TYPE-CERTIFICATE DATA SHEET

No. EASA.A.068

for

SAAB SF340A , 340B

Type Certificate Holder:

Saab AB

581 88 Linköping

SWEDEN

For Models: SF340A , 340B

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2. Performance Class

A

3. Certifying Authority

European Aviation Safety Agency (EASA)
Postfach 101253
D-50452 Köln
Deutschland

4. Manufacturer

Saab AB
581 88 Linköping
SWEDEN

5. State of Design Authority Certification Application Date

31 March 1980

6. EASA Type Certification Application Date

N/A

7. State of Design Authority Type Certificate Date

30 May 1984

Note: Original LFV TC A 1/84 was replaced by the EASA TC EASA.A.068

8. EASA Type Certification Date

N/A

9. Production conditions

N/A

II. Certification Basis

1. Reference Date for determining the applicable requirements

31 March 1980

2. State of Design Airworthiness Authority Type Certification Data Sheet No.

Original LFV TC A 1/84 was replaced by the EASA TC EASA.A.068.

3. State of Design Airworthiness Authority Certification Basis

See below

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5. Special Conditions

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Item B-4	Performance in Icing Conditions
Item B-5	All engines operating, Steep Approach Landing
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CRI H-01	Enhanced Airworthiness Programme for Airplane Systems – ICA on EWIS

6. Exemptions

No exemptions have been granted

7. Deviations

No deviations have been granted.

8. Equivalent Safety Findings

Item / CRI	Topic	Requirement
Item A-2	Oil quantity indicator	JAR 25.1551
Item A-3	Refuelling system, auto shut-off testing	JAR 25.979(b)(1)
Item A-5	Static system integrity	JAR 25.1333(c)
Item A-6	Stand-by compass system	JAR 25.1333(b)
Item A-7	AC system indication	JAR 25.1351(b)(6)
Item A-11	Exit handle illumination	JAR 25.811(e)(3)
CRI D-9	Improved flammability standards for thermal and Acoustic insulation materials used in Large Airplanes	JAR 25.853(a) ; JAR 25.855(d)
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9. Elect To Comply

N/A

10. Environmental Protection

Refer to TCDSN EASA.A.068

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Defined by Type Specification 72PJS0006.
Drawings are defined in the Saab AB System List, Doc. No. 7200-0.
Type Record, Doc. No. 72CCS1091 and 72CCS2333

2. Description

A low wing, twin-engine turboprop aircraft equipped to carry up to 37 passengers and cargo in a pressurized cabin and intended for short to medium haul routes.

3. Equipment

Equipment is listed in the SAAB SF 340 Master Equipment Register, Doc. No. 72PWS0861

4. Dimensions

	Dimensions	
Span	21,44 m	(70 ft 4 in)
Length	19,73 m	(64 ft 9 in)
Height	6,97 m	(22 ft 11 in)
Wing Area	41.8 m^2	(450 ft^2)

5. Engines

2 engines – General Electric Company, Model CT7-5A2, free turbine turboprop
Power turbine/propeller reduction gearing 15.9:1

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

	Shaft horse power		Jet Thrust		Torquemeter Reading
	(kW)	**(SHP)**	**(N)**	**(lbf)**	**(%)**
Take-off	1 294	1 735	730	164	108
Max, continuous	1 193	1 600	667	150	100

6. Auxiliary Power Unit

N/A

7. Propellers

2 propellers

	Propeller model	Blade config / Dimension	Note
Dowty Aerospace	(c) R.354/4-123-F/13	Blades: 4 Diameter: 3.35 m (132 in)	no reduction permitted
	(c) R.354/4-123-F/20		
	(c) R.375/4-123-F/21		
	(c) R.389/4-123-F/25		
	(c) R.389/4-123-F/26		
	(c) R.390/4-123-F/27		

8. Fluids (Fuel, Oil, Additives, Hydraulics)

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.

Location	Volume		Mass	
	l	U.S. Gal	kg	lbs
Left wing	1 610	425	1 290	2 845
Right wing	1 610	425	1 290	2 845
Total Usable	3 220	850	2 580	5 690

Fuel weight based upon fuel density 0.802 kg/l (6.7 lb/U.S. Gal).

Max pressure for pressure fuelling is 345 kPa (50 psi)

9. Fluid Capacities

Refer to applicable approved manuals

10. Airspeed Limits

Indicated Airspeed – IAS – unless otherwise stated
Refer to Aeroplane Flight Manual

11. Flight Envelope

Maximum operating altitude: 7 620 m (25 000 ft) pressure altitude

12. Operating Limitations

Refer to Aeroplane Flight Manual

Engine	GE CT7-5A2
Data sheets	E8NE (FAA) IM.E.010 (EASA)

Other engine limitations: see the relevant Engine Type Certificate Data Sheet.

12.1 Approved Operations

Transport commercial operations.

All Weather capability : CAT II

12.2 Other Limitations

Refer to Aeroplane Flight Manual

13. Maximum Certified Masses

	Mass		Note
Taxi	12 380 kg	(27 300 lbs)	Pre Modification No. 1531 (see Note 3)
	12 840 kg	(28 300 lbs)	Post Modification. No. 1531 (see Note 3)
	13 065 kg	(28 800 lbs)	Post Modification No. 3139 (see Note 3)
Takeoff	12 370 kg	(27 275 lbs)	Pre Modification No. 1531 (see Note 3)
	12 700 kg	(28 000 lbs)	Post Modification. No. 1531 (see Note 3)
	12 930 kg	(28 500 lbs)	Post Modification No. 3139 (see Note 3)
Landing	12 020 kg	(26 500 lbs)	Pre Modification No. 1531 (see Note 3)
	12 340 kg	(27 200 lbs)	Post Modification. No. 1531 (see Note 3)
Zero Fuel	11 340 kg	(25 200 lbs)	Pre Modification No. 1531 (see Note 3)
	11 660 kg	(25 700 lbs)	(See Note 2)

14. Centre of Gravity Range

Refer to Aeroplane Flight Manual

15. Datum

N/A.

16. Mean Aerodynamic Chord (MAC)

2.08 m

17. Levelling Means

Refer to Weight and Balance Manual.

18. Minimum Flight Crew

Two (Pilot and Co-pilot)

19. Minimum Cabin Crew

See paragraph 20.

20. Maximum Seating Capacity and Exit configuration

The table below provides the certified Maximum Passenger Seating Capacities (MPSC) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirements:

Passenger Seating Capacity	Cabin crew
37	1

The corresponding cabin configuration (exits arrangement) is the following :

	No	Type	Size mm (inches)
Passenger door	1	Type I	0.69x1.60 m (27x63 in)
Service door	1	Type II	0.61x1.22 m (24x48 in)
Emergency exits	2	Type III	0.51x0.91 m (20x36 in)
Crew hatch	1	-	0.48x0.50 m (19x19.7 in)

21. Baggage/ Cargo Compartment

Cargo compartment	Maximum load	
Rear (bulk)	950 kg	(2100 lbs)

Refer to Weight and Balance Manual.

22. Wheels and Tyres

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

23. ETOPS

N/A

IV. Operating and Service Instructions

1. Aeroplane Flight Manual (AFM)

Aeroplane Flight Manual	Document ref.
Standard version	AFM 340A 000
U.S. Type design version	AFM 340A 001
Australian Type design version	AFM 340A 003
Canadian Type design version	AFM 340A 005

2. Instructions for Continued Airworthiness and Airworthiness Limitations

Service document	Document ref.
Airworthiness Limitation Manual	72LKS036057
Aircraft Maintenance Manual	72LKS3076
Wiring Manual	72LKS3078
Structural Repair Manual	72LKS3079
Maintenance Review Board Report	72LKS3081
Illustrated Parts Catalogue	72LKS3077
Certification Maintenance requirement based on System Safety Assessment	72DSS0602

Other limitations

Document	Document ref.
Aircraft Operations Manual	340LKS042108
Weight and Balance Manual	72LKS3080
Master Minimum Equipment List	72LKS3091

V. Operational Suitability Data (OSD)

Master Minimum Equipment List: CRI A-MMEL

The Operational Suitability Data element listed below is approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.068 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List
   a. The Master Minimum Equipment List has been approved as per the defined Operational Suitability Data Certification Basis and as documented in SAAB 340 Master Minimum Equipment List, ref: 72LKS3091 at the latest applicable revision.
   b. Required for entry into service by EU operator.

VI. Notes

1. SAAB SF340A is same as SAAB-FAIRCHILD 340A

2. Weights valid when carrying passengers and/or passenger seats are used for cargo stowage in all passenger configuration or when carrying cargo configuration and centre of gravity is aft of or at 28% MAC.

3. Modifications scope :
   - Modification No. 1531 : Landing Gear - Increased Aircraft Weight
   - Modification No. 3139 : Increased Operational Weights by 500 lbs (230 kg)

SECTION 2: SAAB 340B

I. General

1. Type/ Model/ Variant

SAAB 340B

2. Performance Class

A

3. Certifying Authority :

European Aviation Safety Agency (EASA)
Postfach 101253
D-50452 Köln
Deutschland

4. Manufacturer:

Saab AB
581 88 Linköping
SWEDEN

5. State of Design Authority Certification Application Date

14 September 1987

6. EASA Type Certification Application Date

N/A

7. State of Design Authority Type Certificate Date

03 July 1989

8. EASA Type Certification Date

N/A

Note: Original LFV TC A 1/84 was replaced by the EASA TC EASA.A.068

9. Production conditions

N/A

II. Certification Basis

1. Reference Date for determining the applicable requirements

14 September 1987

2. State of Design Airworthiness Authority Type Certification Data Sheet No.

Original LFV TC A 1/84 was replaced by the EASA TC EASA.A.068.

3. State of Design Airworthiness Authority Certification Basis

See below

4. EASA Airworthiness Requirements

JAR 25 Change 7
JAR 25 Change 8 for paragraph 25.305(d)
JAR 25 Change 10 for paragraph 25.807(d)
JAR 25 Change 12 for paragraphs 25.341; 25.812; 25.853

5. Special Conditions

Special conditions in accordance with LFV Issue Book

Item / CRI	Topic
Item B-2	Stall identification and recovery characteristics
Item B-4	Performance in Icing Conditions
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-112 applies in lieu of JAR 25.571(e)(2)
Item C-5	Composite structure
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-1	Flight guidance system (basic system)

Item / CRI	Topic
Item F-2	CAT II requirements
Item F-3	Effect of external radiation upon aircraft systems
CRI F-04	Lithium battery installations
CRI H-01	Enhanced Airworthiness Programme for Airplane Systems – ICA on EWIS

6. Exemptions

No exemption have been granted.

7. Deviations

No deviation have been granted.

8. Equivalent Safety Findings

Equivalent Safety Findings in accordance with LFV Issue Book

Item / CRI	Topic	Requirement
Item A-2	Oil quantity indicator	JAR 25.1551
Item A-3	Refuelling system, auto shut-off testing	JAR 25.979(b)(1)
Item A-5	Static system integrity	JAR 25.1333(c)
Item A-6	Stand-by compass system	JAR 25.1333(b)
Item A-7	AC system indication	JAR 25.1351(b)(6)
Item A-11	Exit handle illumination	JAR 25.811(e)(3)
Item B-6	Stall and stall warning speeds and manoeuvre capability	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)
CRI D-9	Improved flammability standards for thermal and acoustic insulation materials used in Large Airplanes	JAR 25.853(a); 25.855(d)

9. Elect To Comply

N/A

10. Environmental Protection

Refer to TCDSN EASA.A.068

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Defined by Type Specification 72PJS0329.
Drawings are defined in the Saab AB System List, Doc. No. 7200-0.
Type Record, Doc. No. 72CCS1091 and 72CCS2333

2. Description

A low wing, twin-engine turboprop aircraft equipped to carry up to 37 passengers and cargo in a pressurized cabin and intended for short to medium haul routes.

3. Equipment

Equipment is listed in the SAAB SF 340 Master Equipment Register, Doc. No. 72PWS0861

4. Dimensions

	Dimensions		Observations
Span	21,44 m	(70 ft 4 in)	Pre Modification 2571 (Extended Wing Tip)
	22,75 m	(74 ft 8 in)	Post Modification 2571 (Extended Wing Tip)
Length	19,73 m	(64 ft 9 in)	
Height	7.00 m	(23 ft)	
Wing Area	41.8 m2	(450 ft2)	

5. Engines

2 engines – General Electric Company, Model CT7-9B, free turbine turboprop
Power turbine/propeller reduction gearing 15.9:1

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

	Shaft horse power		Jet Thrust		Torquemeter Reading
	(kW)	**(SHP)**	**(N)**	**(lbf)**	**(%)**
Max Takeoff (with APR)	1 395	1 870	792	178	107
Take-off	1 305	1 750	743	167	100
Max continuous.	1 305	1 750	743	167	100

6. Auxiliary Power Unit

N/A

7. Propellers

2 propellers

	Propeller model	Blade config / Dimension	Note
Dowty Aerospace	(c) R.354/4-123-F/13	Blades: 4 Diameter: 3.35 m (132 in)	no reduction permitted
	(c) R.354/4-123-F/20		
	(c) R.375/4-123-F/21		
	(c) R.389/4-123-F/25		
	(c) R.389/4-123-F/26		
	(c) R.390/4-123-F/27		
Hamilton Standard	14 RF-19	Blades: 4 Diameter: 3.35 m (132 in)	no reduction permitted

8. Fluids (Fuel, Oil, Additives, Hydraulics)

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.

Location	Volume		Mass	
	l	U.S. Gal	kg	lbs
Left wing	1 610	425	1 290	2 845
Right wing	1 610	425	1 290	2 845
Total Usable	3 220	850	2 580	5 690

Fuel weight based upon fuel density 0.802 kg/l (6.7 lb/U.S. Gal).

Max pressure for pressure fuelling is 345 kPa (50 psi)

9. Fluid Capacities

Refer to applicable approved manuals

10. Airspeed Limits

Indicated Airspeed – IAS – unless otherwise stated
Refer to Aeroplane Flight Manual

11. Flight Envelope

Maximum operating altitude: 7 620 m (25 000 ft) pressure altitude

12. Operating Limitations

Refer to Aeroplane Flight Manual

GE CT7 Engines

Engine	**GE CT7-9B**
Data sheets	E8NE (FAA) IM.E.010 (EASA)

Other engine limitations: see the relevant Engine Type Certificate Data Sheet.

12.1 Approved Operations

Transport commercial operations.
All Weather capability : CAT II

12.2 Other Limitations

Refer to Aeroplane Flight Manual

13. Maximum Certified Masses

	Mass		Note
Taxi	13 065 kg	(28 800 lbs)	Pre Modification No. 2438 (See Note 1)
	13 290 kg	(29 300 lbs)	Post Modification No. 2438 (See Note 1)
	13 740 kg	(30 300 lbs)	Post Modification No. 3655 (See Note 1)
Take-off	12 930 kg	(28 500 lbs)	Pre Modification No. 2438 (See Note 1)
	13 155 kg	(29 000 lbs)	Post Modification No. 2438 (See Note 1)
	13 605 kg	(30 000 lbs)	Post Modification No. 3655 (See Note 1)
Landing	12 700 kg	(28 000 lbs)	Pre Modification No. 2438 (See Note 1)
	12 930 kg	(28 500 lbs)	Post Modification No. 2438 (See Note 1)
Zero Fuel	11 790 kg	(26 000 lbs)	Pre Modification No. 2438 (See Note 1)
	12 020 kg	(26 500 lbs)	Post Modification No. 2438 (See Note 1)

14. Centre of Gravity Range

Refer to Aeroplane Flight Manual

15. Datum

N/A.

16. Mean Aerodynamic Chord (MAC)

2.08 m

17. Levelling Means

Refer to Weight and Balance Manual.

18. Minimum Flight Crew

Two (Pilot and Co-pilot)

19. Minimum Cabin Crew

See paragraph 20.

20. Maximum Seating Capacity and Exit configuration

The table below provides the certified Maximum Passenger Seating Capacities (MPSC) and the associated minimum numbers of cabin crew members used to demonstrate compliance with the certification requirements:

Passenger Seating Capacity	Cabin crew
37	1

The corresponding cabin configuration (exits arrangement) is the following :

	Nr	Type	Size mm (inches)
Passenger door	1	Type I	0.69x1.60 m (27x63 in)
Service door	1	Type II	0.61x1.22 m (24x48 in)
Emergency exits	2	Type III	0.51x0.91 m (20x36 in)
Crew hatch	1	-	0.48x0.50 m (19x19.7 in)

21. Baggage/ Cargo Compartment

Cargo compartment	Maximum load	
Rear (bulk)	950 kg	(2100 lbs)

Refer to Weight and Balance Manual.

22. Wheels and Tyres

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

23. ETOPS

N/A

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Aeroplane Flight Manual	Document ref.
Pre Modification No. 2571 (Extended Wing Tip):	
Standard version	AFM 340B 000
U.S. Type design version	AFM 340B 001
Australian Type design version	AFM 340B 003
Canadian Type design version	AFM 340B 005
Post Modification No. 2571 (Extended Wing Tip):	
Standard version	AFM 340B 010
Canadian Type design version	AFM 340B 015

2. Instructions for Continued Airworthiness and Airworthiness Limitations

Service document	Document ref.
Airworthiness Limitation Manual	72LKS036057
Aircraft Maintenance Manual	72LKS3076
Wiring Manual	72LKS3078
Structural Repair Manual	72LKS3079
Maintenance Review Board Report	72LKS3081
Illustrated Parts Catalogue	72LKS3077
Certification Maintenance requirement based on System Safety Assessment	72DSS0602

Other limitations

Document	Document ref.
Aircraft Operations Manual	340LKS042109
Weight and Balance Manual	72LKS3080
Master Minimum Equipment List	72LKS3091

V. Operational Suitability Data (OSD)

Master Minimum Equipment List: CRI A-MMEL

The Operational Suitability Data element listed below is approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.068 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List
   a. The Master Minimum Equipment List has been approved as per the defined Operational Suitability Data Certification Basis and as documented in SAAB 340 Master Minimum Equipment List, ref: 72LKS3091 at the latest applicable revision.
   b. Required for entry into service by EU operator.

VI. Notes

1. Modification scope :
   - Modification No. 2438 : Increased Operational Weights by 500 lbs (230 kg)
   - Modification No. 3655 : Increase MTW and MTOW by 1000 lbs

SECTION 3: ADMINISTRATIVE

I. Acronyms and Abbreviations

AFM	Airplane Flight Manual
ALM	Airworthiness Limitation Manual
APU	Auxiliary Power Unit
CRI	Certification Review Item
CS	Certification Specification
EASA	European Aviation Safety Agency
ES(F)	Equivalent Safety (Finding)
EWIS	Enhanced Wiring Interconnection System
ICA	Instructions for Continued Airworthiness
JAA	Joint Aviation Authorities
JAR	Joint Aviation Requirements
LFV	Luftfartsverket (Swedish Civil Aviation Administration)
NPA	Notice of Proposed Amendment
SB	Service Bulletin
SC	Special Condition
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise

II. Type Certificate Holder Record

Saab AB, Support and Services
581 88 Linköping
SWEDEN

III. Change Record

Starting with issue 21

Issue	Date	Changes	TC issue
21	16/12/2011	Type Certificate Holder's name changed. Addition of CRI H-01 for ICA on EWIS and CRI D-9 for Improved Flammability Standards New TCDS format plus some editorials.	Issue 1, dated 30/05/1984 (LFV A 1/84)
22	27/06/2018	Type Certificate Holder's name changed. Addition of CRI F-04 (lithium battery installations) TCDS reformatting Addition of Airworthiness Limitation Manual (ALM) and MMEL OSD	dated 25 June 2018
23	24/04/2020	For Saab 340B : Introduction of new Maximum Certified Masses – Post mod 3655	N/A
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