



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

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

August 31, 2015

Exemption No. 12668
Regulatory Docket No. FAA-2015-1202

Mr. Carl France
Alaska Aerial Services
3875 Geist Road, Suite E #210
Fairbanks, AK 99709

Dear Mr. France:

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 letters dated April 22, 2015, and July 13, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Alaska Aerial Services (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial data collection, inspections, filmmaking, cinematography, videography, precision agriculture, surveying, and monitoring.

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 Flame Wheel F450, DJI Flame Wheel F550, DJI S800, DJI S1000, DJI S900, 3D Robotics X8, and 3D Robotics Aero-M.

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 collection¹. 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 Astraesus 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, Alaska Aerial Services 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.

¹ 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, Alaska Aerial Services 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 Flame Wheel F450, DJI Flame Wheel F550, DJI S800, DJI S1000, DJI S900, 3D Robotics X8, and 3D Robotics Aero-M 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.

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



April 22, 2015

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

Dear Sir or Madam,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act) and 14 C.F.R. Part 11, Alaska Aerial Services, operator of Small Unmanned Aircraft Systems (“sUASs”) equipped to offer on-demand commercial UAS operations for a host of industries and applications. These include:

- Flare stack inspection,
- Utility-power generation and transmission system inspections and patrolling,
- Pipeline inspection and patrolling,
- Filmmaking, cinematography, and videography,
- Precision agriculture,
- Wildlife and forestry monitoring,
- Aerial surveying,
- Construction site inspection and monitoring, and
- Public Entity Support Operations.

hereby applies for an exemption from the listed Federal Aviation Regulations (“FARs”) to allow commercial operation of its sUASs, so long as such operations are conducted within and under the conditions outlined herein or as may be established by the FAA in the future in the Federal Aviation Regulations or official guidelines for operators at large, should those be less restrictive.

The name and address of the applicant is:

Alaska Aerial Services
3875 Geist Rd Ste E #210
Fairbanks, AK 99709
info@alaskaaerialservices.com

REGULATIONS FROM WHICH THE APPLICANT REQUESTS RELIEF

14 CFR Part 21 14 C.F.R. 45.23(b)
14 CFR 61.113 (a) & (b)
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 91.405 (a)
14 CFR 407 (a) (1)
14 CFR 409 (a) (2)
14 CFR 417 (a) & (b)

AIRCRAFT AND EQUIVALENT LEVEL OF SAFETY

The aircraft requested for operation have been approved by other exemption holders and are as follows:

Aircraft	Previously Approved Exemption Number
F450	11287
F550	11397
S800, S1000	11401
S900	11256
X8, AERO-M	11379

Alaska Aerial Services' sUAS are rotorcraft and fixed wing aircraft, weighting 55 or fewer lbs. including payload. Such operations will ensure that the sUAS will "not create a hazard to users of the national airspace system or the public."

The applicant requests to be allowed to operate under the typical 31 bullet point outline typically granted to other Section 333 Exemption holders. This will ensure the required "equivalent level of safety" and offer an explicit outline as to how this will be achieved, and a justification of the request to be relived from the burden of the CFR's previously stated.

PUBLIC BENEFIT

Approval of this request would benefit the public by allowing legal professional use of this new technology under FAA guidelines where safety is a major concern.

ADDITIONAL INFORMATION

Alaska Aerial Services is made up of engineers, manned aircraft pilots, remote control aircraft pilots, and experienced UAV operators.

Sincerely,
Carl France
Alaska Aerial Services



July 13, 2015

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

Dear Sir or Madam,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act) and 14 C.F.R. Part 11, Alaska Aerial Services, operator of Small Unmanned Aircraft Systems ("sUASs") equipped to offer on-demand commercial UAS operations for a host of industries and applications, hereby applies for an exemption from the Federal Aviation Regulations, stated later, in the operation/mission:

- Aerial Data Collection

Alaska Aerial Services requests to allow commercial operation of its sUASs, so long as such operations are conducted within and under the conditions outlined herein or as may be established by the FAA in the future in the Federal Aviation Regulations or official guidelines for operators at large, should those be less restrictive.

AIRCRAFT

The aircraft requested for operation have been approved by other exemption holders and are as follows:

Aircraft	Previously Approved Exemption Number
F450	11287
F550	11397
S800, S1000	11401
S900	11256
X8, AERO-M (aka Skywalker 1900)	11379

Alaska Aerial Services' sUAS are rotorcraft and fixed wing aircraft, weighting 55 or fewer lbs. including payload, and flown well under 100mph. Such operating conditions ensure that the sUAS will "not create a hazard to users of the national airspace system or the public."

The DJI F450, F550, S800, S900 and S1000 are from a family of multirotor frames manufactured by DJI and frequently used by both hobbyists and professionals for use in aerial filming, mapping, and surveying applications. The aircraft are electric propulsion and capable of manual and autonomous flight.

The Aero-M is a modified version of the SkyWalker 1900 outfitted and sold by 3DR Robotics. It is a fixed wing aircraft with 45 minute endurance made of foam with an extremely low impact energy and flying speed. All aircraft in this request have been included in other successful Section 333 exemption requests and have been staple aircraft around the world for years.

All our aircraft are outfitted with the APM or Pixhawk autopilots-- intelligent and well-tested pieces of control hardware that are in use in numerous other aircraft flying under previously granted exemptions.

These autopilots allow for return to home functionality in the event of a loss of communication link between the aircraft and PIC and also allow a geofence to be set up that will not allow the PIC or autopilot to accidentally fly out of the pre-determined safe flight area. Both of these features are very useful to help the flight crew ensure that safety and privacy concerns are met.

Especially in the case of the Pixhawk autopilot, there are dual independent sensor sets for both IMU suite, barometer, and compass. The autopilot also supports dual GPS, RTK GPS, laser altimeter, and sonar. Safety is further increased by redundant power supplies, independent attitude, navigation, and communication software loops, and a completely independent second processor for manual control and communication in the unlikely case of total system failure in flight.

SPECIFIC EXEMPTION REQUESTS AND EQUIVALENT LEVEL OF SAFETY

Alaska Aerial Services requests an exemption from the following FAR's:

14 CFR Part 21, Airworthiness Certificates

This part establishes the procedures for the issuance of an airworthiness certificate. The FAA and drone industry continue to develop airworthiness standards for Unmanned Aerial Systems. Until then we request an exemption from this FAR be issued for the aircraft requested in this petition on the basis they meet 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 proposed uses will fulfill an equivalent level of safety to 14 CFR Part 21. All aircraft we are requesting be included in our Section 333 exemption for have been approved by the FAA for this use case in other applications.

14 CFR 45.23 Display of marks; general and 45.29 Size of marks.

These regulations require that each aircraft must display an "N" number in letters at least 3 inches high. sUAS may not be large enough to meet the size requirements stated. We propose to affix the aircraft's "N" number "as large as practicable" to the aircraft as per the FAA's guideline in bullet point #22 in typical Section 333 exemptions.

14 CFR 61.113 Private pilot privileges and limitations: Pilot in Command and 61.133 Commercial pilot privileges and limitations.

The regulation provides that no person that holds a Private Pilot certificate may act as pilot in Command of an aircraft for compensation or hire. We propose an equivalent level of safety by observing the FAA's guideline in bullet point #13 in typical Section 333 exemptions where a PIC of an sUAS must hold least a Sport Pilot certificate and, for medical testing, at least a Driver's License and the PIC will maintain currency in their type and category of manned aircraft.

14 CFR 91.7 Prohibits the Operation of an aircraft without an airworthiness certificate. As no such certificate will be applicable in the form contemplated by the FARs, this Regulation is inapplicable and we defer to the reasoning stated above in respect to 14 CFR 45.23.

14 CFR 91.9 Civil aircraft flight manual, marking, and placard requirements.

This regulation provides that no person may operate an aircraft unless a current, approved flight manual is in the aircraft. As no persons are in the aircraft to benefit from reading the manual and the aircraft is unlikely to be large enough to carry a manual, we propose an equivalent level of safety by ensuring an operating manual provided by the manufacturer, and including supplemental material generated by Alaska Aerial Services' chief pilot and engineers, be included at the ground station accessible by the PIC and VO as per the FAA's guideline in bullet point #7 in typical Section 333 exemptions.

14 CFR 91.109 Flight Instruction; Simulated instrument flight and certain flight tests

The regulation states that "No person may operate a civil aircraft that is being used for flight instruction unless that aircraft has fully functioning dual controls." In the case of sUAS dual controls are not possible in the same way as in typical training manned aircraft. Additionally, sUAS are typically "flown" by an autopilot and manual manipulation of flight controls is an unusual flight condition allowed as a backup if the autopilot malfunctions. Given the nature of unmanned aircraft operations we propose an equivalent level of safety by the rules and procedures required in the FAA's guideline in bullet point #7 in typical Section 333 exemptions.

91.119 Minimum safe altitudes:

This regulation states that over sparsely populated areas the aircraft cannot be operated closer than 500 feet to any person, vessel, vehicle, or structure. Since the maximum height allowed by a Section 333 Exemption's blanket COA is 400ft this is not possible. In order to maintain an equivalent level of safety we propose to adhere to the 500ft separation from non-participating people, property, and structures as per the FAA's guideline in bullet point #26 in typical Section 333 exemptions.

CFR 91.121 Altimeter settings.

This regulation requires that aircraft shall maintain cruising altitudes by reference to an altimeter setting available within 100 NM of the aircraft. The sUAS will always fly below 400 feet AGL and will not need to maintain VFR or IFR cruising altitudes. Since the aircraft will always be flying in reference to AGL altitudes, and uses both a GPS and dual Barometers that

automatically set a new “zero altitude” at power up, the aircraft’s local altitude setting is of more than sufficient accuracy to maintain 400ft AGL altitudes and would not require local pressure altitude data for cruising altitude traffic separation purposes.

14 CFR 91.151 Fuel requirements for flight in VFR conditions.

The regulation provides that no person may begin a flight in an airplane under day-VFR conditions unless there is enough fuel to fly to the first point of intended landing and to fly after that for at least 30 minutes. The intention of this regulation is to provide adequate fuel reserve for handling unforeseen difficulties during landing. Since sUAS only fly within line of sight of the operator and only a few minutes at a time the reserve amount of fuel required to deal with unforeseen difficulties is much less than manned aircraft. In order to maintain an equivalent level of safety we propose to adhere to a 5 minute reserve flight time upon landing as per the FAA’s guideline in bullet point #20 in typical Section 333 exemptions.

14 CFR 91.203(a) & (b) Civil aircraft: Certifications required.

The regulation provides that an airworthiness certificate, with the registration number assigned to the aircraft and a registration certificate must be aboard the aircraft. Since this is not possible on an sUAS we propose to achieve an equivalent level of safety and meet the intent of 91.203 by providing the certification and registration materials required for this aircraft with the crew at the ground control station and available for inspection upon request as per the FAA’s guideline in bullet point #23 in typical Section 333 exemptions.

14 CFR Subpart E (91.401- 91.417)- Maintenance, Preventive Maintenance, Alterations

The regulation compels that the operator is primarily responsible for maintaining the aircraft in an airworthy condition, including compliance with part 39 and 43. Paragraphs 91.407 and 91.409 require that the aircraft be "approved for return to service by a person authorized under 43.7" after maintenance and inspection. It is our intention that the PIC perform maintenance and inspection of the aircraft and "be authorized to approve the aircraft for return to service." The PIC will ensure that the aircraft is in an airworthy condition prior to every flight and in addition conduct detailed inspections after every flight. We believe this, along with the FAA’s guidelines in bullet points #8-#12 in typical Section 333 exemptions, provide for an equivalent level of safety.

PUBLIC BENEFIT

Approval of this request would benefit the public by allowing Alaska Aerial Services to provide aerial data collection in a safe and professional manner under FAA guidelines.

Alaska Aerial Services plans to work closely with the local FAA test site located within the University of Alaska, Fairbanks to help conduct research into UAS integration and safe UAS practices.

Additionally, many of the aerial data collection use cases for sUAS our company has received requests for such as fish counting, forest surveys, wildlife surveys, and aerial filming are conducted by manned aircraft. These operations require very low and slow flight for adequate

surveys to be done which presents a great hazard to the pilots, scientific passengers, and people on the ground. There have been deaths in recent years in Alaska both in fish counting and wildlife surveys where stall/spin situations were encountered at only a few hundred feet. These are the types of low and slow operations where unmanned aircraft are likely to save lives, collect better data, and benefit the public as a whole.

ADDITIONAL INFORMATION

Alaska Aerial Services is comprised of engineers, manned aircraft pilots, remote control aircraft pilots, and experienced UAV operators. We have at various times been engineers and operators for, and still work closely with, the FAA test site at the University of Alaska, Fairbanks, and have years of experience in each of the preciously stated competencies.

Alaska Aerial Services believes that good cause exists for not publishing a summary of this 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.

The name and address of the applicant is:

Alaska Aerial Services
3875 Geist Rd Ste E #210
Fairbanks, AK 99709
info@alaskaaerialservices.com

Expeditious processing of this request is greatly appreciated.

Sincerely,
Carl France
Alaska Aerial Services