

# Israeli Firms Debut UAV Technology

Israel is highlighting its world leading unmanned aerial systems (UAS) technologies with a number of UAVs making their debut here at Paris. This year Israeli UAV developers are joining the growing trend of hovering and VTOL vehicles designed for operations in densely wooded (jungle) or urban environments.

Among the new platforms on display at the Israeli pavilion is a model of the MULE, developed by Urban Aeronautics. The MULE is currently undergoing ground tests in Israel and is expected to begin flight testing this year. The vehicle introduces a revolutionary capability for battlefield logistics “push” and casualty evacuation, supporting land forces and amphibious operations. The vehicle employs the Fancraft louvered internal-rotor lift and propulsion system, which enables missions of two to four hours at speeds up to 100 knots. The Picador, unveiled here by Aero-

navics Defense Systems, employs the Belgian Dynali platform, modified into an unmanned platform. It can carry multiple payloads weighing up to 180 kg. A third company, Steadicopter, which also produces unmanned helicopters in Israel, is absent from the show this year. The company’s 35 kg Black Eagle 50 platform is already flying. It is designed to carry payloads up to 3 kg. The company is eyeing the Lev-6 multi-sensor payload weighing 1.5 kg.

At Paris, Aeronautics Defense Systems is also unveiling its “strategic” platform — named Dominator. Like the Picador, the Dominator utilizes a commercial aircraft that has been modified into an unmanned system — in this case, a DA42, custom built by the Austrian Diamond Aircraft Industries. The 1.785-ton twin-engine platform is designed to fly missions of 28 hours, at altitudes up to +30,000 ft, carrying payloads up to 400 kg. The



Urban Aeronautics is showing a model of its new MULE.

Dominator is fitted with line of sight and satellite communications systems developed by Aeronautics’ subsidiary Comtact. The unmanned DA42 is fitted with four different cameras providing remote operators and pilots full situational awareness.

A new member of the Hermes

family of UAVs is debuting here. The Hermes 90 is designed for close-range class UAV systems, supporting tactical, mobile land forces with real-time intelligence, surveillance and reconnaissance services in day or night as well as under restricted weather conditions. The Hermes 90 uses the new Micro-Compass multi-sensor payload developed by Elbit Systems.

The third type of UAV offered by Aeronautics is the electrically powered Orbiter mini-UAV. The company has enhanced the original design, to enable this UAV to sustain an operational endurance of up to 4.5 hours. A larger configuration currently in development will have mission endurance of seven hours, operating at altitudes up to 18,000 ft. This UAV will carry the new T-STAMP stabilized multi-sensor payload developed by Controp. T-STAMP weighs only 1.8 kg and comprises a cooled FLIR with continuous zoom, a powerful video channel and a laser. Among the smallest Israeli micro UAVs making their debut at the Paris Air Show is the Micro-Falcon I, designed for carrying and operation by a single operator. Weighing 6 kg, the MicroFalcon on display here carries the MicroBat 275 electro-optical payload developed by Bental Industries. This lightweight payload is expected to extend the mini-UAV’s endurance to two hours.

—Tamir Eshel

## Embraer Delivers 1,100th ERJ Series

At the end of May, Embraer (Chalet B167) delivered the 1,100th aircraft of the ERJ 145 jet family — a Legacy 600 executive variant. Since entering service in 2002, more than 160 Legacy 600s have been delivered to 25 countries. The milestone aircraft will be managed on behalf of its owner by London Executive Aviation (LEA), which operates a diverse fleet of 25 executive aircraft from seven bases in the UK, and will join

two other Legacy 600s in the fleet.

“This moment is especially gratifying, in that the 1,100th ERJ 145 family aircraft is a Legacy 600, which has experienced strong acceptance in the executive aviation market,” said Frederico Fleury Curado, Embraer president and CEO. Since entering service in 1996, the ERJ 145 family has accumulated over 14 million flight hours.



1,100th ERJ 145 family aircraft happens to be a Legacy 600 business jet, for London Executive Aviation.