

FAA - Rotorcraft Regulations & Policy Update



Federal Aviation
Administration



Presented to: EASA Rotorcraft Symposium

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Rotorcraft ACs & Policies

- **HTAWS AC 27/29 MG-18**

- Issued March 2014
- Provides guidance for HTAWS as required per HEMS final rule issued Feb. 2014

- **HEMS AC 27/29 MG-6**

- Issued March 2014
- Provides guidance for Flight Data Monitors (FDM) as required per HEMS final rule issued Feb. 2014

- **AC 27/29 Groups 1 & 2**

- Group 1- material where few changes were made (Issued May 2014)
- Group 2- consists of new material and material involving more extensive changes (Final release ~ Dec. 2014/Jan. 2015)
 - Electronic Display Systems (EDS)
 - Functional Hazard Assessment (FHA)
 - Human Factors (HF)
 - Night Vision Imaging Systems (NVIS)
 - Human External Cargo



Rotorcraft ACs & Policies

- **Non-Required Safety Enhancing Equipment (NORSEE)**

- Issued May 2013
- Objective – Promote installation of non-reqd. safety enhancing equipment
- Working with AEA/GAMA to identify NORSEE eligible equipment
- National policy to be developed in FY15.



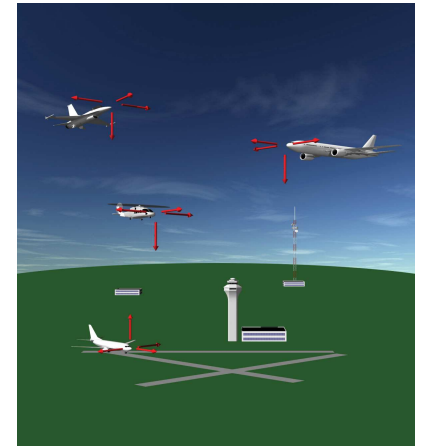
- **Rotorcraft Laser & Filtered Infrared (IR) Searchlights- Proposed**

- Dispositioned public comments on rotorcraft policy
- National Laser AC – Draft (FAA Internal Review July 13)
- Due to numerous comments and interest by industry, an industry committee is working on development of a Filtered IR Searchlight ASTM standard.



Rotorcraft ACs & Policies

- **Advanced Flight Controls (AdFC) AC**
(e.g. Fly-By-Wire, Fly-By-Light)
 - AC issued June 2014
 - MG-17 of AC 27 & AC 29
 - Provides guidance for rotorcraft fly-by-wire, fly-by-light, etc.
 - FAA, EASA, TCCA working on update to incorporate additional EASA & TCCA comments
- **Advanced Flight Controls Handbook**
 - Referenced in AdFC Policy Statement
 - Nearing final release ~ Dec. 2014
- **Auto Flight Guidance Control Systems (AFGCS)**
 - Issued July 2014
 - Recognized recently updated MOPS



Where to Find FAA Rotorcraft Guidance

- **Advisory Material (AC)**
 - Part 27 (Normal Category Rotorcraft)
 - http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/106
 - Part 29 (Transport Category Rotorcraft)
 - http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/107
- **Policy Statements (Parts 27 & 29)**
 - http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgPolicy.nsf/MainFrame?OpenFrameSet
- **Advanced Flight Controls (AdFC), Auto Flight Guidance & Control System (AFGCS)**
 - Contact Dan Black, FAA/ASW-112
 - Email: Daniel.Black@faa.gov
- **Advanced Flight Controls Handbook**
 - Will post with Policy Statements once issued



Rotorcraft Rulemaking (Near-Term)

- **Retrospective Regulatory Review (R3)**
 - U.S. Executive Order to focus on rulemaking that is relieving
 - Candidates are those resulting in recurring Special Conditions, Equivalent Levels of Safety, Means of Compliance Issue Papers, etc.
- **Miscellaneous Changes, Parts 27 & 29 (R3)**
 - Rulemaking application approval – Dec. 2014
- **30-Min All Engines Operative (AEO) (R3)**
 - Rulemaking application approval ~ Dec. 2015



Rotorcraft Rulemaking (Near-Term)

- **Miscellaneous Changes, Parts 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 & Appdx B (Interconnection of pilot/co-pilot systems)
 - 27/29.1545 & 27/29.1549 (Powerplant Instrument display of operating ranges)
- **Update of these miscellaneous Part 27/29 & 30-Min AEO rules will eliminate need for recurring SCs, ELOS, & MOC IPs**



Rotorcraft Rulemaking - Other

- **Potential Rotorcraft Rulemaking Candidates**
 - Based on outcome of Rotorcraft Safety Initiative (RSI)
 - Focus on preventing **fatal** accidents
 - Crashworthiness
 - Post-crash fire survivability
 - Installation of safety systems in legacy rotorcraft
- **Part 27/29 Re-write (Long-Term)**



Rotorcraft Certification Challenges

- No significant updates to the Part 27 & 29 standards in over 20 years
- Technology advancements have outpaced our Part 27 & 29 standards
- Seeking ways to promote technology that can enhance rotorcraft safety
- Preparing our standards for the future rotorcraft?



Part 27/29 Federal Register (FR) Notice

- FR Notice published in Feb. 2013
- Solicited public input on ways to revamp Part 27 & 29 standards
- Solicited level of interest in industry's willingness to support any future Part 27/29 rulemaking
- Closed in June 2013
- Depending on level of interest, future rulemaking may be limited in scope or as broad as Part 23's major revamp of their airworthiness standards
- Planning coordinated effort with other Authorities (e.g. EASA, TCCA, etc.)



Part 27/29 Industry Certification Process Study (CPS)



- Industry to begin Part 27/29 CPS
- Will evaluate rotorcraft airworthiness standards, maintenance, operations, and training
- Will provide recommendations to Authorities
- Any rulemaking recommendations will follow formal rulemaking process, including use of the ARC/ARAC process



