Federal Aviation Administration

Light Sport Aircraft Structural Safety Record

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Safety Analysis Branch, AAI-220

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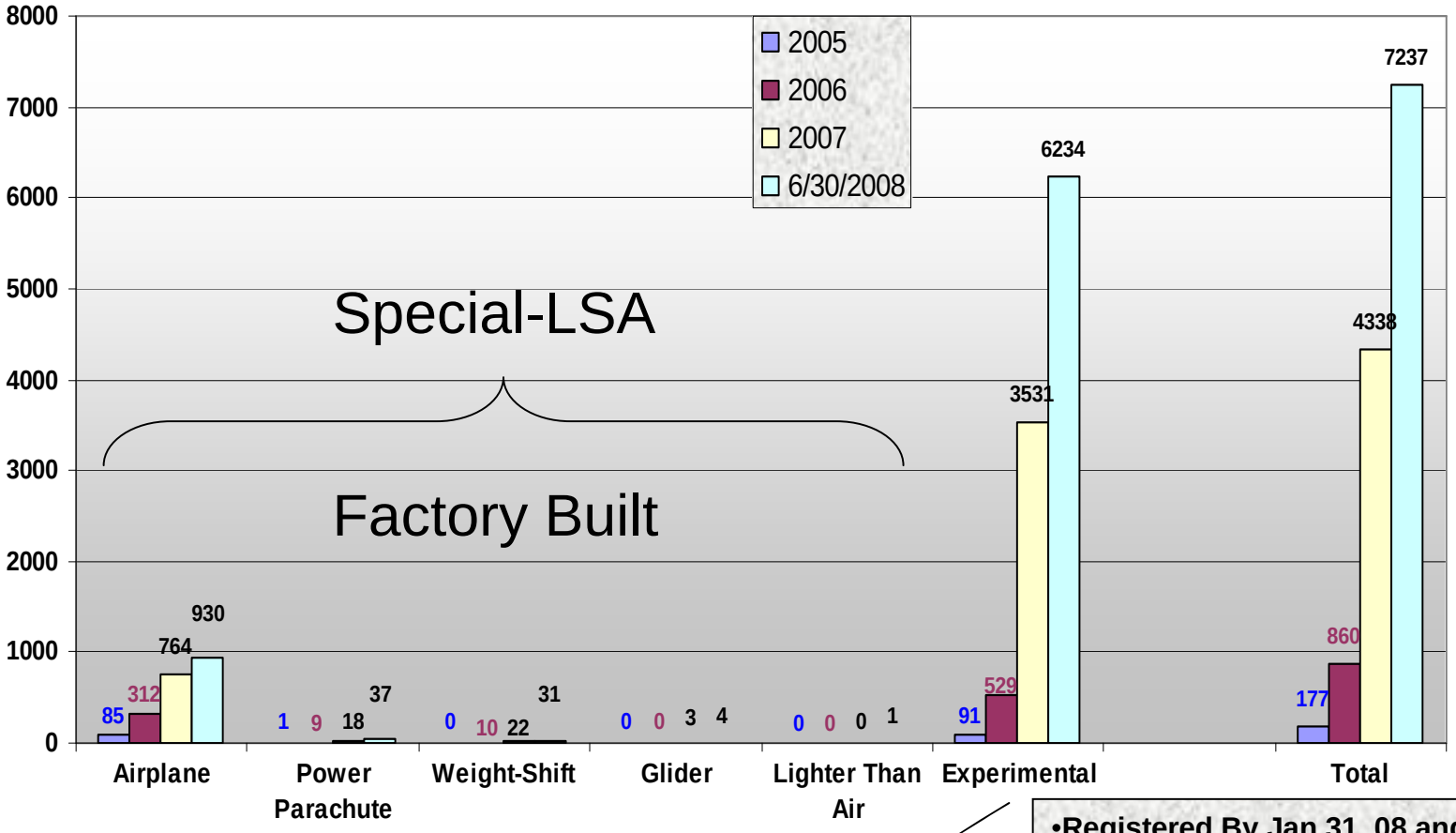
Light Sport Aircraft

Fleet Summary and Accident Classification

LSA Airworthiness Certificates



- Registered By Jan 31, 08 and Not Part 103
- Kit-Built
- Previously Issued Under 21.190 (S-LSA)

LSA / SP Fatal Accidents FY05-08 (Jul)

(29 Fatal Accidents)

Loss of Control	16	55%
Fuel Exhaustion	3	10%
In-flight Breakup	4	14%
Fuel Starvation	1	3%
Midair	1	3%
Missing	1	3%
Unknown	3	10%

LSA Structural Failure (In-flight) Fatal Accidents FY05-08

4 Fatal Accidents

- **2 E-LSA (home-built)**
- **2 S-LSA (factory built)**
- **3 of the 4 in-flight breakups involved Zenith Zodiac aircraft.**
- **2 of the 3 Zenith Zodiac aircraft were factory built.**
- **This indicates a potential design issue specific to the Zenith Zodiac aircraft.**
- **There are no other known in-flight structural failures.**
- **In FY08-09, the FAA's Small Airplane Directorate (AIR-200) will conduct a major study of the effectiveness of ASTM Consensus Standards and manufacturer's adherence to these standards. This study is expected to completed by July, 2009.**

LSA Structural Failure Summary

- **NTSB Identification # MIA08LA105**
  E-LSA Aviate Raptor (home-built)
  Still under investigation

- **NTSB Identification #DFW07LA102**
  E-LSA Zenith Zodiac (home-built)
  Still under investigation

- **NTSB Identification #LAX07FA026**
  S-LSA Zenith Zodiac (factory built)
  Still under investigation

- **NTSB Identification #NYC08FA158**
  S-LSA Zenith Zodiac (factory built)

Probable Cause: Improper pre-flight planning, deteriorating weather conditions, resulting in Loss-of-control followed by in-flight break-up.