

Wichtige und interessante Informationen aus dem CIA Newsletter Herbst 2005:

## **Aluminium Propane Tanks**

**Reuse of the aluminium gas tanks of the manufacturer Worthington for the operation of hot-air balloons**  
(Document received on November 8, 2005 from DFSV CIA delegate Uwe Schneider)

During a discussion about the gas tanks of hot-air balloons and their road transport held at the beginning of 2004, the German Ministry of Transport explained to the German Free Balloon Sports Association (DFSV) that the aluminium gas tanks were not covered by any exemption provision with regard to road transport. With the transfer of the law on pressure tanks to European regulations, national special provisions which have been valid so far could not be applied anymore either.

To eliminate this legally questionable condition, the Technical Control Association was commissioned to carry out a design check of the aluminium gas tanks according to the regulation 99/36/EC. The standard DIN/EN 12 862 : 2000 was taken as basis.

With the certificate 01 202 322/W-040129-T, the Technical Control Association has determined with Europe-wide validity that the gas tanks correspond to the required European directive, and each single item can be marked with the Pi-sign by each recognized European testing station during the next recurring examination. A copy of the certificate has to be presented in this connection.

The approval of the gas tanks in the aviation is not affected by this.

The gas tanks correspond to the European regulations then, and may be transported without restrictions on roads, provided that the ADR regulations are observed during the transport. This is not valid for all gas tanks made of chrome nickel steel which were manufactured prior to 1 July 2004. All gas tanks delivered after 1 July 2004 correspond to the regulation 99/36/EC. Special provisions apply to the use of gas tanks made of chrome nickel steel or titanium which were delivered prior to 1 July 2004. The gas tank manufacturers have to be asked about such special provisions.

The DFSV has incurred costs to the amount of approximately 10,000 Euro for these examinations of the aluminium gas tanks.

## **News From Europe Air Sports** **By Hans Åkerstedt**

### **Mode S transponders**

This is a refined version of the old Mode A/C transponders which dates back from old WWII technology. The Mode S system is more reliable, gives more information and can handle more aircraft at the same time. Actually the old type transponders will saturate the system when more than about 100 are transmitting. Needless to say, the units are also more expensive.

Mode S will initially be deployed in the airspace of **Belgium, France, Germany, Luxembourg, the Netherlands, Switzerland** and the **United Kingdom**. It is expected that other European States will upgrade to Mode S at a later stage.

All aircraft flying VFR in designated airspace are required to carry and operate Mode S Elementary Surveillance airborne equipment by 31 March 2005 with Transition Period for the completion of retrofits by 31 March 2008, subject to individual State agreements.

At the following website you will find links to AICs for the countries mentioned above describing the rules in force in the respective areas. Look under "Documentation and AIC".

[http://www.eurocontrol.int/mode\\_s/](http://www.eurocontrol.int/mode_s/)

In Germany Mode S is compulsory for new aircraft from 2005-03-31 and from 2008-03-31 also for old aircraft for VFR flights as follows:

- in airspace classes C, D and TMZ (Transponder Mandatory Zones)
- with powered aircraft above 5000ft MSL or 3500ft GND whichever is higher
- All VFR flights at night in controlled airspace

For IFR flights it will be compulsory for all aircraft from 2007-03-31. For new aircraft it has been compulsory for IFR flights since 2004.

In principle the rules are similar in all above countries but in the UK they are discussing even more strict regulations.

Here is a link to German LBA with a good summary in English about Mode-S  
<http://www.lba.de/englisch/technical/avionik/modes.htm>

EAS has tried and is still trying to limit the damage.

EAS policy is that transponders shall not be compulsory for non-powered aircraft.

EAS can accept it for flights above certain altitudes and to get access to TMAs and class C and D airspace.

A further problem is the establishment of new TMAs at formerly low use airports.

In the UK, Coventry and RAF Finningley, Yorkshire are such examples and there are many more in Germany and other countries thanks to the low-cost airlines. We have to make sure that they do not take more airspace than necessary. There are 700 000 PPL holders in Europe but only 7000 airline pilots.

There are some Mode-S equipment available but it is a matter of taste if they are affordable. In many European countries all costs for ballooning have escalated. Insurance up 2-300%, annual CofA renewal up 400%, license renewal up 300%, all in the last 2 years is not unusual. Those who are still flying may be those who are financially independent.

#### **Available Mode S transponders**

There are basically two types of equipment. The main difference is signal output and therefore a big difference in battery requirement.

Normally the required signal power is about 150W but for LAST (Light Aviation SSR Transponder) the requirement is 70 W. They are approved for up to 15 000 ft and max 175 kts true airspeed and seems to be the best option for balloons and gliders.

#### **Available LAST units.**

##### **Filser TRT-600 LAST**

Price: 2200 EUR. Additionally EUR 660 for carrying case with battery and antenna.

[http://www.filser.de/index/?dat=e\\_ger\\_trt600](http://www.filser.de/index/?dat=e_ger_trt600)

The Filser TRT-600 is the only approved LAST so far.

There is also the **Filser TRH 100 LAST**. This is a handheld unit for EUR 1950,

##### **Garrecht VT01**

Price: About 2100 EUR without carrying case, battery and antenna.

This is a two part unit with a transmitter part and a control panel.

<http://www.volkslogger.de/e/english/index.html>

#### **Standard units**

**Becker BXP 6401-2-(01)** is a normal Mode S transponder with 150W output.

Cost: 2300 EUR. Add antenna, rechargeable battery, charger, altitude encoder ....

[http://www.becker-avionics.com/product/files/bxp\\_6401\\_2\\_01.pdf](http://www.becker-avionics.com/product/files/bxp_6401_2_01.pdf)

**Garmin GTX330** in an aluminium case with charger, battery, encoder and antenna can be yours for only 6728 EUR.

Garmin GTX330 for ballooning:

[http://www.friebe.aero/Transceivers\\_\\_Transponders/5,2,19,129,285,2865,0,2.html](http://www.friebe.aero/Transceivers__Transponders/5,2,19,129,285,2865,0,2.html)

#### **Driving license in the European Union**

The plan is to harmonize the many variations in regulations and format for driving licenses in the EU. One conflict area seems to be the **obligatory** exchange of the old driving licenses against common new ones. The advantage would be that the police in all countries can easier recognize a license but the cost and trouble for all citizens would be high. Another subject for different opinions is the issue of medical examinations for renewal of licenses above a certain age. There is a strong opposition in some countries where there is no such requirement at present.

After the first reading of the European Parliament at the end of February, meetings between the European Commission, the European Parliament and the Council have taken place in order to enable an early compromise and to speed up the procedure. Evidently the problem is that there is no agreement within the Council. In June,

the Council ( the 25 transport ministers) met in Luxembourg and one point on their agenda was the **Driving License Directive**.

The subject of **trailers** which EAS is following closely has also been discussed vividly. Here there seems to be a tendency that the Council could accept the European Parliament's position. But now the whole process is kind of open until the Council reaches a Common Position. It is not clear, yet, if this will be a priority of the British Presidency which began 1 July.

- A the Commission's proposal tightens the current regulations of class B by restricting the trailers' weight to 750 kg and not allowing any longer a vehicle-trailer combination of 3500 kg overall maximum weight. To tow heavier trailers you would need a new driving license B+E
- B the European Parliament's position after the first reading allows a vehicle-trailer combination of 3500 kg overall maximum weight (as currently allowed) and further more a maximum authorized mass of 4250 kg if the driver has taken part in a driver training
- C The Luxemburg's Presidency has apparently drafted the following compromise: a maximum authorized mass of 4250 kg with allowing a trailer of 750 kg. As soon as the trailer weighs more than 750 kg the driver has to do a driver training or an exam (choice of the member states)

EAS is supporting alternate B in cooperation with the trailer manufacturers and the European Gliding Union.  
2005-10-02 Hans Åkerstedt

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