

UASolutions *group*

UASolutions Group, LLC
19940 Simla Hwy.
Simla, CO 80835-9501
Tel: (321) 261-2547

kellyneubecker@gmail.com

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

Re: Summary Grant Amendment to Exemption No. 18998, FAA-2020-0807-0008, to add the DJI Agras T-016, T-20, and T-30 to Conduct Unmanned Aircraft Systems (UAS) Operations Allowed by Special authority for certain unmanned aircraft systems. Title 49 U.S.C. § 44807, and 14 C.F.R. Part 11 to Authorize Commercial Agricultural- Related Services

A. SUMMARY:

On behalf of our client, FARM-I-TUDE (division of The WakWay Foundation), an agricultural services company (hereafter known as FARM-I-TUDE), and pursuant to Title 49 U.S.C. § 44807, Special authority for certain unmanned aircraft systems and 14 C.F.R. Part 11, FARM-I-TUDE hereby respectfully requests to amend their exemption, Exemption No. 18998 to add the DJI Agras T-16, T-20, and T-30 unmanned aircraft systems (“UAS”) weighing over 55 pounds but no more than 97.2 pounds for the DJI Agras T-16, 100.75 pounds, for the DJI Agras T-20 and the DJI Agras T-30 weighing over 55 pounds but no more than but no more than 142 lbs. maximum spray weight and 171.96 lbs. maximum spreading weight, for various agricultural operations and noxious weed and vegetation control throughout the United States. The operations will be conducted within and under the conditions outlined herein, or as may be established by the FAA, as required by Title 49 U.S.C. § 44807.

Although all three aircraft are included in this amendment, this is not a request for multiple aircraft operations.

Farm-i-tude’s Flight Operations Manual, Safety Manual, and Training manuals have been previously submitted. A revised SMS case is for the relief of Condition and Limnitation 27(c) is enclosed with this request as well as the manufacturers manuals.

The proposed operations in this amendment are also similar in nature to that currently conducted by DroneXum, Exemption No. 18413A, except the aircraft in the current petition are the DJI Agras T-16, T-20, and T-30 and have been previously approved in numerous other petitions, therefore also considered a summary grant for the aircraft and the requested relief from Condition and Limitation 27c.

The requested amendment would permit the operation of the DJI Agras T-16, DJI AGRAS T-20 and DJI Agras T-30 by petitioner, under controlled conditions in predetermined airspace that is, 1) Limited in scope 2) Controlled as to access by mission essential personnel only. Grant of the requested exemption is based upon the concise direction expressed within Title 49 U.S.C. § 44807; the added authority granted by the Act, as amended; an equivalent level of safety regarding flight operations as expressed herein, and significant cost savings achieved by transitioning from traditional manned aerial resources to UASs. The petitioner respectfully requests that the FAA grant the requested exemption without delay. Petitioner will operate the DJI AGRAS T-16, T-20, AND T-30 while keeping the documents required by the regulations at the ground control station and immediately accessible to the Pilot in Command (PIC) and by modification of the required markings (registration number) of the UAS to be displayed on the fuselage.

The name and address of the Petitioner is:

FARM-I-TUDE (division of The WakWay Foundation)

The primary contact for this petition, with a copy to me at the address above is:

Michelle Truman
P.O. Box 13031
Scottsdale, AZ 85267

In support of this Petition for Exemption, FARM-I-TUDE will submit the following associated UAS operating documents:

- FARM-I-TUDE Safety case for 500-foot setback
- DJI AGRAS T-16, T-20, and T-30 Operating Manual and site link

All of these documents will be submitted on a confidential basis under separate cover, pursuant to 14 C.F.R. § 11.35(b), as the documents contain confidential commercial and proprietary information that FARM-I-TUDE has not and will not share with others. The information contained in this material is not generally available to the public and is protected from release under the Freedom of Information Act, 5 U.S.C. § 552 *et seq.*

B. BACKGROUND OF PETITIONER AND MANUFACTURER

FARM-I-TUDE, is a diversified provider of agricultural services. FARM-I-TUDE will be utilizing the T-16, T-20, AND T-30 for the spray application of liquid herbicides, fungicides, and pesticides on agricultural crops. FARM-I-TUDE will also be using the T-16, T-20, AND T-30 for the application of granular products such as fertilizer, lime, and seed in each of these areas and on each crop.

FARM-I-TUDE is utilizing their experience in agriculture to expand into missions well suited for UAS/drones to reduce risk and improve efficiencies and value added. For all operations the T-16, T-20, AND T-30 has a maximum flight height of 100'. This allows for clearance of obstacles such as trees, buildings, power lines etc. Having said that, the primary flight height during operation will be 10' feet above the canopy of the crop being sprayed. (typically 18-25 feet elevation from the ground) FARM-I-TUDE plans to provide a wide array of services in agricultural markets where UAS/drones fit the mission better and safer than manned aircraft.

The major benefits to the general public are 1) reduction in injury to ground based applicators in challenging terrain, 2) reduced exposure to chemicals for applicators, 3) reduction in chemical drift compared to manned aircraft application, 4) reduced risk to flight crew compared to manned aircraft, 5) reduced exposure of surrounding beneficial vegetation, 6) more environmentally friendly application with reduced noise, 7) selective use of chemicals for a safer more targeted application, and 8) better value for the customer.

The UAS for the purposes of this petition is the DJI AGRAS T-16, T-20, AND T-30. DJI has an unparalleled presence in the UAS market with steadfast commitment to R&D, a culture of constant innovation and curiosity, and a focus on transforming complex technology into easy-to-use devices. Building on the ethos of "form follows function," DJI products combine advanced technology with dynamic designs.

Established to produce DJI's innovative products safely and responsibly, the wholly owned subsidiary Shenzhen Dajiang Baiwang Technology Co., Ltd. is a high-tech manufacturing facility specializing in unmanned aerial vehicles. In 2016, Dajiang Baiwang passed the ISO 9001:2015 Quality Management System Certification and in 2017 passed the SGS ISO 14001:2015 Environmental Management System Certification. DJI's offices can now be found in the United States, Germany, the Netherlands, Japan, South Korea, Beijing, Shanghai, and Hong Kong. As a privately owned and operated company, DJI focuses on its vision, supporting creative, commercial, and nonprofit applications of their technology. Today, DJI products are redefining industries. Professionals in filmmaking, agriculture, conservation, search and rescue, energy infrastructure, and more customers trust DJI to bring new perspectives to their work and help them accomplish feats safer, faster, and with greater efficiency than ever before.

To date, sales of the DJI Agras T-16, T-20, AND T-30 have occurred in Japan and China for over a year with a combined total of 5,856,935 hours flown without any recorded incidents.

C. RELIEF FROM CONDITION AND LIMITATION 27c

This relief is also now considered a summary grant as there have been previous approvals to petitions seeking the same. See FAA Exemption No. 18852 and FAA Exemption No. 18413A.

Condition and Limitation Number 27c states that:

27. All flight operations must be conducted at least 500 feet from all persons who are not directly participating in the operation, and from vessels, vehicles, and structures, unless when operating:

c. Near vessels vehicles and structures. Prior to conducting operations, the operator must obtain permission from a person with the legal authority over any vessels, vehicles or structures that will be within 500 feet of the UA during operations. The PIC must make a safety assessment of the risk of operating closer to those objects and determine that it does not present an undue hazard.

To expedite the FAA's safety assessment of the proposed relief sought, FARM-I-TUDE has included a robust SRM.

D. FEDERAL REGISTER SUMMARY

Pursuant to Title 49 U.S.C. § 44807, Special authority for certain unmanned aircraft systems and 14 C.F.R. Part 11, 49 U.S.C. § 44701(f), and 14 C.F.R. Part 11, the following summary is provided for publication in the FEDERAL REGISTER, should it be determined that publication is needed: Petitioner seeks an exemption from the following rules in Title 14 of the Code of Federal Regulations:

61.3 (a)(1)(i), 91.7(a), 91.119(c), 91.121, 91.151(b), 91.403(b), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), 91.417(a) and (b), 137.19 (c), (d) and (e)(2)(ii)(iii) and (v), 137.31, 137.33, 137.41(c), 137.42.

E. CONCLUSION

For the foregoing reasons, FARM-I-TUDE requests that the FAA grant this amendment to Exemption No. 18998 to add the DJI Agras T-16, weighing 55 pounds or more, but no more than 97.2 pounds, the DJI T-20 weighing 55 pounds or more, but no more than and 100.75 pounds, and the DJI Agras T-30 weighing over 55 pounds but no more than but no more than 142 lbs. maximum spray weight and 171.96 lbs. maximum spreading weight, to provide commercial agricultural-related services in the United States.

Should you have any questions, or if you need additional information to support FARM-I-TUDE's request, please do not hesitate to contact the undersigned.

Respectfully Submitted,



Kelly J. Neubecker

President, UASolutions Group

Cc. Michelle Truman