



SkyShark, 450km/h top speed for the British kamikaze drone born from Formula 1

Published on 28/07/2025

In the heart of Oxfordshire, MGI Engineering has officially unveiled **SkyShark**, a one-way attack drone that represents a bold transition from Formula 1 engineering to the world of defense. The founder and CEO of the company is **Mike Gascoyne**, known for his role as a technical director in Formula 1, now leading a transition that combines **racing aerodynamics** and **military innovation**.

SkyShark is a **one-way effector**, meaning a kamikaze drone designed to **strike and not return**, intended for high-risk and high-impact missions. It has been conceived to adapt to a wide range of missions: data collection (ISR), precision strikes, disrupting enemy defenses through saturation or deception.

With speeds exceeding **450 km/h** and an operational range of **250 km**, SkyShark can carry a **20 kg warload**, a considerable power for a system designed to be expendable. The entire project is **self-funded** and developed on British soil with national components, in line with MGI's strategy of pursuing **full technological sovereignty**.

British technology serving the new asymmetric warfare

SkyShark is available in **two main versions**. The first, high-performance version, employs a **gas turbine engine** developed by **Argive Ltd**, ideal for operations requiring high thrust and readiness. The second, more discreet version, uses an **electric ducted fan engine** made by **Greenjets**, designed for stealth missions with low acoustic signature.

One of the most significant innovations of the drone is the adoption of the **TERCOM (Terrain Contour Matching) navigation system**, which allows it to fly even in the **absence of GPS** or in environments where communications are disrupted — a scenario increasingly common in high-intensity conflicts like the one in Ukraine. In these conditions, the drone can map the terrain profile and reach the target without detectable electronic emissions.

The connection with the world of Formula 1 is not just aesthetic or technological, but methodological: MGI applies the **philosophy of rapid prototyping**, constant iterations, and quick modifications based on current needs to the drone, as if each mission were a new circuit to tackle. “Changing avionics packages, adapting payloads, or reconfiguring the structure: for us, it's routine, just like in motorsport,” explained Gascoyne.

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The SkyShark was created to meet a request from the British Ministry of Defence (MGI Engineering)

A low-cost strategic response to new global challenges

The **United Kingdom Ministry of Defence** has expressed the intention to acquire **7,000 one-way effectors** in the coming years, and MGI has presented **SkyShark as the main candidate** to meet this need. An objective that requires large-scale production — potentially **hundreds of units per month** — and pushes the company to consider opening a second facility or industrial licensing agreements.

One of the strengths of the project is the **low unit cost**, estimated at **around 100,000 pounds per drone**, far from the price of a cruise missile like the Storm Shadow, which can exceed **2 million pounds**. In modern warfare dominated by **quantity and speed of deployment**, having fleets of economical, expendable, and customizable drones is a decisive strategic advantage.

The lesson comes straight from the eastern front: the massive use of Iranian kamikaze drones **Shahed** by Russia has changed the perception of attritional UAV systems. Although MGI does not operate directly in Ukraine, Gascoyne revealed that the company **collaborates with Eastern European avionics suppliers**, who share real-time operational feedback on vulnerabilities and improvements to be adopted.

"We believe the United Kingdom must act quickly, think independently, and build smartly", stated Gascoyne. In this vision, SkyShark is much more than a drone: it is an **operational concept**, an example of **ingenuity applied to asymmetric warfare**, a weapon born in a paddock and ready to take off towards the front.

News link: <https://breakingdefense.com/2025/07/with-formula-1-blueprint-mgi-engineering-says-its-revving-up-to-scale-drone-production/>