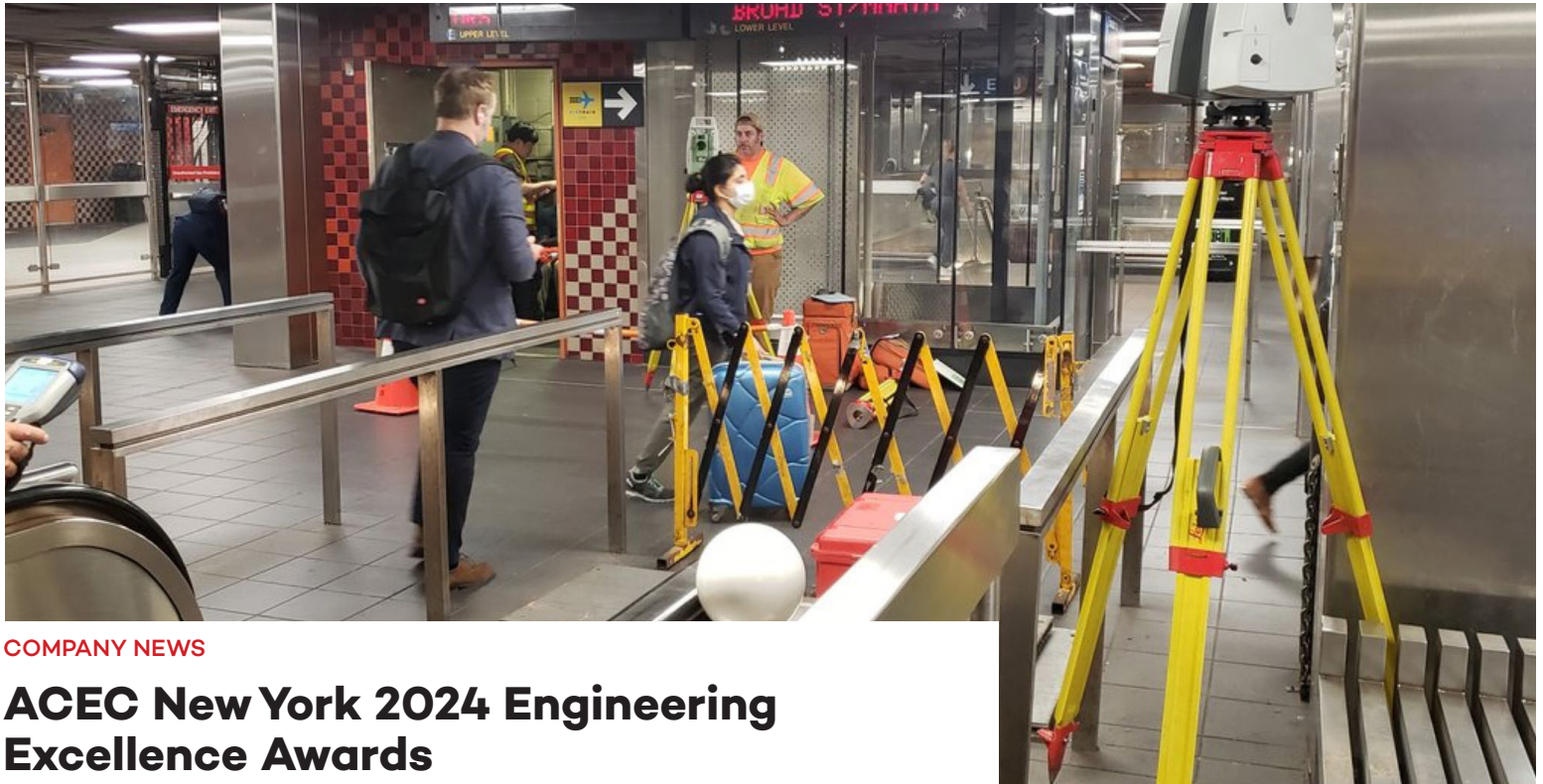


INNOVATOR

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COMPANY NEWS

ACEC New York 2024 Engineering Excellence Awards

We are delighted to share the incredible news that GEOD Corporation and MFS Engineers & Surveyors have been awarded the 2024 ACEC New York Silver Award in Category D: Surveying and Mapping Technology for our exceptional work on the NYCTA Escalator Survey at West 4th Street Station, Manhattan & Sutphin Station, Queens. This prestigious recognition is a testament to the excellence, quality, and technical expertise that our team demonstrates. We are proud to be part of the 2024 ACEC New York Engineering Excellence Awards Competition!

The ACEC New York Silver Award is an honor that recognizes engineering and surveying projects that demonstrate a high degree of innovation, complexity, achievement, and value. The American Council of Engineering Companies of New York (ACECNY) is the largest national organization of professionals

engaged in the practice of consulting engineering.

We look forward to celebrating this achievement with our industry colleagues at the black-tie gala being held at the New York Hilton Midtown's Ballroom on Saturday, April 13, 2024.

We also want to express our gratitude for the dedication and hard work of our team members who made this accomplishment possible. This award belongs to each of them!





GEOD CORPORATION
AERIAL MAPPING - LAND SURVEYING - UTILITY MARKOUTS
AN **MFS** AFFILIATE

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GEOD Provides:

- 3D Laser Scanning
- Aerial Photography / Photogrammetric & LiDAR Mapping
- Drone Surveying
- Land Surveying
- Subsurface Utility Markouts

As of October 2021, GEOD Corporation became an affiliated company of MFS Consulting Engineers & Surveyor, DPC (MFS Engineers & Surveyors), a multidiscipline, MBE/DBE/SBE certified civil engineering firm. Visit www.mfsengineers.com



INDUSTRY NEWS

Navigating the Skies: A Thorough Guide to Drone Regulation in Land Surveying

In land surveying, the integration of drone technology has revolutionized efficiency and accuracy. However, with drones soaring into the skies, a complex web of regulations governs their usage. This article explores the regulatory landscape in land surveying, offering a comprehensive overview to help readers navigate the legal aspects of this evolving technology.

Understanding the Basics: **Drone Regulations 101.**

The Federal Aviation Administration (FAA) and Part 107: At the heart of drone regulations in the U.S. lies the Federal Aviation Administration (FAA) and its Part 107; Small Unmanned Aircraft Systems (sUAS) Rule, outlines the operational limitations and requirements for commercial drone pilots.

Key Provisions of Part 107: 1. Pilot Certification: Part 107 mandates that drone operators obtain a Remote Pilot Certificate by passing the FAA's Aeronautical Knowledge Test. This ensures that operators have a foundational understanding of airspace regulations and safety protocols.

2. Operating Limitations: Part 107 imposes various operating restrictions, including daylight-only operations, a maximum altitude of 400 feet above ground level, and a speed limit of 100 miles per hour. These limitations are designed to ensure safe drone operations and prevent interference with manned aircraft.

3. Visual Line of Sight (VLOS): Drone operators must maintain visual line of sight with their aircraft at all times or use a visual observer. This requirement is crucial for avoiding collisions and ensuring the operator can respond to unforeseen obstacles.

Waivers and Authorizations: While Part 107 provides a framework for drone

operations, the FAA recognizes that certain situations may warrant exceptions. Operators can apply for waivers to specific regulations or seek airspace authorizations for operations in controlled airspace. This flexibility allows for customized solutions, but compliance with safety and operational standards remains paramount.

Recent Changes and Updates: **Staying Current in a Dynamic Landscape.**

Remote ID Rule: One of the significant recent developments in drone regulations is the implementation of the Remote Identification (Remote ID) rule. This rule, effective as of April 2021, requires most drones to broadcast identification and location information in real-time. The goal is to enhance airspace security and facilitate the integration of drones into the national airspace system.

Impact on Land Surveying: For land surveyors, compliance with the Remote ID rule is essential. It ensures that drone operations are transparent and traceable, addressing concerns related to unauthorized drone activities. Understanding the technical requirements and ensuring drone systems are compliant with Remote ID standards is crucial for staying on the right side of the law.

Evolving Airspace Restrictions: As drone technology advances, airspace restrictions are subject to continuous evaluation and adjustment. Temporary Flight Restrictions (TFRs) may be implemented for specific events or situations, affecting drone

operations in certain areas. Land surveyors must stay informed about dynamic airspace restrictions to plan their operations accordingly.

Compliance Requirements: **A Checklist for Land Surveyors.**

Ongoing Education: Staying informed about regulatory changes is a continuous process. Land surveyors utilizing drones should prioritize ongoing education to keep abreast of updates, attend relevant training programs, and engage with industry associations that provide guidance on regulatory compliance.

Maintenance and Record-Keeping: Maintaining detailed records of drone operations, including flight logs, maintenance records, and any required waivers or authorizations, is crucial. These records serve as evidence of compliance in the event of an audit or investigation.

Technology Compliance: Ensuring that drones and associated technology comply with current regulations, including Remote ID standards, is essential. Regular software updates and equipment checks help land surveyors maintain compliance with evolving technological requirements.

Collaboration with Authorities: Establishing communication channels with local aviation authorities and obtaining necessary permissions for specific operations, especially in controlled airspace, fosters a collaborative relationship and ensures adherence to regulations.

NJDOT TP-480 Rte 46, I-80 Ramp to Rte 53

GEOD was contracted to provide the low altitude photogrammetric basemapping for NJDOT TP-480 of US Rte 46/I-80/SR 53 in Denville, Morris County, NJ.

The aim is to improve safety and traffic flow at the Route 46 EB ramp intersection with Route 53 SB, where accidents and congestion are common. Additionally, safety and traffic flow along Route 46 EB, between the I-80 WB ramp and the Route 53 SB ramp, need enhancement. The proximity of these ramps causes weaving issues and lacks proper acceleration and deceleration lanes and there is traffic congestion which further complicates traffic flow. Additionally, this stretch of Route 46 EB lacks shoulders.



Services provided included selecting target locations for the photo control; acquiring new 2.0cm GSD digital aerial imagery; performing the aero triangulation on the imagery; softcopy compilation of all visible man-made and natural planimetric features; digitizing terrain breaklines and spot elevations to create a DTM from which the project ½ ft contours would be generated; and ortho rectifying the aerial imagery at a 3" pixel resolution. This project also involved incorporating topographic mapping that had been prepared using mobile mapping technology into the photogrammetric basemapping and filling in details that had not been visible during the mobile scanning, such as behind guiderails and walls, etc. The final mapping dataset was prepared in Bentley OpenRoads (ORD) format at a scale of 1"=30' utilizing NJDOT's ORD interim specifications as the DOT transitions from MicroStation v8 to this newer Bentley platform.

Rehabilitate Eastern Approach of NYS Capitol Building

GEOD provided comprehensive 3D laser scanning and subsurface utility markout services to support the NYSOGS project. The project encompassed the restoration of the Eastern Approach Staircase, Promenades, Eastern Portico, and Executive Ramp.

Field technicians meticulously established survey and secondary scan control for each scan setup. Scans were systematically obtained at all designated locations, covering the entirety of the eastern approach staircase, promenades, eastern portico, and executive ramp. Point cloud data was meticulously processed, registered to the project control, and exported as rcp, e57, and xyz file formats.

GEOD conducted a comprehensive subsurface utility investigation utilizing state-of-the-art equipment and methodologies. A combination of electromagnetic (EM) locators and ground penetrating radar (GPR) was employed to accurately map out subsurface utilities within the project area. All identified utilities were meticulously marked using paint and/or pin flags to ensure their visibility and preservation during the rehabilitation process.



Through its expertise in 3D laser scanning and subsurface utility investigation, GEOD successfully contributed to the rehabilitation efforts of the Eastern Approach of the NYS Capitol Building in Albany, NY. The comprehensive data and insights provided by GEOD will play a crucial role in ensuring the seamless and efficient execution of the rehabilitation project while upholding the highest standards of accuracy, efficiency, and safety.

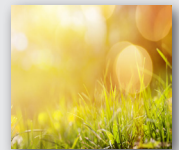


Spring Flying Season is Here!

This is the perfect time to take advantage of the mild weather and thawing ground to conduct aerial mapping and surveying. The spring flying season, which lasts from late winter to late spring, is the most effective time for aerial surveying. Our team of experts is ready to help you with all your surveying needs.

Contact us today to learn more about our services and how we can help you make the most of the spring flying season!

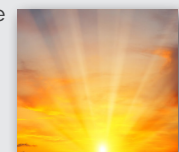
Warmer Weather makes it easier to work outside and reduces the risk of frostbite or hypothermia. Spring temperatures are generally mild, which makes it more comfortable to work for extended periods of time.



Less Snow and Ice on the ground means that surveyors can access more areas of the land. This makes it easier to get accurate measurements and complete the survey more quickly.



Increased Daylight Hours provide more time for surveying and mapping. As the days get longer, surveyors have more time to work and can complete the project more quickly.





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Want to stay up-to-date with GEOD news? Sign up for our emails at: <http://tinyurl.com/62en3kh9>

Spring Puzzle for a \$200 Prize

To find out the solution to the puzzle and who the winner is, visit our website: www.geodcorp.com.

Complete the magic square, entering the numbers 3, 3, 4, 4, 5 & 5 so that each horizontal row, vertical row and diagonal row all sum to a total of 12.

		5	Total (12)
	4		Total (12)
3			Total (12)
Total (12)	Total (12)	Total (12)	Total (12)



Email your answer to marketing@geodcorp.com by midnight on **Friday, April 19, 2024**.

A random winner will be drawn from the correct entries, and will receive a **\$200 Amazon gift card**. As always, if you are precluded from accepting such a prize, we'll be delighted to donate a check for \$200 to the charity of your choice.

Enjoy the puzzle and good luck! Of course, as always the decision of the judges is final!

