

Daily Defence Current Affairs

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NCC Will Touch Strength Of 20 Lakh In Coming Years

- The National Cadet Corps has completed 76 years of its existence and made commendable efforts in increasing the strength of cadets, the defence ministry said asserting that the Corps will touch the strength of 20 lakh in coming years.
- The largest uniformed youth organisation in the world, the NCC was raised in 1948.
- As per tradition, the NCC day is being celebrated across India and pan-India 'Blood Donation camps' are being organised. The quantum of blood donation this year is likely to exceed the mark of 50,000 blood units donation achieved last year, it said.
- Apart from this, various social activities and cultural awareness programs are being organised like tree plantation drive, cleaning of statues, 'Swachhta hi Sewa', and Nasha Mukti Abhiyaan.
- Apart from aiming for its expansion, the syllabus and training of the NCC cadets have also been "overhauled with a specific aim" and desired outcome in consonance with various government initiatives.



'Women officers have poor interpersonal skills, complain too much': Lt General Rajeev

- A senior Indian Army officer has called for a comprehensive review of women commanding officers' (COs) performance, citing significant concerns regarding their leadership in the force.
- Lt General Rajeev Puri, who recently completed his tenure as commander of the 17 '**Brahmastra**' **Mountain Strike Corps**, highlighted several challenges faced by women COs, suggesting that their lack of training for command roles and certain leadership traits were affecting their effectiveness.
- Lt Gen Puri's review focused on eight women COs serving in his corps, noting various leadership shortcomings. "Women COs have been exhibiting poor 'interpersonal relations', with an 'exaggerated tendency to complain' to senior commanders about their subordinates rather than exercising their own authority and powers first," he said.
- He also pointed to a "lack of empathy" among some women COs for officers and troops in their units. The general added, "Any professional disagreement or minor argument is viewed as insubordination... The lack of empathy may be attributable to a need to overcompensate."



L&T's Spanish partner rolls out new stealth tech for submarines

- In a milestone for the high stakes contest to manufacture and supply next-generation conventional submarines to the Indian Navy, L&T's foreign partner for the project has embarked new stealth technology on a Spanish Navy submarine, which will give it the ability to stay underwater for up to three weeks.
- The bio ethanol stealth technology (BEST) is being integrated onto the S 83 submarine under construction for the Spanish Navy and has been offered with complete transfer of technology (ToT) in a joint bid by **Navantia and L&T** for the requirement of six submarines by the Indian Navy.
- Amid the ongoing Rs 70,000 crore deal for buying six new submarines, Indian Larsen and Toubro and its Spanish partner Navantia on Tuesday showcased the integration of the critical Air Independent Propulsion system on an under-construction Spanish Navy submarine.
- The L&T and Navantia are partners for the Indian Navy's programme to buy six new AIP-fitted submarines, which can help the boats to stay underwater for at least up to three weeks.
- The other competitor in the contract is a combination of Indian Mazagaon Dockyards Limited and German firm ThyssenKrupp.



Dornier 228 Aircraft Flypast On The Sidelines of India-CARICOM Summit

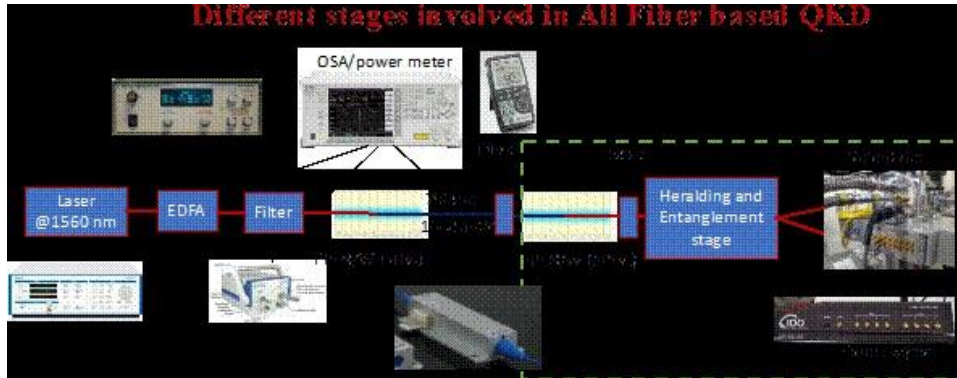
- On the sidelines of the 2nd India-CARICOM Summit, leaders of the member countries witnessed a flypast of two Dornier 228 aircraft sourced from India (HAL) by Guyana.
- In visuals shared by the Ministry of External Affairs, the Dornier aircraft was seen performing an elegant flypast as the leaders of India and Guyana watched.
- As per the information provided by the ICG, Dornier 228 is a twin-engine turboprop, highly versatile multi-mission maritime patrol aircraft manufactured by HAL for the Indian Coast Guard. The aircraft is lightweight with a wide range of operating speeds and fuel-efficient uniqueness.
- The Dornier 228 has quick role-changing capability for various roles such as maritime patrol & surveillance, marine pollution contingency, search and rescue and medical evacuation.
- The two Dornier 228 aircraft were commissioned by the Guyanese Defense Force in April earlier this year.



DRDO and IIT Delhi organise demonstration of various Quantum Communication Technologies

- The DRDO Industry Academia–Centre of Excellence (DIA-CoE), IIT Delhi demonstrated quantum communications technologies in New Delhi. It has been developed by their collaborative initiative of the entanglement based quantum key distribution approaches for robust and secure communication, demonstrating entanglement distribution and quantum key distribution (QKD) over a 50 km fiber link in laboratory.
- A separate field test has demonstrated entanglement distribution and QKD over 8 km of optical fiber in IIT Delhi campus.
- In another initiative of quantum research, Free-space Entanglement distribution was demonstrated using the **BBM-92 protocol**, a key QKD method, between two tables separated by 20 meters in the lab and 80m in the open space. This experiment demonstrated short-range quantum communication in a free-space setup.
- In an innovative experiment, **Hybrid entanglement** has been demonstrated in a free-space environment, achieving a Quantum Bit Error Rate (QBER) of around 6% in the laboratory over a distance of 10m in the lab. In addition, QKD systems supporting multiple independent channels driven by a single source are also being explored with promising results. These open the door for more flexible, multi-protocol quantum communication systems.
- In achieving the above breakthrough, an all-fiber heralded photon source with second-order correlation function ($g^2 \sim 0.01$) at rates reaching hundreds of kHz is developed. This innovation is vital for single-photon generation, a critical requirement for secure quantum communication.
- An all-fiber entangled photon source has also been developed with high visibility. The Bell test parameter for this source is more than 2.6, exhibiting strong quantum entanglement, which is essential for protocols like BBM-92.
- For free space quantum communication experiments, Free-space heralded single photon source has been demonstrated with a heralding rate of over 4 million counts/sec. This development enables robust free-space quantum communication.
- Following **India's First Quantum Key Distribution (QKD)** demonstration between the cities of **Prayagraj and Vindhyachal**, separated by 100 km, by DRDO labs and

IIT (D) in February 2022, many new initiatives have been taken by DRDO and IIT (D).



REVIEW QUESTIONS

1. In which Indian state was the multi-agency disaster relief exercise 'Sanyukt Vimochan 2024'?

- A. Maharashtra
- B. Gujarat
- C. Karnataka
- D. Tamil Nadu

ANSWER: B

2. Where was the joint military exercise 'Poorvi Prahar' held from November 14-17, 2024?

- A. Arunachal Pradesh
- B. Assam
- C. Rajasthan
- D. Jammu & Kashmir

ANSWER: A

3. Which country has partnered with BDL to jointly develop advanced Pantsir air defence systems?

- A. United States
- B. Israel
- C. Russia
- D. France

ANSWER: C

4. INS Taragiri Is Manufactured By

- A. CSL
- B. MDL
- C. GRSE
- D. None

ANSWER: B

5. Ex SURYA KIRAN Conducted b/w India &

- A. Bhutan
- B. Sri Lanka
- C. UAE
- D. Nepal

ANSWER: D

6. European ASRAAM Stands For

- A. Advanced Short Range Air Missile
- B. Advanced Short Ring Air-to-Air Missile
- C. Advanced Short Range Air-to-Air Missile
- D. None

ANSWER: C

7. Marine Engineering Training Establishment of the Indian Navy located at

- A. Noida
- B. Kochi
- C. Pune
- D. Wayanad

ANSWER: C

8. Where Is The Hq Of The Southern Western Command of The Indian Army?

- A. Jaipur
- B. Jabalpur
- C. Pune
- D. Mumbai

ANSWER: A

9. Sea Dragon Exercise Hosted By

- A. USA
- B. Sweden
- C. France
- D. None of the above

ANSWER: A

10. India Purchased C 130 J from

- A. USA
- B. Sweden
- C. France
- D. None of the above

ANSWER: A

11. College of Military Engineering (CME) Is Located At

- A. Pune
- B. Kamptee
- C. Mumbai
- D. Noida

ANSWER: A

12. Which Country Ranked Third Highest In The World Defence Expenditure?

- A. Australia
- B. USA
- C. France
- D. Bharat

ANSWER: D

13. Regimental Center Of PUNJAB REGIMENT Is In

- A. Balasore, Odisha
- B. Chennai, T.N.
- C. Trombay, M.H.
- D. Ramgarh Cantonment, Jharkhand

ANSWER: D

14. India Purchased IAI Searcher UAV from

- A. USA
- B. Sweden

- C. France
- D. Israel

ANSWER: D

15. KHARTOUM Is The Capital Of

- A. Spain
- B. Sri Lanka
- C. Suriname
- D. Sudan

ANSWER: D

16. "A Promised Land" Book Is Written By

- A. Barack Obama
- B. Meena Iyer
- C. Amish Tripathi
- D. PS Sreedharan Pillai

ANSWER: A

17. HELINA Missile Has A Maximum Range Of

- A. 7 kilometres
- B. 8 kilometres
- C. 9 kilometres
- D. 10 kilometres

ANSWER: A

18. "We Protect" Is The Motto Of

- A. ICG
- B. IAF
- C. Indian Army
- D. BSF

ANSWER: A

19. Joint Exercises B/w The India And France Is Called:

- A. Yama
- B. SLINEX
- C. Indra
- D. GARUDA

ANSWER: D

20. India Purchased MiG-21 from

- A. USA
- B. Sweden
- C. France
- D. Russia

ANSWER: D

