European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

EASA.IM.A.294 A-1

Type Certificate Holder

Aviat Aircraft Inc.
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

For models: **A-1**
A-1A
A-1B
A-1C-180

Issue 4: 12 Mar 2016

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SECTION A: A-1

A.I. General

1. a) Type:	A-1
b) Model:	A-1
c) Marketing Designation:	Husky
2. Airworthiness Category:	Normal Category
3 Type Certificate Holder:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A
4. Manufacturer:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A.
5. Certification Application Date:	20 Nov 1985
6. FAA Type Certificate Date:	1 May 1987

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	20 Nov 1985
2. Airworthiness Requirements:	Part 23 of Federal Aviation Regulations dated 1. February 1965, Amendment 23-1 thru 23-31 The EASA Aircraft Type Certification standard includes that of FAA TCDS A22NM, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS standards certified by individual EU member States prior to 28 September 2003 are also acceptable.
3 Special Conditions:	None
4. Exemptions:	None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

11. Eligible S/N 1001 to 1394

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List Model A-1
2. Description: single piston engine, two-seats, steel cage construction, high wing monoplane with conventional tail and tail wheel
3. Equipment: Refer to AFM
4. Dimensions: Refer to AFM
5. Engine:
   - 5.1.1 Model: Lycoming O-360-C1G or Lycoming O-360-A1P (see Note 2)
   - 5.1.2 Type Certificate: FAA TCDS E-286
   - 5.1.3 Limitations: For all operations: 2700 RPM
6. (reserved)
7. Propeller:
   - 7.1 Model: Hartzell HC-C2YK-1Bf/F7666A (Constant Speed)
   - 7.2 Type Certificate: EASA.IM.P.130
   - 7.3 Diameter: Not over 76 inch, not under 72 inch
     Hartzell spinner assy 836-60 and governor V3-6 or S-1-16
     Avoid continuous operations between 2000-2250 RPM

8. Fluids:

8.1 Fuel:	100/100LL minimum grade aviation gasoline
8.2 Oil:	Refer to AFM
8.3 Coolant:	Not applicable

9. Fluid capacities:

9.1 Fuel:	Standard Fuel Tank	Total:	196,8 Litre
		Usable:	189,2 Litre
9.2 Oil:	Max. 7,6 litres		
9.3 Coolant system capacity:	Not applicable		

10. Air Speeds:

VNE (Never Exceed speed)	133 KIAS (153 mph)
VNO (Maximum structural cruising speed)	103 KIAS (119 mph)
VA (Manoeuvring speed)	82 KIAS (94 mph)
VFE (Maximum Flap Extended)	63 KIAS (73 mph)

11. Maximum Operating Altitude: 18500 feet

12. Operational Capabilities: IFR Day/Night; VFR Day/Night (Note 19)
Flight into known or forecast icing condition is prohibited

13. Masses
Maximum Take-off Mass (MTOM): 816 kg (1800 lbs)

14. Centre of Gravity Range:
Forward limit
from +189,2 to + 199,1 cm at 816 kg
from +184,2 to +199,1 cm at 680 kg

15. Datum: 152,4 cm forward of wing leading edge

16. (reserved)

17. Levelling Means: Cabin door, lower sill

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity: 1

20. Baggage/Cargo Compartments:	Max. Allowable Load	22,7 kg (at +304,8 cm)

A.IV. Operating and Service Instructions

Airplane Flight Manual (AFM)	Model A-1 dated 1/5/87 or later approved revision
Maintenance Manual (MM)	MM for Model A-1

A.V. Notes

1. This certification applies to serial numbers 1001 to 1394 of A-1 Series under Production Certificate 704NM
2. All placards specified in the approved Airplane Flight Manual must be displayed in the airplane in the appropriate locations.
3. Export aircraft incorporating the Lycoming O-360C1G engine are certified for use with a 72 inch dia. Propeller, VFR day and night only, and 2550 RPM max. continuous power, with 2700 RPM max. take-off power for 5 minutes. Aircraft incorporation the Lycoming 0-360-A1P engine are certified for use with a 72 inch dia. Propeller and be limited to 2400 RPM max. continuous power and 2700 RPM max. continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is then required.
4. Export aircraft incorporation the Lycoming 0-360-A1P engine must have a 72 inch diameter propeller and be limited to 2400 RPM maximum continuous power and 2700 RPM maximum continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is required.
5. Model A-1 are approved for use with Aero Ski Models M1500, M1800, M2000, and M3000H installed per Christen Drawing 35569. Christen Airplane Flight Manual Supplement, dated April 11, 1988, or later FAA approved revision for fixed ski operation is required.
6. The Model A-1 is approved for banner and glider towing when an approved tow hook is installed in accordance with Aviat Drawing 35572. Aviat Aircraft Flight Manual Supplement, dated September 1, 1988, or later FAA approved revision for banner and glider tow operations is required.
7. The Model A-1 is approved for use with EDO 89-2000 Floats installed in accordance with Christen Drawing 35600. Christen Aircraft Flight Manual Supplement, dated February 28, 1989, or later FAA approved revision for the floatplane configuration is required. The maximum aircraft gross weight with EDO 89-2000 floats installed is 898 kg.
8. Models A-1 are approved for use with Aero Ski Models R2800 retractable ski installed per Christen Drawing 35593. Christen Airplane Flight Manual Supplement, dated Nov 7, 1989, or later FAA approved revision for retractable ski operation is required.

9. Model A-1 are approved for use with optional skylight panel installed in accordance with Aviat Aircraft Inc. drawing 35640.
10. Model A-1 is approved for use with Horizon Instruments Model P-1000 Digital Engine Tachometer. Aviat Aircraft Inc. Flight Manual Supplement date Dec. 4, 1997 or later FAA approved revision is required.
11. The following main gear tires are approved for use on Model A-1:

    6.00 x 6 4-ply Type III tube

    8.00 x 6 4-ply Type III tube.

    8.50 x 6 6-ply Type III tube.

    24 x 10-6 Type III Tundra

    26 x 10.5-6 Tundra and 8.50 x 6 tube.
12. Model A-1 are approved for use with the Alaskan Bushwheel P/N 31136, 31" Diameter Tundra tire. Model A-1 must have the Aero Ski gear P/N 35017-503 and 35017-504 installed in conjunction with the 31" tundra tires P/N 31136. The Scott 10" Model L3450 tail wheel must also be installed per Aviat Aircraft Drawing 35340 on the model A-1. FAA approved Flight Manual Supplement dated September 18, 1998 or later for the Tundra Tire configuration is required.
13. Models A-1 are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System when installed in accordance with Aviat Master Drawing List 95-0, dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystem VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, dated 5 August 1999, or later revisions, are required.
14. Models A-1 are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System with IFR equipment when installed in accordance with Aviat Master Drawing List 95-0, Revision A dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystems VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, Revision B dated 5 August 1999, or later revisions, are required.
15. Models A-1 are approved for use with the Aviat Aft Stowage Compartment when factory-installed in accordance with Aviat Master Drawing List 96-00-00, Revision F dated 5/28/2000, or field installed per Aviat Service Bulletin 16, dated 4/19/2000 as Aviat Kit A-1-351 Revision D. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Models A-1 with the Aft Stowage Compartment Installed, dated 4/28/2000 and Supplemental Instructions for Continued Airworthiness - Aft Stowage Compartment, dated 4/17/2000, or later revisions, are required.
16. Models A-1 are approved for use with the Fluidyne Model C-2200 Retractable Skis when installed in accordance with Aviat Husky Service Bulletin 15, Fluidyne C-2200 Retractable Ski Installation and Operation; A-1/A-1A Forward CG Expansion, dated 6/14/1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Fluidyne Skis, dated 6/25/1999 and Supplemental Instructions for Continued Airworthiness -

Fluidyne C2200 Retractable Skis, dated 6/25/1999, or later revisions, are required.

17. Model A-1A S/N 1395 to 1429 are eligible for increased flap speed of 80 mph if airspeed indicator P/N 81714 is installed and Airplane Flight Manual is updated to reflect 80 mph flap speed
18. Model A-1all serial numbers are approved for installation of VFR short instrument panels part numbers 39725-501, 39770-501 or 39770-502, when installed in accordance with Master Changed Drawing List document AAI-2015-100-2 rev. D dated 09 SEP 2015. Maintenance and operation compliance is required under Instructions for Continued Airworthiness document 70192-006 revision D dated 07 AUG 2012 or later accepted revision, and the Airplane Flight Manual Supplement document AAI-2015-100-4 revision IR, dated 06 JUL 2015, or later FAA approved revision.
19. Model A-1 may be operated in day or night VFR, day or night IFR, when the approved equipment is installed and operable in accordance with the kinds of operating equipment list (KOEL) as outlined in the Model A-1 AFM

SECTION B: A-1A

B.I. General

1. a) Type:	A-1
b) Model:	A-1A
c) Marketing Designation:	Husky
2. Airworthiness Category:	Normal Category
3.a) Type Certificate Holder:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A.
3.b) Contracted DOA Holder:	-
4. Manufacturer:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A.
5. Certification Application Date:	25 August 1997
6. FAA Type Certificate Date:	28. January 1998

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	25 August 1997
2. Airworthiness Requirements:	Part 23 of Federal Aviation Regulations dated 1. February 1965, Amendment 23-1 thru 23-31 The EASA Aircraft Type Certification standard includes that of FAA TCDS A22NM, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS standards certified by individual EU member States prior to 28 September 2003 are also acceptable.

3 Special Conditions:	None
4. Exemptions:	None
5. Deviations:	None
6. Equivalent Safety Findings:	None
7. Requirements elected to comply:	None
8. Environmental Standards:	ICAO Annex 16
9. (Reserved)	
10. (Reserved)	
11. Eligible S/N	1395 to 1467

B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition:	Master Drawing List Model A-1A
2. Description:	single piston engine, two-seats, modified steel cage construction, high wing monoplane with conventional tail and tail wheel
3. Equipment:	refer to AFM
4. Dimensions:	refer to AFM
5. Engine:	
5.1.1 Model:	Lycoming O-360- A1P (see Note 2)
5.1.2 Type Certificate:	FAA TCDS E-286
5.1.3 Limitations:	For all operations: 2700 PRM
6. (reserved)	
7. Propeller:	
7.1 Model:	Hartzell HC-C2YK-1Bf/F7666A (Constant Speed)
7.2 Type Certificate:	FAA TCDS P-910
7.4 Diameter:	Not over 74 inch, not under 72.5 inch Hartzell governor V3-6 or S-1-16

Avoid continuous operations between 2000-2250 RPM

8. Fluids:

8.1 Fuel:	100/100LL minimum grade aviation gasoline
8.2 Oil:	Refer to AFM
8.3 Coolant:	Not applicable

9. Fluid capacities:

9.1 Fuel:	Total capacity	196,8 Litre
	Total usable capacity	189,2 Litre
9.2 Oil:	Max. 7,6 litres	
9.3 Coolant system capacity:	Not applicable	

10. Air Speeds:	VNE (Never Exceed speed)	133 KIAS (153 mph)
	VNO (Maximum structural cruising speed)	103 KIAS (119 mph)
	VA (Manoeuvring speed)	86 KIAS (99 mph)
	VFE (Maximum Flap Extended) (S/N 1395 to 1429)	63 KIAS (73 mph)
	VFE (Maximum Flap Extended) (S/N 1430 and up)	70 KIAS (80 mph)

11. Maximum Operating Altitude: 18500 feet

12. Operational Capabilities: IFR Day/Night; VFR Day/Night (Note 18)
Flight into known or forecast icing condition is prohibited

13. Masses
Maximum Take-off Mass (MTOM): 857 kg (1890 lbs)

14. Centre of Gravity Range:
Forward limit
from +189,2 to + 199,1 cm at 816 kg
from +184,2 to +199,1 cm at 680 kg

15. Datum: 152,4 cm forward of wing leading edge

16. (reserved)

17. Levelling Means: Cabin door, lower sill

18.	Minimum Flight Crew:	1 (Pilot)	
19.	Maximum Passenger Seating Capacity:	1	
20.	Baggage/Cargo Compartments:	Max. Allowable Load	22,7 kg (at +304,8 cm)

B.IV. Operating and Service Instructions

Airplane Flight Manual (AFM)	Model A-1A dated 28/1/98 or later approved revision
Maintenance Manual (MM)	MM for Model A-1A

B.V. Notes

1. This certification applies to serial numbers 1395 to 1999 of A-1A Series under Production Certificate 704NM
2. All placards specified in the approved Airplane Flight Manual must be displayed in the airplane in the appropriate locations.
3. Export aircraft incorporating the Lycoming O-360C1G engine are certified for use with a 72 inch dia. Propeller, VFR day and night only, and 2550 RPM max. continuous power, with 2700 RPM max. take-off power for 5 minutes. Aircraft incorporation the Lycoming 0-360-A1P engine are certified for use with a 72 inch dia. Propeller and be limited to 2400 RPM max. continuous power and 2700 RPM max. continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is then required.
4. Export aircraft incorporation the Lycoming 0-360-A1P engine must have a 72 inch diameter propeller and be limited to 2400 RPM maximum continuous power and 2700 RPM maximum continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is required.
5. Model A-1A are approved for use with Aero Ski Models M1500, M1800, M2000, and M3000H installed per Christen Drawing 35569. Christen Airplane Flight Manual Supplement, dated April 11, 1988, or later FAA approved revision for fixed ski operation is required.
6. The Model A-1A is approved for banner and glider towing when a approved tow hook is installed in accordance with Aviat Drawing 35572. Aviat Aircraft Flight Manual Supplement, dated September 1, 1988, or later FAA approved revision for banner and glider tow operations is required.
7. Models A-1A are approved for use with Aero Ski Models R2800 retractable ski installed per Christen Drawing 35593. Christen Airplane Flight Manual Supplement, dated Nov 7, 1989, or later FAA approved revision for retractable ski operation is required.
8. Model A-1A are approved for use with optional skylight panel installed in accordance with Aviat Aircraft Inc. drawing 35640.
9. The following main gear tires are approved for use on Model A-1A:

   6.00 x 6 4-ply Type III tube

   9.00 x 6 4-ply Type III tube.

   8.50 x 6 6-ply Type III tube.

   24 x 10-6 Type III Tundra

   26 x 10.5-6 Tundra and 8.50 x 6 tube.

10. Model A-1A S/N 1395 to 1429 are eligible for increased flap speed of 70 KIAS (80mph) if airspeed indicator P/N 81714 is installed and Airplane Flight Manual is updated to reflect 70 KIAS (80 mph) flap speed.
11. Model A-1A are approved for use with the Alaskan Bushwheel P/N 31136, 31" Diameter Tundra tire. Model A-1A must have the Aero Ski gear P/N 35017-503 and 35017-504 installed in conjunction with the 31" tundra tires P/N 31136. The Scott 10" Model L3450 tail wheel must also be installed per Aviat Aircraft Drawing 35340 on the model A-1A. FAA approved Flight Manual Supplement dated September 18, 1998 or later for the Tundra Tire configuration is required.
12. Models A-1A are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System when installed in accordance with Aviat Master Drawing List 95-0, dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystem VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, dated 5 August 1999, or later revisions, are required.
13. Models A-1A effective serial numbers 1451 and above are equipped for a baggage area access door located below the right hand aft side window. The door is optional for the A-1A and is available as a production design change only on the serial numbers listed above.
14. Models A-1A are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System with IFR equipment when installed in accordance with Aviat Master Drawing List 95-0, Revision A dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystems VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, Revision B dated 5 August 1999, or later revisions, are required.
15. Models A-1A are approved for use with the Aviat Aft Stowage Compartment when factory-installed in accordance with Aviat Master Drawing List 96-00-00, Revision F dated 5/28/2000, or field installed per Aviat Service Bulletin 16, dated 4/19/2000 as Aviat Kit A-1-351 Revision D. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Models A-1A with the Aft Stowage Compartment Installed, dated 4/28/2000 and Supplemental Instructions for Continued Airworthiness - Aft Stowage Compartment, dated 4/17/2000, or later revisions, are required.
16. Models A-1A are approved for use with the Fluidyne Model C-2200 Retractable Skis when installed in accordance with Aviat Husky Service Bulletin 15, Fluidyne C-2200 Retractable Ski Installation and Operation; A-1/A-1A Forward CG Expansion, dated 6/14/1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Fluidyne Skis, dated 6/25/1999 and Supplemental Instructions for Continued Airworthiness - Fluidyne C2200 Retractable Skis, dated 6/25/1999, or later revisions, are required.
17. Model A-1A all serial numbers are approved for installation of VFR short instrument panels part numbers 39725-501, 39770-501 or 39770-502, when installed in accordance with Master Changed Drawing List document AAI-

2015-100-2 rev. D dated 09 SEP 2015. Maintenance and operation compliance is required under Instructions for Continued Airworthiness document 70192-006 revision D dated 07 AUG 2012 or later accepted revision, and the Airplane Flight Manual Supplement document AAI-2015-100-4 revision IR, dated 06 JUL 2015, or later FAA approved revision.

18. Model A-1A may be operated in day or night VFR, day or night IFR, when the approved equipment is installed and operable in accordance with the kinds of operating equipment list (KOEL) as outlined in the Model A-1A AFM

SECTION C: A-1B

C.I. General

1. a) Type:	A-1
b) Model:	A-1B
c) Marketing Designation:	Husky
2. Airworthiness Category:	Normal Category
3.a) Type Certificate Holder:	AVIAT AIRCRAFT INC. 672 SOUTH WASHINGTON STREET AFTON, WYOMING 83110 U.S.A.
3.b) Contracted DOA Holder:	-
4. Manufacturer:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A.
5. Certification Application Date:	25 August 1997
6. FAA Type Certificate Date:	28 January 1998 18 August 2003 for EOGCnF (Note 16) 21 October 2005 for EOGCwF (Note 17)

C.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	25 August 1997
2. Airworthiness Requirements:	Part 23 of Federal Aviation Regulations dated 1. February 1965, Amendment 23-1 thru 23-31 The EASA Aircraft Type Certification standard includes that of FAA TCDS A22NM, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS standards certified by individual EU member States prior to 28 September 2003 are also acceptable.

3	Special Conditions:	None
4.	Exemptions:	None
5.	Deviations:	None
6.	Equivalent Safety Findings:	None
7.	Requirements elected to comply:	None
8.	Environmental Standards:	ICAO Annex 16
9.	(Reserved)	
10.	(Reserved)	
11.	Eligible S/N	2000 and up NF0001 through NF0006, NF0008 and up for **EOGCnF** NF0007, WF0001 and up for **EOGCwF** **(see Note 16)**

C.III. Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Master Drawing List Model A-1B
2.	Description:	single piston engine, two-seats, modified steel cage construction, high wing monoplane with conventional tail and tail wheel
3.	Equipment:	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.
4.	Dimensions:	refer to AFM
5.	Engine:	
5.1.1	Model:	Lycoming O-360- A1P Lycoming O-320-D2A (160 HP) for **EOGC** (see Note 2)

5.1.2 Type Certificate: FAA TCDS E-286
FAA TCDS E-274 for **EOGC**

5.1.3 Limitations: For all operations: 2700 PRM

6. (reserved)

7a. Propeller:

7.1 Model: Hartzell HC-C2YK-1BF/F7666A (Constant Speed)

7.2 Type Certificate: FAA TCDS P-920 / EASA TCDS EASA.IM.P.130

7.3 Diameter: Not over 76 inch, not under 72 inch
Hartzell governor V3-6 or S-1-16
Hartzell spinner assy 836-60 required
Avoid continuous operations between 2000-2250 RPM

7b. Propeller for **EOGC**:

7.1 Model: Sensenich 74DM6S8-0-58
With Sensenich C2366 or
AE C-2367 FWD Bulkhead,AE A1233-5 Doubler Plate
AE C2347 Spinner Dome, AE C2348 Rear Bulkhead

7.2 Type Certificate: FAA TCDS P-886

7.3 Diameter: Not over 74 inch, not under 72 inch
Sensenich spinner assembly C2366 required

8. Fluids:

8.1 Fuel: 100/100LL minimum grade aviation gasoline

8.2 Oil: Refer to AFM

8.3 Coolant: Not applicable

9. Fluid capacities:

9.1 Fuel: Standard Fuel Tank Total: 196,8 Litre
Usable: 189,2 Litre

9.2 Oil: Max. 7,6 litres

9.3 Coolant system capacity: Not applicable

10. Air Speeds:

VNE (Never Exceed speed)	133 KIAS (153 mph)
VNO (Maximum structural cruising speed)	103 KIAS (119 mph)
VA (Manoeuvring speed)	98 KIAS (113 mph)
VFE (Maximum Flap Extended)	70 KIAS (80 mph)

11. Maximum Operating Altitude:	18500 feet	
12. Operational Capabilities:	IFR Day/Night; VFR Day/Night (Note 19) Flight into known or forecast icing condition is prohibited	
13. Masses Maximum Take-off Mass (MTOM)	907 kg (2000 lbs)	
14. Centre of Gravity Range:	Forward limit	from +186,9 to + 203,2 cm at 907 kg from +180,3 to +203,2 cm at 693 kg
15. Datum:	152,4 cm forward of wing leading edge	
16. (reserved):		
17. Levelling Means:	Cabin door, lower sill	
18. Minimum Flight Crew:	1 (Pilot)	
19. Maximum Passenger Seating Capacity:	1	
20. Baggage/Cargo Compartments:	Max. Allowable Load	22,7 kg (at +304,8 cm)

C.IV. Operating and Service Instructions

Airplane Flight Manual (AFM)	Model A-1B dated 28/1/98 or later approved revision
AFM for **EOGCnF**	Airplane Flight Manual dated August 18, 2003 or later approved revisions
AFM for **EOGCwF**	Airplane Flight Manual dated September 23, 2005 or later approved revisions
Maintenance Manual (MM)	MM for Model A-1B

C.V. Notes

1. This certification applies to serial numbers 2000 and up of A-1B Series under Production Certificate 704NM
2. All placards specified in the approved Airplane Flight Manual must be displayed in the airplane in the appropriate locations.
3. Export aircraft incorporating the Lycoming O-360C1G engine are certified for use with a 72 inch dia. Propeller, VFR day and night only, and 2550 RPM max. continuous power, with 2700 RPM max. take-off power for 5 minutes. Aircraft incorporation the Lycoming 0-360-A1P engine are certified for use with a 72 inch dia. Propeller and be limited to 2400 RPM max. continuous power and 2700 RPM max. continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is then required.
4. Export aircraft incorporation the Lycoming 0-360-A1P engine must have a 72 inch diameter propeller and be limited to 2400 RPM maximum continuous power and 2700 RPM maximum continuous take-off power for 5 minutes. Aviat Aircraft Inc. Flight Manual Supplement dated December 1, 1994 or later FAA approved revision is required.
5. Model A-1B are approved for use with Aero Ski Models M1500, M1800, M2000, and M3000H installed per Christen Drawing 35569. Christen Airplane Flight Manual Supplement, dated April 11, 1988, or later FAA approved revision for fixed ski operation is required.

   *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*
6. The Model A-1B is approved for banner and glider towing when a approved tow hook is installed in accordance with Aviat Drawing 35572. Aviat Aircraft Flight Manual Supplement, dated September 1, 1988, or later FAA approved revision for banner and glider tow operations is required.

   *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*
7. Models A-1B are approved for use with Aero Ski Models R2800 retractable ski installed per Christen Drawing 35593. Christen Airplane Flight Manual Supplement, dated Nov 7, 1989, or later FAA approved revision for retractable ski operation is required.

   *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*

8. Model A-1B are approved for use with optional skylight panel installed in accordance with Aviat Aircraft Inc. drawing 35640.
9. The following main gear tires are approved for use on Model A-1B:

   6.00 x 6 4-ply Type III tube

   8.00 x 6 4-ply Type III tube.

   8.50 x 6 6-ply Type III tube.

   24 x 10-6 Type III Tundra

   26 x 10.5-6 Tundra and 8.50 x 6 tube.
10. Model A-1B are approved for use with the Alaskan Bushwheel P/N 31136, 31" Diameter Tundra tire. The Scott 10" Model L3450 tail wheel must also be installed per Aviat Aircraft Drawing 37340 on the model A-1B. FAA approved Flight Manual Supplement dated September 18, 1998 or later for the Tundra Tire configuration is required.

    *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*
11. Models A-1B effective serial numbers 2007 and above are equipped for a baggage area access door located below the right hand aft side window. The door is optional for the A-1B and is available as a production design change only on the serial numbers listed above.
12. Models A-1B are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System when installed in accordance with Aviat Master Drawing List 95-0, dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystem VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, dated 5 August 1999, or later revisions, are required.

    *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*
13. Models A-1B are approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System with IFR equipment when installed in accordance with Aviat Master Drawing List 95-0, Revision A dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystems VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness - VM1000 Engine Monitoring System, Revision B dated 5 August 1999, or later revisions, are required.

    *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGC**w**F**, **EOGC**n**F**, see Note 16)*
14. Models A-1B are approved for use with the Aviat Aft Stowage Compartment when factory-installed in accordance with Aviat Master Drawing List 96-00-00, Revision F dated 5/28/2000, or field installed per Aviat Service Bulletin 16, dated 4/19/2000 as Aviat Kit A-1-351 Revision D. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Models A-1 with the Aft Stowage Compartment Installed, dated 4/28/2000 and Supplemental Instructions for Continued Airworthiness - Aft Stowage Compartment, dated 4/17/2000, or later revisions, are required.

*This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGCwF**, **EOGCnF**, see Note 16)*

15. Models A-1B are approved for use with the Fluidyne Model C-2200 Retractable Skis when installed in accordance with Aviat Husky Service Bulletin 15, Fluidyne C-2200 Retractable Ski Installation and Operation; A-1/A-1A Forward CG Expansion, dated 6/14/1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for Fluidyne Skis, dated 6/25/1999 and Supplemental Instructions for Continued Airworthiness - Fluidyne C2200 Retractable Skis, dated 6/25/1999, or later revisions, are required.

    *This note does not apply to the Engine Option Group Configurations of model A-1B (**EOGCwF**, **EOGCnF**, see Note 16)*

16. **EOGC** stands for **E**ngine **O**ption **G**roup **C**onfiguration:

    EOGCnF stands for **E**ngine **O**ption **G**roup **C**onfiguration **without F**lap

    The Engine Option Group Configuration without Flap is a model A-1B with a flapless wing (no flaps or flap control system installed and has unique wing tips)

    EOGCwF stands for **E**ngine **O**ption **G**roup **C**onfiguration **with F**lap

    The Engine Option Group Configuration with Flap is a model A-1B equipped with balanced ailerons, without spades, long flaps, flap control system per Engineering Report 55-4, Revision D, Appendix A, dated 8-25-05 or later FAA approved revisions.

    Aircraft with **EOGC** are approved for Day VFR only.

    Aircraft with **EOGC** equipped with Anti-Collision, Taxi/Landing, Position, and Instrument Flood Red/White lights are approved for both Day and Night VFR.

17. The following main gear tires are approved for use on Model A-1B **EOGC**:

    6.00 x 6 4-ply Type III tube

    8.00 x 6 4-ply Type III tube.

    8.50 x 6 6-ply Type III tube.

18. Model A-1B all serial numbers are approved for installation of VFR short instrument panels part numbers 39725-501, 39770-501 or 39770-502, when installed in accordance with Master Changed Drawing List document AAI-2015-100-2 rev. D dated 09 SEP 2015. Maintenance and operation compliance is required under Instructions for Continued Airworthiness document 70192-006 revision D dated 07 AUG 2012 or later accepted revision, and the Airplane Flight Manual Supplement document AAI-2015-100-4 revision IR, dated 06 JUL 2015, or later FAA approved revision.
19. Model A-1B may be operated in day or night VFR, day or night IFR, when the approved equipment is installed and operable in accordance with the kinds of operating equipment list (KOEL) as outlined in the Model A-1B AFM

SECTION D: A-1C-180

D.I. General

1. a) Type:	A-1
b) Model:	A-1C-180
c) Marketing Designation:	Husky
2. Airworthiness Category:	Normal Category
3.a) Type Certificate Holder:	AVIAT AIRCRAFT INC. 672 SOUTH WASHINGTON STREET AFTON, WYOMING 83110 U.S.A.
3.b) Contracted DOA Holder:	-
4. Manufacturer:	Aviat Aircraft Inc. 672 South Washington Street Afton, Wyoming 83110 U.S.A.
5. Certification Application Date:	26 September 2006
6. FAA Type Certificate Date:	24 September 2007

D.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	26 September 2006
2. Airworthiness Requirements:	Part 23 of Federal Aviation Regulations dated 1. February 1965, Amendment 23-1 thru 23-31 The EASA Aircraft Type Certification standard includes that of FAA TCDS A22NM, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003; Other standards conforming to TC/TCDS

standards certified by individual EU member States prior to 28 September 2003 are also acceptable.

3 Special Conditions: None

4. Exemptions: None

5. Deviations: None

6. Equivalent Safety Findings: None

7. Requirements elected to comply: None

8. Environmental Standards: ICAO Annex 16

9. (Reserved)

10. (Reserved)

11. Eligible S/N 3000+

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List Model A-1C 180
2. Description: single piston engine, two-seats, steel cage construction high wing monoplane with conventional tail and tail wheel
3. Equipment: Refer to AFM
4. Dimensions: Refer to AFM
5. Engine:
   - 5.1.1 Model: Lycoming O-360-A1P (see Note 9)
   - 5.1.2 Type Certificate: FAA TCDS 1E10
   - 5.1.3 Limitations: Refer to propeller and propeller limits
6. (reserved)

7. Propeller:

7.1 Model:	Hartzell HC-C2YR-1N/N7605 (Constant Speed)
7.2 Type Certificate:	FAA TCDS P-920 / EASA TCDS EASA.IM.P.130
7.3 Diameter:	Diameter not over 76 in., not under 66 in. Pitch setting at 30 in. station Low 10.5º ± .2º, high 29.0º ± 1.0 Takeoff & maximum continuous power 2700 RPM

8. Fluids:

8.1 Fuel:	100/100LL minimum grade aviation gasoline
8.2 Oil:	Refer to AFM
8.3 Coolant:	Not applicable

9. Fluid capacities:

9.1 Fuel:	Standard Fuel Tank	Total:	196,8 Litre
		Usable:	189,2 Litre
9.2 Oil:	Max. 7,6 litres		
9.3 Coolant system capacity:	Not applicable		

10. Air Speeds:

VNE (Never Exceed speed)	133 KIAS (153 mph)
VNO (Maximum structural cruising speed)	103 KIAS (119 mph)
VA (Manoeuvring speed)	98 KIAS (113 mph)
VFE (Maximum Flap Extended)	70 KIAS (80 mph)

11. Maximum Operating Altitude: 18500 feet

12. Operational Capabilities: IFR Day/Night; VFR Day/Night (Note 15)
Flight into known or forecast icing condition is prohibited

13. Masses
Maximum Take-off Mass (MTOM): 998 kg (2200 lbs)

14. Centre of Gravity Range:

Forward limit	from + 189,2 to + 205,7 cm at 998 kg	
	from + 183,6 to + 205,7 cm at 808 kg	

15. Datum: 152,4 cm forward of wing leading edge

16. (reserved)

17. Levelling Means:	Cabin door, lower sill	
18. Minimum Flight Crew:	1 (Pilot)	
19. Maximum Passenger Seating Capacity:	1	
20. Baggage/Cargo Compartments:	Max. Allowable Load	22,7 kg (at +304,8 cm)

D.IV. Operating and Service Instructions

Airplane Flight Manual (AFM)	Model A-1C 180 dated 7/24/07 or later approved revision
Maintenance Manual (MM)	MM for Model A-1C-180 dated 7-10-07 or later approved revisions

D.V. Notes

1. This certification applies to serial numbers eligible 3000 and up of A-1C Series under Production Certificate 704NM.
2. All placards specified in the approved Airplane Flight Manual must be displayed in the airplane in the appropriate locations.
3. Model A-1C 180 is approved for use with optional skylight panel installed in accordance with Aviat Aircraft Inc. drawing 35640.
4. The following main gear tires are approved for use on Model A-1C 180:

TIRE SIZE	TUBE
8:00 X 6 4 TO 6 PLY	6.00 X 6 TYPE III
8:50 X 6 4 TO 6 PLY	8:00 X 6 TYPE III
26 X 10.5 X 6 6 PLY	8:50 X 6 TYPE III
26 X 13 X 6	TUBELESS
29 X 13 X 6	TUBELESS
31 X 13 X 6	TUBELESS

5. Model A-1C 180 is equipped for a baggage area access door located below the right hand aft side window. The door is optional for the A-1C.
6. Model A-1C 180 is approved for use with the Vision Microsystems Inc. VM1000 Engine Monitoring System when installed in accordance with Aviat Master Drawing List 95-0, dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystems VM1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness – VM 1000 Engine Monitoring System, dated 5 August 1999, or later revisions, are required.
7. Model A-1C 180 is approved for use with the Vision Microsystems Inc. VM 1000 Engine Monitoring System with IFR equipment with installed in accordance with Aviat Master Drawing List 95-0, Revision A dated 25 October 1999. Operation and maintenance in accordance with FAA Approved Airplane Flight Manual Supplement for the Vision Microsystems VM 1000 Engine Monitoring System, dated 18 August 1999 and Supplemental Instructions for Continued Airworthiness – VM 1000 Engine Monitoring System, Revision B dated 5 August 1999, or later revisions, are required.
8. Model A-1C 180 is approved for use with the Aviat Aft Stowage Compartment when factory-installed in accordance with Aviat Master Drawing List 96-00-00, Revision F dated 5/28/2000, or installed per Aviat Service Bulletin 16, dated 4/19/2000 as Aviat Kit A-1-351 Revision D.
9. Model A-1C 180; both the upper and lower doors may be opened and the aircraft flown to Vne except serial numbers 3036, 3048, 3050, and up with the 38001-501 fuselage. Serial numbers 3036, 3048, 3050, and up have a modified

fuselage to accommodate a larger door, and the fuselage cluster behind the instrument panel has been moved. These modifications are on the 38001-501 fuselage drawing.

10. The EASA Engine Type Certification standard includes that of FAA TC E286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003, Other standards conforming to TC/TCDS standards Certificated by individual EU member States prior to 28 September 2003 are also acceptable.
11. Model A-1C-180 all serial numbers are approved for installation of VFR short instrument panels part numbers 39725-501, 39770-501 or 39770-502, when installed in accordance with Master Changed Drawing List document AAI-2015-100-2 rev. D dated 09 SEP 2015. Maintenance and operation compliance is required under Instructions for Continued Airworthiness document 70192-006 revision D dated 07 AUG 2012 or later accepted revision, and the Airplane Flight Manual Supplement document AAI-2015-100-4 revision IR, dated 06 JUL 2015, or later FAA approved revision.
12. Model A-1C-180 is approved for use with glider/banner Tow hook when installed in accordance with Aviat assembly drawing 35572-501, revision C or later approved revision
13. Model A-1C-180 S/N 3000 and up are approved for use with JP Instruments EDM-930 or MVP-50 Primary Engine Data with Garmin G500 or G600 Primary flight Display (PFD) with multi-function display(MFD) when installed at the factory in accordance with Aviat Aircraft Inc. drawing 38401 revision E dated 02 January 2013 or later approved revision and Flight Manual Supplement document No. AAI-G500-2009-005 revision IR dated 03/30/2010 or later approved revision.

    Maintenance compliance is required under Aviat Aircraft Inc. Instructions for Continued Airworthiness document No. 70192-006 revision D dated 7 Aug 2012 or later accepted revision. Garmin G500 PFD/MFD system Instructions for Continued Airworthiness document No. 190-01102-00 revision 2 or Garmin G600 PFD/MFD System Instructions for Continued Airworthiness document 190-00601-00 revision A or later accepted revision.
14. Model A-1C-180 S/N 3085 and 3141 and up are approved for use with rebound damping landing gear strut installation. Maintenance and operation compliance is required under Supplemental Instructions for Continued Airworthiness document AA-A1C-LG-801 revision A, dated 12/28/2011 or later accepted revision, and Airplane Flight Manual Supplement document No. AA-A1C-811 revision IR, dated 20 JAN 2012, or later approved revision.
15. Model A-1C-180 may be operated in day or night VFR, day or night IFR, when the approved equipment is installed and operable in accordance with the kinds of operating equipment list (KOEL) as outlined in the Model A-1C-180 AFM

ADMINISTRATIVE SECTION

I. Acronyms

None

II. Type Certificate Holder Record

From 1 May 1987 to 4 Apr 1991:
Christen Industries
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

From 4 April 1991 to 3 Dec 1992:
Aviat Aircraft Inc.
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

From 3 Dec 1992 to 10 Jan 1996:
White International, LTD
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

From 10 Jan 1996 to 27 Feb 2012:
Sky International, Inc.
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

Since 27 Feb 2012:
Aviat Aircraft Inc.
672 South Washington Street
Afton, Wyoming 83110
U.S.A.

III. Change Record

Issue	Date	Changes
1	31 Jan 2008	Initial Issue issued by EASA
2	23 Apr 2010	Update to include A-1C-180
3	20 Nov 2015	Update to include A-1B engine option group and various new equipment, revised TCDS for TCH update and new format layout
4	12 Mar 2016	Correction of Operational Capabilities for all Models