



SINGLE STAGE TO ORBIT · DEFENCE PLATFORM

ONE ENGINE. FOUR MODES.

SkySkipperONE is a flying-wing drone platform powered by the ceramic Aggregat99 engine: laser-printed, no moving parts, no cooling, no cryogenic propellants. A single engine changes its operating mode from the ground to the edge of space.

PROPULSION · FUEL SHIFTING

01 ROCKET MODE Cold start without launch rail $H_2O_2 + CH_3OH$ · 0–3 km	02 RAMJET Air-breathing above ~800 km/h $Air + CH_3OH$ · 3–18 km	03 FUEL SHIFTING Atmospheric nitrogen as oxidiser $SiH_4 + N_2$ · 18–50 km	04 ROCKET MODE Beyond the atmosphere $H_2O_2 + CH_3OH$ · 50–100 km
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PLATFORM

SKYSKIPPER 120 SPAN 1.2 m BUILD 3D-printed DRIVE electric	SKYSKIPPER 240 SPAN 2.4 m BUILD 3D-printed DRIVE el. / Aggregat99	SKYSKIPPER 640 SPAN 6.4 m PAYLOAD up to 80 kg SPEED target 600 / max. 1,000 km/h	SKYSKIPPER TWO SPAN 3.2 m HULL ceramic-based SPEED target Mach 3–5
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PRELIMINARY DATA · DEVELOPMENT STATUS 2026 · TWO IN DEVELOPMENT

MISSIONS & ADVANTAGES

EFFECTOR CARRIER Modular by wingspan	INTERCEPTOR Cold start in seconds	RECONNAISSANCE Offline-capable AI control
IR DEMINING Detection from a safe altitude	GLIDE MODE No engine signature	FIELD FUEL Methanol and peroxide produced on site