

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

kellyneubecker@gmail.com

May 24, 2023

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

Re: Amendment to Exemption No. 20008 Petition for Exemption 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 seeking relief from condition and limitation 17.

# **SUMMARY:**

On behalf of my client, Doebele Agridrone Solutions LLC, an agricultural services company and pursuant to Title 49 U.S.C. § 44807, Special authority for certain unmanned aircraft systems and 14 C.F.R. Part 11, Doebele Agridrone Solutions hereby respectfully requests to amend their or Exemption, Exemption No. 20008 to add the relief from condition and limitation 17.

Number 17 states that:

17. "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). Operations may not be conducted under special visual flight rules (SVFR)".

It is the night portion of condition and limitation Number 17 that Doebele Agridrone Solutions is seeking relief from. Doebele Agridrone Solutions operations will require certain limited night operations and will be conducted during VMC conditions at all times.

Currently, Doebele Agridrone Solutions has an approved Exemption for the DJI Agras T-40 for agricultural aircraft operations, Exemption No. 20008. Previously, in Exemption No. 18596, Overwatch Aero, the FAA recognized that "training mitigates the risks of night operations because it requires the PIC to accumulate nighttime operating skills, knowledge, and experience of UA prior to conducting commercial operations". To accompany this amendment, Doebele Agridrone Solutions is submitting a revised Flight Operations and Procedures Manual (FOPM) and a revised Training Manual. A robust SMS case is also enclosed with analysis and justification for the relief from condition and limitation 17, "UAS operations may not be conducted during night".

In this particular amendment, the requested exemption would permit the single operation of no more than one DJI AGRAS T-40, with the relief added from Condition and Limitation 17, 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.

The name and address of the Petitioner is:

Doebele Agridrone Solutions, LLC

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

Phillip Doebele 2508 Hanover Avenue Hanover, KS 66945

In support of this Petition for Exemption, Doebele Agridrone Solutions will submit the following associated UAS operating documents:

- SMS safety Case seeking relief from Condition and Limitation 17
- Revised Training Manual
- Revised FOPM

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 Doebele Agridrone Solutions 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*.

#### A. BACKGROUND AND BENEFITS TO THE GENERAL PUBLIC

Doebele Agridrone Solutions, LLC is a diversified provider of agricultural services and is utilizing their experience in agriculture to expand into missions well suited for over 55 lb. UAS/drones to reduce risk and improve efficiencies and value added. Doebele Agridrone Solutions 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.

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.

As of Dec 2021, DJI Agriculture has a global market volume of 134,850 drones and total treated area of 60 million hectares, having trained more than 65,000 certified agricultural drone pilots. DJI Agriculture has supplied digital agricultural solutions to over 30 countries and regions, serving more than 10 million agricultural populations.

The DJI AGRAS T-40 currently approximately 443,000 flight hours without any recorded incidents.

The wide range of DJI Agras products, such as the T-series and MG series agricultural drones, P4 Multispectral, Phantom 4 RTK, DJI Terra and DJI Agras App, are used in various regions and favored by customers worldwide.

# C. Relief from condition and limitation 17

#### **Condition and Limitation Number 17 states that:**

17. "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). Operations may not be conducted under special visual flight rules (SVFR)".

Doebele Agridrone Solutions will conduct all operations during VMC conditions and will not conduct any operations under special visual flight rules (SVFR). However, the following are the mitigations Doebele Agridrone Solutions will incorporate to operate safely at night. It is the night portion of condition and limitation Number 17 that Doebele Agridrone Solutions is seeking relief from. Doebele Agridrone Solutions' operations will require certain limited night operations and will be conducted during VMC conditions at all times.

To expedite the FAA's safety assessment of the proposed relief sought, Doebele Agridrone Solutions has included a robust SRM.

### D. CONCLUSION

For the foregoing reasons, Doebele Agridrone Solutions respectfully requests that the FAA grant this amendment seeking relief from condition and limitation 17. If you need additional information to support Doebele Agridrone Solutions Petition, please do not hesitate to contact the undersigned.

Respectfully Submitted,

form 1

Kelly J. Neubecker