



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



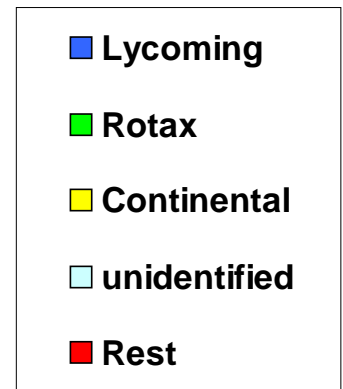
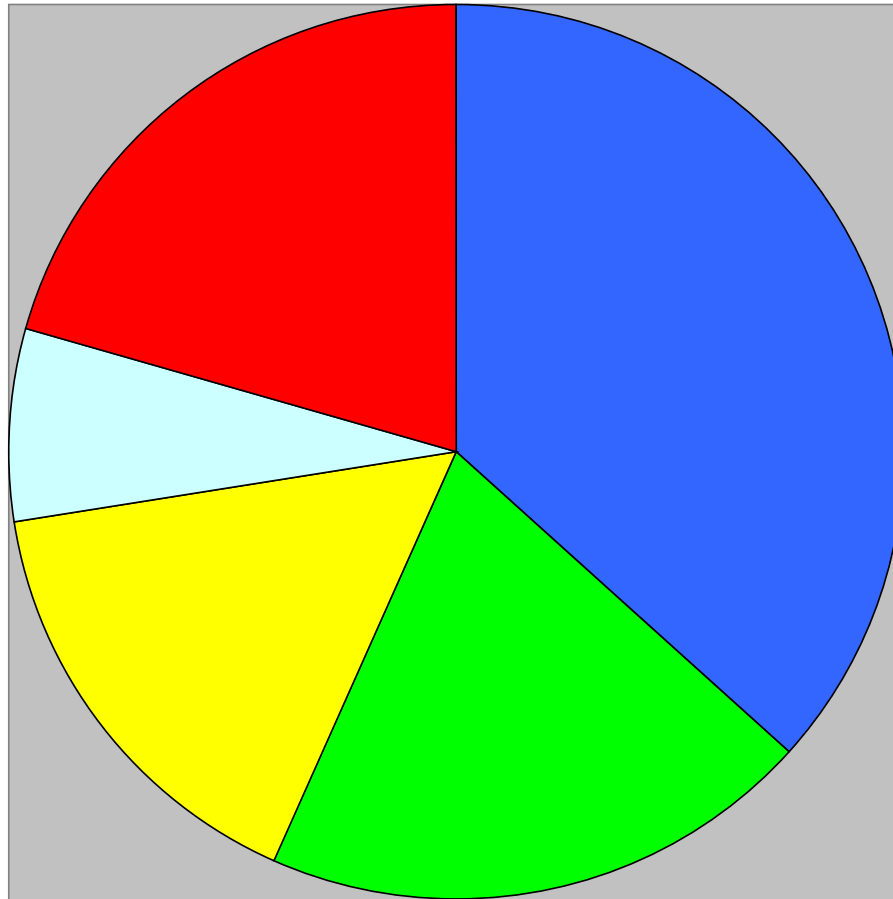
Introduction

- Request for information about European piston engine fleet required for evaluation of its fuel needs

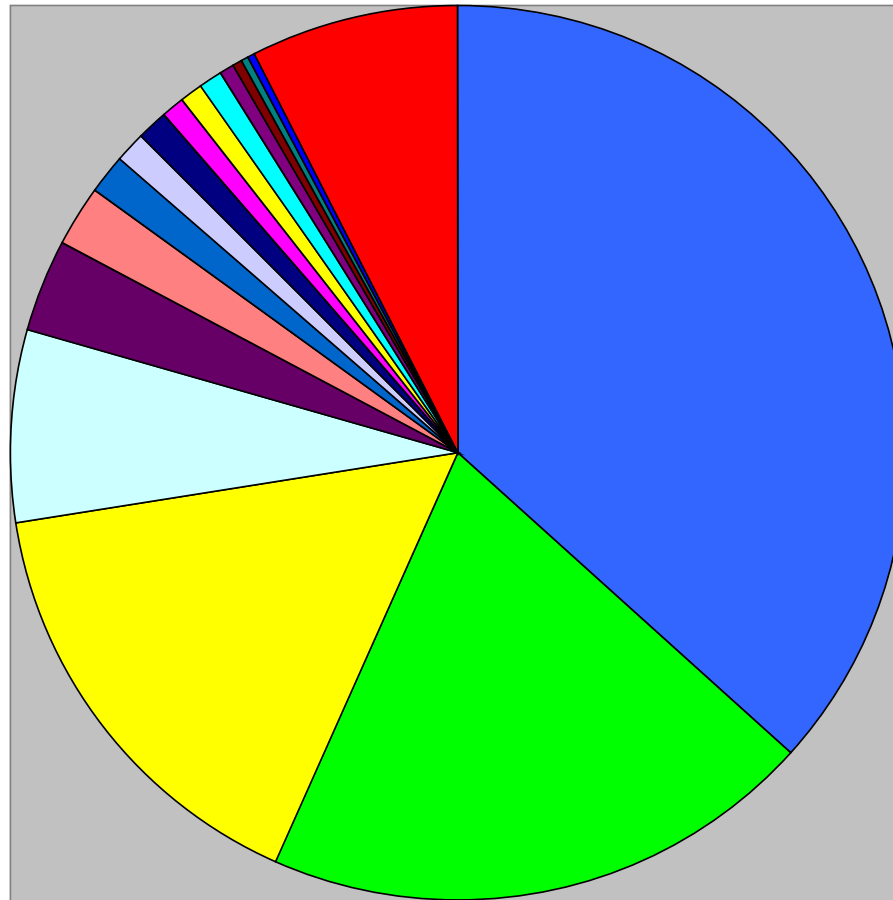
- Problems
 - No single European aircraft register
 - No data provided by Italy, Greece, Czech Republic
 - Incorrect or missing engine designations
 - No data about engine utilisation available (no fleet hours)
 - No data about N-registered aircraft operated in Europe

- 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

- ▶ 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

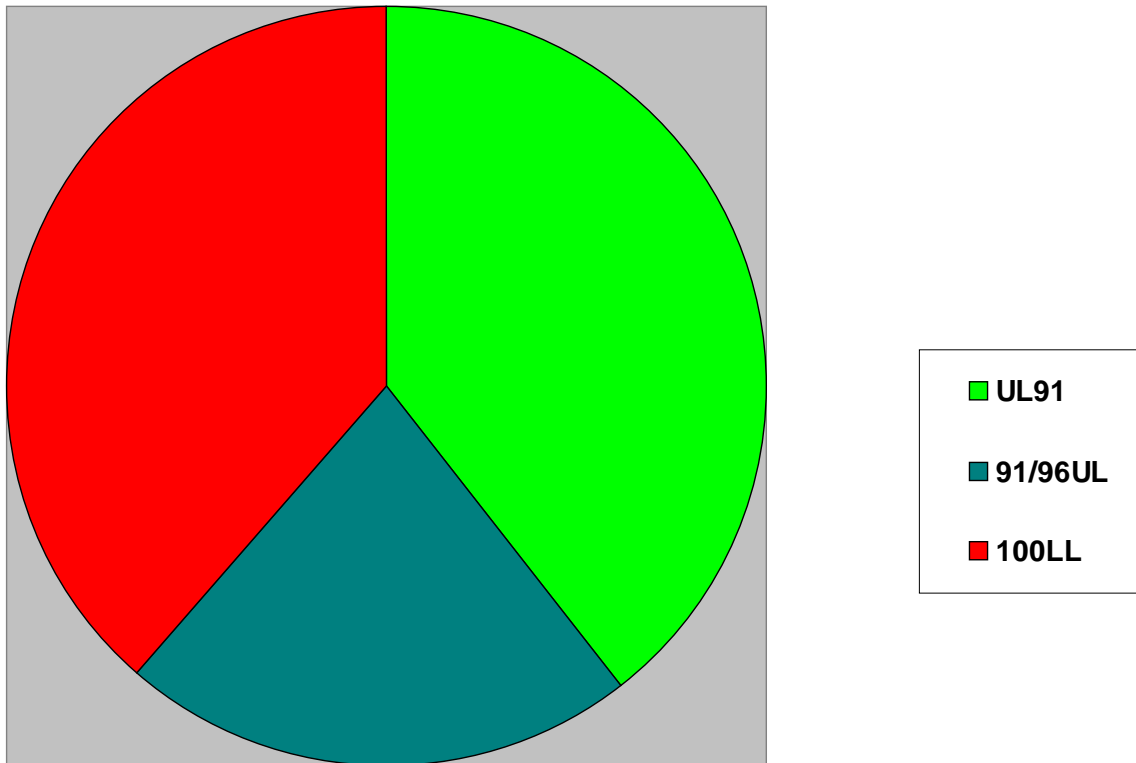


- Total number minus Lycoming/Continental/Rotax: 14887
- Total number of unidentified engines: 3792
- 14887 – 3792 = 11095 rest
 - Solo engines: 1741
 - Limbach engines: 1199
 - TAE 125 engines: 749 (diesel engines)
 - M-14/AI-14 engines: 689
 - Gipsy Minor engines: 570
 - ASz-62 engines: 473
 - LOM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

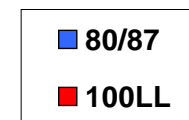
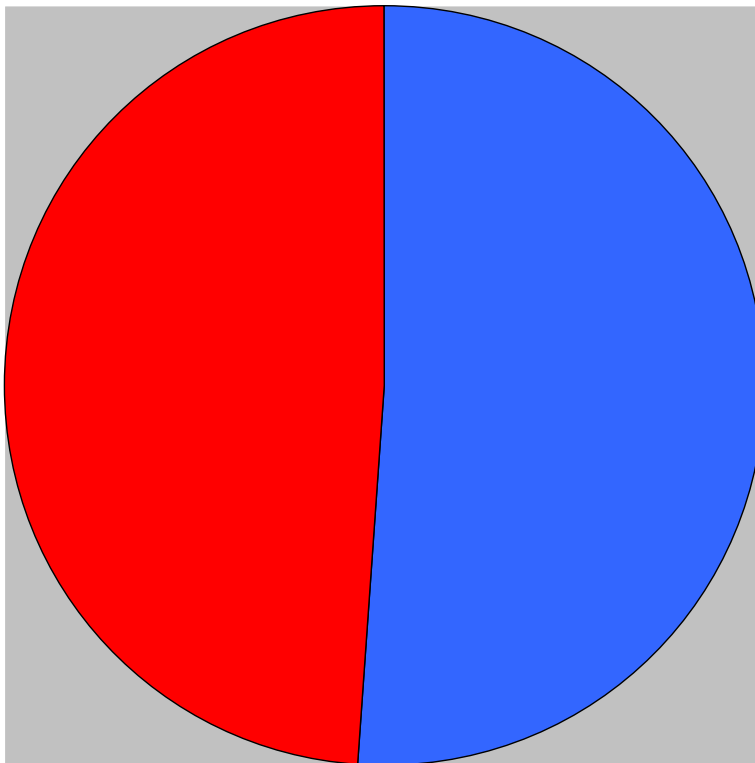


- Lycoming
- Rotax
- Continental
- unidentified
- Solo
- Limbach
- TAE 125
- M-14/AI-14
- Gipsy Minor
- Asz-62
- LOM Praha
- VW Beetle
- P&W radials
- Fuji-Robin
- Hirth 2stroke
- Franklin
- other

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



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





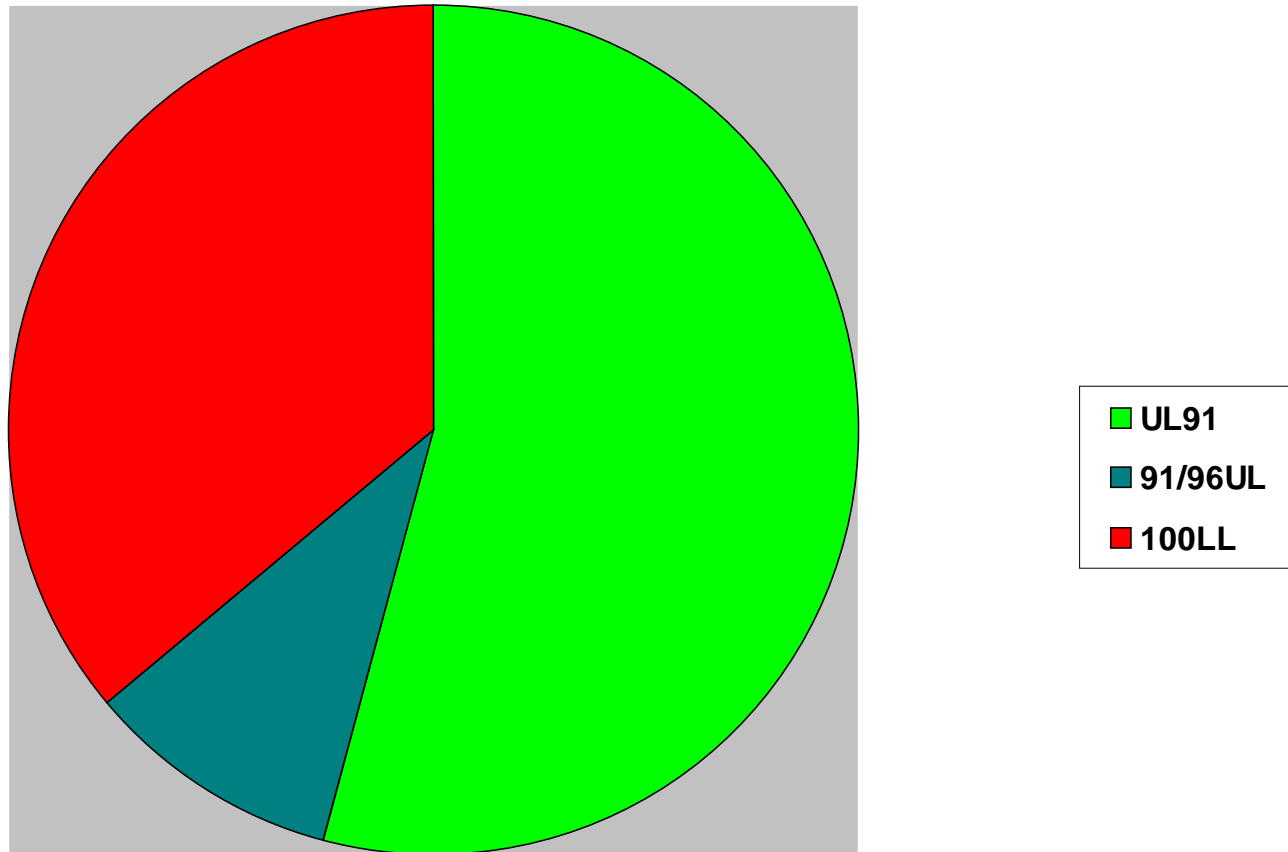
Conclusion – European Fleet

- ▶ 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?

➤ Estimate for European fleet





EASA
Cologne - Germany

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