

Lighter, deadlier Gen Next Akash flight-tested

The missile will be offered for export; possibility of sales to east Asian and African countries

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The Defence Research & Development Organisation (DRDO) successfully flight-tested the “New Generation Akash Missile” (Akash-NG) on Wednesday at the Integrated Test Range (ITR) at Balasore in Odisha.

“The flight trial was conducted at 12:45 PM from a land-based platform with all weapon system elements such as multifunction radar, command, control and communication system and launcher participating in deployment configuration,” announced the Ministry of Defence (MoD).

The Indian Air Force (IAF) and the army already operate nine batteries of the old Akash missile. This is now being improved into the Akash-NG, which is engineered to shoot down extremely high-performing fighter aircraft — or high-maneuvring, low radar cross-section aerial threats, as the IAF calls them.

Two key improvements to the current Akash missile have transformed it into the Akash-NG. The first is a brand new, two-pulse, solid rocket motor that replaces the old ramjet on the legacy Akash missile. The new motor not just reaches out

to 30 kilometres (km), but also generates a high terminal velocity to strike even the fastest and most agile enemy fighters.

The second major change in the Akash-NG is its new seeker head, which has been developed by the DRDO laboratory, Research Centre Imarat (RCI). At the terminal phase of engagement, the seeker locks onto the enemy aircraft and continuously guides the Akash-NG to impact with the target.

The phases of engagement are measured in seconds. The

The IAF earlier inducted seven units of the Akash missile, while the army has inducted two and has another two on order. Bharat Electronics Ltd builds the Akash missile system for the IAF

Akash-NG detects enemy fighters at ranges out to 80 km and initiates the launch sequence. By the time the enemy aircraft is 50 km away, the Akash-NG’s computers have calculated the launch trajectory and impact point and launched the missile. In just over a minute, the missile blazes its way to the impact point 30 km away and destroys the target.

The Akash-NG rocket has been re-engineered comprehensively and brought down from the legacy Akash’s 700 kg to a sleek 350 kg. This not just increases range, but also lets the Akash-NG launcher and replenishment vehicle carry more missiles.

“Once deployed, the Akash-NG weapon system will prove to be a force multiplier for the



Akash factfile

- New-generation surface-to-air missile with 30 km range
- High manoeuvrability to strike fast moving aircraft
- Has a brand new, two-

pulse, solid rocket motor that replaces the old ramjet on the legacy Akash missile

- The new motor generates a high terminal velocity to strike even the fastest and most agile enemy fighters

- Rocket has been re-engineered and brought down from the legacy Akash’s 700 kg to a sleek 350 kg

- Missile a boost to air defence capabilities of Indian Air Force

air defence capability of the IAF,” stated the MoD.

The IAF earlier inducted seven units of the Akash missile, while the army has inducted two and has another two on order. Bharat Electronics Limited builds the Akash missile system for the IAF, while Bharat Dynamics Limited is the prime integra-

tor for the army.

The MoD earlier announced that indigenisation levels in the Akash are above 96 per cent. The IAF has part-funded the development of the Akash-NG. The cost of the system would reduce, were foreign governments to buy the economically priced, hardy missile.

In December, the Union

Cabinet approved exporting the Akash missile system and, in January, the missile was on display in the Republic Day parade. There is a possibility of sales to east Asian countries, such as Vietnam and the Philippines, that are wary of Chinese aggression. There is also interest from several African countries.