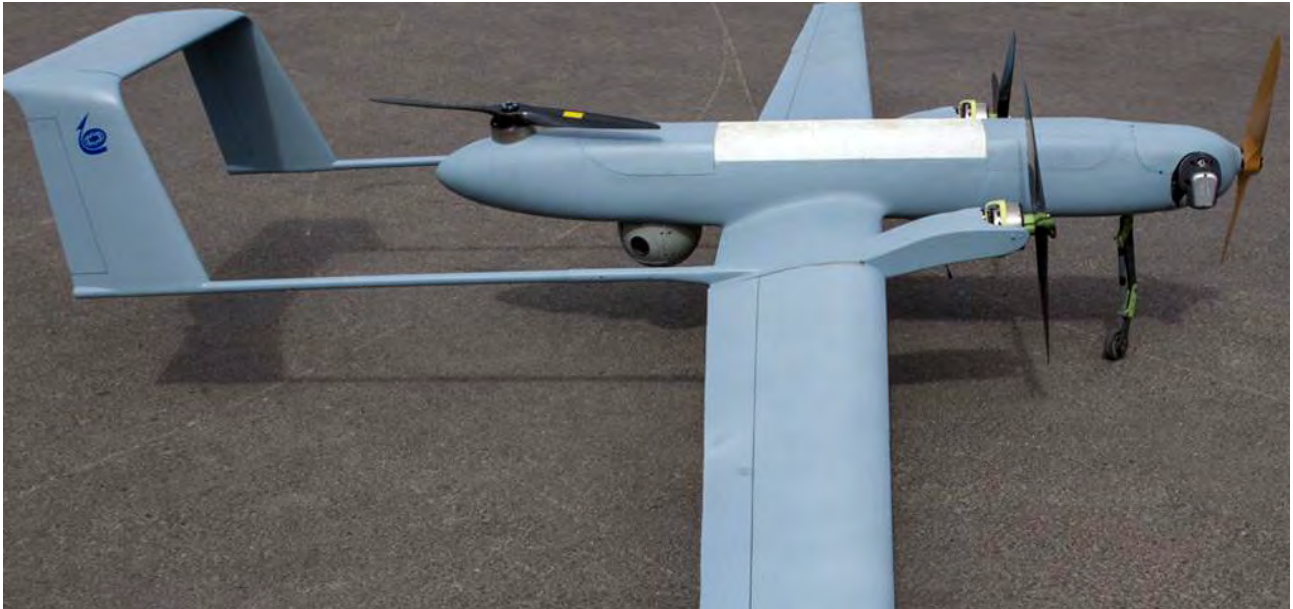


IAI Extends Panther's Endurance, Positioning the VTUAV to Address South Korean Surveillance Needs

Defense-Update



The new variant weighs 67 kg. – only two kilograms more than the existing three-motor Panther. The new propulsion system extends the mission endurance of the Panther by 33%, maintaining the same payload capacity (6 kg.) as the all-electric version.

Israel Aerospace Industries (IAI) is unveiling a new variant of its Panther Vertical Take Off and Landing (VTOL) UAV, equipped with a hybrid propulsion system integrating electric and internal combustion engines. The drone, displayed by the Korean Hankuk Carbon company, is designated 'Front Engine Panther' (FE-Panther) and is the latest development of IAI's Panther family.

"Cooperation with Hankuk Carbon is a real opportunity to develop new capabilities and to pursue new business opportunities," Ofer Haruvi, CTO of IAI's Military Aircraft Group said. "This cooperation will be beneficial to the Republic of South Korea's military and civilian authorities."

IAI and Hankuk Carbon are marketing the FE-Panther to South Korean governmental entities under a Memorandum of Understanding (MoU) signed between the two companies, pursuing the feasibility study of the concept of a VTOL UAS for South Korean requirements.

According to Moon-Soo Cho, CEO of Hankuk Carbon, the new drone will be tailor-made to meet local requirements, which demand independence from runways in Korea's mountainous region.



FE-Panther uses a hybrid propulsion system integrating three electric motors (two tilting and the fixed tail motor) with a single internal combustion engine, enabling the drone to fly missions for up to eight hours carrying payloads weighing six kg. Photo: IAI

The new variant weighs 67 kg. – only two kilograms more than the existing three-motor Panther. Hankuk Carbon provides the fuselage assembly, made of lightweight composite materials, and some sub-systems.

The hybrid propulsion system enables users to employ two different power sources – the tilting electrical motors are optimal for vertical takeoff/landing and hovering, while the internal-combustion engine is employed for cruising.

The new propulsion system extends the mission endurance of the Panther by 33%, maintaining the same payload capacity (6 kg.) as the all-electric version.

“To develop and manufacture this VTOL UAV for Korean civil and military uses, and to meet the different needs of potential customers, both companies are also working on the joint development of another hybrid propulsion system,” Moon-Soo Cho added. “This strategic partnership will become a major manifestation of the Korean government’s policy of creative economy.”



At 67 kg of weight, FE Panther weighs only two kilograms more than the all-electric Panther launched by IAI in 2010. Photo: IAI