

To:  
FAI Executive Board

Copy to:  
FAI General Aviation Commission  
FAI Aerobatics Commission  
FAI Rotorcraft Commission  
FAI Gliding Commission (towing)  
FAI Parachuting Commission (lifting)

Deres ref:

Vår ref: 399021v1

7 July 2010

### **Proposal for FAI initiatives on problems related to the future fuel situation for Air sports world-wide**

During the FAI Environmental Commission meeting in Frankfurt February 6<sup>th</sup> 2010, Norway brought forward the following proposal (see minutes of meeting, section 4.2):

- EnvC should make FAI and relevant air sport commissions aware of an aircraft fuel situation which in several countries already has a severe impact on air sports, i.e. the availability, use, and environmental problem of Avgas 100 LL fuel.
- EnvC should urge FAI to take on a central role in providing future fuel-solutions for air-sports world-wide, in close cooperation with other relevant stakeholders in this field.
- EnvC should urge FAI to establish an “official set of data” to verify emission and means of emission reduction from relevant fuel and engine types.

The FAI EnvC gave its support to the above proposal.

Due to the tragic loss of FAI EnvC President Michael Goth, this issue has not being brought forward as anticipated. As the proposer, Norway feels responsible for addressing the issue to the FAI Executive Board and relevant FAI air sport commissions.

**Background:**

- Norway is addressing this matter primarily because the most commonly utilised fuel type for smaller aircraft, the Avgas 100 LL, in addition to the CO<sub>2</sub> emission, also contains significant amounts of poisonous lead, which is a detrimental pollution agent to the natural environment. As an example our estimates show that the rather modest yearly consumption of approximately 2 million litres of Avgas 100 LL in Norway results in a yearly emission of 1 metric ton of lead into the environment, in a state that is easily absorbed by the various organisms in the nature.
- Further the availability of Avgas 100 LL seems to be increasingly restricted, especially at smaller airfields in remote areas. This is mainly due to the fact that sales volumes are going down all the time, as the commercial operators are steadily changing to aircraft equipment burning Jet A-1, and modern light aircraft are changing to Mogas.
- Due to reduced sales volumes and availabilities, the cost of distribution tend to move upwards, as are also the fees and taxes. A scary, but likely, scenario will be the introduction of a potential "penalty-tax" due to the lead emission.
- To our knowledge, there is only one major producer of Avgas 100 LL in Europe, making the supply chain extremely vulnerable.
- The USA has decided to ban Avgas 100 LL from 2012 onward, and several projects are initiated for potential replacement. However, the availability and cost for potential replacement products outside the USA is a potential threat to air sports world-wide.
- A presentation given by Mr. Michael Kraft, Senior VP and General Manager of Lycoming Engines, during Aero 2010 in Friedrichshafen, fully underlines the extreme seriousness and urgency in this matter.

**Why FAI-actions?**

- The environmental pollution issues related to lead emissions from Avgas 100 LL will potentially be an economic and political environmental burden to air sports in several parts of the world.
- The availability of Avgas 100 LL will shortly be a detrimental threat to air sports, especially in remote areas.
- The environmental challenges as well as the lack of availability of the Avgas 100LL will probably be a major challenge world-wide.
- Avgas 100 LL is utilised within the execution of several air-sports activities within the FAI-family: General Aviation, Aerobatics, Gliding (towing), Helicopters, Parachute (lifting).

**Potential consequences:**

- With reference to environmental arguments, the various authorities may, on short notice, forbid or impose a penalty tax on Avgas 100 LL, making it extremely costly or un-available.

- The oil companies may suspend production and/or distribution of Avgas 100 LL due to declining sales volumes and reduced profits
- If this happens, lots of air sports activities will be grounded, unless alternative fuel solutions have been provided in due time.

### **What to be done by FAI?**

Although this problem on future fuel availability is addressed via FAI EnvC due to its rather delicate environmental aspects, the problem comprises so many complex aspects related to technical, operational, economical and political issues that we find it necessary to leave further initiative to the FAI Executive Board.

In our opinion the FAI EB should, without delay:

- Engage relevant professional expertise (person/company) to analyse and evaluate all the aspects of the present and future fuel situation for air sports, especially related to Avgas 100 LL.
- Said professional expertise should be given the mandate, on behalf of FAI, to contact all relevant parties such as government authorities, fuel suppliers and engine manufacturers to collect relevant information and discuss future solutions to the future fuel challenges for air sports.
- As a result from this work FAI should, as soon as possible, provide relevant advices to the air-sports societies about future steps related to aircraft and engines.
- FAI should also, throughout all available channels, urge government bodies as well as fuel and engine manufacturers to come up with solutions that are suitable for air sport activities.

Sincerely,

Norges Luftsportforbund



Otto Lagarhus  
President



Tore Båslund  
Secretary General