

*European Aviation Safety Agency*

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# Certification Specifications

for

# Standard Changes

and

# Standard Repairs

## CS-STAN

ACCEPTABLE METHODS, TECHNIQUES AND PRACTICES FOR CARRYING OUT AND IDENTIFYING  
STANDARD CHANGES AND STANDARD REPAIRS (SCs/SRs) AS PERMITTED IN PART-21.

Issue 1

8 July 2015<sup>1</sup>

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<sup>1</sup> For the date of entry into force of this Issue, please refer to Decision 2015/016/R in the [Official Publication](#) of the Agency.

## Standard Change CS-SC203a

### USE OF AVIATION GASOLINE (AVGAS) HJELMCO 91/96 UL AND 91/98 UL

#### 1. Purpose

Unleaded Avgas Hjelmc0 91/96 UL and 91/98 UL (meeting the requirements of MIL-G-5572 and ASTM D910 for grade 91/96 and 91/98 fuel (except of colour), as well as the requirements of ASTM D7547 and Def Stan 91-90) may be used if approved for the particular engine types, and the installation at aircraft level is already approved for operation with conventional Avgas or Motor Gasoline (Mogas).

Avgas Hjelmc0 91/96 UL and 91/98 UL may also be used in all engines and aircraft types approved for use with Mogas RON 95 (MON 85) or RON 98 (MON 88) in accordance with Standard EN 228.

Even if approved for the engine, the operation with Avgas 91/96 UL or 91/98 UL is a modification at aircraft level, and placards and manuals have to be amended. This could be done using this SC.

#### 2. Applicability/Eligibility

Aeroplanes other than complex motor-powered aircraft and powered sailplanes with spark-ignited piston engines using Avgas or Mogas.

#### 3. Acceptable methods, techniques and practices

Before releasing the use of unleaded Avgas Hjelmc0 91/96 UL and 91/98 UL with this SC, the following conditions are to be met:

- the engine installed on the aircraft is approved for use of unleaded Avgas 91/96 UL or 91/98 UL (or UL 91) and the aircraft is already approved for operation with conventional Avgas (according to ASTM D910, Def Stan 91-90, Mil-G-5572, GOST1012-72 or equivalent) or Mogas, or;
- the engine as well as the aircraft are approved for operation with Mogas RON 95 (MON 85) or RON 98 (MON 88) in accordance with standard EN 228;
- the installed engine has not been modified and meets the specifications of the original engine Type Certificate; and
- placards are installed/amended as needed to allow the use of the approved fuels.

#### **Warning 1:**

***Use of unleaded Avgas 91/96 UL or 91/98 UL in engines that have not been approved for their use may cause extensive damage to the engine or lead to in-flight failure due to the lower Motor Octane Number (MON) of the fuel, compared to Avgas 100LL.***

#### **Warning 2:**

***This SC is not intended for approving the use of automotive fuel.***

**4. Limitations**

None.

**5. Manuals**

Amend AFM with AFMS introducing the operation of unleaded Avgas Hjelmcø 91/96 UL and 91/98 UL (unless the use of Avgas UL91 is already approved).

**6. Release to service**

The Pilot-owner may release to service the aircraft after embodiment of this SC, subject to compliance with AMC M.A.801.