



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

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

July 23, 2015

Exemption No. 11110B
Regulatory Docket No. FAA-2014-0367

Mr. Jonathan B. Hill
Ms. M. Anne Swanson
Cooley LLP
Counsel for Trimble Navigation Limited
1299 Pennsylvania Avenue, NW Suite 700
Washington, DC 20004

Dear Mr. Hill and Ms. Swanson:

This letter is to inform you that we have granted your petition for an amendment. It explains the basis for our decision, describes its effect, and lists any changes to the original conditions and limitations.

By letters dated May 19 and June 3, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Trimble Navigation Limited (hereinafter petitioner or operator) for an amendment to your current exemption. That exemption from §§ 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) of Title 14, Code of Federal Regulations (14 CFR) allows the petitioner to operate a UAS to perform aerial data collection. You requested an amendment to add the Trimble ZX5 and Eagle G4.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested amendment to the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the petitioner. The unmanned aircraft authorized in the original grant are comparable in type, size, weight, speed and operating capabilities to those in this petition.

Airworthiness Certification

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 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.

Our Decision

The FAA has determined that the justification for the issuance of Exemption No. 11110A remains valid and is in the public interest. Therefore, under the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, the operator is granted an amendment to add new aircraft to its UAS operations.

The operator shall add this amendment to its original exemption.

Conditions and Limitations

All conditions and limitations within Grant of Exemption No. 11110A remain in effect except as follows. Condition No. 1 has been updated to reflect the additional aircraft.

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 Trimble UX5, Trimble UX5 hp, Trimble ZX5, and Eagle G4 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.

This exemption terminates on December 31, 2016, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan
Director, Flight Standards Service

Enclosures



Jonathan B. Hill
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May 19, 2015

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

Re: Application for Amendment to Exemption 11110A, Trimble Navigation, Ltd.,
FAA Docket 2014-0367

Dear Sir or Madam:

On March 4, 2015 and April 14, 2015, Trimble Navigation, Ltd. (hereinafter "Trimble"), through its attorneys, submitted applications for amendments to Exemption 11110, originally issued December 10, 2014 in FAA Docket 2014-0367 to (1) allow operations of an updated model of its UX5, named the "UX5hp" and (2) update the terms of the conditions contained in Exemption 11110 to those that are being issued currently to all exemption holders under Section 333 for the FAA Modernization and Reform Act of 2012. On May 7, 2015, the FAA issued Exemption 11110A allowing the commercial operation of the of the UX5 hp with updated standard terms and conditions.

This letter is a further request for an amendment to add the following aircraft to the amended Exemption 11110A for commercial use in aerial data collection:

- 1) Service-drone Eagle G4
- 2) Trimble UX3

The Service-drone Eagle is a rotor aircraft weighing a maximum of 11 lbs. at takeoff (in any event, less than 55lbs.), with payload. It will not operate at a speed greater than 87 knots. Preflight maintenance will be accomplished as set forth in the Operations Manual submitted confidentially with this application.

The Trimble UX3 is a rotorcraft weighing a maximum of 11 lbs. at takeoff (in any event, less than 55 lbs.), with payload. It will not operate at a speed greater than 87 knots. Preflight maintenance will be accomplished as set forth in the Operations Manual submitted confidentially with this application.

Attachment 1 to this petition for amendment is a listing of operations manuals submitted confidentially.



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All the listed aircraft will be operated in accordance with the procedures set forth in the manuals listed above and submitted confidentially. The FAA has issued exemption grants in circumstances similar in all material respects to those presented in this petition. In Exemption No. 11062 to Astraeus Aerial (see Docket No. FAA-2014-0352), No. 11109 to Clayco, Inc. (see Docket No. FAA-2014-0507), No. 11112 to VDOS Global, LLC (see Docket No. FAA-2014-0382), and No. 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, gave the FAA good cause to find that the UAS operation at issue was in the public interest.

To the extent necessary, Trimble refers the FAA to its original exemption request submitted in Docket FAA-2014-0367 for a listing of regulations (as amended by Exemption 11110A) for which an exemption is being sought; a demonstration of the public interest; and a showing of an equivalent level of safety. Based on the foregoing and for all the reasons set forth in Trimble's previous filings in Docket 2014-0367, which are now incorporated by reference, Trimble notes that the FAA has granted similar exemptions, as set forth above, for aerial data collection, and it, therefore, believes that this amendment request is subject to the FAA's already announced Summary Exemption Process.¹

Finally, as set forth in more detail in its March 4, 2015 amendment request, Trimble requests that all of its aircraft granted authorization to conduct commercial operations under this amendment be allowed to operate without a separate Certificate of Operation ("COA") in Class G airspace, at 400 feet AGL and below, and at least 5 nautical miles from the geographic center of an airport unless a letter of agreement with the airport's management is obtained.

¹ Applicant interprets Section 333 as placing a duty on the Administrator not only to process applications for exemptions under Section 333 but, if he determines that the conditions set forth herein do not fulfill the statutory requirements for approval, to craft conditions for the safe operation of the UAS.



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If you have any questions, please contact us at your earliest convenience.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jonathan B. Hill".

Jonathan B. Hill
M. Anne Swanson
Counsel for Trimble Navigation Limited

Encl:

cc: Robert Pappas
Thuy Cooper
Jake Troutman
Dean Griffith
James Kirkland
Kyle Gilbertson



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List of Confidential Manuals

1. Operations Manual-Service-drone Eagle G4.
2. Operations Manual-Trimble UX3.



M. Anne Swanson
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June 3, 2015

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

Re: Application for Amendment to Exemption 11110A, Trimble Navigation Limited
FAA Docket 2014-0367

Dear Sir or Madam:

On May 19, 2015, Trimble Navigation Limited ("Trimble") submitted an amendment to add two aircraft to amended Exemption 11110A for commercial use in aerial data collection. The FAA issued Exemption 11110A on May 7, 2015.

One of the two aircraft discussed in the amendment is the "Trimble UX3." Trimble has now renamed that craft the "Trimble ZX5." By this letter, Trimble hereby requests that every reference to the "UX3" in the May 19, 2015 filing, including in the separately filed manuals, now be read to refer instead to the "ZX5."

We believe this request to be ministerial in nature, but please advise us if other procedures are preferred. If you have any other questions, please contact us.

Very truly yours,

A handwritten signature in black ink, appearing to read "M. Anne Swanson", with a long horizontal flourish extending to the right.

M. Anne Swanson
Counsel for Trimble Navigation Limited

cc: Robert Pappas
Thuy Cooper
Jake Troutman
Dean Griffith
James Kirkland
Kyle Gilbertson
Jonathan Hill