

David Thompson Awards

Serianna Schroh, CLS Named Winner at 2025 David Thompson National Geomatics Awards

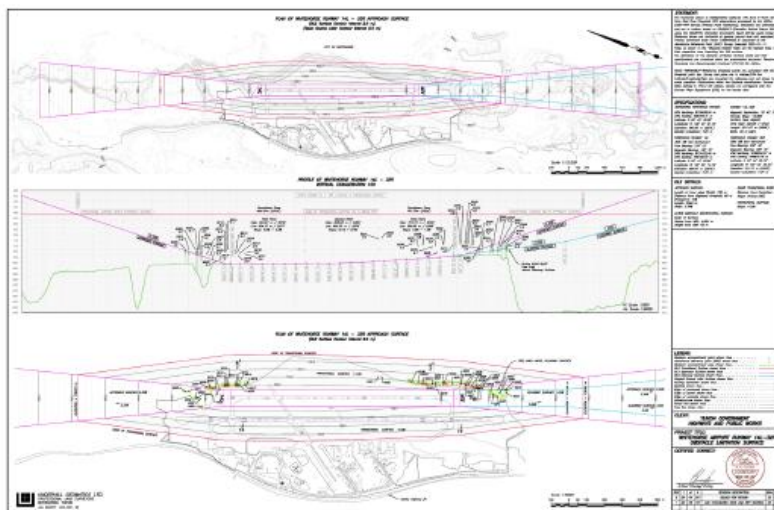
The 2025 David Thompson National Geomatics Awards celebrated excellence in innovation and technical achievement with submissions in Challenging Non-Cadastral Survey Projects. The competition featured three outstanding submissions from Underhill, each demonstrating cutting-edge approaches to complex geomatics challenges.

We are proud to announce Serianna Schroh as this year's award winner for her project: "Innovative Application of UAV LiDAR in Airport Obstacle Limitation Surveys".



From March 2022 to April 2024, Underhill Geomatics Ltd. conducted Obstacle Limitation Surface (OLS) surveys using UAV LiDAR across nine Yukon airports to comply with updated national safety standards (TP 312 5th Edition), replacing traditional ground-based methods that were slower and more labor-intensive. Transitioning to drone-based LiDAR introduced challenges, including managing vast amounts of complex data and adapting workflows to interpret the detailed point clouds accurately while ensuring no obstacles were overlooked.

Innovative Application of UAV LiDAR in Airport Obstacle Limitaiton Surveys



Despite these difficulties, the project successfully completed 41 LiDAR flights covering 1,600 hectares, producing nine compliant OLS plans that improved efficiency, accuracy, and set a new precedent for remote aviation surveys.

Other notable submissions included:

"High-Precision Change Detection Monitoring using Photogrammetry" Submitted by: **Ryan Schuler, CLS**

Underhill Geomatics developed a high-precision change detection monitoring program for BC Hydro's Site C Clean Energy Project by integrating UAV photogrammetry with traditional survey methods to track surface changes over a large, dynamic construction area. The project produced 36 detailed datasets with 1 cm resolution and <2 mm accuracy on monitoring prisms, enabling reliable, timely assessments of dam stability while reducing costs and improving efficiency.

"High Precision Monitoring of the BC Hydro Site C Powerhouse" Submitted by: **Dave Storback, BSc, BCLS, CLS, P.Surv**

Underhill Geomatics implemented a high-precision monitoring program for BC Hydro's Site C Dam Powerhouse, establishing a robust control network of reference pillars, threaded plates, and prism nests to track movement during and after construction and reservoir filling. Despite extreme temperatures, water inundation, ice fog, and other environmental challenges, the team conducted biweekly GNSS, conventional, and differential levelling observations, processing the data with least squares adjustments to ensure accurate, reliable monitoring of this critical infrastructure.

Each of these projects exemplifies the expertise and forward-thinking solutions that define the geomatics profession today. Congratulations to all participants, and especially to Serianna Schroh for her well-earned recognition!