## **EASA** AIRWORTHINESS DIRECTIVE AD No.: 2014-0133 Date: 27 May 2014 Note: This Airworthiness Directive (AD) 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. This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption]. **Design Approval Holder's Name:** Type/Model designation(s): VULCANAIR S.p.A. P.68 aeroplanes TCDS Number: EASA.A.385 Foreign AD: Not applicable This AD supersedes EASA AD 2014-0020 dated 20 January 2014. Supersedure: Engine Indicating System – Multifunction Engine Gauge – **ATA 77** Inspection / Replacement Manufacturer(s): Vulcanair S.p.A., formerly Partenavia Costruzioni Aeronautiche S.p.A. Applicability: P.68 "Victor" and P.68B "Victor" aeroplanes, all serial numbers. Two multifunction engine gauges (one for each engine) are installed on each Reason: P.68B "Victor" aeroplane, indicating data related to engine oil temperature, oil pressure and cylinder head temperature. The approved aeroplane configuration allows installation of different part numbers (P/N) of engine gauges. manufactured by different suppliers and having some differences in terms of engine data presentation, provided that the engine data shown on the right hand (RH) engine gauge are displayed consistently with engine data shown on the left hand (LH) engine gauge. Incorrect installation of multifunction engine gauges, with engine data display of RH engine gauge different from LH engine gauge, was reported on a P.68B aeroplane. This condition, if not detected and corrected, might impair the readability of

engine data which, during flight phases involving increased crew workload, could be misleading to the pilot, possibly resulting in reduced control of the aeroplane.
To address this potential unsafe condition, Vulcanair issued Service Bulletin (SB) No. 236, which clarifies the suitable configurations of the multifunction engine gauges which can be installed, and includes instructions to inspect and correct the configuration status of the engine indicators and EASA issued AD 2014-0020 for P.68B aeroplanes to require inspection of the multifunction

engine gauges and, depending on findings, accomplishment of the applicable

	corrective actions.				
	Since that AD was issued, it was determined that the same unsafe condition might also be present on Model P.68 aeroplanes and, consequently, Vulcanair issued SB No. 236 Revision 1 (Rev. 1), expanding its applicability to that Model.				
	For the reasons described above, this AD retains the requirements of EASA AD 2014-0020, which is superseded, expands the Applicability to include Model P.68 aeroplanes.				
Effective Date:	10 June 2014				
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:				
	(1) Within 30 days after the effective date of this AD, inspect the RH and LH multifunction engine gauges in accordance with the instructions of Vulcanair SB No. 236 Rev. 1, to verify that the relevant P/Ns are included in Table 1 of Appendix 1 of this AD, and that the gauges have correct markings for red radials and green arcs, have the same presentation of the engine data, in terms of position, concavity and convexity of the arcs related to oil temperature, oil pressure and cylinder head temperature as shown in Figure 1. or Figure 2. of Appendix 1 of this AD, corresponding respectively to Figure 3 and Figure 4 of Vulcanair SB No. 236 Rev. 1.				
	(2) If, during the inspection as required by paragraph (1) of this AD, it is found that the two instruments have a different presentation of the engine data in terms of position, concavity and convexity of the arcs related to oil temperature, oil pressure and cylinder head temperature, before next flight, replace each incorrect instrument with a serviceable part in accordance with the instructions of Vulcanair SB No. 236 Rev. 1, in order to restore a correct configuration, as specified in Figure 1. or Figure 2. of Appendix 1 of this AD, as applicable to aeroplane configuration.				
	(3) If, during the inspection as required by paragraph (1) of this AD, it is found that the two instruments have the same presentation of the engine data in terms of position, concavity and convexity of the arcs related to oil temperature, oil pressure and cylinder head temperature, but one or both do not have correct markings as indicated in Table 2 of Appendix 1 of this AD, before next flight, install a temporary placard on the instrument panel in accordance with the instructions of Vulcanair SB No. 236 Rev. 1, displaying standard values for oil temperature, oil pressure and cylinder head temperature.				
	(4) Within 6 months after the effective date of this AD, unless already accomplished as required by paragraph (2) of this AD, replace each affected multifunction engine gauge with a serviceable part in accordance with the instructions of Vulcanair SB No. 236 Rev. 1. After restoring the correct configuration, the temporary placard, installed as required by paragraph (3) of this AD, can be removed from the aeroplane.				
	(5) Inspection, and, depending on findings, corrective actions, and modification of a P.68B aeroplane, before the effective date of this AD, in accordance with the instructions of Vulcanair SB No. 236 original issue are acceptable to comply with all the requirements of this AD for that aeroplane, provided that since that modification was accomplished, the engine indicator instrument was not changed on that aeroplane.				
	(6) From the effective date of this AD, installation on an aeroplane of an engine indicator instrument is allowed, provided the part is listed as an eligible part in Vulcanair SB No. 236 Rev. 1.				
Ref. Publications:	Vulcanair SB No. 236 original issue dated 05 November 2013, or Rev. 1 dated 22 May 2014.				

	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.		
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>		
	<ol> <li>Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.</li> </ol>		
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>		
	<ul> <li>4. For any question concerning the technical content of the requirements in this AD, please contact:</li> <li>Vulcanair S.p.A., via G. Pascoli, 7 - 80026 Casoria (NA) – Italy Tel +39 081 5918111; Fax +39 081 5918172, E-mail: <u>airworthiness@vulcanair.com</u>.</li> </ul>		

## Appendix 1

Table 1. Multifunction Engine	<ul> <li>Gauges approved for installatior</li> </ul>	n on P.68 "Victor	" and P.68B "Victor					
aeroplanes								

Original Equipment Manufacturer (OEM)	OEM P/N	
Weston	22-804-01-19A	
Aircraft Instrument Development (A.I.D.)	18-1000-11	
Sigmo Tok (Edo Airo)	1U378-003-20	
Sigma Tek (Edo Alre)	1U378-003-20A	

Table 2. Correct instrument markings on P.68 "Victor" and P.68B "Victor" aeroplanes

	Red radial	Green arc	Red radial
Oil temperature		75 ÷ 245 °F	245 °F
Oil pressure	25 psi	60 ÷ 90 psi	90 psi
Cylinder Head Temperature (CHT)		200 ÷ 475 °F	475 °F

Figure 1. Correct configuration with Weston P/N 22-804-01-19A or A.I.D. P/N 18-1000-11



Figure 2. Correct configuration with Sigma Tek (Edo Aire) P/N 1U378-003-20, or P/N 1U378-003-20A

