



## **Vanilla UAS Arctic Operations: From the Desert to the Frozen North**

Press release

December 2021

DEADHORSE, AK – Flying from Deadhorse on Alaska's Northern Slope, Vanilla Unmanned conducted Arctic environmental monitoring operations on behalf of the NASA Goddard Cryospheric Sciences Laboratory and the University of Kansas (KU) Center for Remote Sensing of Ice Sheets (CReSIS).

The sortie represents yet another Vanilla-only multi-payload, over the horizon (beyond visual line of sight, BVLOS) capability and comes immediately on the heels of Vanilla's >8-day world record flight in the California desert.

Operating in the Arctic Circle at 72 degrees north of the equator in temperatures ranging from 0° to 15°F, NASA declared the mission a success after the aircraft demonstrated its ability to gather snow and ice thickness data using wing-mounted radar, and to operate on SATCOM in the harsh Arctic environment.

Vanilla carried as payloads KU's RADAR for snow depth measurements, a SKYTRAC SATCOM radio for high-latitude operations, and multiple state-of-the-art ice detection and anti-icing applications, along with modifications for the cold temperatures.

"The extreme weather conditions were challenging," said Dr. Dan Edwards, Platform Aerospace's Chief Technology Officer. "But pre-flight ground runs showed that Vanilla's anti-icing and weather hardening modifications were sufficient to fly in these austere conditions. Flying at 2,000 feet altitude at 130 miles range over the Arctic Ocean with KU's Radar and all on SATCOM, this was a high-risk, high-reward flight. Vanilla now has its Arctic wings."

This polar operation illustrates a broader market shift to replace traditionally manned surveying operations with lower-risk, long-endurance UAS that offer greater data collection at reduced cost.

"We are grateful for the partnerships with NASA Goddard, the University of Kansas, Alaska Center for Unmanned Aircraft Systems Integration, Alaska DOT, and other stakeholders who worked together to navigate first-of-their-kind airspace and operational challenges," said Jared Tharp, Chief Operations Officer. "Delivering the mission success from a remote location was a great demonstration of the Platform team's capabilities."

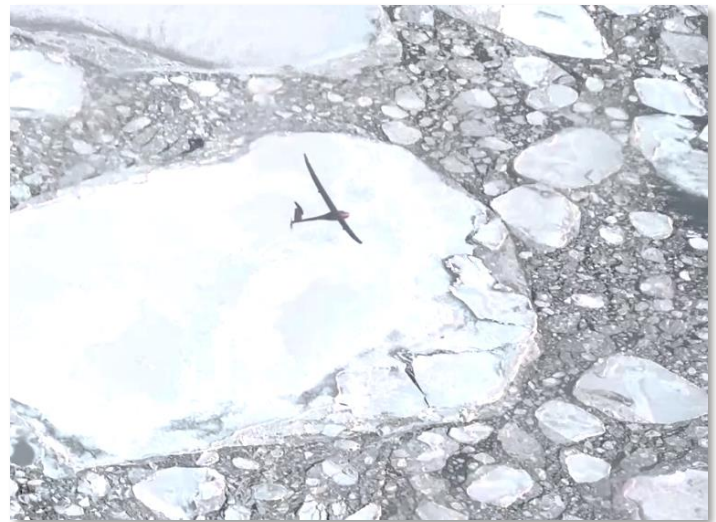
If you are interested in hearing more, please contact Greg Pappianou, Platform Aerospace's Chief Growth Officer ([greg.pappianou@platformaero.com](mailto:greg.pappianou@platformaero.com)).

### **About Platform Aerospace**



Platform Aerospace is a service-disabled veteran-owned small business (SDVOSB) dedicated to supporting the warfighter and its customers' success. Platform is AS9100D and ISO 9001:2015 certified, and specializes in manufacturing, aviation modification and prototyping, and cutting-edge aerial ISR products.

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*Vanilla gathers snow and ice thickness RADAR data in the Arctic Circle for NASA and KU*