

May 7, 2004

Exemption No. 5209I
Regulatory Docket No. FAA-2000-8528

Mr. Greg Gremminger
ASTM Gyroplane Subcommittee Chairman
Popular Rotorcraft Association
17225 Pleasant View Drive
Sainte Genevieve, MO 63670

Dear Mr. Gremminger:

This is in response to your April 8, 2003, letter petitioning the Federal Aviation Administration (FAA) on behalf of Popular Rotorcraft Association (PRA) for an amendment to Exemption No. 5209, as amended. That exemption from § 91.319(a) of Title 14, Code of Federal Regulations (14 CFR) permits PRA and its member flight instructors to conduct pilot and flight instructor training in an experimental gyroplane for compensation or hire. The amendment you request would allow training for commercial and certified flight instructor (CFI) gyroplane ratings and transition training. The amendment would also include flight training for a sport pilot rating.

In your petition, you indicate that the lack of provisions for training to the commercial and CFI gyroplane ratings is a significant contributor to the continued poor safety and fatality record of gyroplanes. You argue that the limited number of available gyroplane instructors severely discourages proper and full training that would likely contribute to improved safety of gyroplanes. Additionally you state that the limited availability of proper gyroplane instruction encourages both illegal (not rated) gyroplane operations and contributes to the resultant unacceptable gyroplane accident record.

AFS-03-394-E

The FAA found that the requested amendment to the exemption would set a precedent. Therefore, to allow an opportunity for the public to comment on the petition, a summary of this petition was published in the Federal Register on February 5, 2004 (69 FR 5651). No comments were received.

The FAA has also determined that a partial grant of exemption would be in the public interest without a decrease in safety. The FAA finds that PRA has made a compelling safety case citing the lack of training for the commercial pilot or flight instructor certificate as reasons to revise the current exemption to include other airmen certificates. The FAA also agrees that the ability to provide transition training for pilots holding other than a gyroplane rating will provide the proper training in gyroplanes to reduce accidents.

While the FAA has proposed to establish requirements for sport pilots and flight instructors with a sport pilot rating, as of this date, a final rule has not been issued. Therefore, an exemption cannot be issued to a rule that does not exist.

Although you did not request an amendment to Condition and Limitation No. 4, the FAA believes that a revision is necessary so that the person may receive the training needed from the instructor.

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, Exemption No. 5209, as amended, is hereby further amended by revising the conditions and limitations as follows:

PRA and its member flight instructors are permitted, under the terms of this grant of exemption, to operate an experimental category gyroplane for the purpose of conducting flight instruction for compensation or hire, provided—

1. The gyroplane—
 - a. Is powered by a single, naturally aspirated engine with a certificated takeoff rating of 200 shaft horsepower or less under sea level standard day conditions;
 - b. Has a maximum certificated gross weight of not more than 2,500 pounds and not less than 254 pounds;
 - c. Has an occupant capacity of at least 2 seats, which includes the pilot's station;
 - d. Has an unpressurized cabin;
 - e. Has a flight manual which has been developed in accordance with Popular Rotorcraft Association's advisory guide. The flight manual must contain at least the following operating limitations:

- (1) Explanation of limitations, when appropriate, (i.e., such as causes of negative roll with yaw, effects of unloading the rotor in flight, recovery from pilot-induced oscillation, etc.);
- (2) Center of gravity range limitation and minimum and maximum weight limitations;
- (3) Normal and emergency operating procedures;
- (4) Vne airspeed limitation;
- (5) Powerplant limitations to include as a minimum the --
 - i. RPM limits;
 - ii. Cylinder head temperature limits;
 - iii. If appropriate, oil temperature and pressure limits; and
 - iv. Recommended fuel grades and mixtures.
- (6) Height velocity limitations;
- (7) Information for marking the Vne airspeed limit;
- (8) Information for determining fuel quantity from the pilot's station;
- (9) Altitude service ceiling limitation (that altitude where the gyroplane's rate-of-climb is less than 100 feet/minute);
- (10) Performance capabilities;
- (11) Kinds of operation limitations that explain the kinds of flight conditions the gyroplane is authorized to operate in (i.e., VFR-day, VFR-night, etc.);
- (12) Any other limitations that are necessary for a pilot to operate the gyroplane safely; and
- (13) A date and manual version number shall be affixed to each page of the flight manual, and the flight manual shall contain a revision page to record future revisions.

- f. The operating limitations of subparagraph e must have been determined while the gyroplane was operating at its maximum declared gross takeoff weight limitation.
 - g. The operating limitations of subparagraph e must be validated by both the owner of the gyroplane and the pilot who performed the actual flight test, and the validation shall be part of the flight manual.
 - h. The owner of the gyroplane shall be responsible for affixing the date and manual version number to each page of the flight manual and to make, when needed, revisions to the flight manual.
 - i. Meets the requirements of § 91.319(b) and has an approved experimental airworthiness certificate which has been issued by the FAA Flight Standards District Office or Manufacturing Inspection District Office having jurisdiction over the district where the gyroplane is based.
 - j. In addition to accomplishing a 12-month conditional inspection, has within the preceding 100-flight hours of operation completed a 100-hour inspection that was accomplished in accordance with scope and detail of Appendix D of part 43 and has been found to be in safe operating condition. The inspection shall be recorded in an appropriate maintenance record with the following or similarly worded statement: "I certify that this aircraft has been inspected on (insert date) in accordance with the scope and detail of Appendix D of Part 43 and found to be in a condition for safe operation." The entry shall include the aircraft's total time-in-service, the name, certificate type and number, and signature of the person or agency who conducted the inspection. Only an FAA-certificated airframe and powerplant-rated mechanic, repairman (provided the repairman is the original builder of the gyroplane), or an appropriately rated repair station may perform this inspection and make the entry in the maintenance record.
2. The flight instructor who conducts the flight training must—
- a. Hold an FAA flight instructor certificate with a rotorcraft-gyroplane rating; and
 - b. Have a total of 250 hours of flight experience, of which 100 hours were in gyroplanes and 10 hours were in the specific make and model of gyroplane in which he or she is giving instruction.
3. The training authorized to be conducted under the terms and conditions of this exemption is limited to that training required for the—

- a. Issuance of a recreational pilot, private pilot, commercial pilot, or flight instructor certificate with a gyroplane rating;
 - b. Satisfactory completion of a flight review in a gyroplane;
 - c. Maintaining or improving of pilot skills and proficiency in gyroplanes; or
 - d. Transition training from other powered aircraft to gyroplanes.
4. The person who receives pilot training under the terms of this exemption may do so only for the purpose of—
- a. Obtaining a recreational pilot, private pilot, commercial pilot, or flight instructor certificate with a gyroplane rating;
 - b. Satisfactory completion of a flight review in a gyroplane;
 - c. Maintaining or improving of pilot skills and proficiency in gyroplanes; or
 - d. Transition training from other powered aircraft to gyroplanes.
5. On the expiration date and prior to renewal of this exemption, PRA will provide the Director, Flight Standards Service, AFS-1, with—
- a. The name, address, and telephone number of each person who receives training under the terms and conditions of this exemption;
 - b. The name, address, telephone number, qualifications, and flight experience of the flight instructor who conducted the training for the person in Condition No. 5a;
 - c. A listing of the date, name of the applicant, kind of certification checkride, the name of the FAA-designated examiner or FAA inspector who conducted the check, and the results of the checkride; and
 - d. A listing of any incident, accident, or mechanical malfunction of the airframe, drive train, or engine involving training under the terms and conditions of this exemption. That listing will include the gyroplane's make/model and N number; aircraft owner, address, phone number; pilot's name, address, and phone number; date of the incident/accident/malfunction; any information on the possible cause factors; and extent of injuries sustained by pilot, instructor, or persons on the ground.

6. PRA and its member flight instructors will provide each person who receives his or her training under the terms and conditions of this exemption a copy of this exemption. This amendment supersedes the grant of exemption that was issued on February 27, 2003. Unless sooner superseded or rescinded, this exemption expires on May 31, 2006.

Sincerely,

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James J. Ballough

Director, Flight Standards Service