countdown for the launch, ISRO Chairman K.Siyan said the PS4-Kalamsat experiment would be short-lived.

It would start about 1.5 hours from take-off and last about 14 hours until Friday midday. Later experiments with PS4 will be improved gradually, he said.

Height: 3.6m | Diameter:2 m | Propellant: HTPB

For the third time in IS-RO's recent history, the mission team is slated to cut off and restart the PS4 engine twice over a flight lasting around 100 minutes.

ISRO's pre-launch brochure said, "In PSLV-C44, the fourth stage (PS4) of the vehicle will be moved to higher circular orbit so as to establish an orbital platform carrying

STAGE 4

Height: 2.5m

Propellant:

Diameter: 1.34 m

experiments." The other experiment with the launcher PSLV-C44 vehicle will be a new third variant having two strap-on boosters. Called the PSLV-DL, D standing for demonstration, it ranges between the older two variants.

by jumbo in Karnataka

SPECIAL CORRESPONDENT

vind Nagar, near Hosakote, Reserve Forest area, known for movement of

Kumar Naik, 45, encountered the pachyderm while he was returning to his ginger field at 9 p.m. to spend the night there to protect the crop. "The place is close to the forest and it is covered by trees. It looks like he did not notice the elephant's movements," S.L. Shilpa, Range Forest

A slice of history



Deep dive: A visitor at the museum in the Red Fort complex in Delhi. Prime Minister Narendra Modi inaugurated museums on Subhash Chandra Bose, the Jallianwala Bagh and 1857 - the first war of Independence on Wednesday. • ARUN SHARMA

FCI job scam: FIR filed against Delhi-based firm

Sabotage in written exam: officials

SPECIAL CORRESPONDENT NEW DELHI

The Central Bureau of Investigation has registered an FIR against a Delhi-based company and 14 others for alleged irregularities in the recruitment of 53 watch & ward staff for the Food Corporation (FCI).

In 2017, the FCI had outsourced the process of recruitment to Ace Integrated Solutions. Accordingly, a written examination was conducted in February 2018 and 171 candidates were short-listed. In all, 96 had qualified.

While 53 candidates were empanelled by the agency, 43 were kept on the waiting list. However, during the



Workers at the FCI storage house in Morinda, Punjab.

subsequent verification of answer sheets of the shortlisted candidates, FCI officials found grave irregularities revealing that several of them had not appeared for the written examination.

4 granted bail in Naroda Patiya case

LEGAL CORRESPONDENT

The Supreme Court has granted bail to four convicts in the Naroda Patiya massacre case in Gujarat.

Over 90 people were killed by a mob in Naroda Patiya during the 2002 Gujarat riots.

A Bench led by Justice A.M. Khanwilkar allowed the bail applications of Umeshbhai Surabhai Bharwad, Rajkumar, Padmendrasinh Jaswantsinh Rajput and Harshad, alias Mungda Jila Govind Chhara Parmar.

The Gujarat High Court, on April 20 last year, upheld the conviction of 12 of the 29 accused who were held guilty on various charges by the trial court.

2 rhinos raised at Kaziranga Investors' India conducts 'largest find a new home at Manas

Displaced by 2016 floods, they were cared for by forest staff

SHIV SAHAY SINGH

They were only a few months old when floods in August 2016 at Kaziranga National Park displaced them. When rescuers found the two rhino calves, they were so small that they had to be fed milk in bottles.

Almost 30 months later, the calves, one male and other female, will find a new home at Manas National Park, about 450 km away from Kaziranga.

On January 22, they were transported to an enclosure, where they will get acclimatised to the surroundings of the Manas National Park, before they are released in the wild. Officials overseeing the translocation said that both the animals, who grew up together at Centre for Wildlife Rehabilitation and Conservation (CWRC) at Kaziranga,



One of the rhinos at Manas National Park. • SPECIAL ARRANGEMENT

have been radio-collared so that their movement in the wild are monitored.

Abhishek Narayanan, head of the Wildlife Rescue Division of Wildlife Trust of India, said that since 2002, when CWRC started, more than 50 calves stranded in the wild at Kaziranga National Park for various reasons, in most cases due to floods, have been rescued.

"Out of these, 16 were translocated to Manas. A few gave birth to calves, thus augmenting the number of rhinos at the Manas National Park by around 20," Mr Narayanan said. The number of rhinos there at present is 38.

The augmentation of Rhinos were part of the initiative "Bring Back Manas', a UNESCO World Heritage

meet a grand success: CM

SPECIAL CORRESPONDENT

Tamil Nadu Chief Minister Edappadi K. Palaniswami on Wednesday termed the second edition of the Global Investors Meet (GIM) a "grand success", and said it had exceeded the targeted investment of ₹2 lakh

"The response in terms of both investment proposals as well as delegate registration for GIM 2019 has far exceeded our expectations. Proposals for new investments have been pouring in ever since we started preparations... This is a momentous occasion in the history of industrialisation of Tamil Nadu, which will set new records of investment," Mr. Palaniswami said in his address at the start of the two-day event.

Union Defence Minister Nirmala Sitharaman assured support from the Centre for investors in defence and other sectors.

coastal security drill

Tests preparedness along coastline

SPECIAL CORRESPONDENT

Ten years after the 26/11 Mumbai terror attack, India conducted its largest coastal defence drill, Exercise Sea Vigil, to test its preparedness along the entire 7,516.6 km-long-coastline and exclusive economic zone of the country.

The first of its kind exercise was conducted on January 22 and 23 and coordinated by the Navy.

"Exercise Sea Vigil aims to comprehensively and holistically validate the efficacy of the measures taken since 26/11. It aims to simultaneously activate the coastal security mechanism across all 13 coastal States and Union Territories," the Navy said in a statement.

This involves the evaluation of critical areas and processes, including interagency coordination, information sharing and technical surveillance. "Multi

agency audit and identification of gaps, shortfalls and incorporation of lessons learnt into Standard Operating Procedures (SOP) are also the desired outcomes," the Navy stated.

preparedness and coordination, some rogue elements tried to breach the surveillance network and reach the coast during the exercise," an official said.

"In an effort to test the

Post 26/11, the Navy was designated as the agency responsible for overall maritime security, including offshore and coastal security, while the Coast Guard was designated as the agency responsible for coastal in territorial security

A multi-tiered patrol and surveillance mechanism with focus on technical surveillance and augmenting Maritime Domain Awareness through the coastal radar chain was adopted.



selection of one Consultant (Veterinarian), one JRF (Chemistry) and one SRF (Pharmacology) required in this institute. For further details please sit our web site www.crisiddha.tn.nic.in

TRANSMISSION CORPORATION OF ANDHRA PRADESH LIMITED VIDYUT SOUDHA :: VIJAYAWADA **NOTIFICATION** The Notification dt: 18.01.2012 issued for filling up of 1648 number of Junior Lineman posts by direct recruitment on regular basis in United Andhra Pradesh is hereby cancelled. The orders issued by APTRANSCO in this regard vide T.O.O(Addl.Secy-Per) Ms.No: 1067

dt: 23.01.2019 may be accessed at www.aptransco.gov.in



Sd/- CHAIRMAN & MANAGING DIRECTOR

Applications Invited for Agripreneurship Orientation Program MANAGE Centre for Innovation and Agripreneurship launches **Agripreneurship Orientation Program** supported by RKVY-RAFTAAR, Ministry of Agriculture and

Farmers' Welfare, Govt of India. Youth/students having an innovative idea and want to start an agri-business venture are encouraged to apply. The program will provide two months training cum hands on internship with startups, Rs.10,000 per month stipend, grant in aid up to Rs.5 lakhs to selected entrepreneurs, and

assistance in incorporating a startup business. Last date for application is 30th January 2019.



Rajendranagar, Hyderabad - 500030, Telangana.

Applications invited for Startup Agri-Business Incubation MANAGE Centre for Innovation and Agripreneurship launches Startup Agri-Business Incubation Program supported by RKVY-RAFTAAR, Ministry of Agriculture and Farmers' Welfare,

Startup Agri-Business entrepreneur looking to scale-up the business can avail incubation facilities at the centre, which includes up to Rs.25 Lakhs grant-in-aid, extensive mentoring from experts technical and business support, and long term incubation support Last date for application is 30th January, 2019.

For more details: www.manage.gov.in

Government of India.

Director (Agricultural Extension)

Now, an app to help the visually impaired

SPECIAL CORRESPONDENT

In a bid to assist visually impaired people to easily determine denomination of currency notes, the Indian Institute of Technology at Ropar in Punjab has developed an Android App "Roshni", using image processing and ana-

The App was launched on Wednesday at the IIT Ropar. Assistant professor Puneet Goyal, said that 'Roshni' is the first Android App that works successfully with new currency notes that were released after demonetisation and it works well in broad range of light conditions and holding angles. "This App utilises an adaptable

deep learning framework, which further uses the patterns and features embedded on the notes to differentiate and determine the currency denomination. Our IP-SA (Image processing, Security and Analytics) lab prepared a rich

dataset of more than 13, 000 images of currency notes under varied real-world conditions. The user has to bring the currency note in front of phone camera and the App would provide audio notification intimating the currency note denomination to the user," said Mr. Goyal.

The team includes Dr. Puneet Goyal, Ph.D scholars Mandhatya Singh and Joohi Chauhan, and student R. Ram of the CSE & Engineering department.



The three months certificate course creates awareness about plant biosecurity. International and national regulations, plant quarantine system in India, import and export procedures, recent incursion and emerging threats w.r.t. plants and plant products to enhance technical capabilities and Sanitary and Phytosanitary compliance.

ELIGIBILITY: Bachelor's degree in any branch of science discipline with 50 per cent marks from a recognized Indian University. IMPORTANT DATE: Last date for receiving completed applications 28 February 2019.

For further details, please log on to https://niphm.gov.in Contact No: +91 8978778704,