



Stratus Aeronautics

Magnetic Surveys

THE FUTURES NOT WHAT YOU SEE TODAY IT'S WHAT WE CREATE FOR TOMORROW

We are Unmanned Aerial Systems Integrators and Developers

Stratus is solving commercial magnetic survey problems with practical & unique unmanned aerial Systems (UAS) solutions, an ability refined by years of experience. It's our team's innovations, combined with advances in technology and our ability to integrate complex systems into our internally designed, manufactured & tested commercial drones, that sets us apart.

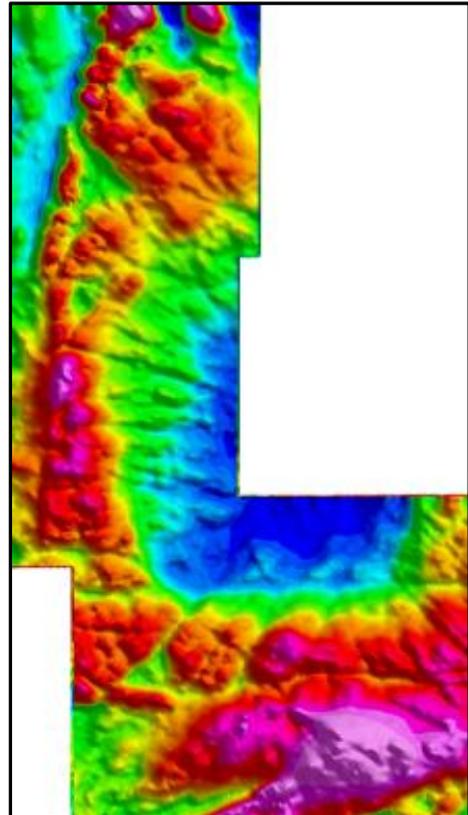
At Stratus we continue to innovate and develop new UAS platforms, constantly striving to improve on our successes bridging the gap between today's concepts and tomorrow's solutions.

Stratus's UAS product family might best be described as robustly built, stable in the air, and deployable in remote and hostile conditions.

Stratus is working with Canadian universities to support innovation and knowledge in the area of UAS applications. Our work with Carleton University has resulted in publication in "The Leading Edge" published by the International Society of Exploration Geophysics.



The below magnetic survey (1,900line km) was completed by Stratus in 10 days



Multicopter Magnetic Survey Drones (Skylance 6100 series)

Stratus engineered, designed and manufactured our Skylance drone specifically to conduct magnetic surveys. Our unique design allows for unparalleled data quality & flight duration/airtime. Stratus completed over 5,000line km of magnetic surveys in 2018.

Improved Safety and Quality

Work place safety is crucial to our customers. Our drones are able to provide the highest quality data available by flying low to the ground, without risk to any personnel. This is impossible to achieve with manned airborne surveys.

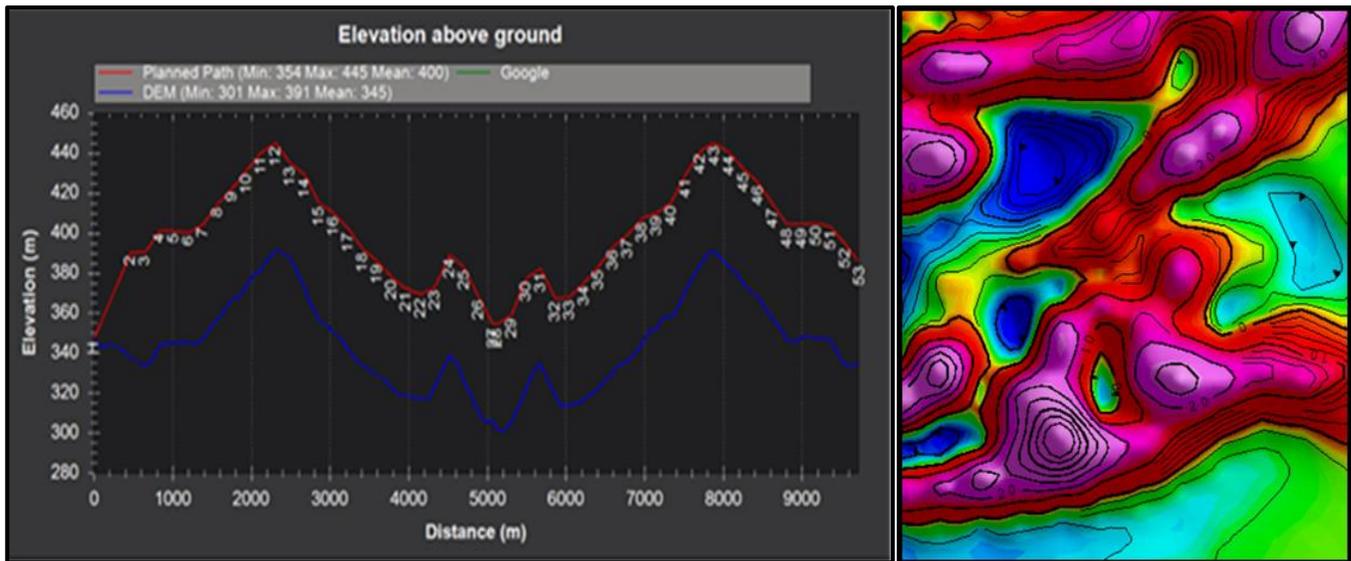
Low Noise Levels

Our drones magnetic survey noise levels constantly exceed industry standards for airborne magnetic surveys.

Terrain Following

Survey flights of over 35km are commonly achieved.

In order to acquire best magnetic signatures, flights are designed to terrain follow. The flight plan utilizes Shuttle Radar Topography Mission (SRTM) elevation data to coincide change in relief with flight altitude. Before each flight an elevation graph, that compares the planned flight path and SRTM elevation profile, is reviewed.



What industry is telling us about our magnetic surveys

Kit Campbell, Geophysicist

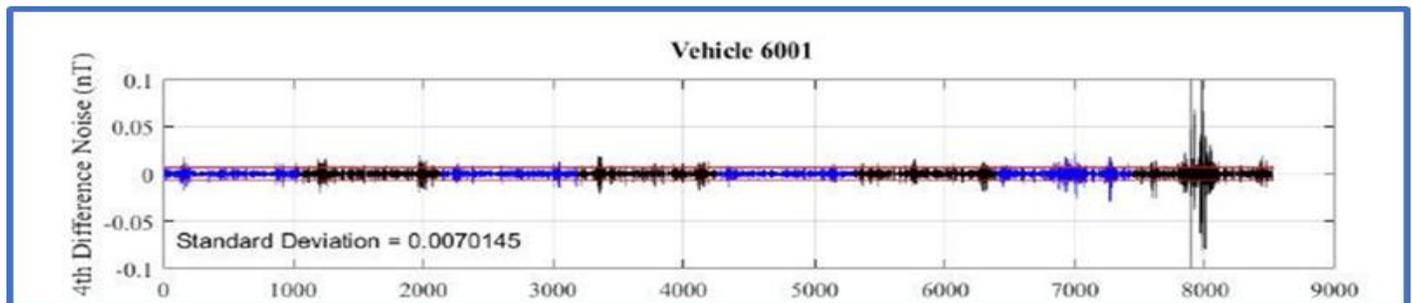
"This is very good data, e.g., "for comparison a recent helicopter survey in the South American using a stinger system ...the rawmag channel yields a normalized 4th difference of 0.135 nT (compare this to Stratus's comparable magnetometer channel's 4th difference of 0.022 nT). Compensation in the case of the UAV is of course passive, with much less metallic objects present to induce noise in the final data. Tieline levelling, decorrugation and micro levelling result in a polished and fully acceptable product."

Troy Gill, Geologist Sanatana Resources Inc

"A really cost-efficient method to acquire prospect scale magnetic data, quicker than ground mag, without the hassle and environmental impact of cutting lines. Their multirotor UAV platform is quite unique and capable of collecting high quality data. These guys are right there on the ground with everything they need to attend to any issues easily and that makes the system very mobile and versatile."

Ron Joly, Geophysical tech

"Data looks really good, probably will need some micro leveling at some point if seeking absolute perfection, although honestly the data is clean enough without leveling. I was surprised that surveying in such a tight grid pattern helped define the subtle magnetic features, giving perhaps a more accurate portrayal of these very subtle anomalies."



Source: Impact of Design and Flight Parameters on Aeromagnetic Surveys with Unmanned Rotorcraft System. Bradley Kuiack, Carleton University, September 8, 2017 "Over the course of two trips to Southern Saskatchewan, Stratus Aeronautics performed over 50 flights testing their unmanned aircraft system, which is currently being designed for use in aeromagnetic surveying." **Low Noise** Stratus Aeronautics has been able to achieve very low noise levels, equalling standard deviations of 0.0070 nT, or much less than 0.05 nT peak-to-peak. Our noise levels constantly exceed industry standards for airborne surveys.

FOR MORE INFORMATION OR QUOTES CONTACT

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