



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

Aviation Safety

800 Independence Ave  
Washington, DC 20591

In the matter of the petition of

**THE COLLINGS  
FOUNDATION**

For an exemption from §§ 91.9(a),  
91.315, 91.319(a), 119.5(g), and  
119.21(a)  
of Title 14, Code of Federal  
Regulations

Exemption No **6540P**  
Regulatory Docket No. **FAA-2001-11089**

**RESCISSION OF EXISTING EXEMPTION AND  
DENIAL OF PETITION TO EXTEND EXEMPTION**

This decision rescinds the relief that the Federal Aviation Administration (FAA) previously granted to The Collings Foundation (Collings) from §§ 91.9(a), 91.315, 91.319(a), 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations (14 CFR), which allows Collings to operate certain aircraft for the purpose of carrying passengers for compensation or hire for living history flight experiences (LHFE). The FAA had granted such relief in Exemption No. 6540 and extended this relief for successive two year periods. The most recent exemption the FAA issued was Exemption No. 6540P, on March 22, 2018. This decision also denies the petitioner's request for extension and amendment, submitted on August 29, 2019, and supplemented on November 8, 2019.

***Rescission of Exemption***

Exemption No. 6540P authorizes Collings to use ten aircraft to conduct LHFE operations in various locations across the country. Specifically, the relief contained in Exemption No. 6540P allows Collings to conduct operations with civil aircraft that either have experimental or limited category airworthiness certificates for the purpose of carrying passengers for flight in historical aircraft. This relief was granted in conjunction with specific conditions and limitations with which

Collings was required to comply. Further information about the FAA's policy for Living History Flight Exemptions can be found in the FAA's 2015 policy statement (the "FAA Policy").<sup>1</sup>

On October 2, 2019, Collings operated a Boeing B-17G (registration number N93012, serial number 32264) under Exemption 6540P in Windsor Locks, Connecticut, during which it undertook an emergency landing and crashed, causing a fire and resulting in fatal injuries to five passengers and two crewmembers onboard the aircraft.<sup>2</sup> Findings from the accident investigation establish that 13 persons were onboard the aircraft at the time of the accident. No seat with a seatbelt on the aircraft existed for the Collings Foundation Crew Chief.

Based on a review of the relevant records and other evidence, the FAA has determined Collings was not fulfilling several requirements of the exemption. Condition and Limitation No. 4 of the exemption states, "[i]n order to participate in Collings's program and operations, persons must initially, and on an ongoing annual basis, receive training appropriate to their position on the contents and application of Collings's manual system, safety and risk management program, and the conditions and limitations set forth in this exemption." Similarly, Condition and Limitation No. 7 provides as follows:

Collings must document and record all ground and flight training and testing. The documentation and records must contain, at minimum, the following information:

- a. Date of each training or testing session;
- b. The amount of time spent for each session of training given;
- c. Location where each session of training was given;
- d. The airplane identification number(s) in which training was received;
- e. The name and certificate number (when applicable) of the instructor who provided each session of training;
- f. The name and certificate number of the pilot who provided each session of testing; and
- g. For verification purposes, the signature and printed name of the person who received the training or testing.

While Collings produced some training records for maintenance personnel and pilots, the evidence indicates that Collings did not train the crew chief who was onboard the B-17G that was involved in the accident on October 2, 2019. The applicable General Operations Manual states that crew chiefs are assigned to every passenger flight aboard the B-17, B-25, and B-24. Crew chiefs must assist the flightcrew with duties as assigned during each flight. Such duties include, but are not limited to, assisting flightcrew with checklists and handling emergencies,

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<sup>1</sup> Policy Regarding Living History Flight Experience Exemptions for Passenger Carrying Operations Conducted for Compensation and Hire in Other Than Standard Category Aircraft, 80 FR 43012 (July 21, 2015) available at <https://www.federalregister.gov/documents/2015/07/21/2015-17966/policy-regarding-living-history-flight-experience-exemptions-for-passenger-carrying-operations>

<sup>2</sup> NTSB Preliminary Accident Report ERA20MA001, available at <https://app.nts.gov/pdfgenerator/ReportGeneratorFile.aspx?EventID=20191002X11326&AKey=1&RType=HTML&IType=MA>.

as well as assisting flightcrew and maintenance personnel in preparation for each flight and helping with ground operations and ramp safety. See Collings Foundation LHFE General Operations Manual at 15 (rev. 1.2, Sept. 10, 2017). Crew chiefs are required to be familiar with all documents that must be on board the aircraft and must be “trained by the [pilot in command], [second in command], another Crew Chief or the [Director of Maintenance].” Id. In an interview with the FAA on March 2, 2020, the crew chief verified that he received no initial training and was unaware of basic information concerning operations under the exemption. Instead, he only received on-the-job training. This lack of training indicates Collings failed to fulfill the terms of Condition and Limitation Nos. 4 and 7.

Condition and Limitation No. 5 states, “Collings must maintain and apply on a continuous basis its safety and risk management program that meets or exceeds the criteria specified in the FAA Policy for all operations subject to this exemption. This includes, at a minimum, the Collings SMS Manual, used as a basis for an equivalent level of safety.”

The evidence establishes Collings did not comply with its Safety Management System (SMS) program. First, the crew chief Collings employed stated he was unaware that a safety and risk management program existed. This absence of awareness and lack of training establishes that Collings failed to maintain and apply on a continuous basis a safety and risk management program that met or exceeded the criteria specified in the FAA Policy. Moreover, the Collings Safety Management System Manual states that hazards should be identified and corrected as a matter of daily routine because identifying and eliminating or mitigating hazards is essential to preventing accidents, incidents, and injuries. See SMS Manual at 10, ¶ 6.1 (rev. 1.2, Sept. 10, 2017). The SMS Manual also emphasizes the performance of audits that cover, in part, “general operations, aircraft maintenance, record keeping, operational procedures, [and] observation of flight operations.” Id. at 15, ¶ 6.5. The SMS Manual further requires a culture of safety exist at Collings Foundation. See id. at 6, ¶ 4. As described below, notable maintenance discrepancies existed with the B-17G, yet the Collings Director of Maintenance signed inspection records—dated as recently as September 23, 2019—indicating no findings of discrepancies. No records or evidence of the completion of periodic audits exist with regard to this aircraft. In addition, the pilot in command of the B-17G was also the Director of Maintenance; as a result, Collings did not have a structure to ensure adequate oversight of his decisions to conduct passenger-carrying operations such as the October 2 flight. This indicates Collings lacked a safety culture when operating the B-17G. As a result, Collings did not fulfill the requirements of Condition and Limitation No. 5.

Condition and Limitation No. 6 states as follows:

Collings must maintain all aircraft subject to this exemption in accordance with the—

- a. Collings General Maintenance Manual;
- b. Maintenance requirements as specified in the appropriate type specification sheet, as amended;
- c. FAA-approved maintenance inspection program that meets the requirements of § 91.409(e), (f)(4), and (g); and
- d. Appropriate military technical manuals.

Inspection of the engines on the B-17G N93012 established magneto and ignition failures existed. Regarding engine 4, to prevent the magneto “P” leads from separating from the magnetos, someone had attempted to rig the magneto leads in place with safety wire. Inspection and testing of engine 4 left magneto revealed the movement of the safety-wired lead caused grounding to the case, which rendered the magneto lead inoperative. In addition, the right magneto of engine 4 was found unserviceable. The cam follower was worn beyond limits and the point gap was less than half the measurement required by service documents. When tested, the magneto produced weak or no spark to four of the nine cylinders. All spark plugs were inspected and required cleaning and all electrode gaps were out of tolerance; therefore, further engine inspection indicated signs of detonation and associated damage. An inspection of engine 3 showed all spark plugs electrode gaps were out of tolerance, fouled, and revealed various signs of detonation. Further inspection of this engine revealed problems with the cylinders. As a result of these findings and other information, the FAA questions whether the engines were inspected adequately and in accordance with the applicable maintenance requirements.

The discrepancies noted above indicate maintenance, or lack thereof, occurred in a manner contrary to maintaining aircraft in accordance with the General Maintenance Manual (GMM). The GMM incorporates by reference inspection procedures for individual aircraft, as described in the Aircraft Maintenance Manuals. See General Maintenance Manual Rev. 1.1 at 19 (Sept. 10, 2017). Moreover, the records memorializing the inspections and maintenance performed on the B-17G lack key information and, in some cases, indicate maintenance was either not performed at all or was performed in a manner contrary to the applicable requirements. See Ground Check Inspection Form #15: Accessory Inspection, Engine Number Four Fourth (25 Hour) (Sept. 23, 2019); Ground Check Inspection Form #17: Ignition System Inspection, Engine Number Four Fourth (25 Hour) at ¶¶ 11-13 (Sept. 29, 2019). In addition, maintenance records indicate the removal of wires and no further repairs or adjustments, even though a wire was burned and arcing. See NL93012 B-17G Flying Fortress Flight Report (May 11, 2019). The same record, as well as a record from the following day, indicates flights with passengers occurred in the aircraft. See id.; NL93012 B-17G Flying Fortress Flight Report (May 12, 2019). As a result, Collings did not fulfill the requirements of Condition and Limitation No. 6.

In addition, Condition and Limitation No. 22 requires compliance with all conditions and limitations set forth in FAA Exemption No. 6540P. The lack of compliance discussed above serves as a basis for the FAA to rescind the exemption.

**Under Exemption No. 6540P, Collings received relief from the following regulations:**

Section 91.9, which prohibits operations of a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards, or as otherwise prescribed by the certificating authority of the country of registry.

Section 91.315, which prescribes, in pertinent part, “No person may operate a limited category civil aircraft carrying persons or property for compensation or hire.”

Section 91.319(a)(1) and (2), which state, “(a) No person may operate an aircraft that has an experimental certificate— (1) for other than the purpose for which the certificate was issued; or (2) Carrying persons or property for compensation or hire.”

Section 119.5(g), which prescribes, in pertinent part, “(g) No person may operate as a direct air carrier or as a commercial operator without, or in violation of, an appropriate certificate and appropriate operations specifications. No person may operate as a direct air carrier or as a commercial operator in violation of any deviation or exemption authority, if issued to that person or that person’s representative.”

Section 119.21(a), which prescribes, in pertinent part, “(a) Each person who conducts airplane operations as a commercial operator engaged in intrastate common carriage of persons or property for compensation or hire in air commerce, or as a direct air carrier, shall comply with the certification and operations specifications requirements in subpart C of this part....”

**The FAA’s Decision:**

The undersigned finds that allowing Exemption No. 6540P to continue in effect until its previously established March 31, 2020, expiration date would not be in the public interest and would adversely affect safety. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f) and (g), 40113, and 44701, delegated to me by the Administrator, Exemption No. 6540P is rescinded in full, effective immediately.

***Decision on Petition to Extend Existing Exemption***

This decision also responds to the petitioner’s request, dated August 22, 2019, to amend and extend Exemption No. 6540P. The relief provided by Exemption No. 6540P is described above. The petitioner requests to extend this relief and to add an additional B-25 aircraft to the exemption for operations beginning in January 2020. Moreover, on November 8, 2019, Collings submitted an additional request to the FAA, in which Collings sought to add another B-17 to exemption 6540P.

**The petitioner supports its request with the following information:**

In its petition to extend Exemption No. 6540P, the petitioner states that all of the aircraft requested are either limited or experimental category and that none of them has a standard category equivalent. Petitioner also states that all of the aircraft have been U.S. operated, none of the aircraft are currently in U.S. military service, and all of the aircraft meet the criteria of being “fragile” as there are less than 1% of each type still in service.

**The FAA's analysis is as follows:**

The FAA has determined good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent.

Although the FAA did not seek comment on this extension, the FAA received over 1,500 comments supporting the renewal of Exemption No. 6540P. Most of these comments were from individuals who cited the historical and sentimental value of allowing living history flights to continue. Some individual commenters strongly urged the FAA to not renew Exemption No. 6540P because of safety concerns regarding the operations Collings has conducted.

In considering the request for further extension of Exemption No. 6540P, the FAA assessed the current risk to the safety of U.S. registered aircraft, FAA-certificated airmen, persons paying for carriage, and the public at large in determining whether granting relief to Collings would be in the public interest. See 49 U.S.C. 44701(f). As noted in the previous section regarding rescission of Exemption No. 6540P, the FAA has determined through ongoing investigation that Collings has not been operating in compliance with the conditions and limitations of the 6540P exemption issued to Collings. In addition, the FAA continues to gather facts that indicate Collings lacked a commitment to safety, insofar as Collings did not take seriously its safety management system program. Based on the totality of facts the FAA has gathered, granting an extension to Collings's current authority to operate and permitting Collings to add an aircraft to its exemption would adversely affect safety.

The FAA is mindful that flight in these historic aircraft is meaningful to some members of the public; however, the FAA is required by statute to ensure that any exemption the FAA grants would be in the public interest. See 49 U.S.C. 44701(f). Given the facts of the accident on Oct. 2, 2019, and the subsequent evidence of Collings's lack of compliance summarized in the *Rescission* section of this document, the FAA has determined that granting the exemption from §§ 91.9(a), 91.315, 91.319(a), 119.5(g), and 119.21(a) would not be in the public interest because of the adverse effect on safety.

**The FAA's Decision:**

In consideration of the foregoing, I find that a grant of exemption is not in the public interest because it would adversely affect the safety of Collings Foundation's U.S.-registered aircraft, the FAA-certificated airmen that would be participating in the operations, the passengers on board the aircraft, and others involved in or affected by the operations. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, the petition for renewal of Exemption No. 6540P issued to The Collings Foundation is denied.

Issued in Washington, D.C., on March 25, 2020

Sincerely,

/s/

Robert C. Carty  
Deputy Executive Director, Flight Standards Service