Type Acceptance Report

TAR 95/11 – Revision 4

SAAB 340 Series

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Executive Summary

New Zealand Type Acceptance has been granted to the SAAB 340 Series based on validation of EASA Type Certificate number A.068. There are no special requirements for import.

Applicability is currently limited to the Models and/or serial numbers detailed in Section 2, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.) Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

1. Introduction

This report details the basis on which Type Acceptance Certificate No. 95/11 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically the report aims to:

(a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the model(s) in New Zealand; and

(b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and

(c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

The report notes the status of all models included under the State-of-Design type certificate which have been granted type acceptance in New Zealand, which are listed in Section 2. Appendix 1 details the type acceptance history under CAR Part 21B and which models were certificated prior to that under NZCAR Section B.9 and are now type accepted under the transitional arrangements of Part 21 Appendix A(c).

2. Aircraft Certification Details

(a) State-of-Design Type and Production Certificates:

Manufacturer: SAAB AIRCRAFT AB

TC Holder: SAAB AB (since 25 June 2018)

Type Certificate: A.068
Issued by: European Union Aviation Safety Agency

(b) Models Covered by the Part 21B Type Acceptance Certificate:

(i) **Model:** SF340A, 340B

MCTOW: 27,300 lb [12,380 kg] – SF340A pre-Mod.1531
28,000 lb [12,700 kg] – SF340A post-Mod.1531
28,500 lb [12,930 kg] – SF340A post-Mod.3139 and 340B
29,000 lb [13,155 kg] – 340B with Mod.2438
30,000 lb [13,605 kg] – 340B with Mod.3655

Max. No. of Seats: 37

Noise Standard: ICAO Annex 16, Vol.1 Chapter 4.

Engine: General Electric CT7-5A2 – SF340A
General Electric CT7-9B – 340B
Type Certificate: E8NE
Issued by: Federal Aviation Administration

Propeller: Dowty Aerospace R.354/4-123-F/13 and 20
Type Certificate: UK 103
Issued by: UK Civil Aviation Authority

Dowty Aerospace R.375/4-123-F/21
Type Certificate: UK 109
Issued by: UK Civil Aviation Authority

Dowty Aerospace R.389/4-123-F/25 and 26
Type Certificate: UK 112
Issued by: UK Civil Aviation Authority

Dowty Aerospace Models R.390/4-123-F/27
Type Certificate: UK 113
Issued by: UK Civil Aviation Authority

Hamilton Standard Model 14RF-19 – 340B
Type Certificate: P11NE
Issued by: Federal Aviation Administration

3. Application Details and Background Information

The SF340A was introduced into New Zealand by Air Nelson prior to 1995 when Part 21 was introduced, and was therefore deemed to have a type acceptance certificate under the transitional arrangements of Part 21 Appendix A(c). The first application for New Zealand type acceptance under Part 21B was for the Model 340B, from the manufacturer SAAB Aircraft AB by letter dated 26 September 1995 and CAA Form 24021/02. The first-of-type SAAB 340B in New Zealand was serial number 301, registered to Vincent Aviation as ZK-VAA. The SAAB 340 Series is a twin-turboprop low-wing all-metal pressurised short-to-medium sector length Transport Category airliner typically configured for 34 passengers.

Type Acceptance Certificate Number 95/11 was granted on 29 April 1996 to the SAAB 340B based on validation of LFV Type Certificate number A 1/84. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

Revision One to this report was issued on 2 May 2003 to include type acceptance of the Hamilton Standard Model 14RF-19 propellers, under CAA Work Request 3/21B/4. (At the time Part 21B did not provide for separate type acceptance of engines or propellers.) This report was raised to Revision 2 to update the format, include the new State-of-Design type certificate details and add details of compliance with the current New Zealand Rules. This was at the request of PASO in support of entry into service of 340B serial number 408 registered as A3-PUA for Real Tonga. This was carried out under Work Request 16/PIA/7. Revision 3 was issued to update to the latest format and include all models type accepted under the foreign type certificate. Revision 4 was issued to note the incorporation of the CASA Code 003 Flight Manual into the standard EASA Code 000 Airplane Flight Manual.

The SAAB-Fairchild SF340A was an all-new commuter aircraft design originally developed as a joint project by SAAB and Fairchild and subsequently certificated and produced solely by SAAB Aircraft. The Model 340B succeeded the Model SF340A in production after aircraft serial number 159 (including three test examples) and is basically an improved version with minimal airframe changes. The main differences from the SAAB SF340A are:

- replacement of the 1735 shp CT7-5A2 engine with the 1870 shp CT7-9B.
- increase in MCTOW from a maximum of 28,000 lb. to a maximum of 30,000 lb.
- installation of an Automatic Take-off Thrust Control System (SAAB designation APR).
- enlarged horizontal stabiliser to permit an extended aft c.g. range.

There is no procedure to upgrade the SF340A partially or fully to 340B standard. A further development of the latter marketed as the 340B Plus incorporates the following changes under Modification 2571:

- Extended Wing Tips (2 ft) – to improve short field and “hot and high” performance.
- Active Noise Control – to achieve a 6dB reduction in cabin noise.
- Improved Propeller Brake – for reliability reasons.
- Ongoing optimisation of the Maintenance Plan based on service experience.

4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents, or were already held by the CAA:

(1) State-of-Design Type certificate:

EASA Type Certificate Data Sheet no. A.068 Issue 24 dated 05 October 2021
– Model SAAB SF340A approved 30 May 1984
– Model SAAB 340B approved 3 July 1989

Supersedes:
LFV Type Certificate No. A 1/84 at Revision 3 dated Dec 3, 1992
LFV TCDS No. A 1/84 at Issue 13 dated December 3, 1992.

(2) Airworthiness design requirements:

(i) Airworthiness Design Standards:
The certification basis of the SAAB SF340A is JAR 25 Change 7, plus two specified paragraphs at Change 8. Ten Special Conditions were applied, and seven equivalent level of safety findings were made, in accordance with the LFV Issue Book. For the SAAB 340B some JAR 25 paragraphs were updated to Change 10 and 12, as detailed in the TCDS, and four more Special Conditions were applied.

This is an acceptable certification basis in accordance with NZCAR Part 21B Paragraph §21.41 and Advisory Circular 21-1, as JAR 25 is equivalent to FAR 25, which is the basic standard for Transport Category Airplanes called up under Part 21 Appendix C. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

(ii) Special Conditions:
SF340A and 340B:
Item B-2: Stall Identification and Recovery Characteristics – This specifies stick-pusher requirements.

Item B-4: Performance in Icing Conditions – Covers the requirement to include information on degradation of performance due to residual ice on propeller driven airplanes.

Item B-5: All engines operating, Steep Approach Landing.

Item B-7: Gravel runway operation.

Item B-8: Take-off and landing in tailwind greater than 10 knots.

Item B-9: High altitude take-off.

Item C-3: Propeller blade impact NPA 25C-11 applies in lieu of JAR 25.571(e)(2) – Also the subject of FAA Exemption No.3469, which details interpretation.

Item C-5: Composite Structure – Verification of structural integrity and durability.

Item F-1: Flight Guidance System – On approval of EFIS and digital microprocessors.

Item F-2: Cat II Requirements – Covers operational approval not covered by basic rules.

CRI F-04: Rechargeable Lithium Battery Installations

CRI F-06: Non-rechargeable Lithium Battery Installations

CRI H-01: Enhanced Airworthiness Programme for Systems – ICA on EWIS.

340B:

Item C-6: Structural design loads for Wing Tip Extension.

Item D-7: Lightning Protection, Indirect effects.

Item E-5: Automatic Reserve Power.

Item F-3: Effect of external radiation upon aircraft systems.

(iii) Equivalent Level of Safety Findings:

SF340A:

Item E-1: JAR 25.903 Engine Certification – General Electric CT7-5A does not meet the requirements of JAR-E. FAA certification and UK CAA validation accepted as equivalent.

SF340A and 340B:

Item A-2: JAR/FAR 25.1551 Oil Quantity Indicator – Engine and gearbox sightglasses have markings for FULL and ADD but no quantity indicator. Markings were accepted as sufficient in concert with full details provided in Maintenance Manual.

Item A-3: JAR/FAR 25.979(b)(1) Refuelling System, Auto Shut-off Testing – Absence of means of testing the auto shut-off feature is compensated for in the design and refuelling procedure used. S/O valve operation is checked before filling, float switches have triple redundancy, overfill warning is provided and vent lines are sized to prevent overpressurisation.

Item A-5: JAR/FAR 25.1333(c) Static System Integrity – Second static system is used for pressure reference for the cabin pressurisation. Provisions must be made to ensure continued normal use in the event of any malfunction of the press. system. This is assured by closing a shut-off valve, primarily intended for separation in case of a leakage caused by a bird-strike.

Item A-6: JAR/FAR 25.1333(b) Stand-by Compass System – Stand-by compass is not gyro stabilised. FAR accepted JAR position that sufficient information must be provided regarding heading to assure control of the aeroplane. Shown by flight test.

Item A-7: JAR/FAR 25.1351(b)(6) AC System Indication – AC heating system does not contain voltage or current instruments, to ensure safe operation of the system. It was accepted the monitoring/caution system gave equivalent assurance.

Item A-11: JAR/FAR 25.811(e)(3) Exit Handle Illumination – Type III exit opening handles required to be self-illuminated to a minimum initial brightness level. SAAB proposed illumination by light from the emergency lighting system. This would meet visibility requirements, would not degrade with time or be shaded by occupant crowding. Handles must be red painted.

CRI D-9: JAR 25.853(a) and JAR 25.855(d) Improved Flammability Standards for Thermal Acoustic Insulation Materials used in Large Airplanes.

340B:

Item B-6: JAR 25.103(a)(b)(c); 25.107(b)(c); 25.119(b); 25.121(c)(d); 25.125(a); 25.145(a)(b)(c)(d); 25.147; 25.149; 25.161; 25.175; 25.177; 25.201(a)(b); 25.207(c)(d); 25.233(a); 25.237(a) Stall and stall warning speeds and manoeuvre capability.

(iv) Airworthiness Limitations:

Document 72LKS036057 – Airworthiness Limitations Manual

(3) Aircraft Noise and Engine Emission Standards:

(i) Environmental Standard:

The SAAB 340 Series has been certificated for noise under ICAO Annex 16, Volume I, Chapter 4.

(ii) Compliance Listing:
EASA Type-Certificate Data Sheet for Noise – Issue 8 dated 20 April 2020
(Supersedes LFV Noise Certificate 1/89 Revision 1.)

(4) Certification Compliance Listing:

SAAB SF340A List of Compliance Documents

Document Number 72SAS0652: SAAB 340 – Complete Airframe Fatigue Test – Inspection Report
SAAB-Fairchild SF340 Issue Book
SAAB-Fairchild SF340 Certification Test Report

SAAB 340 List of Compliance Documents – Doc. No.72CCS2750 dated 29-05-95

Hamilton Standard Failure Analysis Report for the 14RF-19 Propeller System on the SAAB 340 B Aircraft – Document HMRR 92036 Rev. A

Hamilton Standard Propeller Vibratory Stress Survey 14RF-19/RF-31 Propellers for the SAAB SF340A/340B Aircraft – Document HSER 13142

(5) Flight Manual: EASA-Approved Flight Manual SAAB SF340A
– Document AFM 340 A 000 – CAA Accepted as AIR 2401

EASA-Approved Flight Manual SAAB 340B (applicable without Modification 2571) – Document AFM 340 B 000
CAA Accepted as AIR 2291

EASA-Approved Flight Manual SAAB 340B (applicable with Modification 2571) – Document AFM 340 B 010
CAA Accepted as AIR 2549

FLIGHT MANUAL NOTES:
The Australian Version (code -003) was originally adopted for the 340 Series in New Zealand because it is metric. (-000 or -010 is the Standard Version, -001 is the USA Version, and -005 is the Canadian Version.) Other differences from the -000 EASA Standard Version include:

Calculation of accelerate-stop distance
The order of actions during an accelerate-stop is slightly different. In the Code 003 AFM braking is applied before selection of Ground Idle whereas in the Code 000 AFM the order is the opposite. The difference in resulting accelerate-stop distance is very small.

Take-off & landing performance on precipitation covered runways (JAA standard)
The Code 003 AFM does not contain performance for precipitation covered runways as required by JAR-OPS (which takes into account an engine failure during takeoff).

Landing performance
*The operational factor for landing performance on wet runway in Code 003 AFM is 1/0.6 (1.67) whereas in the Code 000 AFM it is 1/0.7*1.15 (1.65).*
The landing performance in the Code 003 AFM for operation according to CAANZ includes the effect of temperature (not included in the Code 000 AFM).
CAANZ requires consideration of runway slope and the CASA regulations require considerations of runway slope above 1%. The landing performance in the Code 003 AFM therefore includes the effect of runway slope whereas the Code 000 AFM does not.

Some minor differences
There are a few minor differences such as statement of "maximum number of occupants" (CASA requirement only) and note regarding "use of wide cut fuel" in the Code 003 AFM.
Supplements unique to the Code 003 AFM
There are some supplements which are only included in the Code 003 AFM such as the "Operation on gravel runways"

FLIGHT MANUAL CHANGE:
In 2022 CAANZ and CASA agreed to the discontinuation of the code -003 AFM and reversion to the standard EASA code -000 AFM. SAAB advised it was not feasible to transfer the metric performance data as a Supplement to the new manual, because this was most of the original manual. However the data was essentially the same and all performance and procedures developed by operators which are based on the Code -003 AFM will still be valid.

Existing code 003 supplements were transferred to the code 000 AFM and other unique code 003 information was included in new Australian or NZ supplements (for the SF340A and 340B), as follows:

1. Supplement 3/12 Operation on Unpaved Runways (Australian CASA Operation).
2. Supplement 14 Takeoff on Precipitation Covered Runways – NZ Operation.
3. Supplement 42 Landing with Tailwind above 10 Knots (CASA Operation).
4. Supplement 46/70 Australian CASA and New Zealand CAA NZ Operation.

To save having to re-issue airworthiness certificates the same AIR number was used for the -000 AFM and the details just changed over in the Flight Manual Register.

The -003 Flight Manuals were formally terminated at Revision 41 (340A003) and Revision 34 (340B003), and the code -003 data was incorporated into the -000 Flight Manuals at Revision 70 (340A000) and Revision 47 (340B000). [See SAAB 340 Operations Newsletter No.23 dated April 21, 2023.]

(6) Operating Data for Aircraft, Engine and Propeller:

(i) Maintenance Manual:
Document 72LKS3076 – SAAB 340 Series Aircraft Maintenance Manual
Document 72LKS3078 – SAAB 340 Series Wiring Manual
Document 72LKS3079 – SAAB 340 Series Structural Repair Manual
Document 72LKS3081 – SAAB 340 Series Maintenance Review Board Report
Document 72DSS0602 – SAAB 340 Certification Maintenance based on SSA

(ii) Current service Information:
SAAB 340 Series Service Bulletins

(iii) Illustrated Parts Catalogue:
Document 72LKS3077 – SAAB 340 Series Illustrated Parts Catalogue

(7) Agreement from manufacturer to supply updates of data in (5), and (6):

Letter from SAAB Director Airworthiness dated 26 September 1995.
Publications are now available on the website https://support.saabgroup.com

(8) Other information:

Document 340LKS042108 – SAAB SF340A Aircraft Operations Manual

Document 340LKS042109 – SAAB 340B Aircraft Operations Manual

SAAB SF340 Type Specification – Airliner Version – Document 72PJS0006

SAAB 340B Type Specification – Document 72PJS0329 at Rev.C1 Feb 95

SAAB 340B Configuration Definition 21 June 1989

Document 72LKS3080 – Weight and Balance Manual

Document 72LKS3091 – Master Minimum Equipment List

Document 72CCS1090 Rev.AY dated 6 Dec 1995 – SAAB SF340A and 340B. Additional Requirements for various countries
Appendix 20 to 72CCS1090 – Rev.A dated 6 Dec 1995 – New Zealand Additional Requirements SAAB SF340A and 340B

5. Additional New Zealand Requirements

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 has been assessed as they are a prerequisite for the grant of an airworthiness certificate.

Civil Aviation Rules Part 26

Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	JAR §25.811(a)
B.2	Crew Protection Requirements – CAM 8 Appdx. B # .35	Not Applicable – Agricultural Aircraft only

Appendix C – Air Transport Aeroplanes – More than 9 Pax

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
C.1	Doors and Exits	JAR §25.809(b) and JAR §25.809(d)
C.2.1	Additional Emergency Exits – per FAR 23.807(b) @ 10.5.93	Meets JAR 25 Change 11 exit certification requirements
C.2.2	Emergency Exit Evacuation Equipment – Descent means	JAR §25.809(f)
C.2.3	Emergency Exit Interior Marking – Size/self-illuminating	JAR §25.811(e) and JAR §25.812(b)
C.3.1	Landing Gear Aural Warning – Automatic Flap Linking	JAR §25.729(e) subparagraphs (2) through (4)

Appendix D – Air Transport Aeroplanes – More than 19 Pax

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
D.1.1	Exit Types – Shall be per FAR 25.807 @ 29.03.93	JAR §25.807(c)
D.1.2	Floor Level Exits – Definition	JAR §25.807(a)
D.2.1	Additional Emergency Exits – Must meet requirements	All exits comply with JAR 25 – There are no ventral exits
D.2.2	Emergency Exit Access – All Required Exits must have: Passageway unobstructed 500m wide between areas and leading to a Type I or II Exit; Crew assist space; Access to Type III or IV Exit is unobstructed Internal doors must be able to be latched open – placarded	JAR §25.813(a) JAR §25.813(b) JAR §25.813(c) – Main passenger exit is Type I, service door is Type II, emergency exits are Type III JAR §25.813(f) – No internal doors in standard config.
D.2.3	Emergency Exit Operating Handles – Markings/Lighting	JAR §25.811(e)
D.2.4	Emergency Exit Evacuation Equipment – Descent means	JAR §25.809(f)
D.2.5	Emergency Exit Escape Route – Must be slip resistant	Meets JAR 25 Change 11 exit certification requirements
D.2.6	Emergency Lightning (a) Switch Provisions; Uninterrupted Power; Last 10 min. (b) Descent Illumination – Automatic and Independent	 JAR §25.812(f) and JAR §25.812(i) JAR §25.812(h)
D.2.7	Emergency Interior Lighting – independent supply; min. Illumination; incl. Floor proximity escape path markings	JAR §25.812(c) JAR §25.812(e)
D.2.8	Emergency Exterior Lighting – in effect 30.04.72 or later	Meets JAR 25 Change 7 exit certification requirements
D.2.9	Emergency Exit Interior Marking – Clear; instructions Location signs above routes, by exits, on bulkheads Meet provisions in effect 30 April 1972, or later Minimum brightness 250 microlamberts	(a) JAR §25.811(b) (b) JAR §25.811(d) (c/d) Meets JAR 25 at Change 7 exit requirements (e) Meets JAR §25.811(e)(2)(ii)
D.2.10	Emergency Exit Exterior Markings – 2" contrasting band; opening instructions in red or bright chrome yellow;	JAR §25..811(f)(1) and (2) JAR §25..811(f)(3)
D.3	Lavatory Fire Protection – Placards; Exterior ashtray; Waste Bin – Sealed door; built-in fire extinguisher; smoke detector system with external warning	JAR §25.853(e) and (f) Lavatory smoke detector and fire extinguisher in trash bin fitted to meet FAR Amendment 121-185 (from S/N 057) See 72CCS1090 Appendix 20.
D.4	Materials for Compartment Interiors – T/C after 1.01.58: (b) Manufactured 20/8/88 – 20/8/90 – Meet heat release requirements of FAR 25 at 20.08.86 increased to 100/100 Manufactured after 20/8/90 – Meet heat release rate and smoke tests of FAR Part 25 in effect 26.09.88 (Amdt 25-66) (c) Seat cushions (except flightdeck) must be fireblocked	SAAB 340 Series complies with FAR 25.853 Amendment 66, Improved Flammability Standards for Material used in the Interiors of A/C cabin, A/C S/N 201 and up. JAR §25.853(c) at Change 12 dated 10 May 1988
D.5	Cargo and Baggage Compartments – T/C after 1.01.58: (a) Each C or D compartment greater than 200 cu ft shall have liners of GFRS or meet FAR 25 in effect 29.03.93 (Amdt 25-78) (c) Liners shall be separate from the aircraft structure	SAAB 340 Series complies with FAR 25.855 Amendment 60, Fire Protection Requirements for Cargo Compartment, with Mod. 1819 and 2243 included. (See LFV TCDS) FAR §25.855(a-1) at Amendment 25-60

Compliance with the following additional NZ operating requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

Civil Aviation Rules Part 91

Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:		MEANS OF COMPLIANCE:	
91.505	Seating and Restraints – Safety belt/Shoulder Harness		JAR §25.785	
91.507	Pax Information Signs – Smoking, safety belts fastened		JAR §25.791	
91.509 Min. VFR	(1) ASI (2) Machmeter (3) Altimeter (4) Magnetic Compass (5) Fuel Contents (6) Engine RPM (7) Oil Pressure	JAR §25.1303(b)(1) JAR §25.1303(c)(2) JAR §25.1303(b)(2) JAR §25.1303(a)(3) JAR §25.1305(a)(2) JAR §25.1305(c)(3) JAR §25.1305(a)(4)	(8) Coolant Temp (9) Oil Temperature (10) Manifold Pressure (11) Cylinder Head Temp. (12) Flap Position (13) U/C Position (14) Ammeter/Voltmeter	N/A – Not air-cooled JAR §25.1305(a)(6) N/A – Turbine powered N/A – Turbine powered JAR §25.699 JAR §25.729(c) JAR §25.1351(b)(6)
91.511 Night	(1)Turn and Slip (2) Position Lights	JAR §25.1303(F)(4)(France) JAR §25.1385	(3) Anti-collision Lights (4) Instrument Lighting	JAR §25.1401 JAR §25.1381
91.513	VFR Communication Equipment		Dual VHF Transceivers fitted as standard – See 72PJS0329	
91.517 IFR	(1) Gyroscopic AH (2) Gyroscopic DI (3) Gyro Power Supply (4) Sensitive Altimeter	JAR §25.1303(b)(5) JAR §25.1303(b)(6) JAR §25.1331(a) JAR §25.1303(b)(2)	(5) OAT (6) Time in hr/min/sec (7) ASI/Heated Pitot (8) Rate of Climb/Descent	JAR §25.1303(a)(1) JAR §25.1303(a)(2) Fitted as Standard JAR §25.1303(b)(3)
91.519	IFR Communication and Navigation Equipment		Dual VOR and single ADF fitted as std – See 72PJS0329	
91.523	Emergency Equipment: (a) More Than 9 pax – First Aid Kits per Table 7 – Fire Extinguishers per Table 8 (b) More than 20 pax – Axe readily accessible to crew (c) More than 61 pax – Portable Megaphones per Table 9		 ***Operational Requirement – Compliance as applicable*** ***Operational Requirement – Compliance as applicable*** ***Operational Requirement – Compliance as applicable*** Not Applicable – Less than 61 passenger seat capacity	
91.529	ELT – TSO C126 406 MHz after 22/11/2007		Fitted as standard – See Type Specification 72PJS0329	
91.531	Oxygen Indicators – Volume/Pressure/Delivery		JAR §25.1439, §25.1441, 1443, 1445, 1447	
91.535	Oxygen for Pressurised Aircraft: (1) Flight Crew Member On-Demand Mask; (2) Pax mask, Portable oxygen equipment (3) Crew Member – Pax Oxygen Mask and Portable (4) Minimal Supplemental Oxygen Quantity (5) Specified Supplemental/Therapeutic Oxygen Quantity Above FL250 (1) Quick-Donning Crew On-Demand Mask (2) Supplemental O_2 Masks for all Pax/Crew and Toilets (3) 15 Minutes Therapeutic Supply Above FL300 (1) Total Outlets Exceed Pax Seats by 10% (2) Extra Units Uniformly Distributed throughout Aircraft (3) Automatically Presented if Cabin Altitude ≥ 14000 ft. (4) Manual Means of Deploying Pax Masks Available		Each crew member supplied with Scott quick-donning mask to TSCO C78, which when used with smoke goggles, meets TSCO C99 PBE fixed equipment standard One portable O_2 bottle is fitted at the Flight Attendant seats, plus one set of TSO C116 PBE in the cabin. Standard passenger oxygen system is a 681 cubic inch cylinder, with provision for a drop-out mask system serving each passenger. (Four plug-in valves and four masks are included as standard equipment.) Not Applicable – Maximum operating altitude is 25,000 ft.	
91.541	SSR Transponder and Altitude Reporting Equipment		***Operational Requirement – Compliance as applicable***	
91.543	Altitude Alerting Device – Turbojet or Turbofan		***Operational Requirement – Compliance as applicable***	
91.545	Assigned Altitude Indicator		***Operational Requirement – Compliance as applicable***	
A.15	ELT Installation Requirements		***To be determined on an individual aircraft basis***	

Civil Aviation Rules Part 121

Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:		MEANS OF COMPLIANCE:
121.355	Additional Instruments (Powerplant and propeller)		JAR Part 25 is equivalent to a Part 21 Appendix C standard
121.357	Additional Eqpt – Windscreen Wiper, Door, Key, Placard		JAR §25.1307(f) and JAR §25.772(a)
121.359	Night Flight - Landing Light, Light in each pax cabin		JAR §25.1383
121.361	IFR Operations	Speed, Alt, spare bulbs/fuses	Fitted as standard – See Type Specification 72PJS0329
121.363	Flights over water	Liferafts	***Operational Requirement – Compliance as applicable***
121.365	Emergency Equipment	Per §91.523 and EROPS kit	***Operational Requirement – Compliance as applicable***
121.367	PBE	TSO C99 cockpit equipment TSO C115 cabin equipment	***Operational Requirement – Compliance as applicable***
121.369	Pax Address, Intercom	Meets FAR § 121.318 and 319	SAAB 340 Series complies with FAR 25 Amendment 70, for an Independent Power Source for Public Address system.

121.371	Cockpit Voice Recorder Appendix B.5 requires TSO C84/C123	SAAB 340 Series complies with FAR 25 Amendment 65, with respect to CVR – Fairchild 100A fitted as standard
121.373	Flight Data Recorder Appendix B.6 requires TSO C124	See 72PJS0329 Section 31.1 (JAR 25.1459) – Lockheed Model 209F FDR fitted as standard
121.375	Additional Attitude Indicator	See 72PJS0329 Section 34 – Sfena 341-ADM fitted as std
121.377	Weather Radar Appendix B.8 requires TSO C63	See 72PJS0329 Section 34.1 Navigation – Collins Model WXR-250B fitted as standard
121.379	Ground Proximity Warning System Appendix B.9 requires TSO C92	Fitted as standard – See 72PJS0329 Sect. 34 Navigation – Sundstrand Mk.II fitted as standard
121.381	Terrain Awareness and Warning System (TAWS) Appendix B.10 requires TSO C151a or b	***Operational Requirement – Compliance as applicable***
121.383	Airborne Collision Avoidance System (ACAS II) Appendix B.11 requires TSO C119b	***Operational Requirement – Compliance as applicable***

NOTES: 1. A Design Rule reference in the Means of Compliance column indicates the Design Rule was exactly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.

2. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since that date and should be checked individually.

3. Some means of compliance above are specific to a particular model/configuration. Compliance with Part 91/119 operating requirements should be checked in each case, particularly oxygen system capacity and emergency equipment.

4. SAAB advised there is no basic difference between aircraft built under the LFV or the FAA Type Certificate. All aircraft are built to the same standard except for some minor differences due to Additional National Requirements. (See Fax dated 11 Aug 1998 from SAAB Aircraft AB Manager Airworthiness and Design Review.)

Attachments

The following documents form attachments to this report:

Copy of EASA Type Certificate Data Sheet Number A.068

Sign off

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David Gill
Team Leader Aircraft Inspection

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Checked – Owen Olls
Airworthiness Inspector

Appendix 1

List of Type Accepted Variants:

Model:	*Applicant:*	*CAA Work Request:*	*Date Granted:*
SAAB SF340A SAAB 340B	AC 21-1.2/NZCAR Part 21 Appendix A(c) SAAB Aircraft AB	96/21B/10	29 April 1996

Appendix 2

3-view drawing SAAB 340B: