



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

800 Independence Ave., S.W.  
Washington, D.C. 20591

May 12, 2015

Exemption No. 11554  
Regulatory Docket No. FAA-2015-0377

Mr. Steven Fargo  
Managing Director  
Midstream Integrity Services, LLC  
18615 Tuscany Stone  
Suite 380  
San Antonio, TX 78258

Dear Mr. Fargo:

This letter is to inform you that we have granted your request for exemption. It transmits our decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

By letter posted to the public docket on February 17, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Midstream Integrity Services, LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct inspections of vertically developed structures, pipelines, right of ways, and provide cost effective aerial imagery services while also inspecting for hydrocarbon gas leaks.

See Appendix A for the petition submitted to the FAA describing the proposed operations and the regulations that the petitioner seeks an exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the petitioner. However, the FAA received one comment from the Association for Unmanned Vehicle Systems International (AUVSI) in support of the petition made to the docket.

## Airworthiness Certification

The UAS proposed by the petitioner are a DJI Phantom 2, S1000, S900, and MU-1H

The petitioner requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*. In accordance with the statutory criteria provided in Section 333 of Public Law 112–95 in reference to 49 U.S.C. § 44704, and in consideration of the size, weight, speed, and limited operating area associated with the aircraft and its operation, the Secretary of Transportation has determined that this aircraft meets the conditions of Section 333. Therefore, the FAA finds that the requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*, and any associated noise certification and testing requirements of part 36, is not necessary.

## The Basis for Our Decision

You have requested to use a UAS for aerial data collection<sup>1</sup>. The FAA has issued grants of exemption in circumstances similar in all material respects to those presented in your petition. In Grants of Exemption Nos. 11062 to Astraeus Aerial (*see* Docket No. FAA–2014–0352), 11109 to Clayco, Inc. (*see* Docket No. FAA–2014–0507), 11112 to VDOS Global, LLC (*see* Docket No. FAA–2014–0382), and 11213 to Aeryon Labs, Inc. (*see* Docket No. FAA–2014–0642), the FAA found that the enhanced safety achieved using an unmanned aircraft (UA) with the specifications described by the petitioner and carrying no passengers or crew, rather than a manned aircraft of significantly greater proportions, carrying crew in addition to flammable fuel, gives the FAA good cause to find that the UAS operation enabled by this exemption is in the public interest.

Having reviewed your reasons for requesting an exemption, I find that—

- They are similar in all material respects to relief previously requested in Grant of Exemption Nos. 11062, 11109, 11112, and 11213;
- The reasons stated by the FAA for granting Exemption Nos. 11062, 11109, 11112, and 11213 also apply to the situation you present; and
- A grant of exemption is in the public interest.

## Our Decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f), 40113, and 44701,

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<sup>1</sup> Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

delegated to me by the Administrator, Midstream Integrity Services, LLC is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

### **Conditions and Limitations**

In this grant of exemption, Midstream Integrity Services, LLC is hereafter referred to as the operator.

Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or rescission of this exemption.

1. Operations authorized by this grant of exemption are limited to the DJI Phantom 2, S1000, S900, and MU-1H when weighing less than 55 pounds including payload. Proposed operations of any other aircraft will require a new petition or a petition to amend this exemption.
2. Operations for the purpose of closed-set motion picture and television filming are not permitted.
3. The UA may not be operated at a speed exceeding 87 knots (100 miles per hour). The exemption holder may use either groundspeed or calibrated airspeed to determine compliance with the 87 knot speed restriction. In no case will the UA be operated at airspeeds greater than the maximum UA operating airspeed recommended by the aircraft manufacturer.
4. The UA must be operated at an altitude of no more than 400 feet above ground level (AGL). Altitude must be reported in feet AGL.
5. The UA must be operated within visual line of sight (VLOS) of the PIC at all times. This requires the PIC to be able to use human vision unaided by any device other than corrective lenses, as specified on the PIC's FAA-issued airman medical certificate or U.S. driver's license.
6. All operations must utilize a visual observer (VO). The UA must be operated within the visual line of sight (VLOS) of the PIC and VO at all times. The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times; electronic messaging or texting is not permitted during flight operations. The PIC must be designated before the flight and cannot transfer his or her designation for the

duration of the flight. The PIC must ensure that the VO can perform the duties required of the VO.

7. This exemption and all documents needed to operate the UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereinafter referred to as the operating documents. The operating documents must be accessible during UAS operations and made available to the Administrator upon request. If a discrepancy exists between the conditions and limitations in this exemption and the procedures outlined in the operating documents, the conditions and limitations herein take precedence and must be followed. Otherwise, the operator must follow the procedures as outlined in its operating documents. The operator may update or revise its operating documents. It is the operator's responsibility to track such revisions and present updated and revised documents to the Administrator or any law enforcement official upon request. The operator must also present updated and revised documents if it petitions for extension or amendment to this grant of exemption. If the operator determines that any update or revision would affect the basis upon which the FAA granted this exemption, then the operator must petition for an amendment to its grant of exemption. The FAA's UAS Integration Office (AFS-80) may be contacted if questions arise regarding updates or revisions to the operating documents.
8. Any UAS that has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g., replacement of a flight critical component, must undergo a functional test flight prior to conducting further operations under this exemption. Functional test flights may only be conducted by a PIC with a VO and must remain at least 500 feet from other people. The functional test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property.
9. The operator is responsible for maintaining and inspecting the UAS to ensure that it is in a condition for safe operation.
10. Prior to each flight, the PIC must conduct a pre-flight inspection and determine the UAS is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, e.g., inoperable components, items, or equipment. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft is prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight.
11. The operator must follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, and life limit requirements for the aircraft and aircraft components.
12. Each UAS operated under this exemption must comply with all manufacturer safety bulletins.

13. Under this grant of exemption, a PIC must hold either an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC must also hold a current FAA airman medical certificate or a valid U.S. driver's license issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government. The PIC must also meet the flight review requirements specified in 14 CFR § 61.56 in an aircraft in which the PIC is rated on his or her pilot certificate.
14. The operator may not permit any PIC to operate unless the PIC demonstrates the ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from persons, vessels, vehicles and structures. PIC qualification flight hours and currency must be logged in a manner consistent with 14 CFR § 61.51(b). Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building) and determining the PIC's ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption are permitted under the terms of this exemption. However, training operations may only be conducted during dedicated training sessions. During training, proficiency, and experience-building flights, all persons not essential for flight operations are considered nonparticipants, and the PIC must operate the UA with appropriate distance from nonparticipants in accordance with 14 CFR § 91.119.
15. UAS operations may not be conducted during night, as defined in 14 CFR § 1.1. All operations must be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.
16. The UA may not operate within 5 nautical miles of an airport reference point (ARP) as denoted in the current FAA Airport/Facility Directory (AFD) or for airports not denoted with an ARP, the center of the airport symbol as denoted on the current FAA-published aeronautical chart, unless a letter of agreement with that airport's management is obtained or otherwise permitted by a COA issued to the exemption holder. The letter of agreement with the airport management must be made available to the Administrator or any law enforcement official upon request.
17. The UA may not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.
18. If the UAS loses communications or loses its GPS signal, the UA must return to a pre-determined location within the private or controlled-access property.
19. The PIC must abort the flight in the event of unpredicted obstacles or emergencies.
20. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UA to conduct the

intended operation and to operate after that for at least five minutes or with the reserve power recommended by the manufacturer if greater.

21. Air Traffic Organization (ATO) Certificate of Waiver or Authorization (COA). All operations shall be conducted in accordance with an ATO-issued COA. The exemption holder may apply for a new or amended COA if it intends to conduct operations that cannot be conducted under the terms of the attached COA.
22. All aircraft operated in accordance with this exemption must be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N-Number) markings in accordance with 14 CFR part 45, Subpart C. Markings must be as large as practicable.
23. Documents used by the operator to ensure the safe operation and flight of the UAS and any documents required under 14 CFR §§ 91.9 and 91.203 must be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. These documents must be made available to the Administrator or any law enforcement official upon request.
24. The UA must remain clear and give way to all manned aviation operations and activities at all times.
25. The UAS may not be operated by the PIC from any moving device or vehicle.
26. All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless:
  - a. Barriers or structures are present that sufficiently protect nonparticipating persons from the UA and/or debris in the event of an accident. The operator must ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately in a manner ensuring the safety of nonparticipating persons; and
  - b. The owner/controller of any vessels, vehicles or structures has granted permission for operating closer to those objects and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard.

The PIC, VO, operator trainees or essential persons are not considered nonparticipating persons under this exemption.

27. All operations shall be conducted over private or controlled-access property with permission from the property owner/controller or authorized representative. Permission from property owner/controller or authorized representative will be obtained for each flight to be conducted.

28. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA must be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: [www.nts.gov](http://www.nts.gov).

If this exemption permits operations for the purpose of closed-set motion picture and television filming and production, the following additional conditions and limitations apply.

29. The operator must have a motion picture and television operations manual (MPTOM) as documented in this grant of exemption.
30. At least 3 days before aerial filming, the operator of the UAS affected by this exemption must submit a written Plan of Activities to the local Flight Standards District Office (FSDO) with jurisdiction over the area of proposed filming. The 3-day notification may be waived with the concurrence of the FSDO. The plan of activities must include at least the following:
  - a. Dates and times for all flights;
  - b. Name and phone number of the operator for the UAS aerial filming conducted under this grant of exemption;
  - c. Name and phone number of the person responsible for the on-scene operation of the UAS;
  - d. Make, model, and serial or N-Number of UAS to be used;
  - e. Name and certificate number of UAS PICs involved in the aerial filming;
  - f. A statement that the operator has obtained permission from property owners and/or local officials to conduct the filming production event; the list of those who gave permission must be made available to the inspector upon request;
  - g. Signature of exemption holder or representative; and
  - h. A description of the flight activity, including maps or diagrams of any area, city, town, county, and/or state over which filming will be conducted and the altitudes essential to accomplish the operation.
31. Flight operations may be conducted closer than 500 feet from participating persons consenting to be involved and necessary for the filming production, as specified in the exemption holder's MPTOM.

Unless otherwise specified in this grant of exemption, the UAS, the UAS PIC, and the UAS operations must comply with all applicable parts of 14 CFR including, but not limited to, parts 45, 47, 61, and 91.

This exemption terminates on May 31, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan

Director, Flight Standards Service

Enclosures



U.S. Department of Transportation  
Docket Management System  
1200 New Jersey Avenue SE  
Washington, D.C. 20590

Re: Exemption Request; Section 333 of the FAA Modernization & Reform Act  
and Part 11 of the Federal Aviation Regulations from 14 C.F.R.  
45.23(b); 14 CFR Part 21; 91.7 (a); 91.9 (b) (2);  
91.103(b); 91.109; 91.119; 91.121; 91.151 (a); 91.203(a) & (b); 91.405  
(a); 91.407(a) (1 ); 91.409 (a) (2); 91.417 (a) & (b).

Dear Sir or Madam:

Midstream Integrity Services, LLC (henceforth referred to as "MIS") hereby petitions the Secretary of Transportation and Federal Aviation Administration ("FAA") for exemption to the above referenced and below more fully described Federal Aviation Regulations. This exemption is being sought for the purpose of utilizing Unmanned Aerial Systems (UAS) to conduct inspections of vertically developed structures, pipelines, right of ways, and provide cost effective aerial imagery services while also inspecting for hydrocarbon gas leaks. The leadership team at MIS (Steven Fargo, and Landon Phillips) has a proven track record in aviation with over 4,000 hours combined flight time in fighter and trainer aircraft, instructor pilot certifications, evaluator pilot certifications, instrument pilot certifications, commercial pilot certifications, and U.S. Air Force flight safety officer / mishap investigation training.

### **Public Interest**

MIS believes that relief from the aforementioned regulations will benefit the public interest in the following manners:

- Removal of human risk from flight operations.
- Removal of human risk from gas detection inspections.
- Removal of human risk from structural inspections.
- Reduction in gas emissions associated with powered flight.
- Reduction in risks associated with factory shutdowns and startups.
- Improvement in ability to provide data to oil and gas operators regarding pipeline encroachment.
- Improvement upon cost efficiencies associated with manned flight.

### **Aircraft and Equipment**

MIS will use the following three unmanned aircraft (UA) for inspection and photography work:

- DJI S1000 (octo-rotor)
  - Capable of sustained flight in the event of single motor failure. In the event of motor failure PIC will execute emergency recovery procedures to the nearest suitable landing surface.
  - <http://www.dji.com/product/spreading-wings-s1000/download>
- DJI S900 (hexa-rotor)

- Capable of sustained flight in the event of single motor failure. In the event of motor failure PIC will execute emergency recovery procedures to the nearest suitable landing surface.
  - <http://www.dji.com/product/spreading-wings-s900/download>
- DJI Phantom 2 (quad-rotor)
  - PIC will operate aircraft in a manner that will not pose a threat to persons or property in the event of a motor failure.
  - <http://www.dji.com/product/phantom-2-vision-plus/download>
- MU-1H (hexa-rotor)
  - Capable of sustained flight in the event of single motor failure. In the event of motor failure PIC will execute emergency recovery procedures to the nearest suitable landing surface.
  - <Operations Manual is Attached>

Aircraft gross weight will not exceed respective operation manual guidance.

MIS will use the following ground support equipment

- DJI laptop Ground Control Station (DJI aircraft)
  - <http://www.dji.com/product/pc-ground-station/download>
- DJI iPad Ground Control Station (DJI aircraft)
  - <http://www.dji.com/product/ipad-ground-station/download>
- DJI Lightbridge video downlink (DJI aircraft)
  - <http://www.dji.com/product/dji-lightbridge/download>
- Micropilot A-2028 autopilot and ground station (MU-1H aircraft)
  - <http://www.micropilot.com/products-manuals.htm>
- Ardupilot/APM Mission Planner Ground Control Station (MU-1H aircraft)
  - <http://planner.ardupilot.com/>
- Pixhawk autopilot (MU-1H aircraft)
  - <http://3drobotics.com/wp-content/uploads/2014/03/pixhawk-manual-rev7.pdf>

Operating characteristics and maintenance procedures are outlined in the attached operations manuals. The radio frequency spectrum used for operation and control of the UA will comply with the Federal Communications Commission (FCC) or other appropriate government oversight agency requirements.

All aircraft operated in accordance with this exemption will be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N-Number) markings in accordance with 14 CFR part 45, Subpart C. Markings will be as large as practicable.

If the UA loses communications or loses its GPS signal, it will return to a pre-determined location within the planned operating area and land or be recovered in accordance with the operating documents.

Altitude awareness will be maintained via a radio communications telemetry data link, which downlinks from the aircraft to the PIC for active monitoring of the flight path. The altitude information will be generated by GPS equipment installed on the aircraft. Prior to each flight, a zero altitude initiation point will be established and confirmed for accuracy by the UAS PIC. Thus, MIS

requests relief from 14 CFR 91.121 *Altimeter Settings* as previously granted in Exemption No.11109, Clayco Inc.

### **Pilot In Command**

The PIC will possess at least a private pilot certificate and at least a current third-class medical certificate. The PIC must also meet the flight review requirements specified in 14 CFR § 61.56 in an aircraft in which the PIC is rated on his or her pilot certificate.

### **Visual Observer**

All operations will utilize a visual observer (VO). The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC will be able to communicate verbally at all times. Electronic messaging or texting will not be permitted during flight operations. The PIC will be designated before the flight. The PIC will not transfer his or her designation for the duration of the flight. The PIC will ensure that the VO can perform the functions prescribed in the operating documents. The VO will not perform any other duties beyond assisting the PIC with seeing and avoiding other air traffic and other ground based obstacles/obstructions and is not permitted to operate the camera or other instruments.

### **Training**

MIS will not permit any PIC to operate unless the PIC meets the operator's qualification criteria in the attached training syllabus (attached) and demonstrates the ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from persons, vessels, vehicles and structures. PIC qualification flight hours will be logged in a manner consistent with 14 CFR § 61.51(b). The VO will also be required to complete the operator's training requirements. A record of training will be documented and made available upon request by the Administrator. Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building), will be permitted during dedicated training sessions. During training, proficiency, and experience-building flights, all persons not essential for flight operations will be considered nonparticipants, and the PIC will operate the UA with appropriate distance from nonparticipants in accordance with 14 CFR § 91.119.

### **Maintenance**

MIS will carry out its maintenance, inspections, and record keeping requirements, in accordance with the operating documents. Maintenance, inspection, alterations, and status of replacement/overhaul component parts will be noted in the aircraft records, including total time in service, description of work accomplished, and the signature of the authorized person returning the UAS to service.

Any UAS that has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g. replacement of a flight critical component, will undergo a functional test flight. The PIC who conducts the functional test flight must make an entry in the aircraft records.

Prior to each flight the PIC will inspect the UAS to ensure it is in a condition for safe flight (relief from 14 CFR 91.7(a) *Civil aircraft airworthiness*, reference Exemption No. 11109 granted to Clayco, Inc.) The pre-flight inspection will account for all potential discrepancies, e.g. inoperable

components, items, or equipment, not already covered in the relevant sections of the operating documents. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft will be prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight. The Ground Control Station will be included in the preflight inspection. All maintenance and alterations will be properly documented in the aircraft records.

Each UAS operated under this exemption will comply with all manufacturer Safety Bulletins. The authorized person will make an entry in the aircraft record of the corrective action taken against discrepancies discovered between inspections.

## **Safety**

MIS is committed to ground and flight safety. A flight safety program will be implemented to ensure appropriate dissemination of information and adherence to FARs and this exemption. MIS has staffed a former U.S. Air Force trained Flight Safety Officer (FSO) / mishap investigator to implement a safety program consistent with the needs of small UAS flight.

Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA will be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: [www.nts.gov](http://www.nts.gov).

## **Availability of Documentation**

The operating documents associated with this exemption will be accessible during UAS operations and made available to the Administrator upon request.

## **Flight Operations**

MIS will obtain an Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA) prior to conducting any operations under this grant of exemption. MIS will also request a Notice to Airman (NOTAM) not more than 72 hours in advance, but not less than 48 hours prior to the operation. All operations shall be conducted in accordance with airspace requirements in the ATO issued COA including class of airspace, altitude level and potential transponder requirements.

Mission planning will be accomplished prior to flight. A preflight briefing will be conducted by the PIC and VO, as well as with any other observers (company representatives, licensed inspectors, etc.) prior to commencement of operations.

The UA will be operated within visual line of sight (VLOS) of the PIC at all times. This requires the PIC to be able to use human vision unaided by any device other than corrective lenses, as specified on the PIC's FAA-issued airman medical certificate.

The UA will be operated at an altitude of no more than 400 feet above ground level (AGL), as indicated by the procedures specified in the operating documents. All altitudes reported to ATC will be in feet AGL.

The UA will not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.

UAS operations will not be conducted during night, as defined in 14 CFR § 1.1. All operations will be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.

The UA will not operate within 5 nautical miles of an airport reference point as denoted on a current FAA-published aeronautical chart unless a letter of agreement with that airport's management is obtained, and the operation is conducted in accordance with a NOTAM as required by the operator's COA. The letter of agreement with the airport management will be made available to the Administrator upon request.

The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough power to fly at normal cruising speed to the intended landing point and land the UA with 30% battery power remaining.

The documents required under 14 CFR 91.9 and 91.203 will be available to the PIC at the Ground Control Station of the UAS any time the UAS is operating. These documents will be made available to the Administrator or any law enforcement official upon request.

The UA will remain clear and yield the right of way to all manned aviation operations and activities at all times.

The UA may not be operated over congested or densely populated areas.

Flight operations will be conducted at least 500 feet from all nonparticipating persons (persons other than the PIC, VO, operator trainees or essential persons), vessels, vehicles, and structures unless:

- Barriers or structures are present that sufficiently protect nonparticipating persons from the UA and/or debris in the event of an accident. The operator will ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately and/or;
- The aircraft is operated near vessels, vehicles or structures where the owner/controller of such vessels, vehicles or structures has granted permission and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard, and;
- Operations nearer to the PIC, VO, operator trainees or essential persons do not present an undue hazard to those persons per § 91.119(a).

All operations shall be conducted over private or controlled-access property with permission from the land owner/controller or authorized representative. Permission from land owner/controller or authorized representative will be obtained for each flight to be conducted.

The UA will not be flown at an indicated airspeed exceeding 30 knots.

The PIC must abort the flight in the event of unpredicted obstacles or emergencies in accordance with the operating documents.

**Conclusion**

MIS requests a review of the aforementioned relief request at the earliest date practicable. We believe we have addressed all the requests and requirements set forth by Section 333 relief guidance and that our request is in line with previously approved relief requests. It is our recommendation that the Secretary of Transportation and FAA approve the exemption for Midstream Integrity Services, LLC due to the favorability of the public interest and the ability of the exemption to provide a level of safety at least equal to that provided by the rules from which exception is being sought.



Steven Fargo  
Managing Director  
Midstream Integrity Services

**Attachments:**

- (1) MU-1H Operations Manual
- (2) MIS Unmanned Aircraft Division – ROAV PIC / VO syllabus
- \*\* Other supporting documentation found in the internet links above