FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: SW-17-31R44
SUBJ: Fuel System **Date:** December 17, 2025

This is information only. Recommendations aren't mandatory.

Introduction

This revised Special Airworthiness Information Bulletin (SAIB) provides information to helicopter owners and operators regarding crash resistant fuel systems (CRFS) and provides a website that lists which helicopters have either:

(1) Full CRFS: Compliant with the CRFS safety standards of title 14, Code of Federal Regulations (14 CFR) part 27 through amendment 27-30 or 14 CFR part 29 through amendment 29-35, or

(2) Partial CRFS: Compliant with the statutory requirements of 49 U.S.C. 44737, established by the FAA Reauthorization Act of 2018 and amended by Pub. L. 118-63 (May 16, 2024), titled § 44737 Helicopter Fuel System.

Operating a helicopter with a full CRFS or a partial CRFS reduces the risk of post-crash fires and improves occupant survivability in an accident.

We are revising this SAIB to publicize the 2024 amendment to 49 U.S.C. 44737 which substituted the word "rotorcraft" with "helicopter" throughout the statute to correct the applicability of the requirements. This change resulted in excluding gyroplanes from the applicability of this law. Currently, the only rotorcraft approved in the primary category are gyroplanes, and these previously approved gyroplanes did not include CRFS in their certification basis, nor are they mandated to add CRFS for future production. Note that new rotorcraft type designs will have appropriate crash resistant fuel system requirements mandated under new type certificate procedures.

Background

On November 2, 1994, helicopter fuel system crash resistance became a regulatory requirement via amendment 27-30 of 14 CFR part 27 and amendment 29-35 of 14 CFR part 29. The amendments include §§ 27.952 and 29.952, along with other related regulatory sections of 14 CFR parts 27 and 29. The regulations apply only to newly type-certificated helicopters. The law is limited in applicability to newly manufactured helicopters. Since the regulations are not retroactive, no requirement exists to modify existing helicopters with crash resistant fuel system systems. The regulations also do not apply to newly manufactured helicopters if the helicopters are produced under a type design that existed before the regulations became effective in 1994.

These design requirements included in 14 CFR part 27 at amendment 27-30 and 14 CFR part 29 at amendment 29-35 are intended to increase safety in the event of a survivable crash by either decreasing the likelihood, or delaying, the onset of post-crash fires. The intent of both amendments is to minimize crash-induced fuel leaks and their contact with potential fuel ignition

sources during and after a crash and increase the time occupants have to egress before a post-crash fire becomes critical.

To further improve helicopter fuel system crash resistance, the U.S. Congress enacted 49 U.S.C. 44737 on October 5, 2018. This law was amended on May 16, 2024 to apply only to helicopters, effectively removing gyroplanes. This law lists the helicopter fuel system safety requirements for operation of a "covered helicopter" in the United States airspace. The requirements took effect on April 5, 2020, corresponding to 18 months after the date of enactment. The law only applies to newly manufactured helicopters. The statutory requirements are not as sweeping as the amendments to 14 CFR parts 27 and 29, rather the statute includes a subset of paragraphs from §§ 27.952 and 29.952, §§ 27.963 and 29.963, and §§ 27.975 and 29.975. The 49 U.S.C. 44737 requirements are consistent with recommendations that the Aviation Rulemaking Advisory Committee (ARAC) Rotorcraft Occupant Protection Working Group (ROPWG) provided to the FAA on March 23, 2018 to improve rotorcraft fuel system crash resistance.

The 14 CFR parts 21, 27, and 29 certification approval process for fuel systems does not change with the establishment of the 49 U.S.C. 44737 requirements. A related bulletin, SAIB 2023-03, encourages voluntary adoption of CRFS by informing owners, operators, pilots, manufacturers, and the flying public about the importance and benefits of CRFS.

Recommendations

The FAA again recommends that owners and operators pursue installation of fuel systems that improve the fuel system crash resistance of their helicopters. The FAA maintains a list of helicopters that are either:

- Compliant with the CRFS safety standards of 14 CFR part 27, through amendment 27-30 or part 29 through amendment 29-35 (See Table 1),

- Compliant with the minimum CRFS requirements established by 49 U.S.C. 44737 but do not comply with the full CRFS safety standards of 14 CFR part 27 through amendment 27-30 or part 29 through amendment 29-35. (See Table 2, Left), or

- Exceeding the minimum CRFS requirements established by 49 U.S.C. 44737 via compliance with certain CRFS safety standards of 14 CFR part 27 through amendment 27-30 or part 29 through amendment 29-35. (See Table 2, Right).

You can find the FAA's *List of Crash Resistant Fuel System Compliant Designs* here:
faa.gov/aircraft/air_cert/design_approvals/rotorcraft/rspc#crfs

For Further Information Contact

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