

COMPANY NEWS / NEW PRODUCTS

Watchkeeper Completes Flight Trials, Heads for Parc Aberporth

Thales U.K. says the Watchkeeper unmanned aircraft system successfully completed a key set of flight trials in June, which will lead to a series of ground system and flight trials at Parc Aberporth in Wales later this year.

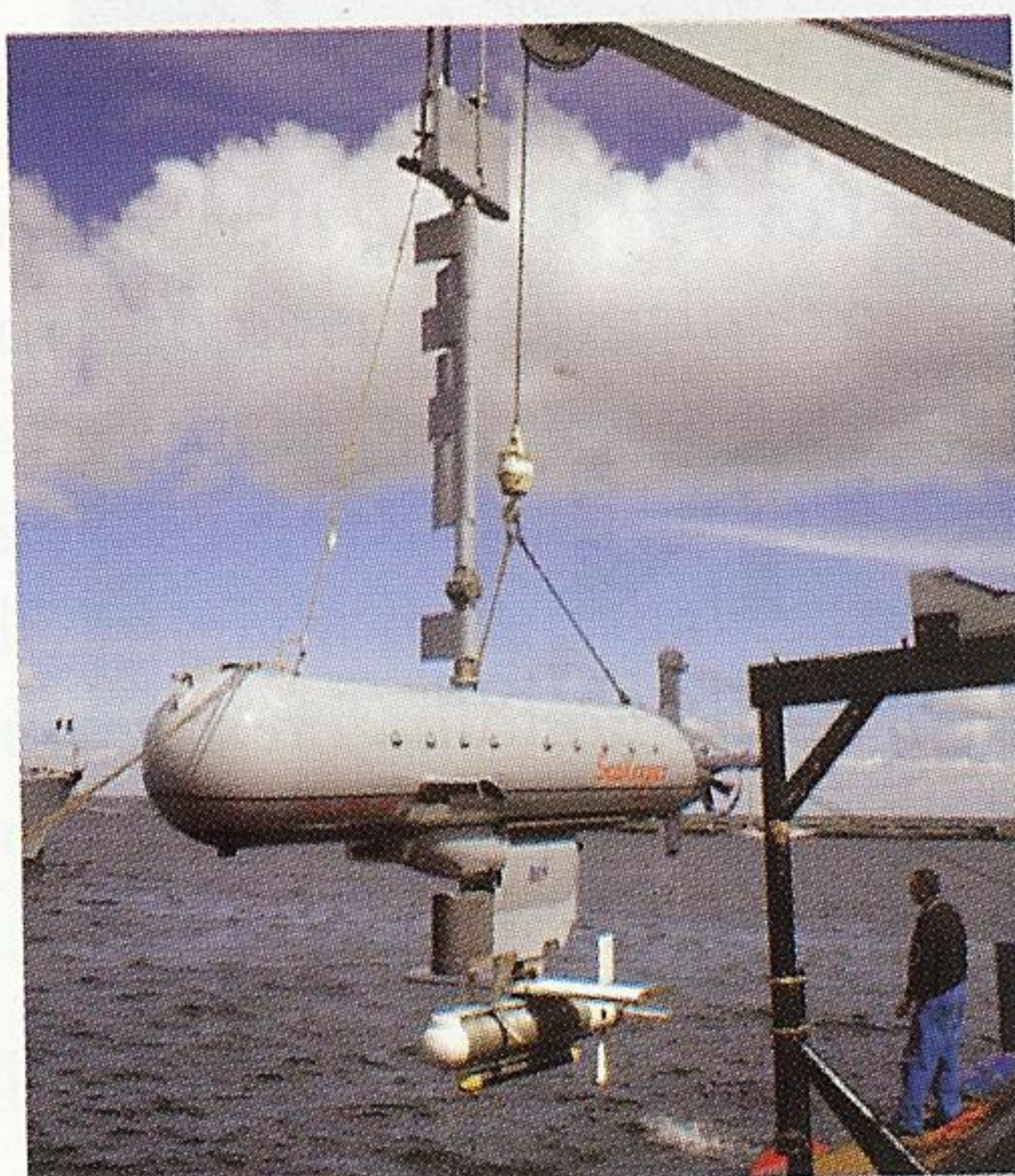
"This is another landmark achievement for the Watchkeeper program and just one of a number of trials that are scheduled over the coming months," Thales U.K. CEO Alex Dorrian says. "We have made good progress following the Watchkeeper maiden flight on 16 April, 2008, and obviously our intention is to continue working closely with the UAS Project Team and our partners in delivering the next phase of the program."

During the flight trials, held in Israel (Watchkeeper is based on Elbit Systems' Hermes 450 UAS), the program demonstrated the full vehicle system, data links, automatic takeoff and landing, payloads, ground control station software, autonomous systems flight control and video imagery downlink.

Thales says the trials took place from a semi-prepared landing strip with rough ground and obstacles, demonstrating the system's ability to operate from open fields with minimal preparation.

ISE Celebrates 35 Years in Business

British Columbia, Canada-based International Submarine Engineering Ltd. has marked its 35th anniversary of providing unmanned and manned undersea vessels and equipment for robotic systems.



SeaKeeper, one of ISE's autonomous underwater vehicles. Photo courtesy ISE Ltd.

ISE was founded in 1974 by James McFarlane, still the company's president. ISE's first remotely operated vehicle (ROVs) was launched in 1975 and its first pipeline support vehicle began work a year later.

ISE also built the semi-submersible autonomous underwater vehicle (AUV) Dolphin in 1981 and conducted the longest AUV mission under Arctic ice in 1998 (Theseus remains the world's largest AUV).

More recently, the Port Coquitlam-based company completed two Arctic Explorer AUVs for Natural Resources Canada, which will gather mapping data that will be part of the scientific basis of Canadian land claims under the U.N. Convention of the Law of the Sea Article 76.



Demonstrating the Iver vehicle's one-handed recovery method. Photo courtesy OceanServer Technology.

OceanServer AUV Headed to Zagreb

The University of Zagreb, Croatia, has purchased an Iver2 autonomous underwater vehicle (AUV) from Fall River, Mass.-based OceanServer Technology to support several research initiatives there.

The university is collecting marine data for research programs in marine biology and the protection of marine habitat and ecological zones, with a focus on protecting natural resources and promoting sustainable economic development in the region.

The Iver2 is a simple AUV with open software and hardware standards and a starting price of \$50,000, making it affordable and flexible for universities to buy and use.

Arcturus' T-20 UAS Completes First Airdrop Mission

Rohnert Park, Calif.-based Arcturus says its T-20 Tier II-class unmanned aircraft has successfully completed its first airdrop tests, releasing ballistic and precision-guided parafoils from under each wing.

The T-20 has underwing hard points for carrying sensors, ordnance and guided payloads up to a total weight of 65 pounds (29 kilograms). The vehicle, the largest built by the company, has a wingspan of 17.3 feet (5.3 meters) and can fly for up to 16 hours.

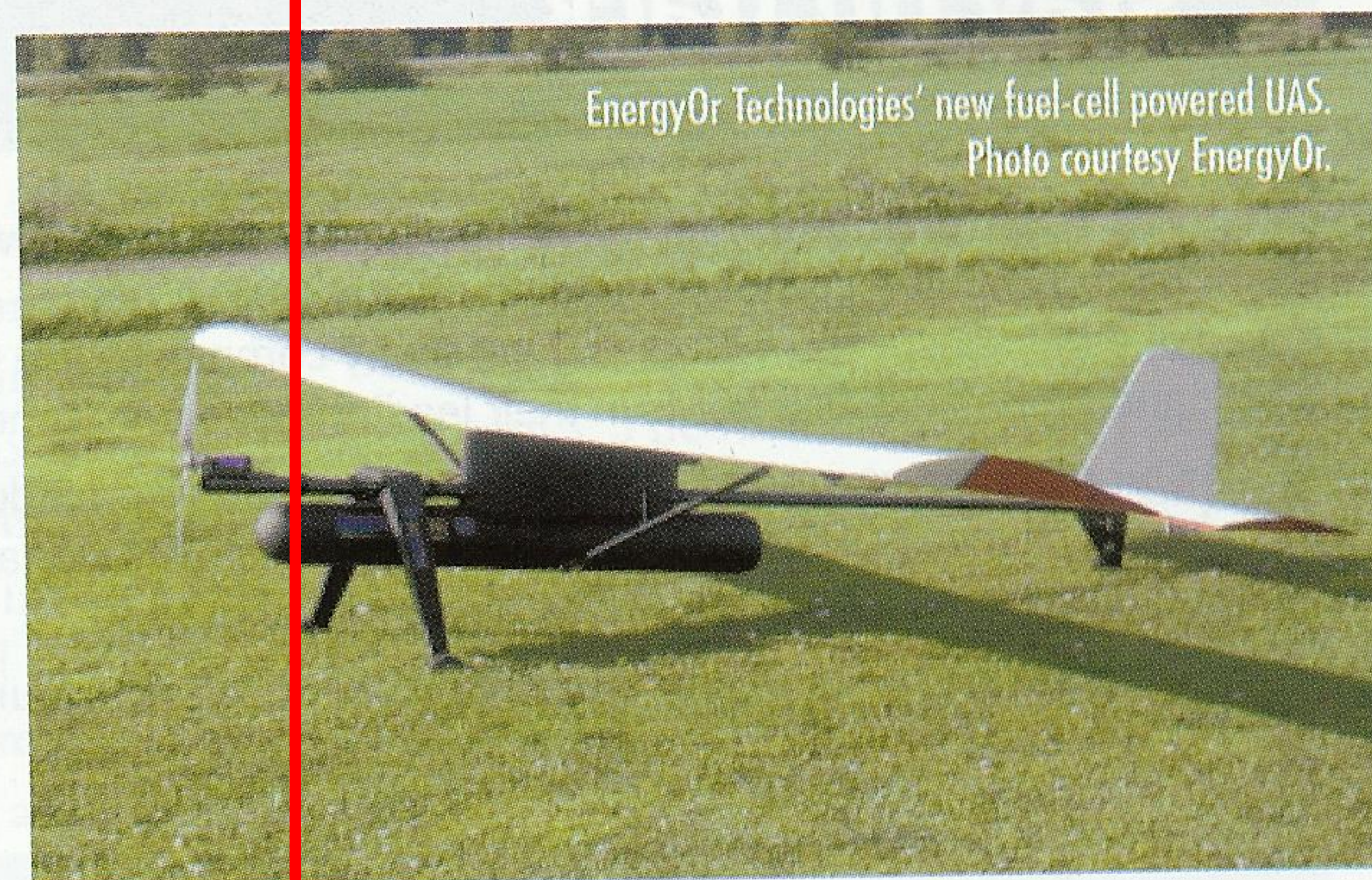
The vehicle has a "payload pallet," or a modular tray that allows sensors to be mounted on interchangeable pallets and quickly exchanged in the field. The T-20 prototype was completed in 2008 and full production is now under way in California.

UAS Fuel Cell Development Continues

Montreal, Canada-based EnergyOr says it has built and tested an unmanned aircraft system, EO-360, to demonstrate the use of its proton exchange membrane (PEM) fuel cells.

The aircraft will be able to fly for eight hours in the near future using the company's hybrid fuel cell/battery system, EnergyOr says. In the run-up to that event, the company has performed numerous test flights with EO-360, which included in-flight charging of the LiPo batteries.

"Our flight times are expected to exceed nine hours in the near future, which will be a revolutionary era for the electrical UAV market," says Michel Bitton, the company's president and CEO.



EnergyOr Technologies' new fuel-cell powered UAS. Photo courtesy EnergyOr.