

IN BRIEF



IAF pilot killed in plane crash in Punjab

CHANDIGARH
A micro-light aircraft crashed in Punjab's Patiala on Monday, killing an Indian Air Force pilot and injuring an NCC cadet. While Group Captain G.S. Cheema died in the accident, NCC trainee from the Government Mohindra College, Vipin Kumar Yadav, was injured. Punjab Chief Minister Amarinder Singh expressed deep anguish over the crash.

IAF, CISF win trophies for Republic Day parade

NEW DELHI
The Indian Air Force has been adjudged the best marching contingent among the three Services, while the Central Industrial Security Force was the best among the Central Armed Police Forces and other auxiliary forces category in this year's Republic Day parade. Defence Minister Rajnath Singh presented the trophies for the best marching contingents on Monday.

Health Minister launches vaccination drive

NEW DELHI
"No child should have to suffer or die due to vaccine preventable diseases," said Union Health Minister Harsh Vardhan on Monday, inaugurating a special campaign on Intensified Mission Indradhanush (IMI 2.0). The campaign aims to immunise children under two years of age and pregnant women against vaccine-preventable diseases.

BJD woman leader's death to be probed

BERHAMPUR
Odisha Director General of Police on Monday ordered a high-level probe into the death of Meenakshi Mishra, leader of the Biju Janata Dal women's wing, who attempted self-immolation in front of the Berhampur Superintendent of Police's office on February 12. She died of burn injuries at a private hospital in Bhubaneswar on February 20.

Exhibition showcases Tagore's voice recording

Rare artefacts of Kolkata featured



Traversing time: Children observing the machine used to record Rabindranath Tagore's voice. SPECIAL ARRANGEMENT

SHIV SAHAY SINGH
KOLKATA

Tracing over a century of evolution of technology, the National Council of Science Museums (NCSM) has curated an exhibition of over 15 artefacts titled 'Rare Artefacts' in the city, which includes a vinyl gramophone disc used to record a rendering of poems and songs by Rabindranath Tagore.

It was in 1932 that Tagore had recorded the poem 'Jokhon hobo babar moto boro' and the song 'Tobu mone-rekhe' in a George Newman disc recording machine that was imported from Germany.

'First of its kind'

"This artefact was one of the first of its kind machines to be imported from Germany by Hindusthan Musical Products Limited. The equipment, which was in the possession of the company, was donated to the Birla Industrial Technological Museum (BITM) in the 1970s," Rajib Nath, curator of the exhibition, said. Mr. Nath pointed out that even after almost eight decades, the flawless rendering of the voice of the Nobel Laureate on the disc being played through an HMV gramophone at the ex-

Income scheme to cover fewer farmers

Kisan Samman Nidhi will benefit only 12 crore people; Centre urges West Bengal to join scheme

SPECIAL CORRESPONDENT
NEW DELHI

One year after the launch of the Pradhan Mantri Kisan Samman Nidhi, the Centre has revised the farmer income support scheme's beneficiary target down to just under 12 crore from 14 crore.

In fact, empirical evidence suggests that saturation level will reach around 10 crore families. So far, almost 8.5 crore farmers have benefited.

Speaking at an event to mark the first anniversary, Agriculture Minister Narendra Singh Tomar pointed to West Bengal and Bihar as the major culprits for the lag. While the West Bengal government has refused to join the scheme at all, the Bihar government's approach of waiting for applicants means more than 60% of potential



Safety assured: The scheme gives land-owning farmer families an annual sum of ₹6,000. FILE PHOTO

beneficiaries are yet to register.

The scheme, which gives land-owning farmer families an annual sum of ₹6,000, was launched in the run-up to the 2019 Lok Sabha elec-

tion, and new registrations have slowed after the election.

The Centre's beneficiary estimate of 14 crore was initially based on the number of landholdings recorded in

the agricultural land census.

The revised estimate of 11.97 crore is based on the 9.84 crore who have registered themselves on the portal so far (although only 8.45 crore have received money so far), plus an estimated 2.13 crore beneficiaries left out, mostly from West Bengal and Bihar. However, "empirical evidence suggests that saturation level will reach around 10 crore farmer families," according to a presentation made at the event.

'No reply from Bengal'

Mr. Tomar pointed out that of West Bengal's 70 lakh farmers, 10 lakh have already self-registered through an online process.

However, they cannot receive the cash benefit until the database is verified by

the State government, he said.

"Officials have approached the State government about this many times and I have also written to the Chief Minister twice, urging the State to join the scheme. But we have not received any reply as yet," Mr. Tomar said, pointing out the State's economy would stand to benefit with a potential annual payout of ₹4,000 crore if all the State's farmers registered themselves for the scheme.

In Bihar, the potential beneficiaries number 158 lakh. However, only 59.7 lakh farmers have uploaded their data on the PM-KISAN portal so far. "The State has adopted a beneficiary application-based approach, which is delaying identification and upload," said the presentation.

Wuhan researchers call for expansive approach to testing SARS-CoV-2

Oral swab testing might not be enough to confirm status, says paper

RAMYA KANNAN
CHENNAI

A paper published in a recent issue of the peer-reviewed, open-access journal 'Emerging Microbes and Infections' has cautioned that SARS-CoV-2, the virus causing the COVID-19 outbreak, is being shed through multiple routes, so testing through oral swabs alone might not be sufficient.

A paper by Wei Zhang, et al, all from the CAS Key Laboratory of Special Pathogens at the Wuhan Institute of Virology, says investigations on patients in a local hospital infected with the virus revealed the presence of SARS-CoV-2 in anal swabs and blood as well. What's more, more anal swabs than oral swabs tested positive at a later stage of infection. Since COVID-19 is believed to be a disease of the respiratory tract, usually only oral swabs



An awareness event on COVID-19 in Siliguri.

are used for diagnosis, and discharge is based on the oral swabs testing negative. The anal positives suggested, they argued, shedding through the oral-fecal route, and therefore transmission is possible as well. The researchers also showed that a serology test (testing blood for antibodies) can improve detection positive rate, and

this should be used in future.

As part of the research, samples - including oral swabs, anal swabs and blood - were collected by Wuhan Pulmonary Hospital. Two investigations were performed - the paper describes - In the first investigation, samples were taken from 39 patients, 7 of whom were in a 'severe condition'. In the second investigation, samples were lifted from 139 patients, whose clinical records were not available.

"When counting all swab positives together, we found most of the positives came from oral swab (8/10, 80%) on day 0. However, this trend appears to change on day 5. We found more (6/8, 75%) anal swab positive than oral swab positive (4/8, 50%)," the paper says. The data suggested a shift from more oral positives during

early period to more anal positives during later period, it adds.

"We show that the current strategy for the detection of viral RNA in oral swabs used for 2019-nCoV diagnosis is not perfect. The virus may be present in anal swabs or blood of patients when oral swabs detection negative," the researchers say, indicating the possible gaps in current detection methods. "We detected the virus in oral swabs, anal swabs and blood, thus infected patients can potentially shed this pathogen through respiratory, fecal-oral or body fluid routes."

This observation implies that a patient cannot be discharged purely based on oral swabs testing negative, and the researchers go on to make a recommendation to do serological tests to confirm status.

CBI files case against govt. mint officials

SPECIAL CORRESPONDENT
NEW DELHI

The CBI has filed a corruption case against five officials of India Government Mint (IGM), Noida, and a company in connection with the supply of ₹10 coin blanks.

IGM floated a tender in March 2010 for supply of 500 million pieces of ₹10 bi-metallic composite coin blanks. An agreement was signed with Mittal Appliances Ltd. in February 2011 for supply of 260 million pieces. But the company could not meet delivery schedules.

In 2013, a file noting was initiated stating that IGM had received all supplies and 100% payment was released to the company. However, two years later, another noting referred to a company representation for the final claim pertaining to two supplies. A sum of ₹1.56 crore was illegally refunded.

WEATHER WATCH

RAINFALL, TEMPERATURE & AIR QUALITY IN SELECT METROS YESTERDAY



TEMPERATURE DATA: IMD, POLLUTION DATA: PCB, MAP: INSAT/IMD (TAKEN AT 18.00 HRS)

Forecast for Tuesday: Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Jharkand, West Bengal and Sikkim.

CITY	RAIN	MAX	MIN	CITY	RAIN	MAX	MIN
Agartala	...	29.3	16.5	Kozhikode	...	35.6	25.4
Ahmedabad	...	31.3	17.4	Kurnool	...	36.0	20.0
Aizawl	...	21.0	10.9	Lucknow	...	28.2	16.2
Allahabad	...	28.4	17.0	Madurai	...	35.4	23.6
Bangalore	...	29.5	18.6	Mangaluru	...	36.7	24.2
Bhopal	...	27.6	13.6	Mumbai	...	32.5	19.4
Bhubaneswar	...	32.8	18.0	Mysuru	...	31.9	20.0
Chandigarh	...	25.1	11.1	New Delhi	...	26.4	11.8
Chennai	...	31.8	22.6	Patna	...	0.1	28.6
Coimbatore	...	33.0	22.3	Port Blair	...	31.0	25.8
Dehradun	...	25.3	8.6	Puducherry	...	32.4	22.4
Gangtok	...	30.6	6.5	Pune	...	36.2	19.0
Goa	...	34.3	22.1	Raipur	...	28.4	18.7
Guwahati	...	29.6	14.4	Ranchi	...	0.2	29.4
Hubballi	...	34.0	20.0	Shillong	...	8.4	17.7
Hyderabad	...	34.7	19.6	Shimla	...	2.0	15.9
Imphal	...	26.0	10.4	Srinagar	...	16.9	4.1
Jaipur	...	27.3	15.0	Thiruvananthapuram	...	33.7	24.6
Kochi	...	33.0	24.8	Tiruchirappalli	...	34.0	22.0
Kohima	...	15.6	9.0	Vijayawada	...	31.0	23.2
Kolkata	...	27.1	19.5	Visakhapatnam	...	31.0	23.2

(Rainfall data in mm; temperature in Celsius)

Pollutants in the air you are breathing Yesterday

CITIES	SO ₂	NO _x	CO	PM _{2.5}	PM ₁₀	CODE	Yesterday
Ahmedabad	52	80	19	150	125	4	
Bangalore	14	20	64	50	66	1	In observation made at 4.00 p.m., Bhubai, Rajasthan recorded an overall air quality index (AQI) score of 289 indicating a hazardous level of pollution. In contrast, Khanna, Punjab recorded a healthy AQI score of 45.
Chennai	39	22	91	38	...	3	
Delhi	24	33	29	294	152	5	
Hyderabad	8	34	19	62	87	1	
Kolkata	9	58	39	300	178	2	
Lucknow	8	68	67	303	...	2	
Mumbai	18	89	41	140	233	3	
Pune	79	30	85	156	118	2	
Visakhapatnam	3	61	55	104	136	1	

Air Quality Code: Poor Moderate Good (Readings indicate average AQI)
SO₂: Sulphur Dioxide. Short-term exposure can harm the respiratory system, making breathing difficult. It can affect visibility by reacting with other air particles to form haze and stain culturally important objects such as statues and monuments.

NO_x: Nitrogen Dioxide. Aggravates respiratory illness, causes haze to form by reacting with other air particles, causes acid rain, pollutes coastal waters.
CO: Carbon monoxide. High concentration in air reduces oxygen supply to critical organs like the heart and brain. At very high levels, it can cause dizziness, confusion, unconsciousness and even death.

PM_{2.5} & PM₁₀: Particulate matter pollution can cause irritation of the eyes, nose and throat, coughing, chest tightness and shortness of breath, reduced lung function, irregular heartbeat, asthma attacks, heart attacks and premature death in people with heart or lung disease