October 6, 2025

U.S. Department of Transportation
1200 New Jersey Avenue, SE
Room W12–140, West Building Ground Floor
Washington, DC 20590–0001

Re: Docket No. FAA-2025-1908, Notice of Proposed Rulemaking, Normalizing Unmanned Aircraft Systems Beyond Visual Line of Sight Operations. Submitted via Regulation.gov.

To Whom It May Concern:

The Marcellus Shale Coalition (MSC), a regional trade association with a national membership, appreciates the opportunity to submit comments regarding the above-referenced proposed Rulemaking. The MSC was formed in 2008 and is currently comprised of approximately 155 producing, midstream, transmission and supply chain members who are fully committed to working with local, county, state and federal government officials and regulators to facilitate the development of the natural gas resources in the Marcellus, Utica and related geological formations. Our members represent many of the largest and most active companies in natural gas production, gathering, processing, transmission and utilization, in the country, as well as the supply chain companies, contractors and professional service firms who work with the industry.

The MSC appreciates the opportunity to submit comments for consideration on the Notice of Proposed Rulemaking related to Normalizing Unmanned Aircraft Systems Beyond Visual Line of Sight Operations (Rulemaking) to the United States Department of Transportation Federal Aviation Administration (FAA). The member companies of the MSC are proud of their cumulative efforts to improve domestic energy production, meet the needs of America's citizens and businesses, strengthen our nation's national security, all the while doing so in a manner that protects and enhances our shared environment.

The work of our member companies and their colleagues throughout the natural gas development sector have led to health benefits being realized for all residents of the United States. This includes historic reductions in carbon dioxide and criteria pollutant emissions, significantly enhancing the air quality in Pennsylvania and our nation. Our members are also extremely proud of their commitment and performance in producing the natural gas supplies our nation depends upon in the most environmentally conscious manner found anywhere in the world.

The use of Unmanned Aircraft Systems (UAS) has grown in the natural gas industry, leading to cost and time savings, but most importantly has enhanced worker safety. It is important to highlight that these aircraft systems are used for more than just deliveries and the Rulemaking must ensure airspace safety for operators, pilots, equipment, and most importantly, the people living on the ground.

The natural gas industry uses UAS to survey long linear projects along very challenging terrain, such as the siting, installation and maintenance of pipelines. They identify hazardous geology, such as slide prone soils that could lead to major earthwork events if not identified. And, finally, they are being used to detect and quantify leaks in equipment in areas not easily accessed by workers.

We ask that you consider these comments developed by the MSC on the Rulemaking.

Operations in Shielded Areas (§ 108.205)

1. Under Section 108.205, the FAA proposes to apply slightly different rules to UAS operating in Shielded Areas, which are areas close to certain infrastructure. The MSC strongly supports the FAA's proposal to differentiate Shielded Areas from other areas where UAS may be operating beyond visual line of sight ("BVLOS"). This proposal will be a significant benefit to the oil and gas industry and will support our members' activities that help provide energy for American citizens. Moreover, Shielded Areas should be treated differently from other areas because these are locations where manned aircraft would not, and should not, typically be operating.

2. Regarding the specific proposed regulation for operations in Shielded Areas, the MSC provides a few proposals for the FAA's consideration. In its Rulemaking document, the FAA noted that it had identified "*infrastructure sites of powerlines and substations, railroads, bridges, and pipelines as the qualifying infrastructure," "there are additional structures that could be included in this definition[.]*" Within the proposed Rulemaking the FAA requested comments on the proposed list of qualifying infrastructure. The MSC supports the proposed list but recommends the FAA consider an expansion of infrastructure which could provide additional benefits and clarity to the oil and gas industry. In particular, the MSC recommends that the FAA include "energy infrastructure" within the list and incorporate the definition of energy infrastructure from Title XVII, Section 1706[1].

3. The MSC recommends that the FAA increase the proposed distance/altitude limitation from 50 feet to 200 feet for Shielded Operations. A 50-foot altitude is insufficient for effective data capture due to the limited field of view of onboard sensors at such low altitudes. As an example, increasing the altitude limitation to 200 feet would significantly reduce flight times and the number of images that need to be captured during a flight. Moreover, since some infrastructure in the oil and gas industry is below ground, the Rulemaking should clarify that the operations may occur within 200 feet of the infrastructure or within 200 feet of the ground, whichever is higher.

Operator Reporting Requirements (§ 108.45(h))

1. The FAA requests comments on the proposal that all ADS-B hits must be shared with FAA. As the FAA points out in this section, the additional cost to providing such information would be unreasonable for a Part 108 operation. This additional data reporting requirement would be a burden on an operator and manufacturer. Rather than being required to report such incidents to the FAA, the MSC recommends that this reporting be voluntary.

[1] Reference to Section 1706, relating to Energy Dominance Financing, of the One Big Beautiful Bill Act

Preflight Requirements (§108.170(a))

1. Section 108.170(a) proposes: "*Ensure weather conditions are appropriate for the intended operation, are determined in a manner acceptable to the Administrator, and are in accordance with the unmanned aircraft limitations specified by the manufacturer.*" The MSC does not believe it is necessary for the FAA Administrator to set forth a manner in which weather conditions are determined. The manufacturer is ultimately responsible for identifying appropriate weather conditions for operation of UAS and should be permitted to explain the manner in which weather conditions are assessed. Therefore, the MSC recommends that the phrase '*are determined in a manner acceptable to the Administrator*' in this proposed subsection is unnecessary and should be removed.

Aerial Surveying Operations (§ 108.450(d))

1. Aerial surveying operations, like those performed by oil and gas pipeline operators, are not currently permitted in Category 4 areas, as defined by proposed section 108.185. However, UAS are commonly used in Category 4 areas to survey pipeline rights of way and other properties commonly within Category 4 areas. The industry realizes several safety and efficiency benefits through use of UAS and, therefore, the MSC recommends that the final Rulemaking permits BVLOS use of UAS for aerial surveying within Category 4 areas.

Treatment of Current Waivers

1. The MSC recognizes that the FAA will be eliminating BVLOS waivers under Part 107 for operations under Part 108 once the Rulemaking is finalized. However, the MSC recommends that current waivers remain in place for two years after the Part 108 final Rulemaking is published to provide UAS operators with a reasonable time to comply.

Operating Categories (§ 108.185(c))

1. The proposed Rulemaking states: "*FAA is considering publishing a map, similar to the UAS Facility Map for LAANC data, which would assist operators in determining population density categories. FAA invites comments on whether this would be helpful or desirable.*" The MSC strongly supports the FAA's proposal to publish a population density map. This tool would be highly beneficial for BVLOS operators in determining applicable population density categories and planning compliant operations.

2. In addition to the map itself, the MSC recommends the FAA make the underlying data layers available as REST services. This would allow operators and infrastructure owners to integrate the population data directly into their own GIS platforms, enabling overlays with assets such as pipelines, transmission lines, and other critical infrastructure. This capability would enhance situational awareness, streamline operational planning, and improve safety and compliance.

Operating Requirements - (§ 108.185(d)(2))

1. Part 108.185(d)(2)) of the proposed Rulemaking bans the use of control links that utilize radio frequencies for BVLOS in certain categories, citing interference concerns. Many UAS use the 2.4 GHz and 5.8 GHz bands for control links and have safely flown in Visual Line of Site (VLOS) and BVLOS (under waivers) for years, using these bands and generally do not result in interference. Banning the use of these frequencies in operations over people would limit UAS options to conduct flights in Part 108 in the proposed Rulemaking. The MSC recommends that limitation of these frequencies should not be included in Part 108 of the proposed Rulemaking.

Airworthy Acceptance Generally (§ 108.700)

1. In the proposed Rulemaking, only drones built in the United States or in countries with specific bilateral agreements may qualify for operations under Part 108. Today, the United States does not have any agreements with other countries that would allow foreign drone makers to apply. Therefore, The MSC recommends that this requirement should be delayed for one year to allow for systems and controls to transition.

Simplified User Interaction (§ 108.810)

1. Section 108.810 appears to exclude "pilot-in-the-loop" designs, which remain essential in many operational scenarios—particularly in infrastructure inspection. These limitations effectively exclude remote operations, which are currently being conducted successfully using various UAS platforms. In general, the Rulemaking makes multiple references that BVLOS operations will rely on automation and computer guidance to execute a mission. While this is generally true, it should be acknowledged that the Pilot in Command (PIC) for a mission has the final authority of the flight and can manually take control if needed, as is stated in the existing 14 CFR 107.19 *Remote Pilot in Command*.

   14 CFR 107.19(e): *The remote pilot in command must have the ability to direct the small unmanned aircraft to ensure compliance with the applicable provisions of this chapter.*

2. As currently written, the proposed Rulemaking disproportionately favors UAS operations such as package delivery, while failing to adequately support the full spectrum of other operations, such as pipeline inspection applications. The operational requirements and constraints do not reflect the realities of low-altitude, terrain-sensitive missions that are critical to infrastructure monitoring and safety. Unlike with package delivery, for aerial surveying of pipeline and other energy infrastructure, there are times when it would be helpful or potentially even necessary for a pilot to take over control of a UAS. The MSC recommends the FAA consider the broad use of UAS operations that provide valuable uses for safe monitoring of infrastructure when finalizing the Rulemaking.

3. The MSC recommends that the FAA acknowledge in the final Rulemaking that manual control of the aircraft offers several key advantages, especially in the application of performing inspections:

a. Real-time adaptability to unexpected environmental conditions (e.g., wind gusts, obstructions, wildlife, downed trees or electrical wires).

b. Precision positioning for close-up inspection of assets such as power lines, bridges, and pipelines, especially when an anomaly is detected.

c. Human judgment in complex or ambiguous situations where automation may misinterpret sensor data.

4. Excluding pilot-in-the-loop configurations could unnecessarily limit operational flexibility and reduce safety in scenarios where human control is superior to automation. The MSC recommends that the final Rulemaking be revised to allow manual control options alongside automated features, ensuring operators can select the most appropriate interface for their mission.

5. The MSC suggests that at the very least, in shielded operations, which provide right-of-way for the UAV, the FAA should allow and permit a pilot to take over manual control of a UAS when the PIC determines it is necessary to do so.

Flight Coordinator (§108.310)

1. The MSC believes that digital processes will reduce staff overhead and time to approve flight operations. The MSC recommends retaining DroneZone, APIs, and avoiding paper processes.

Area of Operation (§108.165(c))

1. The MSC recommends that population density buffers for risk assessment should not exceed 500 feet. FAA should publish clear guidance on how operators may demonstrate compliance with population thresholds using available GIS or census data.

Preflight Requirements (§108.170)

1. Ratios greater than 1:1 for remote pilots to aircraft may be authorized by demonstration of compliance with FAA-accepted standards (e.g., ASTM autonomy/monitoring standards). The MSC recommends that FAA oversight should be limited to reviewing compliance artifacts rather than requiring on-site demonstration for each operator.

Thank you for your consideration of these comments. Should you desire any additional information or clarification, please do not hesitate to contact me.

Sincerely,

Jim Welty, President
Marcellus Shale Coalition

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