

# TYPE CERTIFICATE DATA SHEET

No. EASA.IM.R.109

For

S-58

# **Type Certificate Holder**

Centerpointe Aerospace, Inc.

279 Blackland Road Royse City, TX 75189 U.S.A.

For Models: S-58 B, S-58 C, S-58 D, S-58 E S-58 BT, S-58 DT, S-58 ET, S-58 FT, S-58 HT, S-58 JT



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# SECTION 1: S-58 B, S-58 C, S-58 D, S-58 E

# I. General

1.	Type/ Model/ Variant	
	1.1 Type	S-58
	1.2 Models	S-58 B, S-58 C, S-58 D, S-58 E
	1.3 Variant	
2.	Airworthiness Category	Large Rotorcraft, Category B
3.	Manufacturer	see Note 3
4.	Type Certification Application Date to	FAA: please refer to FAA for details LBA DE: 7 March 1974
5.	State of Design Authority	Federal Aviation Administration, U.S.A.
6.	Type Certification Date by	FAA:       S-58B, S-58C       2 August 1956         S-58D       15 December 1961         S-58E       27 May 1971         LBA DE:       S-58B, S-58C, S-58D, S-58E       8 December 1975
7.	Type Certificate n° by	FAA: 1H11 LBA DE: 3040
8.	Type Certificate Data Sheet n°	FAA: 1H11 LBA DE: 3040
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 <sup>nd</sup> bullet, 2 <sup>nd</sup> indented bullet.
<u>II. C</u>	ertification Basis	
1.	Reference Date for determining the applicable requirements	Please refer to FAA for details
2.	Airworthiness Requirements	<ul> <li>CAR 6, dated 15 January 1951, including Amdts. 6-1 through 6-6</li> <li>FAR Part 29, dated 1 February 1965, including Amdts. 29-1 through 29-3, see Sikorsky Compliance Checklist SER-58464, LBA approved.</li> </ul>
3.	Special Conditions	FAA Special Condition 27-33-EA-8 (Docket Nr. 10991), dated 14 April 1971 (excluding Special Flight Condition Nr. 1)
4.	Exemptions	FAA Exemption Nr, 1154 (Docket Nr. 10310), dated 10 July 1970
5.	Deviations	none
6.	Equivalent Safety Findings	none
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.IM.R.109
	8.2 Emission Requirements	n/a
9.	Operational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not



require OSD elements for this model (see Article 7a, 1.).

# III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	SER 58465
2.	Description	Main rotor:four MR blades (fully articulated)Tail rotor:four TR blades (fully articulated)Fuselage:conventional, aluminiumLanding gear:two main and one tail wheelPowerplant:radial piston engine
3.	Equipment	As per compliance with certification basis and included in Type Design Definition Document
4.	Dimensions	
	4.1 Fuselage	Length: 11.89 m Width: 1.73 m Height: 4.85 m
	4.2 Main rotor	Diameter: 17.07 m
	4.3 Tail rotor	Diameter: 2.90 m
5.	Engine	
	5.1 Model	Curtiss-Wright/Marquette, Inc. 1 x Model 989C9HE-2
	5.2 Type Certificate	FAA TC/TCDS: E-259 LBA DE: n/a EASA TC/TCDS: n/a

#### 5.3 Limitations

5.3.1 Installed Engine Limits

Rating	Fuel quality [-]	Max PWR [hp]	Speed [rpm]	Manifold [in Hg]	Altitude [ft (m)]		
	115/145	1 525	- 2 800	56.5	sea level (ISA)		
Taka off 5 min	115/145			55.5	700 (213)		
	100/130	1 425		53.0	sea level (ISA)		
				52.0	2 900 (894 )		
Max continuous	115/145	1 275	1 275	1 275	2 500	47.5	sea level (ISA)
	100/130	12/5	2 300	46.0	3 500 (1 067)		
Note: - same limitations for models 989C9HE-2 and 998C9HE-2 - straight line manifold pressure variation with altitudes shown							

#### 5.3.2 **Transmission Torque Limits**

not recorded

#### 6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel

6.2 Oil

6.3 Additives

- 7. Fluid capacities
  - 7.1 Fuel

Туре	Specification			
Aviation gasoline	115/145	100/130		

Refer to approved RFM

Refer to approved RFM

	Quantity [litres]	Remark [-]
Fuel tank S-58 B, S-58 C:	1 078	12-chamber tank, pump supply



		Fuel tank S-58 D, S-58 E:	962	12-chamber tank, ejector supply
			962	11-chamber tank, ejector supply
	7.2 Oil		Q [	uantity litres]
		Engine total		39.75
		Engine usable		29.35
8.	Air Speed Limitations	V <sub>NE</sub> : 117 KIAS For further inform See Note 3 of 'Sec models' for requir	ation refer to ap tion: Data and no ed placards.	proved RFM. otes pertinent to all
9.	Rotor Speed Limitations	Maximum Nr: 258 rpm (104%) Minimum Nr: 170 rpm (68%) See Note 3 of 'Section: Data and notes pertinent to all models' for required placards.		
10.	Maximum Operating Altitude and Temperature			
	10.1 Altitude	15 000 ft PA/DA (4	4 572 m)	
	10.2 Temperature	-20°C to +40°C		
11.	Operating Limitations	<ul> <li>VFR day and night only</li> <li>no flights under icing conditions</li> </ul>		
12.	Maximum Mass			
	12.1	S-58 B, S-58 C: - 5 761 kg (12 700 <u>Note:</u> s/n conver have a lower ma	) lb) rted from former iximum mass of 5	military to civil aircraft 700 kg (12 566 lb).
		- With mod \$1605 5 897 kg (13 000	b-1700 A installed 1 lb) (RFM Supple	d: ement Nr. 6)
	12.2	S-58 D, S-58 E: 5 897 kg (13 000 ll	b)	
13.	Centre of Gravity	max. forward: 3 max. backward: 3 No empty mass C.	3 290 mm (129.6 3 720 mm (146.7 G. range	i in) behind STA 0 ' in) behind STA 0
14.	Datum	Longitudinal: The datum plane ( forward of the ma Lateral: no indicat	(STA 0) is located in rotor centroid ed limitation for	at 3 498 mm (137.7 in) I. cargo loading.
15.	Levelling Means	Plumb bob from to lower door sill	op of cabin door	frame to scale on
16.	Minimum Flight Crew	1 (one)		
17.	Maximum Passenger Seating Capacity	16 (sixteen) Approved seating Sikorsky drawings and S1607-5094 fo	configurations ir S1650-61750, S1 or all configuratio	accordance with 1650-61760, 1607-5091 ons
18.	Passenger Emergency Exit	1, on the right side 2, on both sides of than 14 passenger	e of the passenge f the passenger c rs (plus 1 pilot) a	er cabin. abin required, if more re on board.
19.	Maximum Baggage/ Cargo Loads	For loading schedu Max. cargo deck fl	ule refer to appro oor loading 976	oved RFM kg/m² (200 lb/ft²)



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20.	Rotor Blade Control Movement	For rigging information, refer to Maintenance Manual
21.	Auxiliary Power Unit (APU)	none
22.	Life-limited Parts	Refer to the Retirement Schedule of the Maintenance Manual SA 4045-15, Part IV, Section IV, pages 4-5 through 4-8. These time limits must not be exceeded.
23.	Wheels and Tyres	<ul> <li>Wheels: - main wheel assembly n° 530884G</li> <li>- tail wheel assembly n° 9531065</li> <li>Tyres: - main: 6-ply rating tires, 11.00-12, Type III</li> <li>- tail: 6-ply rating tire, 6.00-6, Type III</li> <li>- all with regular tubes</li> </ul>
<u>IV. C</u>	Operating and Service Instructions	
1.	Flight Manual	Rotorcraft Flight Manual S-58 A, B, C Helicopter, Publication Nr. SA 4045-12, new edition dated 28 June 1957, including revision dated 24 April 1961, and Supplements Nr. 1 through 9 and 11 through 14.
2.	Maintenance Manual	Maintenance Manual Sikorsky Aircraft, Publication Nr. SA 4045-15, Part IV,
3.	Structural Repair Manual	There is no approved SRM associated with this aircraft
4.	Weight and Balance Manual	Refer to approved RFM, Section 5
5.	Illustrated Parts Catalogue	Parts Catalog, Sikorsky Aircraft Publication SA 4045-14
6.	Miscellaneous Manuals	<ul> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2, and 998C9HE2 Service Manual</li> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2, and 998C9HE2 Overhaul Instructions</li> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2, and 998C9HE2 Parts Catalog</li> </ul>
7.	Service Letters and Service Bulletins	As published by Sikorsky, Wright Aircraft Engines and California Helicopter Airways Inc.
8.	Required equipment	Refer to approved RFM and related supplements for approved mandatory and optional equipment.

# V. Notes

 Manufacturer's eligible serial numbers: 58310, 58312, 58324, 58333, 58350, 58356, 58363, 58387, 58388, 58395, 58396, 58403, 58410, 58414, 58432, 58449, 58462, 58470, 58482, 58519, 58530, 58534, 58700, 58775, 58807, 58836, 58898, 581016, 581573

See Note 6, 7, 8 in "Section: Data and notes pertinent to all models" for other s/n's eligible.

- 2. In addition to the pertinent required basic equipment specified in CAR 6, the following items of equipment must be installed: 102, 104, 105, 111, 112, 201, 202, 205, 206, 301, 302, 303, 401
- 3. FAA Production Certificate No. 105 (S-58B, S-58C, S-58D, S-58E)



# SECTION 2: S-58 BT, S-58 DT, S-58 ET, S-58 FT, S-58HT, S-58 JT

# I. General

1.	Type/ Model/ Variant			
	1.1 Туре	S-58		
	1.2 Models	S-58 BT, S-58 DT, S-58 ET, S-58 FT, S-58HT, S-58 JT		
	1.3 Variant			
2.	Airworthiness Category	Large Rotorcraft, Category A and B		
3.	Manufacturer	see Note 3		
4.	Type Certification Application Date to	FAA: please refer to FAA for details LBA DE: not recorded CAA UK: not recorded		
5.	State of Design Authority	Federal Aviation Administration, U.S.A.		
6.	Type Certification Date by	FAA: S-58BT, S-58DT, S-58ET 18 February 1972 S-58 FT, S-58HT, S-58 JT 27 March 1972		
		CAA UK: S-58BT, S-58DT, S-58ET, 22 June 1973 S-58 FT, S-58 HT, S-58JT		
		LBA DE: S-58BT, S-58DT, S-58ET for Category B: 7 March 1974, for Category A: 20 December 1974		
		DGAC FR: S-58BT, S-58DT, S-58ET 29 November 1974		
7.	Type Certificate n° by	FAA: 1H11 DGAC FR: 88 LBA DE: 3040 CAA UK: FR2		
8.	Type Certificate Data Sheet n°	FAA: 1H11 DGAC FR: 88 LBA DE: 3040 CAA UK: FR2		
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 <sup>nd</sup> bullet, 2 <sup>nd</sup> indented bullet.		
<u>II. C</u>	ertification Basis			
1.	Reference Date for determining the applicable requirements	Please refer to FAA for details.		
2.	Airworthiness Requirements	<ul> <li>CAR 6, dated 15 January 1951, including Amdts. 6-1 through 6-6</li> <li>FAR Part 29, dated 1 February 1965, including Amdts. 29-1 through 29-3, Category A Power Plant Installation</li> <li>UK CAA Special Survey Report N° 4202, dated November 1971</li> </ul>		
3.	Special Conditions	FAA Special Condition 27-33-EA-8 (Docket Nr. 10991), dated 14 April 1971 (refer to FAA TCDS 1H11, issue 15)		
4.	Exemptions	none		
5.	Deviations	none		
6.	Equivalent Safety Findings	none		
7.	Requirements elected to comply	none		



#### 8. **Environmental Protection Requirements**

	8.1	Noise Requirements	See TCDSN EASA.IM.R.109
	8.2	Emission Requirements	n/a
9.	Opei	rational Suitability Data (OSD)	Not required for rotorcraft that are no longer in production. CR (EU) 748/2012, as amended by CR (EU) 69/2014 does not require OSD elements for this model (see Article 7a, 1.).

# III. Technical Characteristics and Operational Limitations

1.	Type Design Definition		
2.	Description	Main rotor: Tail rotor: Fuselage: Landing gear: Powerplant:	four MR blades (fully articulated) four TR blades (fully articulated) conventional, aluminium 2 main wheels, one tail wheel Twin Power Section turbo shaft engine i.a.w. Turbine kit 58000-10000-013
3.	Equipment	As per compliance with certification basis and included in Type Design Definition Document and in accordance with FAA-approved Data Application List, Program EYIAIGA	
4.	Dimensions		
	4.1 Fuselage	Length: Width: Height:	11.89 m 1.73 m 4.85 m
	4.2 Main Rotor	Diameter:	17.07 m
	4.3 Tail Rotor	Diameter:	2.90 m
5.	Engine		
	5.1 Model	Pratt & Whitne 1 x Model PT6T 1 x Model PT6T Twin Power Sec power section of	y Canada Ltd. -3, or, -6 ction turbo shaft engine capable of single- operation, Note 4
	5.2 Type Certificate	FAA TC/TCDS: EASA TC/TCDS:	E22EA EASA.IM.E.059

#### 5.3 Limitations

5.3.1 Installed Engine Limits

PT6T-3	Max PWR [shp]	PWR turbine [rpm (%)]	Gas producer [rpm (%)]	Gas temperature [°C]
Take-off 5 min	1 505	33 000 (100)		810
Max continuous	1 262	29 700 (90) max. 29 040 (88) min.	38 100 (100)	765
Transition 10 sec			38 157 (101.5)	850
Engine start 2sec				1 090
OEI (single PWR section)	900	33000 (100)	38 100 (100)	810



PT6T-6	Max PWR [shp]	PWR turbine [rpm (%)]	Gas producer [rpm (%)]	Gas temperature [°C]
Take-off 5 min	1 625	33 000 (100)		624
Max continuous	1 420	31 020 (94) max. 30 360 (92) min.	38 400 (100.8)	593
Transition 5 sec			39 100 (102.6)	645
Engine start 2sec				760
OEI (single PWR section)	970	33 000 (100)	38 400 (100.8)	624

Refer to approved RFM

Refer to approved RFM

5.3.2 Transmission Torque Limits

not recorded

# 6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel

Engine model	Specification		
РТ6Т-3	JP-1, JP-4, JP-5 in accordance with valid Issue of PWA Specification N° 522		
РТ6Т-6	In accordance with PWA Specification N° 522 and CPW-46, and subsequent revisions		
In case of urgent need the use of aviation fuel of all types (MIL-G-5572) is allowed for a total tome of 150 hours between two revisions.			

6.2 Oil

- 6.3 Additives
- 7. Fluid capacities
  - 7.1 Fuel

7.2 Oil

	-		
	Usable [litres]	Unusable [litres]	Total [litres]
Forward tank engine n° 1:	476	17	493
Aft tank engine n° 2:	590	24	614
Auxiliary:	549	21	570
Total:	1 615	62	1 677
	Quantit	y (each engii [litres]	ne system)
Engine	6.06		
Engine unusable	3.22		

<ol><li>Air Speed Limitation</li></ol>
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**Rotor Speed Limitations** 

	Engine unusable	9	3.22
	V <sub>NE</sub> : 117 KIAS For reduction de to approved RFM	epending o M.	on mass, altitude and Nr refer
	Maximum Nr:	258 rpm	(104 %)
	Minimum Nr:	170 rpm	( 68 %)
perature			
	15 000 ft PA/DA	(4 572 m)	)

10. Maximum Operating Altitude and Temperat

10.1 Altitude	15 000 ft PA/DA (4 572 m)
10.2 Temperature	please refer to FAA for details



9.

11.	Operating Limitations	- VFR day and night - IFR - no flights under icing conditions
12.	Maximum Mass	
	12.1 Take-off mass	5 900 kg (13 000 lb)
	12.2 Landing mass	5 900 kg (13 000 lb)
13.	Centre of Gravity	max. forward: 3 292 mm (129.6 in) behind STA 0 max. backward: 3 726 mm (146.7 in) behind STA 0
14.	Datum	Longitudinal: The datum plane (STA 0) is located at 3 498 mm (137.7 in) forward of the main rotor centroid. Lateral: no indicated limitation for cargo loading.
15.	Levelling Means	Plumb bob from top of cabin door frame to scale on lower door sill
16.	Minimum Flight Crew	VFR: 1 (one) IFR: 2 (two)
17.	Maximum Passenger Seating Capacity	17 (seventeen), 16 (sixteen) when flown by 2 pilots
18.	Passenger Emergency Exit	1, on the right side of the passenger cabin. 2, on both sides of the passenger cabin required, if more than 14 passengers (plus 1 pilot) are on board.
19.	Maximum Baggage/ Cargo Loads	For loading schedule refer to approved RFM Max. cargo deck floor loading 976 kg/m² (200 lb/ft²)
20.	Rotor Blade Control Movement	For rigging information, refer to Maintenance Manual
21.	Auxiliary Power Unit (APU)	none
22.	Life-limited Parts	Refer to the Retirement Schedule of the Maintenance Manual SA 4045-15, Part IV, Section IV, pages 4-5 through 4-8. These time limits must not be exceeded.
23.	Wheels and Tyres	<ul> <li>Wheels: - main wheel n° 9531432 <ul> <li>tail wheel assembly n° 9531065</li> </ul> </li> <li>Tyres: - main: 6-ply rating tires, 11.00-12, Type III <ul> <li>tail: 6-ply rating tire, 6.00-6, Type III</li> <li>all with regular tubes</li> <li>alternatively for S-58BT, S-58DT, and S-58ET: <ul> <li>11.00-12, Type 20, No. 6, 1EXX, nylon 8-ply rating</li> </ul> </li> </ul></li></ul>
IV. C	Operating and Service Instructions	
1.	Flight Manual	<ul> <li>Rotorcraft Flight Manual,</li> <li>Publication Nr. SA 4047-17 Part 1.</li> <li>UK CAA approved Rotorcraft Flight Manual Supplement N° 9 Part 1 to Publication Nr. SA 4047-17.</li> </ul>
2.	Maintenance Manual	Maintenance Manual Sikorsky Aircraft, Publication Nr. SA4047-20
3.	Structural Repair Manual	There is no approved SRM Associated with this aircraft
4.	Weight and Balance Manual	Refer to approved RFM, Section 5
5.	Illustrated Parts Catalogue	Parts Catalog, Sikorsky Aircraft Publication SA 4045-14
6.	Miscellaneous Manuals	<ul> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2, and 998C9HE2 Service Manual</li> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2,</li> </ul>



		<ul> <li>and 998C9HE2 Overhaul Instructions</li> <li>Wright Aircraft Engine Models 989C9HE1, 989C9HE2, and 998C9HE2 Parts Catalog</li> </ul>
7.	Service Letters and Service Bulletins	As published by Sikorsky, Wright Aircraft Engines and California Helicopter Airways Inc.
8.	Required equipment	Refer to approved RFM and related supplements for approved mandatory and optional equipment.

### V. Notes

- Manufacturer's eligible serial numbers: Production of turbine models is not planned, but rather conversion of the reciprocating engine models to turbine models. All S-58B's, S-58D's and S-58E's serial numbers are eligible for conversion. See Note 6, 7, 8 in 'Section: Data and notes pertinent to all models' for other serial numbers eligible.
- Basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the helicopter for certification: Also Items 103, 106, 108, to 125 except 111, 201, 202, 205, 206, 304, 305, 401. Also 126a. required with P&W Aircraft PT6T-3 engine installation. Item 126b. required with P&W Aircraft PT6T-6 engine installation.
- 3. FAA Production Certificate No. 105 (S-58BT, S-58DT, S-58ET, S-58FT, S-58HT and S-58JT)
- 4. The PT6T-3 and PT6T-6 twin power section turbo shaft engine is capable of single power section operation when driving through a mixing gear box (UACL Part n° 3017680), main rotor blades S1615-20301-3 or -5, and tail rotor blades S1615-30100-2, -4, -6, -9, -10 or -15.



Equipment:

Engine and Engine Accessories - Fuel and Oil System

Item	litere ef environment	Mass at STA	En	gine
N°		[lb (in)]	Piston	Turbine
102.	Starter Model AN4116R3	28 (+22)	х	-
103.	Starter generator, Lear Siegler 23046-0019		-	x
104.	Fuel Pump - engine driven AN4101-1	3 (+31)	х	-
105.	Fuel pump, boost, Romec RG11260-A1	4 (+121)	х	-
106.	Fuel pump, boost, Lear Siegler P/N RG17020A-1		-	х
107.	Master mechanical fuel shut-off valve installation in accordance with Sikorsky Kit Dwg. No. S1607-3041. Item 401(k) required with this installation.		х	-
108.	Fuel shut-off valve, Aerospace Controls AV16B1847D		-	х
109.	Manual fuel drain valve, Koehler 8151-4AF		-	х
110.	Fuel filter drain valve, Koehler 3-116965		-	х
111.	Oil cooler, engine, Airesearch Model No. 88340	36 (+66)	х	-
112.	Oil cooler, transmission, Harrison Radiator Model No. 852534	28 (+199)	х	-
113.	Oil cooler, (four) radiator, Harrison 8538233		-	х
114.	Oil cooler, blower (a) Dynamic Air M141S-1A (b) Torin A27583		-	x
115.	Manual oil drain valve, Koehler 8151-8AV		-	x
116.	Oil pump, angle gear box, Lear Siegler RG34000C		-	х
117.	Hydraulic pump, N.Y. Airbrake 67WL200-2		-	х
118.	Torquemeter Transmitter, Bendix 58450-10012-101		-	х
119.	Torquemeter Indicator, Bendix 6300-C49A-155-B1		-	х
120.	Engine Tachometer generator (Ng), MS25038-4		-	х
121.	Engine Tachometer generator (Nf), MS25038-2		-	х
122.	Engine Tachometer Indicator (Ng), General Electric 8DJ1CAA-2		-	х
123.	Engine Tachometer, Indicator (Nf), included Item 125		-	х
124.	Main Rotor Tachometer generator, MS25038-2		-	х
125.	Triple Tachometer Indicator (a) Kollsman P/N 58450-10011-101 (b) Kollsman A5590110010		-	х
126a.	Engine T5 Gas Temperature Indicator, Lewis 152B33		-	х
126b.	Engine T7 Gas Temperature Indicator, Lewis 71700 (see Note 3)		-	х
127.	Auxiliary 85 gal. fuel tank installation in 60 lb (+223) accordance with Sikorsky Dwg. No. S1630-62703 Fuel arm (+223) (S-58C)	60 (+223)	х	-
128.	Auxiliary 60 gal. fuel tank installation in accordance with Sikorsky Kit Dwg. No. S1607-3106. (S-58B, S-58C, S-58BT, S-58FT). Use actual wt. change.		x	x
129.	Auxiliary 150.5 gal. fuel tank installation in accordance with Sikorsky Kit Dwg. No. S1630-62245-5. (Installation of basic tank P/N 58088-30008 as modified by 58088-30010 mod. kit.) (S-58BT, S-58DT, S-58ET, S-58FT, S-58HT) Item 401 (bb) required with this installation. See Note 3 for operating limitations		-	x
130.	Chip detector installation in accordance with sikorsky KIT DWg. NO.		×	X



ltem N°	Item of equipment	Mass at STA	Engine	
		[lb (in)]	Piston	Turbine
	S1607-4598. Item 401(1) required with this installation.			

Landing Gear

Item	Itom of aquiament	Mass at STA	Eng	gine
N°	item of equipment	[lb (in)]	Piston	Turbine
201.	Two main wheel-brake assemblies, 11.00-12, Type III (a) Goodyear Model L12HBM Wheel assembly No. 530884G Brake assembly No. 530886SG	39 (+101)	x	-
202.	Two main wheels, 6-ply rating tires, 11.00-12, Type III, with regular tubes	31 (+101)	х	х
205.	Tail wheel assembly, 6.00-6, Type III (a) Goodyear Model L6HBD Wheel assembly No. 9531065	4 (+440)	х	х
206.	Tail wheel 6-ply rating tire, 6.00-6, Type III, with regular tube. Dunlop tube and tire size 11.00-12, Type 20, No. 6, 1EXX, nylon 8 ply rating may be used as an alternate on Models S-58BT, S-58DT, and S-58ET.	11 (+440)	x	x
207.	Emergency inflatable float gear installed in accordance with Sikorsky Dwg. No. S1625-55030 for S-58B, S-58D, S-58E, S-58BT, S- 58DT, S-58ET, S-58FT, S-58HT, S-58JT. Sikorsky Dwg. No. S1625-55000 for S-58C. Additional modifications in accordance with Sikorsky Dwg. No. S1607-2556 are required when Item 209 is installed. Item 401(d) required with this installation on reciprocating models. Item 401(v) required with this installation on turbo shaft models. See Note 3 for operating limitations.	338 (+164)	x	x
208.	Emergency flotation gear. Use actual wt. change (a) P/N S1625-56000 installed in accordance with Sikorsky Kit Dwg.S6107-2515 and Sikorsky Service Information Circular No. 1625-1188. (S-58B, S-58D, S-58E Item 401(e) and/or Item 401(h) required with this installation) (S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, S-58JT, Item 401(w) and/or Item 401(x) required with this installation).		x	x
	<ul> <li>(b) P/N S1625-56100 installed in accordance with Sikorsky Kit Dwg.</li> <li>No. S1607-2515 and Sikorsky Service Information Circular No.</li> <li>S1625-1123 (S-58C Item 401(e) and/or 401(h) required with this installation).</li> <li>(maximum weight 12 700 lb).</li> <li>See Note 3 for operating limitations.</li> </ul>		-	X
209.	Main landing gear installation in accordance with Sikorsky Dwg. No. S1607-2552A.	use actual wt.	х	х
210.	Salvage flotation gear installed in accordance with Sikorsky Dwgs. S1607-2571-4, -7, -8. (S-58B, S-58C, S-58D, S-58E Item 401(n) required with this installation) (S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, S-58JT, Item 401(y) required with this installation)	use actual wt.	x	x



Item	Item of equipment	Mass at STA	Engine	
N°		[lb (in)]	Piston	Turbine
	See Note 3 for operating limitations.			
211.	Ditching flotation system installation in accordance with Sikorsky Dwgs. S1607-2571-4, -7, or -8, and Sikorsky Dwg. 58088-20073 (modified door); Item 401(dd) required with this installation.		х	x

# **Electrical Equipment**

Item	Itom of aquipment	Mass at STA	Engine		
N°	item of equipment	[lb (in)]	Piston	Turbine	
301.	Generator	45 (+19)	х	-	
	30E20-49A				
302.	Battery				
	(a) 24V, 24 amp. hr., Model AN3151-2	56 (+77)	х	-	
	(b) 24V, 26 amp. hr., Model AN3150-2	80 (+77)	х	-	
303.	Two inverters, 250 V.A. output, Model AN3532-2	17 (+76)	x	-	
304.	Battery Sontone				
	(a) Sonotone CA21H-1, 22 amp hr., 28V		-	x	
	(b) Sonotone CA5, 35 amp hr., 28V		-	х	
305.	Inverters (two) AN3532-3, 250VA, 11V, 400 cycl		-	х	
306.	Relay & Sensor Assembly 58550-10249-042		-	х	

# Interior Equipment

Item	Itom of oquinment	Mass at STA	Engine	
N°		[lb (in)]	Piston	Turbine
401.	(a) FAA approved Rotorcraft Flight Manual dated August 2, 1956, reissued June 28, 1957, revised 13 August 1972 (RFM 4045-12)		х	-
	(b) Supplement No. 1 dated August 2, 1956, reissued June 10, 1958, revised August 28, 1983, to item 401(a). Contains operational information for Item 602.		х	-
	(c) Supplement No. 2 dated August 2, 1956, reissued April 25, 1958, revised August 28, 1973 to Item 401(a). Contains operational information for Item 603.		х	-
	(d) Supplement No. 3 dated December 10, 1956, reissued May 7, 1958, revised 21 October 1971, to Item 401(a). Required when Item 207 is installed.		х	-
	(e) Supplement No. 4 dated February 18, 1957, reissued May 7, 1958, revised October 21, 1971, to item 401(a). Required when Item 208 is installed.		х	-
	(f) Supplement No. 5 dated October 9, 1957, reissued June 10, 1958, revised April 23, 1959, to Item 401(a). Required when grade 100/130 fuel is used.		х	-
	(g) Supplement No. 6 dated December 30, 1957, reissued June 18, 1958, revised October 21, 1960, to Item 401(a). Required when Item 604 is installed		х	-
	(h) Supplement No. 7 dated April 25, 1958, revised 28 August 1973, to Item 401(a). Contains operational information when		х	-



m		Mass at STA [Ib (in)]Eng PistonItem 603 are installed8 dated May 7, 1958, revised December 15, a). Required when Item 605 is installed.×9 dated February 24, 1959, to Item 401(a). al information when Ejector Fuel System is×11 dated November 13, 1959, to Item 401(a). n 107 is installed.×12 dated October 17, 1960 to Item 401(a). n 130 is installed×12 dated December 15, 1961, revised May O((a). Required for the model S-S8D and×.14 dated March 5, 1965, revised October 20, a). Required for installed.×.15 dated 15 April 1971, revised 30 November a). Required for installation of UACL PT6T-3 S8B, S-S8D and S-S8E. Required for raft.×.16 dated 5 November 1971, revised 10 April a). Required for installation of UACL PT6T-3 R 29, Category A Power Plant Installation S8B, S-S8D and S-S8E. Required for raft. See Note 12.×.16 ated 30 June 1972 to Item 401(a). m 602 is used in isolated Mountain Operations ensity Altitude.×.1 dated April 20, 1973 to Item 401(s). m 602 is installed2 dated April 20, 1973 to Item 401(s). m 603 is installed3 dated April 20, 1973 to Item 401(s). m 208 is installed4 dated April 20, 1973 to Item 401(s). m 208 is installed5 dated April 20, 1973 to Item 401(s). m 208 are installed. Cancelled5 dated April 20, 1973 to Item 401(s). m 208 are installed. Cancelled5 dated April 20, 1973 to Item 401(s). m 208 are installed. Cancelled5 dated April 20, 1973 to Item 401(s). m 208 are installed. Cancelled.	gine	
•	Item of equipment	[lb (in)]	Piston	Turbine
	both Item 208 and Item 603 are installed			
	(i) Supplement No. 8 dated May 7, 1958, revised December 15, 1961, to Item 401(a). Required when Item 605 is installed.		х	-
	(j) Supplement No. 9 dated February 24, 1959, to Item 401(a). Contains operational information when Ejector Fuel System is used on S-58B.		х	-
	(k) Supplement No. 11 dated November 13, 1959, to Item 401(a). Required when Item 107 is installed.		х	-
	(I) Supplement No. 12 dated October 17, 1960 to Item 401(a). Required when Item 130 is installed		х	-
	(m) Supplement No. 13 dated December 15, 1961, revised May 27, 1971, to Item 401(a). Required for the model S-58D and S-58E.		х	-
	(n) Supplement No. 14 dated March 5, 1965, revised October 20, 1971, to Item 401(a). Required when Item 210 is installed.		х	-
	(o) Supplement No. 15 dated 15 April 1971, revised 30 November 1973, to Item 401(a). Required for installation of UACL PT6T-3 engine in Model S-58B, S-58D and S-58E. Required for configuration I aircraft.		x	-
	(p) Supplement No. 16 dated 5 November 1971, revised 10 April 1973, to Item 401(a). Required for installation of UACL PT6T-3 engine, meeting FAR 29, Category A Power Plant Installation requirements in S-58B, S-58D and S-58E. Required for configuration II aircraft. See Note 12.		х	-
	(q) E and J model not validated		x	-
	(r) Supplement No. 18 dated 30 June 1972 to Item 401(a). Required when Item 602 is used in isolated Mountain Operations Above 8 000 feet Density Altitude.		х	-
	(s) FAA Approved Rotorcraft Flight Manual dated November 5, 1971, reissued April 18, 1973, revised September 13, 1977 See Note 12.		-	x
	(t) Supplement No. 1 dated April 20, 1973 to Item 401(s). Required when Item 602 is installed.		-	х
	(u) Supplement No. 2 dated April 20, 1973 to Item 401(s). Required when Item 603 is installed.		-	x
	(v) Supplement No. 3 dated April 20, 1973 revised July 15, 1976 to Item 401(s). Required when item 207 is installed.		-	x
	(w) Supplement No. 4 dated April 20, 1973 to Item 401(s). Required when Item 208 is installed. Cancelled.		-	-
	(x) Supplement No. 5 dated April 20, 1973 to Item 401(s). Required when Items 603 and 208 are installed. Cancelled.		-	-
	(y) Supplement No. 6 dated April 20, 1973, revised March 28, 1978, to Item 401(s). Required when Item 210 is installed.		-	x
	(z) Supplement No. 7 dated April 20, 1973, revised July 15, 1976, to Item 401(s). Required when Item 602 is used in Isolated, Mountain Operations above 8 000 feet Density Altitude.		-	x
	(aa) Supplement No. 8 dated June 5, 1973, revised March 28, 1975 to Item 401(s). Required when Item 608 is installed.		-	x



Item	Item of equipment (bb) Supplement No. 10 dated May 2, 1974, revised March 27, 1975 to item 401(s). Required when Item 129 is installed (cc) Supplement No. 12 dated May 2, 1974, revised May 2, 1974 to Item 401(s). Required when Item 609 is installed. (dd) Supplement No. 13, dated April 10, 1975 revised March 28 1978, to item 401(s) when Item 211 is installed Optional cabin seating arrangements, Sikorsky Dwg. Nos.; (a) S1650-61750, 12 Place (S-58B, S-58D, S-58BT, S-58BT, S-58HT). (b) S1650-61760, 14 Place (S-58B, S-58BT, S-58FT) (c) S1607-5091, 15 Place (S-58B, S-58D, S-58ET, S-58BT, S-58ET, S-58FT, S	Mass at STA	Engine	
N°		[lb (in)]	Piston	Turbine
	(bb) Supplement No. 10 dated May 2, 1974, revised March 27, 1975 to item 401(s). Required when Item 129 is installed		-	х
	(cc) Supplement No. 12 dated May 2, 1974, revised May 2, 1978 to Item 401(s). Required when Item 609 is installed.		-	х
	(dd) Supplement No. 13, dated April 10, 1975 revised March 28, 1978, to item 401(s) when Item 211 is installed		-	х
402.	Optional cabin seating arrangements, Sikorsky Dwg. Nos.;		х	х
	(a) S1650-61750, 12 Place (S-58B, S-58D, S-58BT, S-58DT, S-58FT, S-58HT).		х	х
	(b) S1650-61760, 14 Place (S-58B, S-58BT, S-58FT)		х	х
	(c) S1607-5091, 15 Place (S-58B, S-58BT, S-58FT)		х	х
	(d) S1607-5094, 16 Place (S-58B, S-58D, S-58E, S-58BT, S-58ET, S-58FT, S-58JT).		х	х
	Note: Seating configuration with more than 15 seats in cabin must have a secondary emergency exit on the left side of the cabin.			
403.	Litters installed in accordance with Sikorsky Dwg. No. S1650- 61770 (S-58B, S-58D, S-58BT, S-58DT).	use actual wt.	х	х
404.	Pilot and copilot seat, Aerosmith Model C-111.		х	x

# Miscellaneous Equipment (not listed previously)

Item	Itom of oquipmont	Mass at STA	Engine	
N°		[lb (in)]	Piston	Turbine
601.	Hydraulic pump, variable delivery, N.Y. Airbrake Model No. 67WB200 (S-58A, S-58B, S-58C, S-58BT, S-58DT, S-58ET, S-58FT). (a) Transmission-driven (b) Engine-driven	8 (+156) 8 (+125)	x x	× -
602.	Cargo sling installation (S-58B, S-58C, S-58D, S-58E, Item 401(b) or 401(r) required with this installation. S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, S-58JT Item 401(t) or 401(z) required with this installation). (a) Sikorsky Dwg. No. S1650-62150, (4 000 lb) (b) Sikorsky Dwg. No. S1650-62195, (5 000 lb) See Note 4 for operating limitations.		x x	x x
603.	Hoist installation in accordance with Sikorsky Dwg. No. S1650- 61700 (S-58A, S-58B, S-58C, S-58D, S-58E). Item 401(c) and/or 401(h) required with this installation. S-58BT, S-58DT, S-58ET, S- 58FT, S-58HT, S-58JT Item 401(u) and/or Item 401(x) required with this installation). See Note 4 for operating limitations.		x	x
604.	Modifications for increase in gross weight of S-58B, S-58C to13 000 lb in accordance with Sikorsky Kit Dwg. No. S1605-1700A.Item 401(g) required with this installation:Fuel:115/145 minimum grade aviation gasolineRotor limits:See Note 3 for required placardAirspeed:Never exceed 107 KIAS. See Note 3 for required placard.Maximum weight:13 000 lb		x	-



Item	Itom of oquinment	Mass at STA	Engine	
N°		[lb (in)]	Piston	Turbine
605.	Automatic Stabilization Equipment installed in accordance with Sikorsky Dwg. No. S1605-4600. Item 401(i) required with this installation.		х	х
606.	omitted		-	-
607.	Modified nose door assembly and relocation of fixed equipment in accordance with Sikorsky Kit Dwg. No. S1607-4554 (S-58B, S-58C).	use act. wt. change	х	-
608.	IFR Mod Kit No. 58000-10001-002. Item 401(aa) required with this installation. See NOTE 3 for operating limitations.		-	x
609.	Product improvement items as defined by Sikorsky Dwg. No. 58000-10000-014. Item 401(cc) required with this installation. See Note 3 for operating limitations.		-	х
610.	Bifilar vibration absorber installation in accordance with Sikorsky Modification Kit 58070-10003. Model S-58T series only.		-	x

# <u>Notes</u>

- 1. Current weight and balance report, including list of equipment included in certificated weight empty, and loading instructions must be in each helicopter at the time of original certification and at all times thereafter. In the case of Air Carrier operators having an approved weight control system, the weight and balance report need not be in the helicopter. When changes are made to the helicopter, which affect weight and balance, refer to the Flight Manual for instructions.
- 2. Information essential to the proper maintenance of the helicopter including retirement time of critical components is contained in the Sikorsky S-58 Maintenance Manual provided with each helicopter. Sikorsky Publication No. SA4045-15, Part IV, S-58 Maintenance Manual, is applicable to Sikorsky Model S-58B, S-58C, S-58D and S-58E helicopters. Sikorsky Publication No. SA4047-20, Equalized Inspection and maintenance Program (which supersedes Sikorsky Publication No. SA4045-15T, Part IV, S-58T Maintenance Manual) is applicable to Sikorsky Model S-58BT, S-58DT, S-58ET, S-58HT, and S-58JT helicopters.

The values of retirement or service life cannot be increased without FAA engineering approval.

3. The following placards must be displayed on the instrument panel in full view of the pilot:

(a) All model S-58 series and S-58T series:

(i) "This helicopter must be operated in compliance with the operating limitations specified in the FAA approved rotorcraft flight manual."

(ii) "Avoid fast turns, 15-sec. minimum for 360 degrees."

(iii) "During extended hovering, close windows and doors and turn vent system on. Close left window during starting and taxiing." except when Item 207, 208, or 210 is installed.

(iv) "Do not fly at a pressure altitude more than 3 500 feet above take-off altitude." (Required when Item 208 or 210 with U.S. Rubber Floats Model Nos. PE-E-1005-1 and PE-E-1005-2 is installed.)
(v) "Do not fly at a pressure altitude more than 6 300 feet above take-off altitude." (Required when Item 208 or 210 with Air Cruisers Floats Model Nos. 11D11149 and 11D11150 is installed.)

(vi) "Do not make water contact above 20 knots." (Required when Item 208 or 210 is installed.)
(vii) "During extended hovering, sideward and rearward flight, close windows and doors and turn vent system on. Close left window during starting and taxiing." (Required when Item 207, 208 or 210 is installed.)

(viii) "Lock tail wheel prior to take-off when the tail wheel type float is installed." (Required when Item 207 is installed).

(ix) "Do not inflate floats above 60 knots IAS. Do not exceed 60 knots with floats inflated." (Required when Item 207 is installed.)



(i) "Avoid taxi turns below 2 400 engine r.p.m."

(ii) Never exceed speeds. Variation of  $V_{ne}$  with altitude, engine r.p.m. and manifold pressure. (S-58B, S-58C, when Item 604 is not installed).

Alt [ft]	2 200 IAS	rpm MP	2 300 IAS	rpm M	2 400 IAS	rpm MP	2 500 IAS	rpm MP
MSL	72	35.5	87	38.7	103	42.3	117	47.5
5 000			60	37.0	76	41.0	90	F.T
10 000							63	F.T.

(iii) Never exceed speeds. Variation of V<sub>ne</sub> with altitude, engine r.p.m. and manifold pressure. Required when Item 604 is installed (S-58A, S-58B, S-58C). Required for the S-58D, S-58E.

Alt [ft]	2 300 IAS	rpm MP	2 400 IAS	rpm M	2 500 IAS	rpm MP
MSL	77	38.7	93	42.3	107	47.5
4 000			71	41.5	85	F.T
8 000					63	F.T.

(c) All model S-58T series only, except as indicated:

(i) "AVOID TAXI TURNS BELOW 88% Nr."

(ii) "MAXIMUM SIDEWARD FLIGHT SPEED NOT TO EXCEED 25 KNOTS."

(iii) "FUELING INSTRUCTIONS" Required with Item 401(p) or 401(s).

"1. SERVICE FROM ALL THREE FILLER NECKS

2. ALLOW SUFFICIENT TIME FOR LEVEL TO STABILIZE

3. TOP OFF AS NECESSARY"

(adjacent to centre and aft fuel cell filler caps)

(iv) "NO. 2 FUEL QTY (Required with Item 401(p) or 401(s)). ADD BOTH NEEDLES"

(v) (below No. 2 Fuel Quantity Indicator)

"PASSENGER CAPACITY IS LIMITED TO 15 PERSONS WHEN EXTERNAL AUXILIARY FUEL SYSTEM IS INSTALLED" (Required when Item 129 is installed.) (Required with Item 401(bb)). (vi) "USE AUXILIARY FUEL FIRST."

"AUXILIARY TANK USABLE FUEL IS 870 LBS. WITH THE BASIC TANK P/N 58088- 30008 988 LBS. AS MODIFIED BY 58088-30010). (Required when Item 129 is installed. Required with Item 401(bb)). (vii) "ACCURATE FOR GROUND ATTITUDE ONLY." (Required when Item 129 is installed. Required with Item 401(bb)).

(viii) Variation of V<sub>ne</sub> with altitude, main rotor r.p.m. and gross weight. (See below) (Required with Item 401(p) or 401(s)).

		13000 lb. or Below	
Takeoff Gross Weight		89% NR	99% NR
Vne	Altitude	KIAS	KIAS
Versus Density Altitude	Sea Level	107	117
Power On	2000	96	117
Not to be Moved in Flight	4000	85	106
	6000	74	95
	8000	63	84
	10000		73
	12000		62



12000 lb.		11000 lb.	or below	Р	OWER OFF VI	ie
		93% NR		Density	81-91% Nr	92-104% Nr
Altitude	KIAS	Altitude	KIAS	Altitude	KIAS	KIAS
Sea Level	117	Sea Level	117	Sea Level	107	117
3500	117	5000	117	2000	96	117
4000	115	6000	111	4000	85	106
6000	104	8000	100	6000	74	95
8000	93	10000	89	8000	63	84
10000	82	12000	78	10000		73
12000	71	14000	67	12000		62
13500	62	15000	62	15000		62

(ix) Never exceed speeds. Variation of  $V_{ne}$  speed with Altitude. (See placard below) Required with Item 401(o).

	Vne at 89% N <sub>r</sub>	
	Takeon Gross Weights	
Density Altitude	12,700 Pounds and Below	12,700 to 13,000 Pounds
S.L.	117 KIAS	107 KIAS
4000 ft.	95 KIAS	85 KIAS
5000 ft.	90 KIAS	79 KIAS
8000 ft.	74 KIAS	63 KIAS
10000 ft.	63 KIAS	

(x) Torque Limits Placard (see below). Required with Item 401(o).

		TA	KE-OFI	POWE	<u>R</u>				N	IAX. CO	ONTINU	JOUS P	OWER		
		Percent	Torque	@ N <sub>r</sub> =	100%					Percent	Torque	@ N <sub>r</sub> =	89%		
Pres Alt 1000	Temp °C						Pres Alt 1000			Т	emp °C				
	-20	-10	0	10	20	30	40		-20	-10	0	10	20	30	40
-1	108	106	103	101	99	96	93	-1	101	98	96	94	93	91	89
0	106	104	101	100	97	93	90	0	100	98	96	94	92	90	88
1	104	102	100	97	94	90	87	1	100	98	96	94	92	89	87
2	102	100	98	94	91	87	84	2	99	97	95	93	91	88	86
3	100	97	95	91	88	84	81	3	99	96	94	92	89	86	83
4	98	94	91	87	84	81	78	4	98	95	92	89	86	83	80
5	95	91	88	84	81	78	74	5	96	92	89	86	83	80	77
6	91	87	84	81	78	74	71	6	93	89	86	83	80	77	74
7	88	84	81	78	75	71	68	7	90	86	83	80	77	74	71
8	84	81	77	74	71	68	65	8	86	83	80	77	74	71	68
9	81	77	74	71	68	65	62	9	83	80	77	74	71	68	65
10	77	73	71	68	65	62	59	10	80	77	74	71	68	65	62

(xi) Variation of  $V_{ne}$  with altitude, main rotor r.p.m. and gross weight (see below). Required when Item 609 is installed. Required with Item 401(cc).

V <sub>NE</sub> VS ALTITUDE PWR ON 93% NR				
	T.O. GROSS WT (LBS.)			
	11000	12000	13000	
	OR BELOW			
ALTITUDE	KIAS	KIAS	KIAS	
2000 & Less		117*		
3500			108*	
4000		115*	106	
5000		109*	100	
6000	111*	104	95	
8000	100	93	84	
10000	89	82	73	
12000	78	71	62	
13500	70	62	01111111111	
14000	67			
15000	62		011111111111	
*FOR IFR FLIGHT REDUCE				
THESE SPEEDS TO 107 KIAS				



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POWER OFF Vne				
DENSITY	81-91% Nr	92-104% Nr		
ALTITUDE	KIAS	KIAS		
SEA LEVEL	107	117*		
2000	96	117*		
4000	85	106		
6000	74	95		
8000	63	84		
10000		73		
12000		62		
15000		62		
*FOR IFR FLIGHT REDUCE THESE SPEEDS TO 107 KIAS				

(xii) "BATTERY STARTS ON GROUND PROHIBITED" (in vicinity of T7 indicator on aircraft equipped with PT6T-6 engine. Placard not required if the DC/DC converter, P/N 58550-10347-101, is installed.)

(xiii) Variation of  $V_{ne}$  with altitude, main rotor r.p.m. and gross weight (see below). Required when Item 608 is installed. Required with Item 401(aa).

TAKEOFF Gross Weight	13000 lb	).	12000 lb		11000 lb. or	Below
		· · ·				
	ALTITUDE	KIAS	ALTITUDE	KIAS	ALTITUDE	KIAS
	SEA LEVEL	117*	SEA LEVEL	117*	SEA LEVEL	117*
Vne versus	2000	117*	3500	117*	5000	117*
DENSITY	4000	106	4000	115*	6000	111*
ALTITUDE	6000	95	6000	104	8000	100
POWER ON	8000	84	8000	93	10000	89
93% Nr	10000	73	10000	82	12000	78
	12000	62	12000	71	14000	67
	-	-	13500	62	15000	62
	*FOR IF	R FLIGE	T REDUCE THE	SE SPEE	DS TO 107 KIA	S

POWER OFF Vne				
DENSITY	81-91% Nr	91-104% Nr		
ALTITUDE	KIAS	KIAS		
SEA LEVEL	107	117*		
2000	96	117*		
4000	85	106		
6000	74	95		
8000	63	84		
10000		73		
12000		62		
15000		62		
*FOR IFR FLIGHT REDUCE THESE SPEEDS TO 107 KIAS				

- 4. The hoist (Item 603) and the cargo sling (Item 602) are special purpose equipment and are to be operated in accordance with the limitations described in CAR 8 or FAR 133 as applicable. Information concerning the operating limitations is also contained in Items 401(b), 401(c), 401(r), 401(h), 401(t), 401(u), 401(z), and (x).
- 5. The cabin floor area for Model S-58C is structurally satisfactory for a uniformly distributed loading of 200 p.s.f. between Stations 112 and 246 and for 100 p.s.f. between Stations 246 and 296 when used for cargo purposes.
- Military model CH-34A (formerly H-34A), CH-34C (formerly H-34C), VH-34C (formerly H-34C), HH-34F (formerly HUS-1G), UH-34D (formerly HUS-1), UH-34E (formerly HUS-1A), VH-34D (formerly HUS-1Z), SH-34G (formerly HSS-1), SH-34H (formerly HSS-1F), SH-34J (formerly HSS-1N), UH-34G and UH-34J

aircraft manufactured by Sikorsky Aircraft may be converted to models of the S-58 type shown on page 1 provided the converted aircraft conforms to a specific model in accordance with FAR 21.183(d). Any serial number in the "Serial Numbers Eligible" sections which has a "D" suffix applies only to the aircraft having a nameplate with a "D" suffix and an aircraft with a nameplate bearing the same Arabic number without the suffix "D" is not eligible.

7. The following helicopters have been converted (reference: NOTE 6):

s/n	Surplus military model	Eligible for certification as civil model	Modifier
58-112	H34C	S-58E	Chicago Helicopters Airways, Chicago, Illinois
58-269	CH34C	S-58E	Heli-Crane, Inc. Maryland Heights, Missouri
58-279	H34A	S-58E	Carson Helicopters, Inc. Perkasie, Pennsylvania
58-317	CH34C	S-58E	Chicago Helicopters Airways
58-328	H34A	S-58ET	Sikorsky Aircraft Stratford, Connecticut
58-336	H34A	S-58E	Imperial Airways, Inc. South St. Paul, Minnesota
58-354	H34A	S-58ET	Sikorsky Aircraft
58-374	H34A	S-58ET	Sikorsky Aircraft
58-378	H34A	S-58ET	Sikorsky Aircraft
58-412	CH34C	S-58E	Chicago Helicopter Airways
58-437	S-58B	S-58BT	Sikorsky Aircraft
58-524	HUS-1	S-58D	Chicago Helicopter Airways
58-531	CH34C	S-58J (not eligible in EU)	Pacific Crown Aviation, Inc.
58-540	CH34C	S-58E	Chicago Helicopter Airways
58-601	H34A	S-58ET	Sikorsky Aircraft
58-673	CH34C	S-58ET	Orlando Helicopter Airways, IncP.O. Box 2802, Orlando, Florida
58-658	UH34J	S-58BT	Chicago Helicopter Airways
58-692	S-58B	S-58BT	Sikorsky Aircraft
58-700	S-58B	S-58BT	Sikorsky Aircraft
58-721	H34A	S-58ET	Sikorsky Aircraft
58-727	H34G	S-58ET	Chicago Helicopter Airways
58-730	S-58H		Pacific Crown Aviation
58-735	S-58J	(not eligible in EU)	Edward Chopot
58-738	CH34C	S-58E	Chicago Helicopter Airways
58-740	H34G	S-58E	Carson Helicopters, Inc.
58-743	UH34J	S-58B	Chicago Helicopter Airways
58-750	H34A	S-58ET	Hawaii Helicopter International
58-761	HSS-1	S-58B	Moore Aviation, Inc.
58-775	S-58B	S-58ET	Sikorsky Aircraft
58-777	HSS-1	S-58B	Carson Helicopters, Inc.
58-780	H34A	S-58ET	Hawaii Helicopter International Lihue, Hawaii
58-787	UH34D	S-58D	Chicago Helicopter Airways
58-827	H34A	S-58ET	Sikorsky Aircraft
58-855	H34G	S-58ET	Sikorsky Aircraft
58-856	H34G	S-58E	Hawaii Helicopter International
58-869	CH34C	S-58J (not eligible in EU)	Edward Chopot Hamilton, Montana
58-879	H34A	S-58ET	Sikorsky Aircraft



s/n	Surplus military model	Eligible for certification as civil model	Modifier
58-926	HSS1N	S-58B	Carson Helicopters, Inc.
58-941	CH34C	S-58E	Chicago Helicopter Airways
58-956	H34A	S-58ET	Sikorsky Aircraft
58-960	H34A	S-58JT	Utility Helicopters, Inc. Long Beach, California
58-1070	H34A	S-58ET	Sikorsky Aircraft
58-1071	H34A	S-58ET	Sikorsky Aircraft
58-1091	H34A	S-58ET	Sikorsky Aircraft
58-1097	H34G	S-58E	Imperial Airways, Inc.
58-1105	H34G	S-58E	Imperial Airways, Inc.
58-1112	H34A	S-58ET	Sikorsky Aircraft
58-1117	H34A	S-58ET	Sikorsky Aircraft
58-1120	H34A	S-58ET	Sikorsky Aircraft
58-1122	H34A	S-58ET	Sikorsky Aircraft
58-1124	H34A	S-58ET	Sikorsky Aircraft
58-1126	H34A	S-58ET	Sikorsky Aircraft
58-1128	H34A	S-58ET	Sikorsky Aircraft
58-1129	H34A	S-58ET	Sikorsky Aircraft
58-1147	HUS-1	S-58D	Carson Helicopters, Inc.
58-1148	HU34D	S-58D	Carson Helicopters, Inc.
58-1158	SH34J	S-58BT	Carson Helicopters, Inc.
58-1186	H34A	S-58JT	Utility Helicopters, Inc.
58-1193	UH34D	S-58D	Orlando Helicopter Airways, Inc.
58-1214	HUS-1	S-58D	Chicago Helicopter Airways
58-1225	UH34D	S-58B	Chicago Helicopter Airways
58-1227	HUS-1	S-58D	Chicago Helicopter Airways
58-1272	S-58J	(not eligible in EU)	
58-1402	HUS-1	S-58D	Carson Helicopters, Inc.
58-1438	UH34D	S-58D	Chicago Helicopter Airways
58-1439	HUS-1	S-58D	Carson Helicopters, Inc.
58-1458	H34A	S-58ET	Sikorsky Aircraft
58-1459	H34A	S-58E(J)	Bering Associates Anchorage, Alaska
58-1461	UH-34D	S-58D	John A. Haertsch Tucson, Arizona
58-1464	HUS-1	S-58D	Carson Helicopters, Inc.
58-1487	UH34D	S-58D	Chicago Helicopter Airways
58-1491	HUS-1	S-58D	Carson Helicopters, Inc.
58-1492	UH34A	S-58D	Chicago Helicopter Airways
58-1493	H34A	S-58ET	Sikorsky Aircraft
58-1503	H34A	S-58ET	Sikorsky Aircraft
58-1514	H34	S-58ET	Sikorsky Aircraft
58-1519	UH34D	S-58DT	Chicago Helicopter Airways
58-1527	H34G	S-58ET	Orlando Helicopter Airways
58-1536	H34A	S-58ET	Sikorsky Aircraft
58-1537	H34A	S-58ET	Sikorsky Aircraft
58-1538	H34A	S-58ET	Sikorsky Aircraft



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s/n	Surplus military model	Eligible for certification as civil model	Modifier
58-1547	H34A	S-58ET	Sikorsky Aircraft
58-1551	H43A	S-58E	Orlando Helicopter Airways, Inc.
58-1561	H34A	S-58ET	Sikorsky Aircraft
58-1564	H34G	S-58ET	Orlando Helicopter Airways, Inc.
58-1565	H34A	S-58ET	Sikorsky Aircraft
58-1567	H34G	S-58E	Chicago Helicopter Airways
58-1570	H34A	S-58ET	Sikorsky Aircraft
58-1575	H34A	S-58E	Lake Line Helicopters, Inc. Eden Prairie, Minnesota
58-1576	H34G	S-58E	Utility Helicopters, Inc.
58-1589	H34G	S-58ET	Orlando Helicopter Airways, Inc.
58-1606	H34A	S-58ET	Sikorsky Aircraft
58-1607	CH34A	S-58E	Helicopter Minut Men, Inc. Columbus, Ohio
58-1613	H34A	S-58ET	Sikorsky Aircraft
58-1618	H34G	S-58E	Chicago Helicopter Airways
58-1626	H34A	S-58ET	Sikorsky Aircraft
58-1627	H34A	S-58E	Olympic Helicopters Inc. Boeing Field, Seattle, Washington
58-1630	H34A	S-58ET	Sikorsky Aircraft
58-1632	H34A	S-58ET	Sikorsky Aircraft
58-1637	H34A	S-58ET	Sikorsky Aircraft
58-1639	H34A	S-58ET	Sikorsky Aircraft
58-1646	H34A	S-58ET	Sikorsky Aircraft
58-1648	CH34A	S-58E	Western Helicopters, Inc. Rialto, California
58-1657	H34A	S-58ET	Sikorsky Aircraft
58-1659	HUS-1	S-58ET	Sikorsky Aircraft
58-1663	H34G III	S-58JT	Air Aisa Ltd.
58-1672	H34G	S-58ET	Orlando Helicopter Airways, Inc.
58-1673	H34G	S-58ET	Orlando Helicopter Airways, Inc.
58-1677	H34G-II	S-58JT	Air Asia, Ltd.
58-1720	UH34D	S-58D	4C's Helicopters, Inc. Martinez, California
58-1732	H34G	S-58E(J)	Trans Alaska Helicopters Anchorage, Alaska
58-1787	UH34D	S-58D	Orlando Helicopter Airways, Inc.
58-1809	UH34D	S-58D	Carson Helicopters, Inc.

- 8. deleted
- 9. Except for a difference in maximum mass, the following models are identical to each other including all limits (only EU validated models listed):

identical to	S-58BT
identical to	S-58D
identical to	S-58DT
identical to	S-58ET
	identical to identical to identical to identical to

10. Initially the Pratt & Whitney Aircraft PT6T-3 engine installation in the S-58B and S-58E was approved via a Supplemental Type Certificate (SH71EA dated 15 April 1971, amended 27 May 1971, 5 November 1971 and 21 January 1972) issued to Sikorsky Aircraft.

Subsequently, Sikorsky Aircraft requested that the turbine configured aircraft be added to Helicopter Type Certificate 1H11 as new models, which was accomplished on 18 February 1972 and 27, March 1972. Special service instructions are provided in SSI 129A for conversion to turbine aircraft.



- 11. The Pratt & Whitney Aircraft PT6T-3 engine may be installed in a military aircraft which has been converted to either an S-58B, S-58D, S-58E, S-58H or S-58J under the provisions of Note 6, 7, and 8.
- 12. Supplement No. 16 to Item 401(a) became Rotorcraft Flight Manual SA4047-17, Item 401(s) for S-58T series configuration II. See certification basis.
- 13. Sikorsky Modification Kit No. 58070-30000 covers Pratt & Whitney Aircraft PT6T-6/PT6T-3 power package replacement.
- 14. Use of the combustion heater installed on rotorcraft equipped with Pratt & Whitney Aircraft PT6T-6 or PT6T-3 engine power package is prohibited unless the heater installation is approved for operation with turbine engine type fuels.

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# SECTION: ADMINISTRATIVE

# I. Acronyms and Abbreviations

Amdt.	Amendment	OEI	One Engine Inoperative
CAA	Civil Aviation Authority (Britain)	OSD	Operational Suitability Data
C.G.	Centre of Gravity	PA	Pressure altitude
DA	Density altitude	P/N	Part number
DGAC	Direction générale de l'aviation civile	PWR	Power
	Directorate General for Civil Aviation (France)	s/n	Serial number
Doc.	Document	STA	Station
FAA	Federal Aviation Administration	TQ	Torque
LBA	Luftfahrt-Bundesamt	VFR	Visual Flight Rules
	Federal Office for Civil Aviation (Germany)	VNE	Velocity Never Exceed
N°	Number		

## II. Type Certificate Holder Record

Type Certificate Holder	Period
Sikorsky Aircraft Division of United Technologies Corporation Stratford, CT 06602, USA	from 2 August 1956
California Helicopter Airways Inc. 279 Blackland Road Fate, TX 75189, USA	since 6 May 2015
Centerpointe Aerospace, Inc. 279 Blackland Road Royse City, TX 75189, USA	since 19 September 2019

## III. Change Record

Issue	Date	Changes	TC issue
Issue 1	4 Jul 2019	Initial issue of EASA TCDS	Initial Issue, 4 July 2019
Issue 2	17 Sep 2020	TC Holder name change	Re-issued, 17 Sep 2020

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