VÆRIDION selects Drive System Design to advance the Microliner electric propulsion system

DSD to develop, build and test the Microliner's high-tech propeller drive system in the UK ahead of Copper Bird integration

Microliner propulsion system development will draw on DSD's aerospace transmission expertise, integrated engineering and advanced physical testing capabilities

LONDON, SURREY, UNITED KINGDOM, July 21, 2026 /EINPresswire.com/ -- VÆRIDION, the all-electric aircraft manufacturer, has selected Drive System Design (DSD) to develop, test and supply the Blue-Label propeller drive system hardware for its nine-seat Microliner aircraft.

Announced at the Farnborough International Airshow, the agreement moves the system from concept into detailed design, build and testing, supporting VÆRIDION's progress towards first flight and certification.

> We are excited to work with VÆRIDION to create a world class solution for its novel propulsion configuration"
>
> *Jason Allen, Managing Director at Drive System Design*

DSD becomes the third key supplier supporting VÆRIDION's Electric Propulsion Unit, alongside MT-Propeller and Evolito.

VÆRIDION selected DSD for its experience in aerospace transmission systems and integrated electric propulsion, including the design and testing of helicopter rotor gearboxes and the development of propeller drives for electric aviation programmes.

The Microliner's propulsion system is defined by VÆRIDION's proprietary multi-engine, single-propeller architecture, in which two independent electric engines drive a single propeller through a direct-drive transmission system. The propeller drive system is a key element of the

architecture that combines and transfers the power output of the two engines to the propeller. If one engine loses power, an integrated clutch automatically decouples it, allowing the remaining engine to continue powering the propeller.

The DSD team at Farnborough

Markus Kochs-Kämper, CTO of VÆRIDION, said: “The propeller drive system is the critical link within our proprietary propulsion configuration, and DSD is the ideal partner to help us mature it. Its proven aerospace transmission expertise and in-house capabilities will help accelerate validation as we progress towards Copper Bird testing and first flight.”

Jason Allen, Managing Director at Drive System Design, said: “Our role as a key partner extends from managing relevant aerospace requirements, through detailed engineering and simulation and onto hardware manufacture and physical testing. DSD brings experience not just in the latest electric propellor drives but also from technically demanding adjacent products such as wheel drives for hypercars or hybrid drives for gas turbines. We are excited to work with VÆRIDION to create a world class solution for its novel propulsion configuration.”

From design to Copper Bird testing
The Microliner’s proprietary multi-engine, single-propeller architecture was first demonstrated at 20% scale in 2024 and has since advanced through preliminary design review in 2026. It is now entering its next phase of maturation towards full-scale Copper Bird testing and detailed design.

In preparation for Copper Bird testing, DSD will lead the detailed design, development, manufacture and initial testing of the first ‘Blue Label’ propeller drive system units at its award-winning UK engineering facilities.

The programme will be delivered in two stages: the first will support VÆRIDION’s Preliminary Design Review gateway while the second will deliver tested hardware for integration into the company’s full-scale Copper Bird ground-test platform at Oberpfaffenhofen airport in Germany.

DSD’s scope covers the propeller drive unit, motor support structure, driveshaft and clutch, alongside oil-system development, component optimisation, hardware procurement, assembly and rig-based testing.

Before shipment, the units will undergo functional testing at DSD’s UK facilities, covering rotational operation, lubrication performance, sealing and governor functionality. They will then

be integrated with two electric engines on VÆRIDION's test rig for full-scale propulsion system testing, maturing the architecture towards flightworthy and certification-compliant configurations.

DSD combines advanced mechanical-system design, simulation, prototyping, manufacturing support and physical testing within one development organisation. Its extensive experience across electric motors, power electronics, transmissions and controls includes transferring automotive electrification methods into aerospace programmes, where low mass, efficiency, integration, reliability and rigorous validation are equally critical.

ENDS.

About Drive System Design (DSD)
Drive System Design (DSD) is a global propulsion system engineering partner which specialises in the rapid development of next-generation electric and hybrid powertrains, internal combustion engines (ICE), and associated technologies.
From concept to creation, DSD's award-winning team collaborates with OEMs, Tier-1s, and industry and government research bodies across automotive, commercial vehicle, off-highway, aerospace, marine and defence sectors.
DSD is part of the Hinduja Tech Group and has internationally recognised expertise in systems integration, simulation-led design, efficiency enhancement, development testing, and the analysis and control of powertrain systems.
DSD offers clients a robust, global delivery model, with state-of-the-art development and test facilities in the UK, USA, and India, and a presence in South Korea, Japan and Australia. All IP is transferred to our customers, ensuring that they can innovate with confidence.

About Hinduja Tech
Hinduja Tech, a Hinduja Group company, is a trusted engineering partner for OEMs and Tier-1 suppliers in the mobility space. We provide end-to-end product engineering and digital technology solutions that accelerate innovation, reduce costs, and improve time-to-market. With a focus on sustainable mobility, Hinduja Tech together with its sister companies Drive System Design (DSD) and TECOSIM, leverages its global engineering talent, frugal methodologies, and deep domain expertise to co-develop future-ready solutions for the rapidly evolving mobility ecosystem. Hinduja Tech is committed to creating value, driving advancement, and ensuring quality and trust. Learn more at www.hindujatech.com.
Hinduja Group has a presence in over 38 countries and employs about 200,000 people with multiple industry verticals like Mobility, Lubricants & Specialty Chemicals, Banking & Finance, Digital Technology, Energy, Media & Entertainment, Realty, Healthcare, Project Development, and Trading.

About VÆRIDION
VÆRIDION is transforming regional air travel with the Microliner, a 100% electric aircraft designed to provide sustainable and cost-efficient air transport.

Serving both passenger and cargo missions, the aircraft is intended for scheduled, semi-scheduled and charter operations, enabling flexible deployment across a broad spectrum of mobility and logistics use cases.
Headquartered in Munich, with subsidiaries in Delft and Brussels, VÆRIDION is developing an aircraft that carries up to nine passengers or 10m³ of cargo over 400km under IFR conditions, meeting the operational, economic and sustainability goals of operators.
The clean-sheet design features a glider-inspired wing with integrated modular batteries and a multi-engine, single-propeller propulsion system. The result is the most energy-efficient aircraft in its class. No science fiction, just real, achievable, zero-emission travel by 2030.

Dean Borge-Slavnich
Influence Associates
dean@influenceassociates.com
