

IAI Introduces New Loitering Weapons for Anti-Radiation, Precision strike

Defense-Update

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Israel Aerospace Industries (IAI) is unveiling two new loitering weapons at the Singapore Airshow this week. The Green Dragon - a compact loitering man-in-the-loop guided weapon and the Harpy New Generation (NG), an autonomous anti-radiation Loitering weapon, are both based on the HARPO family and technology.



Harpy NG (New Generation) is designed to counter the newer types of air defense radar threats that have evolved since the introduction into service of its former version, in the early 1990s. Photo: IAI

Israel Aerospace Industries (IAI) is unveiling two new variants of its Harpy/Harop loitering weapon family at the Singapore Airshow this week. The first is the Harpy New Generation (NG) — an autonomous, anti-radiation loitering weapon designed to Suppress and Destroy Enemy Air Defense (SEAD/DEAD) operations. The second is the Green Dragon, a compact, lightweight variant of the HAROP, which uses Electro-Optical/Infra-Red (EO/IR)-guidance to provide ‘man-in-the-loop’ capability. HAROP and Green Dragon are designed to locate, track and destroy high-quality static and mobile targets.



***The expanded family of IAI's loitering munitions displayed at the Singapore Airshow 2016.
Photo: Tamir Eshel, Defense-Update***

Harpy NG was developed to counter the newer types of air defense radar threats that have evolved since the introduction into service of its first-generation predecessor, in the early 1990s. It automatically engages emitters and radar-dependent threats in an area of responsibility assigned to it. The NG retains its predecessor's original 15 kg. warhead, but has a new and improved RF seeker which covers a wider frequency range, to match the 'migration' of modern target-acquisition and fire-control radars to the lower frequency bands.

Utilizing the HAROP airframe, the Harpy NG also offers a longer loitering time of about six hours, extended range and a higher altitude ceiling. The common platform enables commonality in maintenance and training across several families of loitering vehicles operated by some of its customers. In addition to its service with the Israel Defense Forces, Harpy also serves as a loitering counter-air-defense weapon with a number of international customers, including India, South Korea, Chile, Turkey and China. Harop is operational with India and Azerbaijan.

Boaz Levi, IAI Corporate Vice-President and General Manager of the Systems, Missiles & Space Group, said: "IAI is introducing these new Loitering Munitions, intended to refresh, update and complement our already successful family of LMs. The new tactical products serve to bolster the abilities of small, tactical, infantry units and Special Ops, with a special emphasis on solving operational problems in urban areas."



The other new member of IAI's family of LM's is the Green Dragon – a tactical, affordable weapon which addresses the growing demand from military users for organic, persistent, situational- awareness diagnosis and rapid kinetic response. It is also suitable for small ground units and special operations forces, operating as an organic loitering weapon which enables both ISR and attack capabilities in short-response time. As an all-electric LM, Green Dragon operates silently for up to two hours, during which its operator can collect visual intelligence of surrounding areas up to a range of 40 km.

Green Dragon can locate and acquire targets and, upon a command from its operator, can dive on designated targets to impact and explode with an accuracy better than 1 meter (CEP). The operator can abort the attack any time before impact, through a built-in "abort and circle" capability, designed to prevent unnecessary collateral damage or mistaken targeting.

The Green Dragon weighs 15 kg. and uses an electro-optical 'micropop' EO/IR payload for surveillance, targeting and terminal homing. Its warhead weighs almost 3 kg. The Green Dragon is carried and launched from a sealed 1.7-meter-long canister that can be carried by a soldier in a backpack or stacked on a small vehicle in groups of 12-16 launchers. Upon launch, the weapon expands to a cruciform 1.7-meter-wide shape optimized for loitering and terminal dive. It is controlled from a tablet-sized control panel, through a tactical, low-power datalink.

<https://www.youtube.com/watch?v=1tZB44fL5tw>

