

Summary of Rotorcraft Regulatory Activities

To: EASA Rotorcraft Symposium

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Federal Aviation
Administration



Rulemaking Process - Overview

➤ FAA Active Rulemaking Throughput

- Approximately 45 active rules per year

➤ Typical Rulemaking Process

- Relies on ARAC/ARC recommendations prior to start of any FAA Rulemaking

➤ Rulemaking Phases:

- Annual FAA prioritized list of proposed Rulemaking projects
- Approval of Application by Rulemaking Council (RMC)
- Rulemaking Application Plan (RAP) approval by RMC
- Issue Notice of Propose Rulemaking
- Issue Final Rule

State of Part 27 & 29 Regulations

- Parts 27 & 29 regulations established 50+ years ago
- No significant updates to the Part 27 & 29 standards in 20+ years
- Technology advancements have outpaced our Part 27 & 29 standards
- Seeking ways to promote technology that can enhance rotorcraft safety
- Applying our standards to the rotorcraft of the future





What Can We Do?

- **Utilize existing “workarounds”**
 - Exemptions
 - Special Conditions
 - Equivalent Level of Safety (ELOS) Findings

- **Problem with these “workarounds”**
 - Time consuming
 - Must be processed on each individual project

- **Preferred solution**
 - Update affected regulations
 - Limited opportunities for new rulemaking due to competing rulemaking priorities

Rotorcraft Rulemaking - Current



➤ **Current Miscellaneous Part 27/29**

- 27/29.1305 & 27/29.1549 (OEI Training Mode)
- 27/29.1305 (Synthesized Power Indicator)
- 27/29.1309 (Eliminate need for 27.1309 SCs, update failure condition terminology)
- 27/29.1329 & 27/29.1335 (Autopilot & Flight Director)
- 27/29.1333 & Appendix B (Interconnection of pilot/co-pilot systems)
- 27/29.1545 & 27/29.1549 (Powerplant Instrument display of operating ranges)
- 27/29.1353 (Recognize various battery technologies, e.g. Lithium)

Rotorcraft Rulemaking - Current



➤ **Special Rotorcraft Configurations**

- Search & Rescue (SAR)
- 30-Minute All-Engine-Operative (AEO)
- Anti-Collision lights (red/white)

➤ **27/29.773 Pilot Compartment View - Rulemaking**

- Single Program Office Tool (SPOT) Rule
- NPRM issued Oct. 17, 2016
- Public comment period ends Nov. 16, 2016
- Relieving to industry by adding “**ground test**” as an option where appropriate. Current rule requires night “**flight test**”.

Rotorcraft Rulemaking - FY17/18

➤ **Rotor Drive System – Loss of Lubrication**

- Participating on EASA's main gearbox loss of lubrication rulemaking program
- CS/FAR 29.927
- FAA Harmonization rulemaking after EASA issues final rule

➤ **Ditching Rulemaking**

- Participating on EASA's rotorcraft ditching rulemaking program
- FAA Harmonization rulemaking after EASA issues final rule



Rotorcraft Occupant Protection - ARAC



➤ **Scope**

- Covers both CRFS and BFT Provisions
- Considers both Newly Manufactured Rotorcraft (NMR) and the Existing Fleet
- Members – rotorcraft OEMs, operators, vendors, associations, etc.

➤ **ARAC Working Group Status**

- Aviation Rulemaking Advisory Committee (ARAC) tasking was published in the Federal Register November 5, 2015.
- Working group has been meeting since January 2016.
- First deliverable is a cost/benefit analysis report- due date extended by 9 months (goal is to provide to ARAC by Oct/Nov 2016).
- Final report (newly manufactured & existing fleet) – Aug. 2018

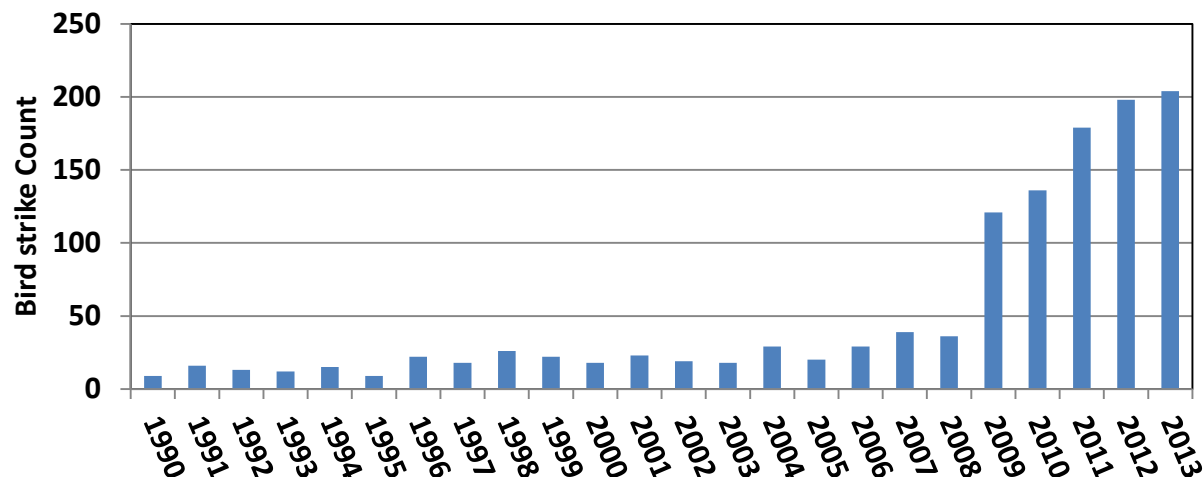
FAA Reauthorization Bill

Congress added the following language:

- SEC. 2105. CRASH-RESISTANT FUEL SYSTEMS. Not later than 1 year after the date of enactment of this Act, the Administrator of the Federal Aviation Administration shall evaluate and update, as necessary, standards for crash-resistant fuel systems for civilian rotorcraft.

Rotorcraft Bird Strike - ARAC

- Dramatic increase in number of Rotorcraft Bird Strikes



- No bird strike rule exists for Part 27, which is 90% of the U.S. fleet
- Federal Register Notice published April 27, 2016
- Working Group held several meetings since Aug. 2016
- Addressing Part 27 & Part 29
- Final report due Oct. 2017

Rotorcraft Rulemaking – Part 27/29 Rewrite



- Industry is conducting a study of a potential rewrite of Parts 27/29 and will provide recommendations to the FAA by 3rd Quarter of 2017
- Industry recommendations will be reviewed by FAA and coordinated with other bilateral partners (EASA, TCCA)
- Any rulemaking recommendations will follow formal rulemaking process, including use of the ARC/ARAC process