EASA	AIRWORTHINESS DIRECTIVE
	**AD No : 2005-0029** **Date : 07 December 2005**

No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holder's Name	**Type/Model designation(s)**
Société de Motorisations Aéronautiques (SMA)	**SR305-230 engine**

TCDS Number : DGAC-F M-23

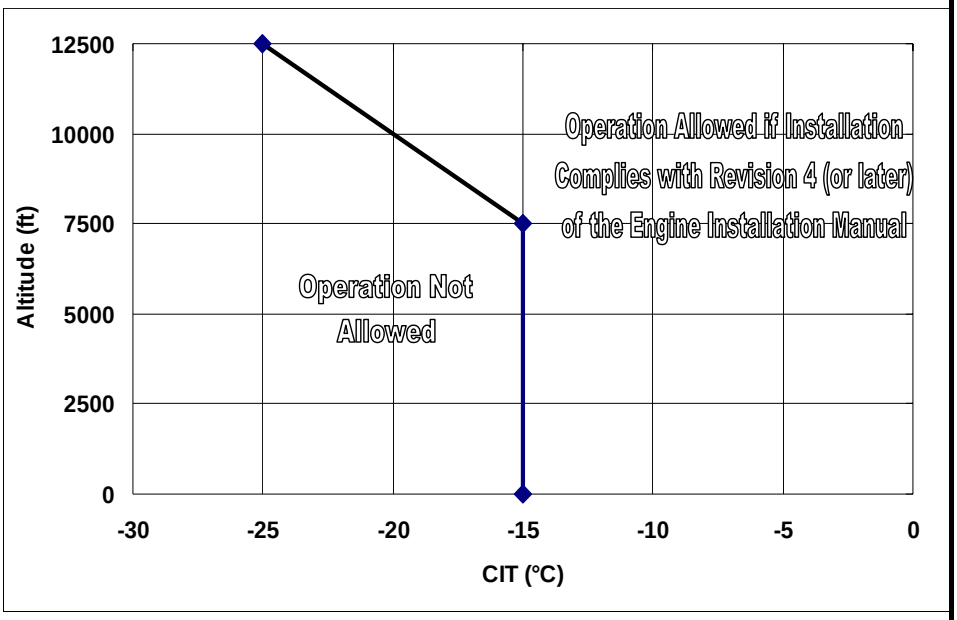
Foreign AD: Not Applicable

Supersedure: None

ATA 72	**Engine - Operation in Cold Ambient Conditions**
Manufacturer:	Société de Motorisations Aéronautiques (SMA)
Applicability:	SMA SR305-230 engine – All serial numbers – Installed on, but not limited to, Cessna 182 aeroplanes
Reason:	Flight tests in cold ambient conditions have demonstrated the need to restrict engine Operating Limitations to prevent engine stall that may cause forced landing.
Effective Date:	22 December 2005
Compliance:	To prevent engine stall in cold ambient conditions, before next flight, amend the Limitations Section of the applicable Aircraft Flight Manual to introduce the following limitations to the operation of the SMA SR305-230 engine: **a)** If the engine installation complies with revision 4 (or later revision) of the Engine Installation Manual, do not operate the engine with a Compressor Inlet Temperature (CIT) below minus 15°C (-15°C) between 0 and 7,500

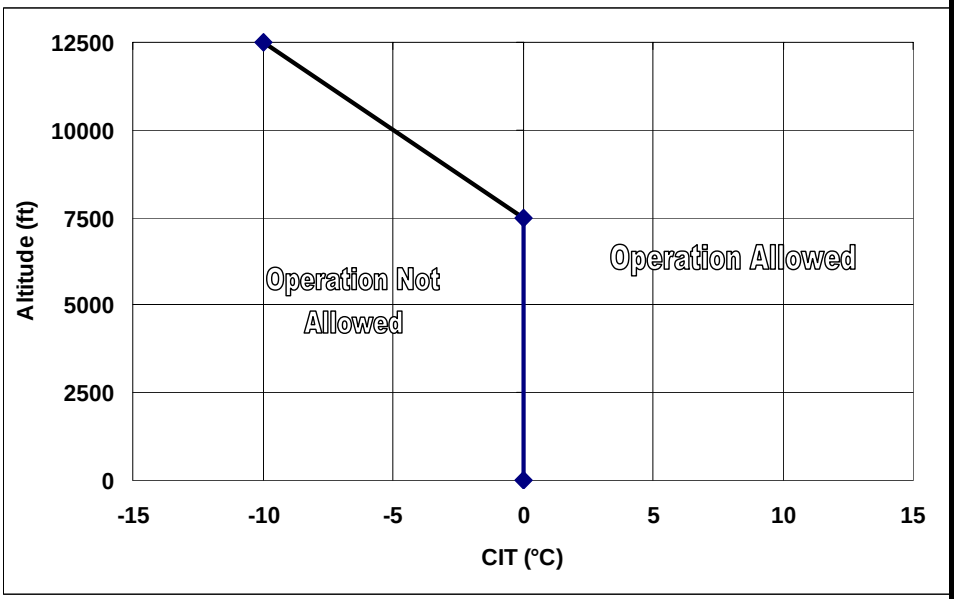
feet.

Between 7,500 and 12,500 feet, do not operate the engine with a CIT below minus 15°C (-15°C) and minus 25°C (-25°C) (linear variation with altitude):



b) If it cannot be determined whether the engine installation complies with revision 4 (or later revision) of the Engine Installation Manual, do not operate the engine with a CIT below 0°C between 0 and 7,500 feet.

Between 7,500 and 12,500 feet, do not operate the engine with a CIT below 0°C and minus 10°C (-10°C) (linear variation with altitude):



	If a CIT indication is not available, consider that CIT = OAT + 5°C. **c)** Unless the conduct of a safe flight dictates otherwise, maintain engine manifold pressure above 45 in. Hg during the flight. Refer to revision 4 (or later revision) of the Engine Operating Manual. Compliance with this Airworthiness Directive may be accomplished by inserting a copy of it into the Limitations Section of the Aircraft Flight Manual. The organisation responsible for the powerplant installation may submit an Alternative Method of Compliance (AMOC) with this Airworthiness Directive to EASA for approval.
Ref. Publications:	SMA SR305-230 Engine Installation Manual revision 4 dated 31 October 2005 SMA SR305-230 Engine Operating Manual revision 4 dated 31 October 2005
Remarks:	This AD was previously published for comment as PAD 05-015. The comments received are addressed in the Comment Response Document on PAD 05-015 published on the EASA web site. Enquiries regarding this AD should be addressed to Mr. Pascal Lair, Project Certification Manager - Propulsion, Certification Directorate, EASA - E-mail pascal.lair@easa.eu.int - fax +49 221 89990 4561 For questions concerning the technical contents of this AD requirement(s), contact SMA Customer Services, Mr Cyrille Deau, tel. +33.2.4867.5631, cyrille.deau@smasr.com