Japan Civil Aviation Bureau
Ministry of Land, Infrastructure, Transport and Tourism

No. 41
Rev.3
Saab AB
SAAB 340B
March 1, 2017

Type Certificate Data Sheet

No.41

This data sheet, which is a part of Type Certificate No. 41, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Japan Civil Aeronautics Law and Regulations.

Type Certificate Holder	Saab AB, Aeronautics SE-581 88 Linköping Sweden
Type Certificate Holder Record	Name changed from Saab Aircraft AB on December 16, 2011

Model SAAB 340B, approved November 24, 1998 (Airplane, Transport Category)

General Description: Twin-engined monoplane equipped to carry up to 37 passengers and cargo in a pressurized fuselage. Low cantilever wing.

Dimensions:

Span	21.44m	(70ft 4in)	S/N 004-360 and S/N 361–up without Mod 2571
	22.75m	(74ft 8in)	S/N 361 - up with Mod 2571
Length	19.73m	(64ft 9in)	
Height	7.0m	(23ft)	
Wing Area	41.8m^2	(450ft^2)	

Engines: 2 Engines – General Electric Company, Model CT7-9B, free turbine turboprop.

Power turbine/propeller reduction gearing 15.9:1

Fuel: Jet A, Jet A-1, Jet B (ASTM D-1655), JP 4, JP 5 (MIL-T-5624), JP-8 (MIL-T-83133D), CIS fuels RT and TS-1 (GOST 10227).
In addition, all aviation gas turbine fuels conforming to the latest revision of GE Jet Fuel Specification No.D50TF2 for the GE CT7 engine installation are approved.

Engine Limits: The maximum continuous and take-off static sea level ratings at ISA.

	Shaft Horse Power		Jet Thrust		Torquemeter Reading
	(kW)	(SHP)	(N)	(lbf)	(%)
Max Take-off (with APR)	1395	1870	792	178	107
Take-off	1305	1750	743	167	100
Max cont.	1305	1750	743	167	100

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Propellers and Propeller limits

2 Propellers – Dowty Aerospace, Model (c) R.354/4-123-F/13 or (c) R.354/4-123-F/20 or (c) R.375/4-123-F/21 or (c) R.389/4-123-F/25 or (c) R.389/4-123-F/26 or (c) R.390/4-123-F/27.
Blades: 4
Diameter 3.35m (132in) – No reduction permitted.

2 Propellers – Hamilton Sundstrand, Model 14 RF-19
Blades: 4
Diameter 3.35m (132in) – No reduction permitted.

Airspeed Limits (IAS)

V_{MO}	Max Operating	16000ft and below	250kts
		25000ft	210kts
		Straight line variation between points	
V_A	Design Maneuvering		180kts
V_{FE}	Flaps Extended	Flaps 7°and 15°	175kts
		Flaps 20°	165kts
		Flaps 35°	140kts
V_{LE}	Landing Gear Extended		200kts

For other airspeed limits, see the appropriate JCAB approved Airplane Flight Manual.

CG Range

See the appropriate JCAB approved Airplane Flight Manual.

Maximum Weights

	Without mod 2438	With mod 2438
Taxi	13065kg 28800lbs	13290kg 29300lbs
Take-off	12930kg 28500lbs	13155kg 29000lbs
Landing	12700kg 28000lbs	12930kg 28500lbs
Zero Fuel	11790kg 26000lbs	12020kg 26500lbs

Mean Aerodynamic Chord (MAC)

2.08 m

Levelling Means

See Weight and Balance Manual

Minimum Crew

2 (Pilot and co-pilot)

Maximum Passengers

37

Exits

	No.	Type	Size m (inches)
Passenger door	1	Type I	0.68x 1.62m (27x 63 in)
Service/emergency door	1	Type II	0.61x 1.22m (24x 48 in)
Emergency exits	2	Type III	0.51x 0.91m (20x 36 in)
Crew hatch	1	-	0.48x 0.50m (19x 19.7 in)

Maximum Baggage

950kg (2100lbs) in rear cargo compartment. See the appropriate Weight and Balance Manual.

Wheels and Tyres

Main wheel tyres: A 24 x 7.7
Nose wheel tyres: A 17.5 x 6.25-6

Fuel Capacity

Usable fuel

Location	Volume		Weight	
	litres	U.S.Gal	kg	lb
Left wing	1610	425	1290	2845
Right wing	1610	425	1290	2845
Total usable	3220	850	2580	5690

Fuel weight based upon fuel density 0.802 kg/l (6.7 lb/U.S.Gal).
Pressure fueling.
Max pressure for pressure fueling is 345 kPa (50psi).

Maximum Operating Altitude

7,620 m (25,000 ft) pressure altitude

All Weather Capability

Cat II

Serial Numbers Eligible

160 and up

Import Requirements

For each newly manufactured aircraft to be delivered to Japan, EASA will issue, when required, an EASA declaration of compliance for Export (so called Export Certificate of Airworthiness), based on the individual EASA Form 52 issued in accordance with the POA granted by the National Authority or by EASA, under Commission Regulation (EC) No. 1702/2003, stating the following:
"The aircraft covered by this certificate has been examined, tested and found to conform to the type design approved under JCAB Type Certificate No. 41 and to be in condition for safe operation."

Certification Basis

Airworthiness standard
Civil Aeronautics Regulations Annex 1

JAR 25 at Change 7 (equivalent to Part III of the TAIKUSEI-SHINSA-YORYO (JCAB Airworthiness Standards) dated February 26, 1991 and Part 25 of the Federal Aviation Regulations Amendment 25-1 through 25-62) , JAR25.305 (d) Change 8, JAR25.807 (d) Change 10, JAR25.341, 25.812 and 25.853 Change 12.

Special Conditions (in accordance with LFV Issue Book)

- Stall identification and recovery characteristics, see item B-2.
- Performance in icing conditions, see item B-4.
- All Engines Operating Steep Approach Landing, see item B-5.
- Gravel runway operation, see item B-7
- Takeoff and landing in tailwind greater than 10, see item B-8
- High Altitude takeoff, see item B-9
- Propeller blade impact NPA 25C-112 applies in lieu of JAR25.571 (e)(2), see item C-3
- Composite structure, see item C-5.
- Structural Design loads for Wing Tip Extension, see item C-6. (with Mod 2571 only)
- Lightning Protection – Indirect Effects, see item D-7.
- Automatic Reserve Power, see item E-5.
- Flight guidance system (basic system), see item F-1.
- CAT II requirements, see item F-2.
- Effect of External Radiation upon Aircraft Systems, see item F-3.
- Enhanced Airworthiness Programme for Airplane Systems – ICA on EWIS, see CRI H-01

Certification Basis (Continued)

Exemptions
No exemptions have been granted.

Equivalent Safety Findings (in accordance with LFV Issue Book)
- JAR25.1551 Oil quantity indicator, see item A-2.
- JAR25.979 (b)(1) Refueling system, auto shut-off testing, see item A-3.
- JAR25.1333 (c) Static system integrity, see item A-5.
- JAR25.1333 (b) Stand-by compass system, see item A-6.
- JAR25.1351 (b)(6) AC system indication, see item A-7.
- JAR25.811 (e)(3) Exit handle illumination, see item A-11.
- JAR25.103 (a)(b)(c); 107(b)(c); 119(b); 121(c)(d); 125(a); 145(a)(b)(c)(d); 147; 149; 161; 175; 177; 201(a)(b); 207(c)(d); 233(a) and 237 (a) Stall and Stall Warning Speeds and Maneuver Capability, see item B-6.
- JAR25.853(a); 855(d) Improved Flammability Standards for Thermal Acoustic Insulation Materials used in Large Aeroplanes, see CRI D-9.
- JAR25.903 Engine Certification, see item E-1.

Civil Aeronautics Regulations Annex 2 Chapter 2 (equivalent to ICAO Annex 16 Volume 1 Chapter 4) for Noise Requirements

Civil Aeronautics Regulations Annex 3 (equivalent to ICAO Annex 16 Volume 2) for Fuel Venting Requirements

Continued Airworthiness and Safety Improvements for Transport Category Airplanes
- TAIKUSEI-SHINSA-YORYO (JCAB Airworthiness Inspection Manual (AIM)) Part III-2 Chapter 2 “Enhanced Airworthiness Program for Airplane Systems” and Part III-3 “Fuel Tank System Airplanes Fault Tolerance Evaluation Requirements” dated March 4, 2015 (equivalent to Part 26 of the Federal Aviation Regulations Subpart B §26.11 Amendment 26-0, and SFAR-88 dated December 9, 2002) are included in the certification basis.

Aircraft definition
- The SAAB 340B is defined in the Type Specification Doc. No. 72PJS0329.
- Drawings are defined in the Saab AB System List, Doc. No. 7200-0.
- Type Record, Doc. No.72CCS1091 and 72CCS2333

Equipment
- Equipment is listed in the SAAB SF340 Master Equipment Register, Doc. No. 72PWS0861.

Operating Manuals
- JCAB approved Airplane Flight Manual, Model 340B
- JCAB approved Airplane Flight Manual, Model 340B with Mod 2571 – Extended Wing Tips installed.
- Weight and Balance Manual, Doc. No. 72LKS3080.
- Master Minimum Equipment List (MMEL), Doc No. 72LKS3091.
- SAAB 340B Aircraft Operations Manual, Doc. No. 72LKS3089.

Airworthiness Limitations

Section F of the Maintenance Review Board Report, Doc. No. 72LKS3081, specifies mandatory inspections and intervals and also mandatory replacement times. The inspection cover Structure as well as Systems and Powerplants.

Service information

TAIKUSEI-KAIZEN-TSUHO (Airworthiness Directives) are published by JCAB.

Service Letter and Service Bulletins are published by Saab AB.

Available service documents:
- Aircraft Maintenance Manual, Doc. No. 72LKS3076
- Wiring Manual, Doc. No. 72LKS3078
- Structural Repair Manual, Doc. No. 72LKS3079
- Maintenance Review Board Report, Doc. No. 72LKS3081
- Illustrated Parts Catalogue, Doc. No. 72LKS3077
- Certification Maintenance requirement based on System Safety Assessment, Doc. No. 72DSS0602

Note J1.

This Type Certificate Data Sheet (TCDS) is based on EASA TCDS No.EASA.A.068 Issue 21 dated December 16, 2011.

Note J2.

Dates of application for LFV and JCAB Type Certification for Model SAAB340B are as follows.

Model SAAB340B	EASA TC No.EASA.A.068	JCAB No.41
	September 14, 1987	October 1, 1997

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