

## LMW-ATC bags DRDO's Defence Technology award

Textile machinery manufacturing major Lakshmi Machine Works (LMW) has bagged the DRDO Defence Technology Absorption Award, 2017. The Advanced Technology Centre (ATC) of LMW recently bagged the award for successful delivery of airborne dome. K Soundhar Rajhan, Director (Operations), LMW, told *BusinessLine* the ATC has been working with the DRDO laboratory, Centre for Airborne Systems (CABS), in Bengaluru, to fabricate and assemble a complete metallic structure of Airborne Dome for Airborne Warning and Control Systems (AWC&S).

This dome structure, which is a significant part of the AWC&S, has been designed and developed indigenously by DRDO for use by the Airforce. "After the establishment of ATC in 2010, LMW got into the development of parts for the aerospace sector. We have done quite a few assemblies and projects for a company in the US and HAL as well. DRDO recognised our work and gave us the airborne dome project. We developed the prototype in record time. It is a surveillance product, is huge, comprises more than 4,500 metallic parts and assembled with more than 65,000 rivets. The product will undergo rigorous tests," said Soundhar Rajhan. Group company Lakshmi Technology and Engineering has also bagged the DRDO Defence Technology Absorption Award 2017 for developing the Power Take Off Shaft (PTO) for the Light Combat Aircraft.

<https://www.thehindubusinessline.com/companies/lmw-atc-bags-drdo-award/article23942475.ece>

## TIMES OF INDIA

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## India now wants artificial intelligence-based weapon systems

### HIGHLIGHTS

- Multi-stakeholder task force, set up in February, to formulate a roadmap
- Establishing tactical deterrence and visualising potential transformative weaponry, developing intelligent, autonomous robotic systems are among ideas being looked at

Humanoid robots, armed with lethal weapons, to guard the long borders with Pakistan and China? Or, unmanned tanks, submarines and aircraft to take the battle to the enemy? Well, all this as of now may be in the realm of pure science fiction for India, which does not even have aerial combat drones.



But India does not want to miss the bus in the new global arms race to develop artificial intelligence(AI)-powered weapon and surveillance systems for futuristic wars. The country's defence establishment is now working towards harnessing the expertise of the information technology industry and academia in this arena, taking a cue from countries like the US and China that are focusing on AI and MI (machine learning) to develop lethal autonomous weapon systems (LAWS).

The critical need to be prepared for this new revolution in military affairs was even stressed by Prime Minister Narendra Modi during the DefExpo in Chennai last month. "New and emerging technologies like AI and Robotics will perhaps be the most important

determinants of defensive and offensive capabilities for any **defence force in the future**. + India, with its leadership in information technology domain, would strive to use this technology tilt to its advantage," he said.

But it will take a lot of doing. The government is banking on a multi-stakeholder taskforce, which was set up in February, to formulate a concrete strategy and framework for "employment of AI for national security and defence needs" in the years ahead.

<https://timesofindia.indiatimes.com/india/india-moves-to-develop-ai-based-military-systems/articleshow/64250232.cms>



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## **Baleswar doppler station still to take off**

Inordinate delay in setting up of Doppler Weather Radar Station (DWRS) at Baleswar and indecision of the India Meteorological Department (IMD) to make functional other DWRSs has become a matter of great concern for the State Government. Even as probable maximum storm surge (PMSS) is highest in Baleswar coast and the area is also prone to cyclone, the Union Government is still undecided over setting up the DWRS at Baleswar. This has come as a surprise for the State Government, which is worried over such development as among the entire Odisha coasts, it has been predicted by the IMD that PMSS is highest 11 meters in Baleswar coast. Setting up of the DWR, therefore, assumes significance at the Baleswar coast and accordingly, the IMD had allowed construction of DWR buildings at Baleswar along with Sambalpur. The DWR buildings both at Sambalpur and Baleswar are complete except the top floor of G+4 storey building.

While procurement of radar for Sambalpur has been included in the annual plan of the IMD, purchase decision of DWR has not been taken for Baleswar, revealed officials. Sources said that as the DRDO is yet to issue clearance, the Earth System Science Organisation (ESSO), which is procurement organisation of DWRs, has not been able to take any concrete decision in this regard. According to officials with the DWRS at Paradip in operation, real time data in every 10 minutes is now available in the IMD website ([www.imd.gov.in](http://www.imd.gov.in)). The DWRS at Gopalpur has already been installed and it is in operational mode now.

Long ago construction of DWRS buildings at Sambalpur and Baleswar was completed except top floor of G+4 storey building at both places. While procurement of radar at Sambalpur is included in the national plan of the IMD, no decision is yet taken for the Baleswar radar by the IMD, sources admit. The State with 480-km-long coastline is prone to cyclones. While the 1999 Super Cyclone had its landfall near Paradip, Phailin had hit the coast near Gopalpur in 2013. After the DWR station is in operation in Paradip, advance and more accurate information on the upcoming cyclones or storms are available - which help in disaster management, said an IMD official. As the procurement of DWR for Sambalpur has already been decided, it is expected that the radar station will be operational this year.

However, without clearance from the DRDO, it will be impossible for authorities to set up the radar station at Baleswar though building has been constructed with huge funds. Keeping in view the urgency and significance of setting up of and making functional all DWRS in the State against the backdrop of rise in sea surges due to adverse climatic change effects, the State Government has decided to take up the matter at the highest level in the Union Government.

<http://www.dailypioneer.com/state-editions/bhubaneswar/baleswar-doppler-station-still-to-take-off.html>