

Mike Hall

From: "Mike Rhodes" <mrhodes@airtractor.com>
Date: Monday, December 19, 2016 9:52 AM
To: <aerialcropservices@sbcglobal.net>
Subject: 802 Pilot Logbook entry

Good morning Mike,

In order to waive the Ground Training requirements of the Exemption No. 5651 (Type Rating Exemption), you need to have the following entry in your logbook, documenting your previous 802 experience.

On this date, I certify that I have logged _____ hours in an Air Tractor AT-802/802A, with _____ hours in the last 12 months. This experience makes me eligible to waive the Ground Training requirements of FAA Exemption No. 5651, as revised.

Signed: _____ Date: _____, Pilot Certificate #:

Several years ago, the Exemption required **502 series** experience in order to waive the Ground Training requirement, but that was recently changed to **802/802A** experience. I suggest that this logbook entry needs to appear in your pilot logbook at the time that you used your 502 recent experience to meet the requirements of the waiver to fly 802s.

Hope this helps.

Mike R



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

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

October 28, 2016

Exemption No. 5651P
Regulatory Docket No. FAA-2002-11498

Mr. Mike Rhodes
Chief Test Pilot
Air Tractor, Inc.
P.O. Box 485
Olney, TX 76374

Dear Mr. Rhodes:

This letter is to inform you that we have granted in part your petition to extend Exemption No. 5651, as amended. It explains the basis for our decision, describes its effect, and lists the conditions and limitations.

The Basis for Our Decision

By letter dated March 7, 2016, you petitioned the Federal Aviation Administration (FAA) on behalf of Air Tractor, Inc. (Air Tractor) for an extension of, and amendment to, Exemption No. 5651, as amended. That exemption from § 61.31(a)(1) of Title 14, Code of Federal Regulations (14 CFR) allows Air Tractor and pilots of AT-802, AT-802A, AT-1002, or AT-1002A airplanes to operate those airplanes without holding a type rating, although the maximum gross weight of the airplanes exceeds 12,500 pounds.

In your March 7, 2016 petition, you also requested an amendment that would include an exemption from § 91.313(a) as described in FAA Notice 8900.295 Pilot Training and/or Certification Events Conducted in Restricted Category Aircraft. The amendment, if granted, would allow Air Tractor to operate a restricted category civil aircraft for other than the special purpose for which it was certificated, or in an operation other than one necessary to accomplish the work activity directly associated with that special purpose.

AFS-14-156-E

In your petition, you indicated 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. On April 18, 2016, the FAA granted a six-month extension of the existing relief at that time, while the agency considered the broader issues related to granting the relief requested in Air Tractor's amendment request.

On June 10, 2016, you petitioned for a two-year renewal of the grant of exemption. This partial grant of exemption is a result of a closer review of current regulations, policies, historical grants of exemption dating back to 1993 that were issued to Air Tractor, and the grant of exemption currently issued to Air Tractor.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension and amendment of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Air Tractor.

Our Decision

The FAA has determined that the justification for the issuance of Exemption No. 5651, as amended, remains valid with respect to this exemption and is in the public interest. However, upon further review of Exemption No. 5651O, the FAA finds it necessary to amend the Conditions and Limitations to provide a level of safety at least equal to § 61.31(a). 14 CFR § 11.81(e) outlines the requirement that a petition for exemption show how granting the exemption would not adversely affect safety or would provide a level of safety at least equal to that provided by the rule from which the petitioner seeks the exemption. Specifically, the FAA has made the following modifications to the grant of exemption:

1. Condition and Limitation No. 1 was amended to remove reference to the AT-1002 and AT-1002A aircraft. The FAA notes that AT-1002/AT-1002A aircraft types were first added to Exemption 5615K on November 23, 2009, at the request of Air Tractor. The request was made due to pending type certification for the AT-1002/AT-1002A. The FAA notes that at present there are no AT-1002 and AT-1002A aircraft that are type certificated. The FAA notes that in previous grants we stated that we could remove the references to the AT-1002 and AT-1002A aircraft in the future, depending on the status of the pending type certification project for these aircraft.
2. Condition and Limitation No. 2 was amended to use clarifying terminology when referring to the training materials that Air Tractor must develop and maintain. The requirement for courseware to be submitted and approved was added. The curriculum outline was further clarified by using information taken from Advisory Circular (AC), 61-89E, *Pilot Certificates: Aircraft Type Ratings*.
3. New Condition and Limitation No. 3 was added to require Air Tractor to provide personnel authorized by Air Tractor to provide training in AT-802 or AT-802A

airplanes, a copy of the approved training manual and courseware and the approval documentation from the General Aviation and Commercial Division (AFS-800).

4. Condition and Limitation No. 3 was amended to become Condition and Limitation No. 4 and to allow pilots operating the AT-802 and/or AT-802A airplanes to exercise the privileges of this partial grant of exemption if Air Tractor continues to maintain approval of its training manual and courseware. Additionally, Air Tractor is required to request an extension to their training manual and courseware with petition for renewal of this partial grant of exemption in order to prevent any lapses in training manual approval.
5. Condition and Limitation No. 4 was amended to become Condition and Limitation No. 5.
6. Condition and Limitation No. 5 was amended to become Condition and Limitation No. 6.
7. Condition and Limitation No. 6 was amended to become Condition and Limitation No. 7.
8. Condition and Limitation No. 7 was amended to become Condition and Limitation No. 8. Additionally, a requirement was added for pilots authorized by Air Tractor to provide training in the AT-802 or AT-802A airplane (as applicable), to hold either an Advanced Ground Instructor certificate or Flight Instructor certificate. Furthermore, a requirement was added for pilots authorized by Air Tractor to provide training in the AT-802 or AT-802A to be authorized by Air Tractor in writing on company letterhead. This amendment also clarified that this required authorization applies to pilot employed by Air Tractor if they provide training in the AT-802 or AT-802A airplane. Finally, this Condition and Limitation was amended to remove reference to the AT-1002 and AT-1002A aircraft as discussed above.
9. Condition and Limitation No. 8 was amended to become Condition and Limitation No. 9. This amendment removed reference to the AT-1002 and AT-1002A aircraft as outlined in item number 1 above.

During our review and analysis, the FAA determined that Air Tractor does not require relief from 14 CFR § 91.313(a) since the only training conducted by Air Tractor is ground training as required by this partial grant of exemption. 14 CFR § 91.313(a) states in pertinent part "No person may *operate* (emphasis added) a restricted category civil aircraft—..." Since the operation of an aircraft is not required to comply with Conditions and Limitations No. 2 and No. 5, no relief from this rule is required. Air Tractor is reminded that they are prohibited from conducting flight training in a restricted category aircraft unless that training complies with the pertinent sections of 14 CFR § 91.313 and FAA Order 8900.1.

During our review and analysis, the FAA determined that the required training curriculum needed to be clarified with more specific wording regarding required training. This was done to align with recommended training outlined in AC 61-89E, *Pilot Certificates: Aircraft Type*

Ratings for aircraft requiring a type rating. Only training appropriate to the AT-802 series airplanes was included. This change, in conjunction with the other conditions and limitations, will help ensure that safety is not adversely affected by pilots not complying with the type rating requirements of 14 CFR § 61.31(a).¹

In order to ensure standardization of the training required in exercising the relief of this partial grant of exemption, the FAA has determined that Air Tractor must provide the appropriate training material, to include courseware required by this partial grant, to personnel authorized by Air Tractor to provide that training on their behalf. A training manual contains only the curriculum that is to be taught, not the specifics of the content of the instruction. The FAA defines courseware "Instructional material developed for each curriculum. This is information in lesson plans, instructor guides, computer software programs, audiovisual programs, workbooks, aircraft operating manuals, and handouts. Courseware must accurately reflect curriculum requirements, be effectively organized, and properly integrate with instructional delivery methods."

Additionally, the FAA has determined that in order to provide a level of safety at least equal to § 61.31(a), anyone authorized by Air Tractor to provide the training required under this exemption must hold an Advanced Ground Instructor certificate or Flight Instructor certificate. Only a person who holds a flight instructor certificate is authorized to provide training for an aircraft rating or a practical test.² Only a person who holds an Advanced Ground Instructor certificate is authorized to provide ground training on the aeronautical knowledge areas required for the issuance of any certificate or rating under part 61, except for the aeronautical knowledge areas required for an instrument rating.³ Therefore, to maintain that standard and ensure that safety is not adversely affected, the ground training required by this exemption must be conducted by a certificated flight instructor or advanced ground instructor.

Under the authority provided by 49 U.S.C. § 106(f), 40113, and 44701, which the FAA Administrator has delegated to me, I grant Air Tractor, Inc. and pilots of Air Tractor Models AT-802 and AT-802A, relief from § 61.31(a)(1) to the extent necessary to operate these models without holding a type rating for the airplane, subject to the following conditions and limitations.

Conditions and Limitations

1. This exemption applies to pilots operating AT-802 and AT-802A airplanes that have a restricted category airworthiness certificate.

¹ 14 CFR § 11.81(e)

² 14 CFR § 61.193(a)(5) and (8)

³ 14 CFR § 61.215(b)(1)

2. Air Tractor must develop and maintain a training manual(s) (to include lesson times and courseware) that includes the following ground training topics for the AT-802 and AT-802A airplane covered by this partial grant of exemption:

A. SEGMENT 1 – GENERAL OPERATIONAL SUBJECTS

- a. Lesson 1 - Introduction to the aircraft and operating limitations
- b. Lesson 2 - Weight and balance
- c. Lesson 3 - Adverse weather practices
- d. Lesson 4 - Aerodynamics, performance, and minimum equipment list (MEL)
- e. Lesson 5 – Segment 1 written examination

B. SEGMENT 2 – AIRPLANE SYSTEMS AND COMPONENTS

- a. Lesson 1 – Fuel and oil systems
- b. Lesson 2 – Powerplant
- c. Lesson 3 - Electrical system
- d. Lesson 4 - Hydraulic system
- e. Lesson 5 - Landing gear and brakes
- f. Lesson 6 – Pneumatic system
- g. Lesson 7 - Environmental system
- h. Lesson 8 - Flight controls
- i. Lesson 9 - Ice and rain protection
- j. Lesson 10 - Fire and overheat protection
- k. Lesson 11 - Flight instruments
- l. Lesson 12 - Navigation equipment and display systems
- m. Lesson 13 - Autoflight system
- n. Lesson 14 - Communications equipment
- o. Lesson 15 - Segment 2 written examination

C. SEGMENT 3 – AIRPLANE SPECIFIC EMERGENCY TRAINING

- a. Lesson 1 - Emergency equipment
- b. Lesson 2 - Abnormal and emergency procedures
- c. Lesson 3 - Segment 3 written examination

D. SEGMENT 4 – SYSTEMS INTEGRATION TRAINING

- a. Lesson 1 – Cockpit familiarization and use of checklists
- b. Lesson 2 – Classroom review of flight maneuvers
- c. Lesson 3 – Single pilot resource management
- d. Lesson 4 – Segment 4 written examination

3. Air Tractor must provide pilots authorized by Air Tractor to provide training in the AT-802 or AT-802 airplane (as applicable) a copy of the approved training manual and courseware described in Condition/Limitation No. 2, along with the applicable approval documentation from AFS-800. This copy may be hard copy or electronic.

4. Pilots operating the AT-802 and/or AT-802A airplanes may continue to exercise the privileges of this exemption only if Air Tractor complies with the following:
 - a) Air Tractor must continue to maintain approval of its training manual and courseware, and obtain approval for any revisions to the approved training manual and/or courseware, from AFS-800.
 - b) The training manual(s) and/or courseware approval documentation must be made available to any representative of the FAA Administrator, upon request.
 - c) Air Tractor must submit a new training manual, or request extension to the approval of the currently approved training manual and courseware, provided no changes are required, when requesting an extension to this exemption. Electronic submissions are desired and can be sent via email to 9-AFS-800-Correspondence@faa.gov. If Air Tractor desires to send a hard copy document, it should be mailed to General Aviation and Commercial Division, AFS-800, 800 Independence Avenue, S.W., Washington, DC 20591
5. Except as provided in Condition/Limitation No. 6, before any pilot can serve as pilot in command (PIC) in the AT-802 or AT-802A airplane (as applicable), that pilot must have successfully completed the applicable training in accordance with Air Tractor's approved training manual described in Condition and Limitation No. 2.
6. Pilots who have logged at least 100 hours of flight time, with at least 10 hours in the preceding 12 months, in an AT-502 series airplane need not complete the training requirements of Condition No.2. A record of this flight time must be made available by the pilot upon request by a representative of the FAA Administrator.
7. Any person (including Air Tractor) that provides training described by Condition and Limitation No. 5 must -
 - a) Ensure each pilot logs the ground training in his or her logbook, or record such training in the pilot's training record; and
 - b) Make this record of training available for review to any representative of the FAA Administrator, upon request.
8. Pilots authorized by Air Tractor to provide training in the AT-802 or AT-802A airplane (as applicable), to include pilots employed by Air Tractor, must meet the following minimum qualifications:
 - a) Be authorized by Air Tractor to provide this instruction. This authorization will be given by Air Tractor in writing and will be on Air Tractor letterhead;
 - b) Hold an Advanced Ground Instructor certificate or Flight Instructor certificate;
 - c) Hold at least a commercial pilot certificate; and
 - d) Meet the following experience requirements:

- i. 500 hours of flight time in turbine-powered agricultural type airplanes;
or
 - ii. 1,000 hours of flight time in agricultural type airplanes which includes at least 100 hours of flight time in an AT-802 series airplane.
9. Air Tractor must make a copy of this exemption available to each pilot who serves as PIC in the AT-802 and AT-802A aircraft.

The Effect of Our Decision

Our decision extends the termination date of Exemption No. 5651, as amended to October 31, 2018, unless sooner superseded or rescinded.

Sincerely,

/s/
John S. Duncan
Director, Flight Standards Service



U.S. Department
of Transportation

**Federal Aviation
Administration**

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

November 29, 2016

Exemption No. 5651Q
Regulatory Docket No. FAA-2002-11498

Mr. Mike Rhodes
Chief Test Pilot
Air Tractor, Inc.
P.O. Box 485
Olney, TX 76374

Dear Mr. Rhodes:

This letter is to inform you that we have granted in part your petition to extend Exemption No. 5651, as amended. It explains the basis for our decision, describes its effect, and lists the revised conditions and limitations.

The Basis for Our Decision

By letter dated March 7, 2016, you petitioned the Federal Aviation Administration (FAA) on behalf of Air Tractor, Inc. (Air Tractor) for an extension of, and amendment to, Exemption No. 5651, as amended. That exemption from § 61.31(a)(1) of Title 14, Code of Federal Regulations (14 CFR) allows Air Tractor and pilots of AT-802, AT-802A, AT-1002, or AT-1002A airplanes to operate those airplanes without holding a type rating, although the maximum gross weight of the airplanes exceeds 12,500 pounds.

In your March 7, 2016 petition, you also requested an amendment that would include an exemption from § 91.313(a) as described in FAA Notice 8900.295 Pilot Training and/or Certification Events Conducted in Restricted Category Aircraft. The amendment, if granted, would allow Air Tractor to operate a restricted category civil aircraft for other than the special purpose for which it was certificated, or in an operation other than one necessary to accomplish the work activity directly associated with that special purpose.

AFS-16-106739-E

On April 18, 2016, the FAA granted a six-month extension of the existing relief at that time, while the agency considered the broader issues related to granting the relief requested in Air Tractor's amendment request.

On October 28, 2016, the FAA granted an extension of the existing relief (Exemption 5651P), with expiration date of October 31, 2018. The extension included a revision to Condition and Limitation No 2 which required Air Tractor to revise its training manuals to include ground training topics consistent with curriculum outlines for type ratings. On November 18, 2016, the FAA received a letter from Air Tractor requesting an amendment to Condition and Limitation No. 2 to give the company adequate time to develop the new training manual specified. In that letter, Air Tractor committed to submitting the required training manual by March 1, 2017 for agency review and approval. The FAA agrees that exemption 5651P gave the petitioner insufficient time to develop and submit the revised training manual specified in Condition and Limitation No. 2. The FAA concurs with the petitioner's request for an extension, in that it gives Air Tractor a reasonable period to develop the new training manual and then to implement this manual after FAA review and approval. Accordingly, the term of the approval of the Air Tractor AT-802/802A Pilot Training Program dated March 1, 2015, is hereby extended to April 30, 2017. The FAA will issue a separate letter to the petitioner to indicate this extension of the term of approval of the current training manual.

This partial grant of exemption is a result of a closer review of current regulations, policies, historical grants of exemption dating back to 1993 that were issued to Air Tractor, and the grant of exemption currently issued to Air Tractor.

In your petition, you indicated 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.

Our Decision

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension and amendment of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Air Tractor.

The FAA has determined that the justification for the issuance of Exemption No. 5651, as amended, remains valid with respect to this exemption and is in the public interest. However, upon further review of Exemption No. 5651P, the FAA finds it necessary to amend the Conditions and Limitations to allow the petitioner adequate time to develop the enhanced training materials specified in that amended exemption. The FAA has also determined that past exemptions erroneously omitted a condition and limitation which restrict the use of this exemption to the area of the United States, its territories and possessions. The petitioner has not asked for this exemption to be used in connection with operations outside the United States. Title 14 Code of Federal Regulations Part 11, §11.83 requires that if a petitioner desires to use an exemption outside the United States, then this must be requested when

petitioning for this relief, as well as the reason for this use. Specifically, this amendment makes the following modifications:

1. Condition and Limitation No. 2 was amended to allow the use of the AT-802/802A training manual, dated March 1, 2015, until April 30, 2017.
2. Condition and Limitation No. 10 was added to restrict the use of this exemption to the area of the United States, its territories and possessions.

Under the authority provided by 49 U.S.C. § 106(f), 40113, and 44701, which the FAA Administrator has delegated to me, I grant Air Tractor, Inc. and pilots of Air Tractor Models AT-802 and AT-802A, relief from § 61.31(a)(1) to the extent necessary to operate these models without holding a type rating for the airplane, subject to the following conditions and limitations.

Conditions and Limitations

1. This exemption applies to pilots operating AT-802 and AT-802A airplanes that have a restricted category airworthiness certificate.
2. Air Tractor must use an FAA-approved pilot training program to comply with the terms of this exemption
 - a) Until April 30, 2017, Air Tractor may use the AT-802/802A Pilot Training Program dated March 1, 2015, for its required training manual.
 - b) After April 30, 2017, Air Tractor must develop and maintain a training manual(s) (to include lesson times and courseware) that includes the following ground training topics for the AT-802 and AT-802A airplane covered by this partial grant of exemption:

SEGMENT 1 – GENERAL OPERATIONAL SUBJECTS

- a. Lesson 1 - Introduction to the aircraft and operating limitations
- b. Lesson 2 - Weight and balance
- c. Lesson 3 - Adverse weather practices
- d. Lesson 4 - Aerodynamics, performance, and minimum equipment list (MEL)
- e. Lesson 5 – Segment 1 written examination

SEGMENT 2 – AIRPLANE SYSTEMS AND COMPONENTS

- f. Lesson 1 – Fuel and oil systems
- g. Lesson 2 – Powerplant
- h. Lesson 3 - Electrical system
- i. Lesson 4 - Hydraulic system

- j. Lesson 5 - Landing gear and brakes
- k. Lesson 6 – Pneumatic system
- l. Lesson 7 - Environmental system
- m. Lesson 8 - Flight controls
- n. Lesson 9 - Ice and rain protection
- o. Lesson 10 - Fire and overheat protection
- p. Lesson 11 - Flight instruments
- q. Lesson 12 - Navigation equipment and display systems
- r. Lesson 13 - Autoflight system
- s. Lesson 14 - Communications equipment
- t. Lesson 15 - Segment 2 written examination

SEGMENT 3 – AIRPLANE SPECIFIC EMERGENCY TRAINING

- u. Lesson 1 - Emergency equipment
- v. Lesson 2 - Abnormal and emergency procedures
- w. Lesson 3 - Segment 3 written examination

SEGMENT 4 – SYSTEMS INTEGRATION TRAINING

- x. Lesson 1 – Cockpit familiarization and use of checklists
- y. Lesson 2 – Classroom review of flight maneuvers
- z. Lesson 3 – Single pilot resource management
- aa. Lesson 4 – Segment 4 written examination

3. Air Tractor must provide pilots authorized by Air Tractor to provide training in the AT-802 or AT-802 airplane (as applicable) a copy of the approved training manual and courseware described in Condition/Limitation No. 2, along with the applicable approval documentation from AFS-800. This copy may be hard copy or electronic.
4. Pilots operating the AT-802 and/or AT-802A airplanes may continue to exercise the privileges of this exemption only if Air Tractor complies with the following:
5.
 - a) Air Tractor must continue to maintain approval of its training manual and courseware, and obtain approval for any revisions to the approved training manual and/or courseware, from AFS-800.
 - b) The training manual(s) and/or courseware approval documentation must be made available to any representative of the FAA Administrator, upon request.
 - c) Air Tractor must submit a new training manual, or request extension to the approval of the currently approved training manual and courseware, provided no changes are required, when requesting an extension to this exemption. Electronic submissions are desired and can be sent via email to 9-AFS-800-Correspondence@faa.gov. If Air Tractor desires to send a hard copy document, it

should be mailed to General Aviation and Commercial Division, AFS-800, 800 Independence Avenue, S.W., Washington, DC 20591

6. Except as provided in Condition/Limitation No. 6, before any pilot can serve as pilot in command (PIC) in the AT-802 or AT-802A airplane (as applicable), that pilot must have successfully completed the applicable training in accordance with Air Tractor's approved training manual described in Condition and Limitation No. 2.
7. Pilots who have logged at least 100 hours of flight time, with at least 10 hours in the preceding 12 months, in an AT-802 series airplane need not complete the training requirements of Condition No.2. A record of this flight time must be made available by the pilot upon request by a representative of the FAA Administrator.
8. Any person (including Air Tractor) that provides training described by Condition and Limitation No. 5 must -
 - a) Ensure each pilot logs the ground training in his or her logbook, or record such training in the pilot's training record; and
 - b) Make this record of training available for review to any representative of the FAA Administrator, upon request.
9. Pilots authorized by Air Tractor to provide training in the AT-802 or AT-802A airplane (as applicable), to include pilots employed by Air Tractor, must meet the following minimum qualifications:
 - a) Be authorized by Air Tractor to provide this instruction. This authorization will be given by Air Tractor in writing and will be on Air Tractor letterhead;
 - b) Hold an Advanced Ground Instructor certificate or Flight Instructor certificate;
 - c) Hold at least a commercial pilot certificate; and
 - d) Meet the following experience requirements:
 - i. 500 hours of flight time in turbine-powered agricultural type airplanes;
or
 - ii. 1,000 hours of flight time in agricultural type airplanes which includes at least 100 hours of flight time in an AT-802 series airplane.
10. Air Tractor must make a copy of this exemption available to each pilot who serves as PIC in the AT-802 and AT-802A aircraft.
11. This exemption is not valid for operations outside the United States.

The Effect of Our Decision

Our decision extends the termination date of Exemption No. 5651, as amended, to November 30, 2018, unless sooner superseded or rescinded.

Sincerely,

/s/

John Barbagallo

Deputy Director, Flight Standards Service