

TALKING POINTS – LONG ENDURANCE DRONES

WORLD RECORD ENDURANCE

The multi-mission heavy lift variant can fly up to three days while carrying up to 150 pounds. The ultra-long endurance set-up can fly up to 10 days and carry 30 pounds. There is also a vertical takeoff and landing version in development that can carry 50 pounds for 24 hours and has four rotors which allow it to take off and land from, say, the flight deck of an aircraft carrier.

UNMATCHED PAYLOAD CAPACITY

Long endurance, BVLOS, multi-sensor payload capability addresses limitations with current Group III systems that provide only EO/IR sensing solutions at limited endurance and range. During the flight, real time radar products, EO/IR imagery, and Command & Control (C2) data were passed via SATCOM to operators at Naval Air Station Key West. The combination of sensors illustrated the power of wide-area detecting and tracking with radar, cross-cueing sensors, and subsequent identification with EO/IR.

NSP-5 is a program of record-based, all-weather, day and night multi-mode radar. Operating from Vanilla UAS, the NSP-5 demonstrated real-time SAR imaging, Maritime Moving Target Indication (MMTI) and Inverse SAR (ISAR). The multi-mode NSP-5 is also capable of Coherent Change Detection (CCD), and Ground and Dismount MTI (GMTI/DMTI) over land. Together, the Vanilla and NSP-5 present a highly capable persistent ISR solution.

The airframe can carry up to 150 lbs. of sensor payloads across five internal bays and external mounts, each receiving onboard power and datalink for sensor C2. A VTOL variant is in production with government sponsorship and will take flight in early 2022.

ATTRIBUTIBLE COST

is a tactical-scale Group III system that uses an internal-combustion engine for propulsion. Its smaller size enables runway independent launch from forward locations with minimal manning. Unlike solar-powered high-altitude systems, Vanilla is immediately responsive to operator tasking and flies at tactical altitudes, thereby accommodating smaller and lower cost sensors for the same C5ISR value. Vanilla runs on standard Jet-A fuel, easing logistics concerns during forward operations.

PLATFORM AEROSPACE

Our partners and an industry leader in agile manufacturing and rapid prototyping. Vanilla's record-setting success is made possible by Platform's teammates who include [AlarisPro](#) (fleet management SaaS), [Avwatch](#) (tracking antenna), [Inmarsat Government](#) (satellite communications (SATCOM)), [L3Harris WESCAM](#) (EO/IR payload), [Mission Secure](#) (cybersecurity), and [Progeny Systems](#) (sensor data PED). The Vanilla program is sponsored in part by the Office of Naval Research (ONR) and the Small Business Innovation Research (SBIR) program.