



SUPPLEMENTAL TYPE CERTIFICATE

In terms of the

SOUTH AFRICAN CIVIL AVIATION REGULATIONS, 2011, AS AMENDED

STC Number	ZAS1435A702		
Name of Holder	Challenge Air cc.		
Name of Previous STC Holder	N/A		
STC Issue Date	13 June 2014	Re-Issue Date	N/A
Physical Address of STC Holder	2 nd Floor, Unit 16 Woodlands Office Park, Woodmead, Gauteng, South Africa		
Postal Address of STC Holder	P.O. Box 155, Paulshof, 2056		
Applies to Product Type/ Model	Cessna 208B	Affected Type Certificate Number	A37CE Revision 20
Description of Type Design Change	Installation of maximum seating configuration to change from 11 to 14 seats including two pilots. In accordance with Challenge Air cc., Master Data List, Doc. No. MDL-CONFIG-S-208-004, Dated 29 May 2014 or later SACAA-approved revision.		

1. Supporting Technical Data

- 1.1 Installation of maximum seating configuration to change from 11 to 14 seats including two pilots in accordance with Challenge Air cc., Master Data List, Doc. No. MDL-CONFIG-S-208-004, Revision 004, Dated 29 May 2014 or later SACAA-approved Revision.
- 1.2 Applicable Instructions for Continued Airworthiness, in accordance with Document Number: OMI-CONFIG-S-208B-001, Revision 001, Dated 15 April 2014 or later SACAA-approved Revision.
- 1.3 Aircraft to be operated in accordance with Flight Manual Supplement, Document Number: FMS-CONFIG-S-208B-003, Revision 003, Dated 15 April 2014 or later SACAA-approved Revision

2. Limitations

- 2.1 This approval should not be extended to product of these model(s) on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any other previously approved modification, including changes in type design, will introduce no adverse effect upon the airworthiness of that product.
- 2.2 The STC is for the structural provision of the additional seat installation only.



3. Conditions

- 3.1 If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.
- 3.2 This certificate and the supporting technical data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the SACAA.
- 3.3 Aircraft complying with the approved STC shall be restricted to operations within the borders of South Africa only. Operations outside this area of operation will be subject to approval by the country of intended operation.

4. Certification Basis

The certification basis for parts changed or affected by the change since the reference date of application, February, 2014, is based on 14 CFR Part 23 as amended by amendment 23-57 except for certain rules as identified below:

Applicable Models List under FAA TCDS A37CE

- (1) FAR Part 36 effective December 1, 1969, as amended by Amendments 36-1 through 36-12.
- (2) FAR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by Amendments 23-1 through 23-28. (3) SFAR 27 effective February 1, 1974, as amended by Amendments 27-1 through 27-4.
- (4) Equivalent Level of Safety applicable to Model 208 and 208B not equipped with the Garmin G1000 Integrated Cockpit System:
 - (a) FAR 23.955(f)(2), Fuel System.
- (5) Special Conditions as follows:
 - (a) 23-ACE-3: Dynamic Evaluation, Engine Installation.
 - (b) 23-214-SC: HIRF, with guidance from AC20-158 (applicable to Models 208 and 208B not equipped with Garmin G1000).

Equivalent Safety Findings

- (1) Applicable to Model 208 and 208B equipped with the Garmin G1000 Integrated Cockpit System:
 - (a) 23.1305 Powerplant instruments – (c) (2), (c) (5), Amendment 52.
 - (b) 23.1549 Powerplant and auxiliary power unit instruments – (a) through (c), Amendment 45, additionally, with guidance from AC 23.1311-1B, Installation of Electronic Display (Section 9 – Powerplant Displays), Section 9.4 Direct-Reading Alphanumeric-Only Displays.
- (2) Applicable to Model 208 with the Garmin G1000 and 208B with or without Garmin G1000 and equipped with the optional TKS ice protection system:
 - (a) 23.207 Stall Warning – (c) Amendment 7.
- (3) Applicable to Model 208B equipped with P&WC PT6A-140 Engine:
 - (a) 23.145 Longitudinal Control. Amendment 17. Compliance with ice protection has been demonstrated in accordance with § 23.1419 when ice protection equipment is installed in accordance with the airplane equipment list and is operated per the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. Application for type certificate dated June 2, 1982. Type Certificate No. A37CE issued October 23, 1984.



Standards relating to Commuter Category aircraft

Special Note: Although this aircraft is certified in the normal category, it is intended to be operated in the commuter category due to operations in excess of 9 passengers.

- (1) Standards relating to multiengine aircraft: FAR 23.3(d), 23.45(h), 23.51(c), 23.53(c), 23.55, 23.57, 23.59, 23.61, 23.63(d), 23.77(c), 23.1323(e)(f), 23.1583(c)(4)(5), 23.1585(f), 23.1587(d).
- (2) Standards relating to aircraft weight: FAR 23.67(d), 23.73(c), 23.77(c).
- (3) Standards relating specifically to commuter category aircraft: FAR 23.161(b)(2), 23.161(e), 23.173(b)(2), 23.175(b)(2), 23.333(c)(1)(iii), 23.335(a)(1)(i), 23.335(b)(2)(i), 23.335(b)(4)(iii), 23.721, 23.775(h), 23.783(d)(e)(f), 23.785(c), 23.803(a), 23.807(d)(e)(3), 23.811(b), 23.813(a), 23.815(a), 23.851(b)(2), 23.853(d), 23.855(c), 23.903(d)(2), 23.979(b)(2), 23.1165(f), 23.1203(a)(1)(iv), 23.1303(g), 23.1305(b)(3)(iii), 23.1351(a)(2)(ii), 23.1351(b)(4), 23.1351(d)(2), 23.1523(a), 23.1583(a)(3), 23.1583(e)(5), G23.3(h).
- (4) Standards relating to loads: FAR 23.337(a)(1), 23.337 (b)(1), 23.343(c), 23.349(a)(2), 23.371(c), 23.397(b), 23.441(b), 23.443(b), 23.561, 23.574.
- (5) Additional standards relating to commuter category aircraft: FAR 23.3, 23.23, 23.51, 23.53, 23.55, 23.57, 23.59, 23.61, 23.63, 23.67, 23.73, 23.77, 23.143, 23.251, 23.255, 23.785.

NOTES:

General:

The abovementioned standards that are affected by this modification have been addressed in this document. Those that have not been addressed are not affected (no change).

- (1) Standards relating to multiengine aircraft:
The C208B is a single engine aircraft. In order to mitigate the risk of having one engine for operations with more than 9 passengers, a strict engine monitoring programme has been put in place as per OMI-CONFIG-S-208B-001 or later revision.
- (2) Standards relating to aircraft weight:
There is no change to the type design with this modification hence the weight and balance limits of the aircraft remain unchanged.
- (3) Standards relating specifically to commuter category aircraft:
This aircraft is certified in the normal category but under provisions of this STC is to be operated under commuter category.
- 4) Standards relating to loads:
There are no changes to the structure of the aircraft or to the weight and balance limits hence the loads encountered are unchanged.
- (5) Additional standards relating to commuter category aircraft:
These standards have been addressed. Ref. CCC-CONFIG-S-208B-000 or later revision

This Certificate and the supporting data, which is the basis for approval, shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Director of Civil Aviation.

2014 -06- 13

DATE OF ISSUE

Carel Raath
Manager: Defect Reporting
Certification Department
Civil Aviation Authority

NAME IN BLOCK LETTERS



For: DIRECTOR OF CIVIL AVIATION