EASA EMERGENCY AIRWORTHINESS DIRECTIVE EAD No: 2007-0174-E Date: 18 June 2007 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. **Design Change description: Design Change Approval Holder's Name:** Carl Aero GmbH Installation of TCM IO-550-D engine and Hartzell PHC-L3YF-1RF/F7691 propeller STC Number: Germany LBA EMZ Nr. SA 1115 Foreign AD: This AD is prompted by, and related to, FAA AD 2007-09-01 Supersedure: Not applicable Electrical Power - Ground Power Receptacle - Disconnect ATA 24, 28 Fuel - Lines - Inspection/Replacement Manufacturer(s): Air Plains Services Corporation Applicability: - Reims Aviation Model F182P and F182Q aircraft, serial numbers F182-0001 through F182-0169, if modified in accordance with EMZ SA 1115, held by Carl Aero GmbH, that have the ground power receptacle mounted on the firewall (forward ground power receptacle); and - Cessna Model 182H, 182J, 182K, 182L, 182M, 182P and 182Q, all serial numbers, if modified in accordance with EMZ SA 1115, held by Carl Aero GmbH, that have the ground power receptacle mounted on the firewall (forward ground power receptacle). Reason: The FAA recently published Airworthiness Directive (AD) 2007-09-01 for certain Cessna Aircraft Company (Cessna) Model 182 series airplanes that

have been modified in accordance with Air Plains Services Corporation Supplemental Type Certificate (STC) SA00152WI. That AD requires the disconnect or removal of the electrical cable between the forward ground power relay and the starter relay, the installation of a placard, inspection of the fuel line between the auxiliary electric fuel pump and the engine-driven fuel pump for chafing, and replacement of the fuel line if chafing is found. The AD results from a report of an in-flight and post-landing engine compartment fire.

The (F)182 design includes two different approved location configurations for the ground power receptacle. These two locations are 1) at the forward location mounted on the LH side of the aircraft at the firewall; and 2) at the rear of the aircraft, aft of the baggage compartment, also on the LH side. Because of the routing of the electrical cable to the rear location, aircraft with this configuration of ground power receptacle are not affected. An EASA investigation showed that LBA Germany validated STC SA00152WI by awarding a German equivalent EMZ (Ergänzung zur Musterzulassung) Nr. SA 1115, to Carl Aero GmbH. In accordance with EU regulations, this is now considered to be an EASA STC. The modification contained in EMZ Nr. SA 1115 may not only be applied to Cessna 182 aircraft, but also to Reimsmanufactured F182Q and F182P aircraft, the TC of which is now held by the Cessna Aircraft Company. For the reasons stated above, this EASA Emergency AD is issued for all aircraft modified in accordance with EMZ Nr. SA 1115, to require the same actions as stated in FAA AD 2007-09-01, to detect and correct interference between the ground power electrical cable, the fuel strainer cable, and the fuel line between the auxiliary electric fuel pump and the engine-driven fuel pump. This condition could lead to a fire in the engine compartment. Please note that this is an interim action. Effective Date: 20 June 2007 Compliance: Required as indicated, unless previously accomplished in compliance with FAA AD 2007-09-01. Within 15 days after the effective date of this directive, or upon modification of the aircraft in accordance with EMZ SA 1115, held by Carl Aero GmbH, whichever occurs later: (1) Remove power to the ground power electrical cable by: (a) Disconnecting the electrical cable at the forward ground power relay and the starter relay, or (b) Removing the electrical cable between the forward ground power relay and the starter relay, in accordance with Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated March 5, 2007; (2) Before further flight after power to the ground power cable is removed per paragraph (1) of this directive, fabricate and install a placard as close as possible to the forward ground power receptacle that incorporates the following words (using at least 1/8-inch red letters on a white background and a red border): "GROUND POWER RECEPTACLE IS INOPERATIVE." (3) Reposition the fuel strainer cable in accordance with Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated March 5, 2007: (4) Visually inspect the fuel line from the auxiliary electric fuel pump to the engine-driven fuel pump for chafing in accordance with Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated March 5, 2007: (5) If chafing at or beyond the limits defined in the Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated March 5, 2007, is found in the inspection required by paragraph (4) of this directive [or during any subsequent inspection], before next flight, replace the fuel

	line between the auxiliary electric fuel pump and the engine-driven fuel pump with a new hose part number AE3663161G0190 (or FAA-approved equivalent) and remove the ground power electrical cable per paragraph (1)(b) of this directive; (6) Adjust the position of the fuel line fitting at the engine-driven fuel pump.
Ref. Publications:	Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated March 5, 2007.
Remarks :	 If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.
	The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.
	 Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.
	 For any question concerning the technical content of the requirements in this AD, please contact:
	CARL AERO GmbH, Telephone (49) 02192-932525; Fax (49) 02192-932526; Internet: <u>www.carl.aero</u> or
	Air Plains Services Corporation, P.O. Box 541, Wellington, Kansas 67152, United States of America; telephone: (1) 620-326-8904; Internet: http://www.airplains.com .