

THIELERT AIRCRAFT ENGINES GMBH – 09350 LICHTENSTEIN

**Interstate Aviation Committee  
Aviation Register  
Attn.: Mr. Alexander Donchenko  
22/2/1, Bolshaya Ordynka St.  
Moscow, 119017, RUSSIA**

Lichtenstein, 22.06.2009

### **Usage of Russian TS-1 fuel on TAE 125-02 series engines**

Dear Mr. Donchenko,

We would like to inform you that TAE has approved the usage of Russian fuel grade TS-1 (Spec 10227-86). Attached you will find the major change approval of the European Aviation Safety Agency (EASA) and the corresponding extraction of the TAE Operation & Maintenance Manual OM-02-02.

Yours sincerely,

  
Dirk Hartung  
Office of Airworthiness  
Thielert Aircraft Engines GmbH  
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Attachments:

- Major Change Approval EASA.E.C.01857 (1 page)
- ALS of Operation & Maintenance Manual OM-02-02 (4 pages)



**European Aviation Safety Agency**

**MAJOR CHANGE APPROVAL**

**EASA.E.C.01857**

This Major Change Approval is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EC) No. 1702/2003 to

**Thielert Aircraft Engines GmbH**

**Platanenstrasse 14  
09350 Lichtenstein  
Germany**

and certifies that the change in the type design for the product listed below with the limitations and conditions specified meets the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified below:

**Original Product Type Certificate Number:** EASA.E.055  
**Type Certificate Holder:** Thielert Aircraft Engines  
**Model:** Thielert TAE 125-02

**Description of Design Change:**

Use of TS-1 Fuel

**Associated Technical Documentation:**

Chapter 5 Rev. 3 Issue 1 of OM-02-02

**Limitations and Conditions:**

This Approval shall remain valid unless otherwise revoked.

**For the European Aviation Safety Agency,**

**Date of issue: 17 June 2009**

  
**Klaus BOEWING**  
**Certification Manager**  
**Propulsion Section**

Major Change Approval – EASA.E.C.01857 – Thielert Aircraft Engines GmbH

## 5 Airworthiness Limitations

### AIRWORTHINESS LIMITATIONS APPROVAL SHEET

This Airworthiness Limitations Section is EASA approved and mandatory. It specifies required maintenance unless an alternative program has been EASA approved.

### 5.1 Mandatory Maintenance Actions

The following maintenance actions are mandatory due to airworthiness reasons. Any changes have to be approved by the local airworthiness authority.

#### 5.1.1 Every 100 operating hours

- Replace fuel filter  
(refer to the aircraft manufacturer's specifications)
- Replace gearbox oil filter  
(refer to Chapter 6, Annex 8, Page 23 of this Manual)
- Check the presetting of the proportional pressure reducing valve (refer to RM-02-02 Chapter 72-10.05)

#### 5.1.2 Every 300 operating hours

- Inspect gearbox (refer to Chapter 6, Annex 15, Page 50 of this Manual)
- Replace clutch (refer to RM-02-02, Chapter 72-10.02)
- Inspect fuel feed pump, except 05-7312-K007301  
(refer to Chapter 6, Annex 18, Page 59 of this Manual)
- Inspect high-pressure pump  
(refer to Chapter 6, Annex 11, Page 43 of this Manual)

◆ Note: Inspection of the high-pressure pump at every 300 operating hours is only applicable if TS-1 jet fuel is being used.

**5.1.3 Every 600 operating hours**

- Inspect alternator 14V  
(refer to Chapter 6, Annex 12, Page 44 of this Manual)
- Inspect alternator 28V  
(refer to Chapter 6, Annex 12, Page 44 of this Manual)
- Inspect high-pressure pump (refer to Chapter 6, Annex 11, Page 43 of this Manual)

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■ **CAUTION:** If TS-1 jet fuel is being used, the high-pressure pump **MUST** be inspected every 300 operating hours.

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- Inspect fuel feed pump 05-7312-K007301  
(refer to Chapter 6, Annex 18, Page 59 of this Manual)
- Replace rail pressure control valve  
(refer to RM-02-02, Chapter 73-10.07)

**5.1.4 Every 1200 operating hours**

- Replace v-ribbed belt  
(refer to RM-02-02, Chapter 72-20.01)

**5.1.5 Every 1200 operating hours or every 24 months, whichever occurs first**

- Exchange coolant  
(refer to aircraft manufacturer's specifications)

**5.1.6 Every 12 months**

- Replace excitation battery of the alternator  
(refer to Chapter 6, Annex 16, Page 51 of this Manual)

**5.1.7 Every 60 months**

- Replace all fuel, oil and cooling lines

## 5.2 Claimable Exceeds of Maintenance Actions

■ CAUTION: Exceedings must not be cumulated!

### 5.2.1 Maintenance Actions based on operating hours

Operating Hours Intervals	Claimable Exceeding of the Basic Interval
up to and including 100 operating hours	± 10 %
between 101 and 1000 operating hours	± 5 %
more than 1000 operating hours	± 50 operating hours

### 5.2.2 Maintenance Actions based on time

Time Intervals	Claimable Exceeding of the Basic Interval
up to and including 2 months	± 5 days
between 2 months and 1 year	±15 days
more than 1 year	± 30 days

**5.2.3****Examples**

## a) Limited intervals based on operating hours

- Maintenance action due on:  
300 operating hours (100 hours check)
- Maintenance action must be performed between:  
290 and 310 operating hours

The maintenance action is performed at the latest at 310 operating hours. Assume the basic interval for the next 100 hours check, i.e.:

400 operating hours (100 hours check) must be performed between 390 and 410 operating hours.

## b) Limited intervals based on time

- Maintenance action due on:  
01.Nov.2004 (12 months check)
- Maintenance action must be performed between:  
15.Oct.2004 and 15.Nov.2004

The maintenance action is performed at the latest at 15. Nov. 2004. Assume the basic interval for the next maintenance action with the same interval, i.e.:

01. Nov. 2005 (12 months check) must be performed between  
15. Oct. 2005 and 15. Nov. 2005.





Operation & Maintenance Manual  
CENTURION 2.0  
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