Development of Light Aviation in Europe

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Light Aircraft Association of the Czech Republic is a competent authority for Certification, Licencing and Operation of microlights in the Czech Republic.

This covers paragliding, powered paragliding, hang gliding, gyroplanes, helicopters, weight shift and aerodynamically controlled microlight.

In this respect it is unique in Europe.

It has 6 400 members and registers 7 900 aircraft and 10 000 pilots.
Microlights in LAA ČR register as of 1.1.2011
Success of Czech Light Aviation

Key Factors

- foundation of LAA ČR in 1990 gave legal framework for all microlight activities including manufacturing

- creation of a certification system within the LAA ČR, offering the acceptable simplicity of certification while providing safety to aircraft design, building and operation.
The aims of association are:

- Promote and protect the interests of its members, and sports and recreational aviation as a whole.
- Introduction of the LSA (Light Sport Aircraft) category in Europe using ASTM standards
- Cooperation with European Institutions (European Parliament, European Council, European Commission, EASA - European Aviation Safety Agency and the respective institutions of European countries to the creation of legislative norms taking into account the needs and interests of sport and recreational aviation.
- Promotion of sports and recreational aviation in the public, particularly its safety, economy and social benefits

www.lamaeurope.com
The aims of association are:

• Providing assistance and information to members on all matters relating to the manufacture of aircraft for sport and recreational aviation.

• International exchange of experiences and information and cooperation with national sports and recreational aviation organizations in other countries.

Membership:

• Any physical person who is the owner or co-owner of the company or holds the position in the management of a legal entity who designs, constructs and manufactures aircraft for sport and recreational flying and their parts as well as service, repair and maintenance facilities for light sport airplanes.

• National association of manufacturers of sports and recreational aviation.

www.lamaeurope.com
Are You manufacturer of Light Aircraft?
For more info visit www.lamaeurope.com
If You wish to join contact Secretary.general@lamaeurope.com
European Aviation Environment

EUROPEAN UNION

- European Parliament
- The Council of the European Union
- European Commission
  - EASA — European Aviation Safety Agency
    - Annex II of Regulation 216/2008, which defines aircraft exempted from EASA responsibility – these are in Member States jurisdiction
    - EASA Working Groups (MDM032, BR010, etc.)

- Eurocontrol
European Aviation Environment

EUROPEAN ORGANISATIONS

• EAS — Europe Air Sports
  • EMF – European Microlight Federation
  • EGU – European Gliding Union
  • EHPU – European Hang Gliding and Paragliding Union
  • EPU – European Parachuting Union
  • PPL/IR Europe
  • Air Show Council
  • EFLEVA – European Federation of Light Experimental and Vintage Aircraft
  • EPFU – European Powered Flying Union

• IAOPA — International Council of Aircraft Owner and Pilot Associations

• ECOGAS — European Council of General Aviation Support

• NAA — National Aviation Authority

ACTIVE EUROPEAN LIGHT MANUFACTURERS ORGANISATION WAS MISSING!!

LAMA-EUROPE was founded during AERO2010
Organisation of EU

• The European Parliament
• The Council of the EU
• The European Commission
• Court of Justice
• Court of Auditors
• European Economic and Social Committee
• The Committee of the Regions
• The European Central Bank
• The European Investment Bank
EU Rulemaking

The Regulation - in our case the basic regulation on civil aviation - is made by the TRANGLE OF POWER

Commission
(Executive)

Council
(Member States)

European Parliament
(Direct election)
EU Rulemaking

• Processes starts with the **Commission**. The Commission tends to be technocrat, but also political. Thinks European.

• The **Council** is the voice of Member States at all levels. May reflect discrepancies in national government policies. Tends to think national interests.

• The **European Parliament** is an entirely political body. Thinks European more than national (depending also on party politics). Thinks according to political lines.
The European Commission – a key institution

Two major roles

- The Commission *initiates* Community policy
- The Commission ensures *proper implementation* of Community policy
- The Guardian of the Treaties

- 17 specialised policy Directorates-General (DGs) comparable to national ministries
  - DG for Mobility and Transport – DG MOVE
  - DG Industry and Entrepreneurship
Politics do not decide on technical details; they stay at a level of Essential Requirements. They created EASA to draft Regulation Proposals (Implementing Rules) for the Commission (in addition to its Certification job).
In July 2002 the EU Council and Parliament have decided to apply common rules to aviation and to establish EASA.

Objectives: ensure a high and uniform level of protection of the European citizen and facilitate free movement of goods persons and services.

EASA is operational since September 2003.

EASA is located in Cologne.

Staff: more than 550 people.

Budget 157 millions EURO.

Website: www.easa.eu.int.
European Light Aviation Industry

- more than 5 000 employes*
- Annual production up to 1600 airplanes, 2000 propellers and 1000 rescue systems*
- **Approximate Annual Turnover 170 milions €**
- Most of the manufacturers are private and employ up to 25 people.
- main players are currently employing some 50 – 350 workers and have yearly turnovers of 3.5 milions € to 20 milions €.

* Estimation
Data based on personal research and only UL and LSA manufacturers are considered
**European Light Aviation Industry**

### 3-axis controlled Microlight & LSA numbers

<table>
<thead>
<tr>
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<th>2006</th>
<th>2008</th>
<th>2010</th>
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<tbody>
<tr>
<td>Number of manufacturers</td>
<td>103</td>
<td>127</td>
<td>133</td>
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<tr>
<td>Number of Types</td>
<td>141</td>
<td>180</td>
<td>183</td>
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<tr>
<td>Number of produced UL&amp;LSA</td>
<td>1 600</td>
<td>1 400*</td>
<td>1600*</td>
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</table>

* Estimation

Data based on Leisure Aviation Directory and personal research
European Light Aviation Industry

3-axis controlled Microlight & LSA numbers

2010 Number of Manufacturers per Country

2010 Number of Types per Country

Data based on Leisure Aviation Directory and personal research
European Light Aviation Industry

Number of European Microlight & LSA manufacturers by country & year

3-axis controlled

Data based on Leisure Aviation Directory and personal research
European Light Aviation Industry

Number of European Microlight & LSA types by country & year

Data based on Leisure Aviation Directory and personal research
LSA Statistics – US market

• LSA rules effective from April 2005

• As of 1st April 2011:
  • 88 airplanes certified as SLSA (factory build)
  • 49 of them are of European origin
  • Manufactured by 64 companies
  • 35 of them are European companies
  • 2031 planes registered
  • 1284 manufactured in Europe

Registered 3-axis control S-LSA as of 1-st April 2011 by country of origin

COUNTRY; No of Aircraft; % of Market

USA; 593; 29%
CZECH REPUBLIC; 528; 26%
GERMANY; 464; 23%
ITALY; 170; 9%
SLOVAKIA; 62; 3%
SOUTH AFRICA; 2; 0%
SPAIN; 1; 0%
UKRAINE/USA; 24; 1%
INDIA; 6; 0%
RUSSIA; 2; 0%
AUSTRALIA; 98; 5%
BRAZIL; 22; 1%
INDIA/USA; 26; 1%
LSA Statistics – US market
3-axis control SLSA registration by region per month

LSA Statistics – US market

524 (348 EU)

3-axis control SLSA registered in 2006
LSA Statistics – US market

584 (382 EU)
3-axis control SLSA registered in 2007

111% (110% EU)
Increase against 2006
LSA Statistics – US market

400 (271 EU)

3-axis control SLSA registered in 2008

- 31% (-29% EU)
Increase against 2007
LSA Statistics – US market

249 (148 EU)
3-axis control SLSA registered in 2009

- 38% (-45% EU)
Increase against 2008
LSA Statistics – US market

244 (143 EU)

3-axis control SLSA registered in 2010

- 2% (-3% EU)

Increase against 2009
LSA Statistics – US market

72 (17EU)

3-axis control SLSA registered in Q1 2011

4% (-45% EU)

Increase against Q1 2010

69 (31EU)
LSA Statistics – US market

3-axis control SLSA registrations per year 2006 - 2010

GAMA Statistics

GAMA Shipment Piston Aircraft versus SLSA 2005-2010

Source: GAMA and personal research
LSA Statistics – US market

Out of

64

3-axis control SLSA manufacturers

15 companies (9EU) have made

80% of Sales
LSA Statistics – US market

3-axis control S-LSA Aircraft and Manufacturers as of 1st April 2011

Most successful European LSA
Flight Design CTSW&CTLS, 327 sold to USA as of 1.4.2011
Most successful European LSA

PS-28 Cruiser, 173 sold to USA as of 1.4.2011
Most sucessfull European LSA

TECNAM, 141 sold to USA as of 1.4.2011
Most successful European LSA

Remos G-3 600, 119 sold to USA as of 1.4.2011
Most successful European LSA

Sportstar, 93 sold to USA as of 1.4.2011
Most sucessfull European LSA

StingSport, 73 sold to USA as of 1.4.2011
Need for European LSA

Why we are (were) able to be successful in the LSA in the USA and we are not able to fly these planes in Europe?

- Most EU LSA planes are based on UL designs
- Reasonable UL regulation allowed manufactures to develop the planes
We need good European legislation

COMPLETE PACKAGE for European LSA

- Airworthiness based on ASTM F2245
- Licencing (simple medical)
- Operations (definition commercial)
- Maintenance

Success only if this will be ballanced
EASA proposed solution

EXPECTED ADVANTAGES FOR MANUFACTURERS

- EASA TC valid in all EU countries
- Reduced production cost
- Hopefully less bureaucracy
- Future growth
POSSIBLE RISKS

- EASA system is too complicated for small companies, it is not worth to build small aircraft even for big companies
- EASA fees and charges
- Need for quick solutions, the planes already exist!
- It is not clear if the whole system will work as a balanced package
Identified problems

- Complexity and difficulty of new EASA proposed rules for sports and recreational aviation
- Requirements of Part 21 for DOA and POA
- Practical cooperation with EASA
- EASA fees & charges
Identified problems

- EASA proposed CS-LSA and ELA process is only partial solution

- European LSA is not US LSA, it is more like light VLA.

The change of Basic Regulation 216/2008 is needed in any case!
Perspective of EU Light Aviation

- Unclear future
- World wide crisis
- Microlight market in Europe slowed
- LSA market in USA slowly recovering
- No simple EU LSA rules ahead
We need

1. Keep Annex II as long as possible in current wording, if possible extend it to include LSA
We need

2.

Solution of problem of (formal) limits of current microlight category – in reality often exceeded
We need

3. GLOBAL LSA SOLUTION
    COMPLETE PACKAGE for whole WORLD

- Airworthiness – define realistic payload
- Licencing (simple medical)
- Operations (definition commercial)
- Maintenance

Success only if this will be ballanced

We should really aim for
GLOBAL LSA solution!
Global LSA system – possible solution

- Establish and maintain a worldwide LSA definition – for example CS-LSA

- Allow use of common industry consensus standards (ASTM and possibly others) as a means of compliance for not only design but manufacturing, quality assurance, continuing airworthiness, maintenance, etc.
Global LSA system – possible solution

- Required initial conformance check by Qualified Entity to assure manufacturer complies with standards (this would be instead of type certificate and DOA/POA and more than U.S. declarative system).

- Required periodic "audit" of manufacturer by Qualified Entity or delegated person/group (this could be LAA, LAMA, etc.)
Global LSA system – possible solution

- Coordination between authorities worldwide on LSA consensus standards development and implementation.

- Coordination in gathering safety data and service data
What can European Commission and EASA do for us

- Realize that Sports and Recreational Aviation needs different treatment and set of rules compared with CAT

- Create specific rules for the Sports and Recreational Aviation

- Cooperate with FAA to create Global LSA system
What can EASA do for us

- Support our requests for change of EASA fees & charges
- Create Light Sport Directorate within EASA in order to address the needs of Sports and Recreational Aviation
- Invite representatives of Microlight & LSA industry to working groups dealing with Annex II or LSA
- Start BR010 as soon as possible!
Will LSA work in Europe?

It must work!

BUT:

If we will just sit and wait we will probably not get what we wanted!
WHAT SHALL WE DO?

Change our behaviour!
Move from resistance approach
to positive offensive approach
WHAT SHALL WE DO?

LOBBY!!

- on all levels starting with national politicians
- We need to reply to all relevant EASA NPA
- We need to explain to European Commission what we want – GLOBAL LSA
- This message must come from all organisations representing Sports and Recreation Aviation as well as from the manufacturers
Thank You for Your attention!

If You have questions, visit LAA ČR at Hall B1, Stand B1-405

fridrich@laacr.cz
I just hope that we will not end up as the pilot on the picture..

Thank You for Your attention!

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