



EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

European Piston Engine Fleet

Your safety is our mission.



Presentation Overview

- ▶ Introduction
- ▶ Results
- ▶ Conclusion for European Fleet



Introduction

- ▶ Request for information about European piston engine fleet required for evaluation of its fuel needs
- ▶ Problems
 - ▶ No single European aircraft register
 - ▶ No data provided by Italy, Greece, Czech Republic
 - ▶ Incorrect or missing engine designations
 - ▶ No data about engine utilisation available (no fleet hours)
 - ▶ No data about N-registered aircraft operated in Europe
- ▶ EASA Safety Analysis & Research Department Agency generated Excel list of engines installed in aircraft registered in EU member states (except I, GR, CZ), Iceland, Norway, Switzerland

27/09/2012

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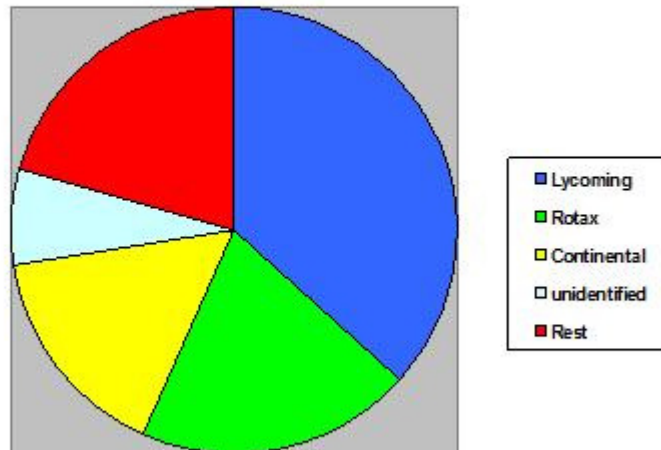


Results

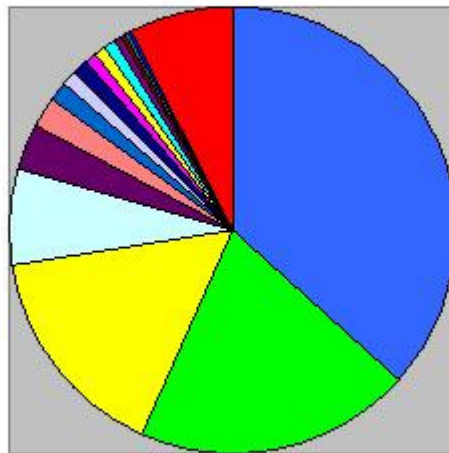
- ▶ Total number of piston engines: 54109
- ▶ Total number of unidentified engines: 3792
- ▶ Continental engines: 6711 (single) + 1776 (twin)
(incl. 591 RR Conti.) = 8487 engines
- ▶ Lycoming engines: 18254 (single) + 1658 (twin)
= 19912 engines
- ▶ Rotax engines: 5313 (2 stroke) + 5510 (4 strk.)
= 10823 engines
- ▶ Total minus Lycoming/Continental/Rotax = 14887 engines

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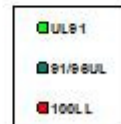
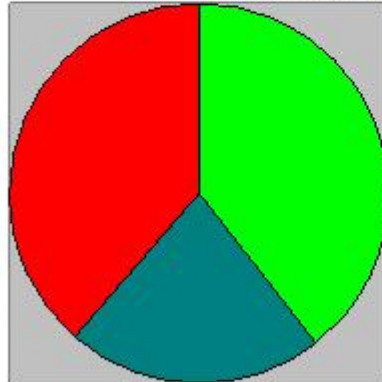
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- ▶ Total number minus Lycoming/Continental/Rotax: 14887
 - ▶ Total number of unidentified engines: 3792
 $14887 - 3792 = 11095$ rest
 - ▶ Solo engines: 1741
 - ▶ Limbach engines: 1199
 - ▶ TAE 125 engines: 749 (diesel engines)
 - ▶ M-14/AI-14 engines: 689
 - ▶ Gipsy Minor engines: 570
 - ▶ ASz-62 engines: 473
 - ▶ LOM Praha engines: 429
 - ▶ VW Beetle derived: 420
 - ▶ P&W radials: 281
 - ▶ Fuji-Robin engines: 163
 - ▶ Hirth two stroke: 147
 - ▶ Franklin engines: 121
- other: 4113

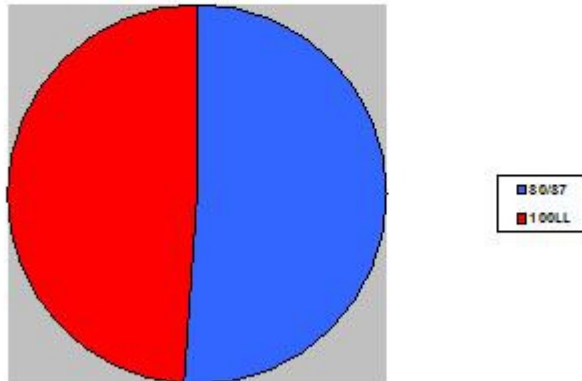


- Lycoming engines: 19912 engines total
 - 7871 engines UL91, 91/96UL, 100LL
 - 4353 engines 91/96UL, 100LL
 - 7688 engines 100LL only



Results

- ▶ Continental engines: 8487 engines total
4345 engines 80/87
4142 engines 100LL only



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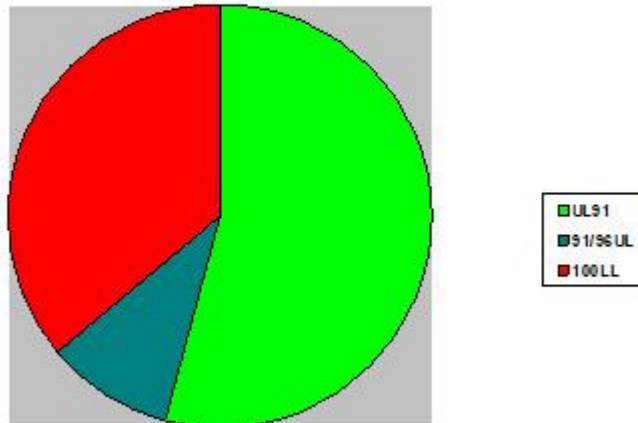
Conclusion – European Fleet

- ▶ UL91 engines: 7871 Lycoming
4345 Continental (?)
10823 Rotax
3000 other?
- ▶ 91/96UL engines: 4353 Lycoming
473 ASz-62
xxx other?
- ▶ 100LL engines: 7688 Lycoming
4142 Continental
4000 other?

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► Estimate for European fleet



EASA
Cologne - Germany

**Thank you very much
for your attention!**