



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

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

August 27, 2015

Exemption No. 12638  
Regulatory Docket No. FAA-2015-2424

Mr. Julian T. Ross  
OxySure Systems, Inc.  
10880 John W. Elliott Drive, #600  
Frisco, TX 75033

Dear Mr. Ross:

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 dated June 1, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of OxySure Systems, Inc. (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial imagery, recovery, search and rescue, and humanitarian relief efforts.

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.

### **Airworthiness Certification**

The UAS proposed by the petitioner are the DJI Inspire 1, DJI Phantom 2, DJI Phantom 2 Vision, DJI S900 and DJI S1000+.

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, delegated to me by the Administrator, OxySure Systems, Inc. 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.

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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.

## Conditions and Limitations

In this grant of exemption, OxySure Systems, Inc. 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 Inspire 1, DJI Phantom 2, DJI Phantom 2 Vision, DJI S900 and DJI S1000+ 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 September 30, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan

Director, Flight Standards Service

Enclosures





June 1, 2015

U. S. Department of Transportation  
Docket Management System  
1200 New Jersey Ave., SE  
Washington, DC 20590

Dear Sir or Madam:

**Re: Exemption Request under Section 333 of the FAA Modernization and Reform Act and 14 C.F.R. Part 11**

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act) and 14 C.F.R. Part 11, OxySure Systems, Inc. (Applicant) a Delaware corporation, seeks an exemption from the Federal Aviation Regulations (FARs) listed and discussed in Appendix A in order to allow for the operation of small Unmanned Aircraft System (sUAS) under the conditions and limitations set forth in this application for Petition.

The operation / mission of this Petition involve aerial operations in support of emergency response and services, disaster response and recovery, search and rescue, and humanitarian relief efforts.

The requested exemption would permit the operation of small, unmanned and relatively inexpensive sUASs under controlled conditions in airspace that (1) is limited, (2) is predetermined, and (3) would provide safety enhancements to First Responders on the front lines in our communities. Other highly effective uses of sUAS endeavors include response to humanitarian relief efforts, emergency and disaster response, and Search & Rescue (SAR) operations. Providing a clear visual from a low altitude flight is extremely valuable with respect to emergency response and SAR missions. Low altitude real-time imagery assists with locating people, locating emergency situations, delivering much-needed emergency supplies quickly as an easily detachable payload (including medical emergency supplies), recognizing and identifying critically affected areas, locating safety zones and increasing situational awareness of identified risks and hazards, resulting in more efficient, decisive and effective response plans. Such planning assists to minimize reaction time and increase the probability of the best outcome for the situation – without increasing risk to human lives and property.

Approval of this exemption would thereby enhance safety and fulfill the FAA Administrator's responsibilities to "...establish requirements for the safe operation of such aircraft systems in the national airspace system." Section 333(c) of the Reform Act.

The name and address of the applicant is:

OxySure Systems, Inc.  
Attn: Julian T. Ross  
Telephone: (972) 294-6450  
Email: [drone@oxysure.com](mailto:drone@oxysure.com)

**OxySure Systems, Inc.**  
10880 John W. Elliott Drive #600, Frisco, TX 75033  
1-888-7OXYSURE | (+1) 972-294-6450 | Fax (+1) -972-294-6501  
[www.oxysure.com](http://www.oxysure.com)

Address: 10880 John W. Elliott Drive #600, Frisco, TX 75033

***Regulations from which the exemption is requested:***

14 CFR Part 21  
14 C.F.R. § 45.23(b)  
14 CFR § 61.3  
14 C.F.R. § 91.7 (a)  
14 CFR § 91.9 (b) (2)  
14 C.F.R. § 91.103  
14 C.F.R. § 91.109  
14 C.F. R. § 91.119  
14 C.F.R. § 91.121  
14 CFR § 91.151 (a)  
14 CFR § 91.203 (a) & (b)  
14 CFR § 91.205(b)  
14 CFR § 91.215  
14 CFR § 91.405 (a)  
14 CFR § 407 (a) (1)  
14 CFR § 409 (a) (2)  
14 CFR § 417 (a) & (b) 3

Appendix 1 describes the FARs from which an exemption is requested and summarizes the justification for each requested exemption.

The Petition is submitted to fulfill Congress' goal under Section 333(a) through (c) of the Reform Act, which directs the Secretary of Transportation to consider whether certain unmanned aircraft systems may operate safely in the national airspace system (NAS) before completion of the rulemaking required under Section 332 of the Reform Act. In making this determination, the Administrator must determine which types of UASs do not create a hazard to users of the NAS or the public or pose a threat to national security in light of the following:

- The UAS's size, weight, speed, and operational capability;
- Operation of the UAS in close proximity to airports and populated areas; and
- Operation of the UAS within visual line of sight of the operator.

Reform Act § 333 (a).

If the Administrator determines that such vehicles “may operate safely in the national airspace system, the Secretary shall establish requirements for the safe operation of such aircraft in the national airspace system.” Id. § 333(c).

The Secretary has delegated his aviation authority to the Administrator of the FAA.

The Federal Aviation Act expressly grants the FAA the authority to grant exemptions from its regulatory requirements for civil aircraft, a term defined under §40101 of the Act, which includes sUASs. The Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or any sections 44702-44716 of the Federal Aviation Act if Administrator finds the exemption in the public interest. 49 U.S.C. § 44701(f) See also 49 USC § 44711(a); 49 USC § 44704; 14 CFR §91.203 (a) (1).

The Petitioner is OxySure Systems, Inc. (“OxySure”), a company founded in January 2004. OxySure was founded upon the goal of improving emergency outcomes, including medical, natural and civil emergencies through the use of technology and innovation. Petitioner has developed and commercialized products aimed at lay rescuers as well as professional first responders. For example, one such product allows lay rescuers to render medical assistance to a person suffering a medical emergency easily and safely, prior to the arrival of professional first responders. Through innovation and technology, OxySure has focused on products designed to “bridge the gap” (which is the time it takes for first responders to arrive on the scene, and can vary widely based on city, traffic conditions, time of day and so forth) between the onset of a medical emergency and the arrival on the scene of professional first responders. Automated External Defibrillators (AEDs) is another example of such a product designed to “bridge the gap.” In most emergencies, and medical emergencies in particular, time is of the utmost essence. Every second counts. That is why “bridging the gap” is a theme OxySure has been very focused on, as it can mean the difference between life and death, or it can mean the difference between a good medical outcome, and an outcome that is undesirable (such as an outcome that involves a loss of quality of life). More generally, OxySure operates in and is well versed in medical emergency equipment and management, commercial as well as military, and first response markets (both lay responders and professional responders).

The Petitioner has formulated a business plan to provide Emergency Management and Response operations and support in medical, natural and civil emergency situations, and to Local, State and Federal entities. The plan is to use small drones for Emergency & Disaster Response, SAR (Search & Rescue), and Hazmat/CBRN Management. When responding to an emergency, one of the priorities is to understand how the most critical areas are affected and where they are situated – before putting any more human lives in danger.

The unmanned Drone platform puts the power of aerial intelligence directly into the hands of the first responders. In many instances, drones can also get to an emergency situation faster because they can fly in straight lines and avoid traffic situations. If the emergency is of a medical nature, then by carrying a payload (at no time shall the sUAS and payload together exceed 55 pounds) such as an AED to the scene of a medical emergency, time and lives can be saved. In such instances, the unmanned Drone can shrink the “gap” – and medical outcomes can be improved and lives can be saved. Further, real-time video streaming can provide navigation and guidance and also show not only the extent of the damage, but may also warn responders of additional hazards. Geo-tagged digital photographs provide an aerial record of the on-ground situation completely untouched. It is very improbable for First Responders to acquire, stay trained up on and be on the leading edge of technology with regards to UASs due to turnover and other training requirements that take priority.

### ***Vehicle***

- UAS will weigh typically less than 15 lbs., and always less than 55 lbs (including payload, if applicable).
- UAS will operate at a maximum speed of no greater than 30 knots.
- UAS will operate at or below 400ft AGL.
- UAS shall not be operated within 5 miles of an airport without prior approval of, or establishing a line of communication for the duration of the flight operations with the controlling authority of that airspace/airport.
- UAS will follow pre-determined flight lines over the mission area conducted via automated navigational flight software.

- UAS will be operated under visibility and cloud clearance requirements equivalent to Visual Flight Rules (VFR).
- UAS will be equipped with an autopilot system. UAS will utilize GPS navigation, systematic pre-flight checks, and failover safety mechanisms such as return-to-home (RTH), auto-land, loiter and flight abort safety features.

Examples of vehicles that the Petitioner will use include DJI Inspire 1s, DJI Phantom 2s, and DJI Phantom 2 Visions, equipped with a three-axis gimbal and camera, and other sensors and equipment that will provide for better situational awareness during emergency response situations, as well as SAR and disaster response missions. If the mission involves additional payload such as emergency supplies (in addition to communications and video equipment) then examples of vehicles include the DJI S900 and DJI S1000+ models.

These vehicles have the built in capability to limit the height they fly above the ground, to limit the radius of the distance they fly from the operator, and to exclude them from class B, C, and D airspace as well as any TFR's (Temporary Flight Restricted) areas. The vehicles also have the built-in capability to return to the launching point if the wireless control link is interrupted or if the operator attempts to exceed any of the height, radius, or airspace limitations programmed into them. The vehicles typically have four fixed-pitch rotors (the DJI S900 and DJI S1000+ models have 8 rotors), thrust from which is varied by changing RPM. They are generally powered by lithium polymer smart batteries.

#### ***Pertaining to Flight Operations***

- Risk assessment evaluation for safe site operations and flight conditions before each mission.
- Prior to a UAS flight, an area of operation will be established. This area of operation will include a defined lateral and vertical area, where the UAS will operate. Safety procedures will be established for persons, property and applicable airspace within the area of operation.
- Flights will be operated in Class G airspace whenever possible.
- See and avoid: If at any time the operator see or hears another aircraft and it appears that aircraft may come within one (1) mile of the sUAS, or it is questionable whether or not it will do so, the PIC shall immediately descend the sUAS and direct it on a heading toward the designated landing area, or alternate landing area if necessary, until the sUAS has landed or it is determined the other aircraft has maintained a separation of one (1) mile.
- The sUAS shall operate from on-site launch/landing locations directly next to the PIC and GCS crew.
- Flight planning will include flight completion with at least 25% battery power remaining as measured by the UAS or appropriate flight time planning.
- A Ground Control Station (GCS) will be connected by radio communication to the UAS during the entire flight operation. Flight information relayed to the PIC will include UAS GPS position, altitude, speed, compass heading/bearing, aircraft angle of attack, flight time, battery power remaining, and other telemetry information.

#### ***Public interest***

Granting the petition would be in the public interest because:

1. The Congress of the United States has determined that early accommodation of sUAS into the National Airspace System advances the public interest. The Committee Report leading the House to adopt H.R. 658 said:

"The successful integration of unmanned aircraft systems (UAS) into the National Airspace System (NAS) can support more than 23,000 high-paying jobs in the United States. . . . The absence of a plan to integrate UASs into the NAS is a barrier to such job creation . . . ."1

Granting the Petition represents a step toward such integration, in the absence of a comprehensive regulatory regime for sUAS, and thus would serve the Congressional goal and the public interest.

2. Granting the Petition will facilitate a new era in Emergency Response activities, one in which the responders themselves have a tool to safely, quickly and remotely assess and access a situation without placing lives in harm's way. In comparison, the EOD robots have saved countless lives since their inception, a feat that will become common place for aerial assessments.

3. Granting the Petition will enable Petitioner to demonstrate the commercial viability of creating new safety techniques and tactics with new aeronautical technology, thereby improving the efficiency of Emergency Responders around the world and making for a safer society.

4. Granting the Petition will fulfill the FAA's own declaration that encouraging new aviation technologies advances the public interest. The FAA itself has recognized the public interest in its role of "Encouraging and developing civil aeronautics, including new aviation technology."<sup>2</sup> Granting the Petition will enhance FAA fulfillment of that commitment, thereby serving the public interest. Air commerce flourishes in the United States because of the rapid pace of innovation in aeronautical and associated technologies, followed by their commercialization and their introduction into the marketplace. The drone technology that the Petitioner uses exemplifies the latest innovative leap forward in aeronautical technology. Preventing the use of this technology in air commerce subverts achievement of the goal.

5. Granting the Petition will fulfill the Congressional determination that integrating sUAS technology into the NAS serves the public interest. Section 330 of the FAA Modernization and Reform Act of 2012, specifically recognizes the advantages to air commerce obtainable from the deployment of sUAS technologies. It mandated several steps by the FAA to accelerate the availability of these technologies in the National Airspace System, thereby representing a congressional determination that the public interest is served by making these technologies more widely available at the earliest practicable date.

The Petition represents a way for the FAA to move incrementally, while still satisfying its congressional mandate and meeting its obligation to enhance the public interest by making new technologies available by allowing the use of sUAS technologies in a manner that protects the public and the rest of the aviation community from significant risk.

The commercial activities by Petitioner proposed in the Petition represent contributions to new forms of air commerce, thereby fulfilling the FAA's statutory mandate under the 2012 Act.

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1. H. R. Rep. 112-29 on H.R. 658, 112th Cong., 1st Sess. at 116. The House-Senate Conference Committee on the FAA Modernization and Reform Act of 2012 recommended amendments to H.R. 658 in lieu of amendments adopted by the Senate. Conference Report to Accompany H.R. 658, H.R. Rep. 112-381, 112th Cong., 2d Sess., at p. 1 (Feb. 1, 2012).

2. FAA, Safety: The Foundation of Everything We Do, [http://www.faa.gov/about/safety\\_efficiency/](http://www.faa.gov/about/safety_efficiency/).

6. Granting the Petition will improve outcomes in many emergency situations by reducing the time it takes to deliver much needed emergency equipment or supplies, including emergency medical equipment and supplies, quickly and efficiently. In doing so, lives may also be saved, and/or outcomes may be improved.

7. Granting the Petition will enhance aviation safety, thereby advancing the public interest. The Petitioner has committed itself in the Petition to safety practices that reduce or eliminate hazards to aircraft in the National Airspace System and to persons and property on the ground. Granting the Petition will offer the Petitioner up as an example of how the FAA is willing to accommodate the new technology when it is constrained by appropriate limitations to enhance safety. It will also allow the Petitioner to be a role model for safe commercial sUAS operations, especially as it specifically relates to emergency and disaster response.

In summary, it is the Petitioner's belief that the size, weight, speed, operating environment, and operating capabilities of each UAS will provide an "equivalent level of safety" or better when operating for commercial and public interest as outlined in Section 333 of the Reform Act. Petitioner appreciates the time and consideration devoted to this request for exemption to permit safe, legal commercial UAS operations within the NAS.

Respectfully submitted,  
/s/ Julian T. Ross  
OxySure Systems, Inc.



## APPENDIX A

<b>FAR section</b>	<b>Subject</b>	<b>Justification</b>
14 CFR § 45.23(b)	Requirement to display registration number on vehicle	Insufficient space on vehicle
14 CFR § 61.3	Requirement for pilot certificate	Part 61 requirements designed for manned aircraft, not sUAS; petition describes training for sUAS operator
14 CFR § 91.7 (a)	Airworthiness requirement	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.9 (b) (2)	Requirement for manual to be available in the cockpit	No one aboard to read manual
14 CFR § 91.103(b)	Requirement for crew members to be onboard	Unmanned vehicle
14 CFR § 91.109	Requirement for dual controls during flight instruction	No one aboard to operate controls
14 CFR § 91.119	Minimum altitudes for safe flight	Safety requires operation below these altitudes
14 CFR § 91.121	Altimeter settings	No one aboard to read altimeter
14 CFR § 91.203 (a) & (b)	Requirement for registration and airworthiness certificates to be onboard	No one aboard to read certificates
14 CFR § 91.205(b)	Cockpit instruments	No one aboard to read
14 CFR § 45.23(b)	Requirement to display registration number on vehicle	Insufficient space on vehicle
14 CFR Part 21	Aircraft certification requirements and procedures	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 61.3	Requirement for pilot certificate	Part 61 requirements designed for manned aircraft, not sUAS; petition describes training for sUAS operator
14 CFR § 91.7 (a)	Airworthiness requirement	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.9 (b) (2)	Requirement for manual to be available in the cockpit	No one aboard to read manual
14 CFR § 91.103(b)	Requirement for crew members to be onboard	Unmanned vehicle
14 CFR § 91.109	Requirement for dual controls during flight instruction	No one aboard to operate controls
14 CFR § 91.119	Minimum altitudes for safe flight	Safety requires operation below these altitudes
14 CFR § 91.121	Altimeter settings	No one aboard to read altimeter
14 CFR § 91.151(a)	Requirement for registration and airworthiness certificates to be onboard	No one aboard to read certificates
14 CFR § 91.205(b)	Cockpit instruments	No one aboard to read

**OxySure Systems, Inc.**

10880 John W. Elliott Drive #600, Frisco, TX 75033

1-888-7OXSURE | (+1) 972-294-6450 | Fax (+1) -972-294-6501

[www.oxysure.com](http://www.oxysure.com)