Welcome to the GAMA Press Luncheon

PETE BUNCE, PRESIDENT & CEO
GAMA Activities in Europe

♦ Regulatory Work
  • EASA, EUROCONTROL, FAA Intl’ etc.

♦ Legislative Affairs
  • European Commission, European Parliament, etc.
State of the GA Industry

♦ Review of 2013 Global Deliveries
♦ Cultivating Future Environment for GA
  ■ European GA Safety Strategy
  ■ Global Process for Aeroplane Design Certification
2013 Shipments and Billings
Piston Aeroplane: Shipments

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>898</td>
</tr>
<tr>
<td>2012</td>
<td>908</td>
</tr>
<tr>
<td>2013</td>
<td>933</td>
</tr>
</tbody>
</table>

+2.8%
Piston Aeroplane: Market Distribution

2011
- North America: 57.7%
- Europe: 15.6%
- Asia-Pacific: 12.0%
- Middle East and Africa: 10.0%
- Latin America: 4.6%

2012
- North America: 50.4%
- Europe: 16.3%
- Asia-Pacific: 12.0%
- Middle East and Africa: 10.0%
- Latin America: 9.7%

2013
- North America: 52.8%
- Europe: 19.6%
- Asia-Pacific: 15.1%
- Middle East and Africa: 10.0%
- Latin America: 5.0%
Piston Aeroplane: Billings

* All Euro conversion based on 1 USD = 0.724 EUR (April 2014)
Piston Helicopter: Shipments

* Equivalent Reporting Companies

<table>
<thead>
<tr>
<th>Year</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>268</td>
</tr>
<tr>
<td>2012</td>
<td>328</td>
</tr>
<tr>
<td>2013</td>
<td>335</td>
</tr>
</tbody>
</table>

+2.1%
Piston Helicopter: Billings

- 2011: €72.8
- 2012: €98.5
- 2013: €98.7

+0.2%

* Equivalent Reporting Companies

* All Euro conversion based on 1 USD = 0.724 EUR (April 2014)
2013 Industry Review

Piston Aeroplanes: +2.8%
Turboprops: +10.4%
Business Jets: +0.9%
Piston Helicopters: +2.1%
Turbine Helicopters: +9.2%
The Start of Something New.
GA Roadmap

- New Approach
- EU-Wide Support
- Common Position
Licensing

♦ New, more accessible Instrument Rating

♦ Move towards competency-based approach

♦ En-Route Instrument Rating
Operations

♦ Single-Engine Commercial Operations
♦ 20-years in the making
♦ Proposed Rule due soon
### Single Engine Turbine Commercial IMC in Europe

<table>
<thead>
<tr>
<th>EUROPE</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population: 739 Million</td>
<td>Population: 314 Million</td>
</tr>
<tr>
<td>Land Area: 3.9 Million Sq. Miles</td>
<td>Land Area: 3.5 Million Sq. Miles</td>
</tr>
<tr>
<td>Economy: €12.9 Trillion</td>
<td>Economy: €11.5 Trillion</td>
</tr>
<tr>
<td>EASA Commercial (Exempted) Single Engine Turbine Fleet: <strong>12</strong></td>
<td>U.S. Commercial Single Engine Turbine Fleet: <strong>673</strong></td>
</tr>
</tbody>
</table>
Route Planning – Example

Flight from VSB (Visby) to HEL (Helsinki-Vantaa) Airport
CS/Part-23
Reorganisation
Global Implementation & Worldwide Acceptance
Timelines of Change

ASTM GA Standards Process
- Jacksonville Face-to-Face
- Wichita Face-to-Face
- Toronto Face-to-Face
- Brussels Face-to-Face

EASA CS23 Process
- Begin RMT.0498
- Volume 1.0 Standards Published

FAA P23 Process
- Internal Rulemaking Begins
- Preliminary Cost Benefit
- Rulemaking Action Plan
- Leadership & Legal Review
- NPRM

General Aviation Manufacturers Association | AERO Friedrichshafen 2014
Global Harmonization

“Less But Better” Regulation

- Patrick Ky, Executive Director of EASA, January 2014

New EASA Boss Pledges “Less but Better” Regulation

by THIERRY DUBOIS

January 3, 2014, 12:35 AM

In his address to symposium attendees, EASA executive director Patrick Ky reiterated his agency’s commitment to “less but better” regulation in future. A paper written along these lines was to be presented at a management meeting last month. However, the rethink will have to strike a balance between calls for lower-level (more detailed) rules and demands for higher-level rules that leave room for interpretation, he said.
Changing the World

Global Regulatory Community Looking at This Approach for All Aircraft Certification

Rotorcraft, Initial Discussions: March 5th 2013

Transport Aircraft?
Energy flow in traffic pattern

-357 Wh
60 kts, 35 kW, 0.8m

60 kts, 60 kW, 0.8m

-350 Wh
70 kts, 1000 ft, 13.5 kW, 2.4m

60 kts, 35 kW, 0.8m

-292 Wh
60 kW, 16s

60 kW, 16s

90% electric efficiency
4 min pattern time
1.6 kWh per pattern
13% potential energy recuperation

+16 Wh
60 kts, -2.0 kW, 450 fpm

+41 Wh
50 kts, -4.2 kW, 600 fpm

+16 Wh
60 kts, -2.0 kW, 450 fpm

-600 Wh
60 kts, 60 kW, 0.8m
Questions?