

TYPE CERTIFICATE DATA SHEET № ER-7906

Type Certificate Holder: SIKORSKY AIRCRAFT CORPORATION 6900 Main Street Stratford, CT - 06497-9129 USA ER-7906-07 Sheet 01 SIKORSKY

S-76A, S-76C

22 January 2009

This data sheet, which is part of Type Certificate No. 7906, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model S-76A (Transport Helicopter, Category B), approved 10 August 1979.

ENGINE	2 RR Allison Engine or 1 each Model 25	e Company Mo 0-C30 and Mod	del 250-C30, or 2 M el 250-C30S. (See N	odel 250-C30S, lote 8).
FUEL	Primary: JP-4 GB6	4, JP-5*, JP-8, 、 537-94(RP-3)*	Jet A*, Jet A1*, Jet I	B, and
	Alternate: * Mixt abov * For requ	ture of AVGAS ve 4°C (40°F). operations belo uired. (See Note	with Jet A, A1, or JF (See Note 5). ow 4°C (40°F), anti-i e 6).	P5. Do not use
ENGINE LIMITS (Sea Level Static / Standard Day)	Take-off (5 min.) Max. Continuous OEI (30 min.) OEI (2-1/2 min.) Transient - 16 sec. (OEI)	Engine Torque Limits (%) 104.6 104.6 104.6 111.2 111.2 to 155	Gas Generator Speed Limits (N ₁), rpm (%) 53 550 (105.0) 53 550 (105.0) 53 550 (105.0) 53 550 (105.0)	Power Turbine Inlet (T5), °C 768 768 798 826
	- 10 sec. (Starting)		53 550 (105.0) to 54 060 (106.0)	826 to 927
	Output Shaft (N ₂) - Normal Range: 9 - Maximum Continu - Maximum 15-sec	95% to 107% uous: Varies autorota .: Varies linear to 109% at 2	linearly from 1 tion to 107.1% at 21 ly from 119% at flig %-min, power.	14% at flight ⁄₂-min. power. ght autorotation
	- Engine torque: 1	00% = 564 foot	-pounds.	
	See Flight Manual power turbine (N2)	for T5 (power t speed limits.	urbine inlet tempera	ture) limits and

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ROTOR LIMITS	Maximum Minimum	Power Off 115% Nr (336 rpm) 87% Nr (255 rpm)	Power On 107% Nr (313 rpm) 100% Nr (2-engine o and 96% Nr (OEI)	peration)
AIRSPEED LIMITS	Never exceed - Power on - Power off L. G. operation L. G. extended	(V _{ne}): 155 kca 135 kca 135 kca 130 kca d (V _{le}): 130 kca	as (155 kias)* as (141 kias)** as (130 kias) as (130 kias)	
	 * See Flight density alt ** Below 36 to 120 kca 	Manual for variations itude. 2 kg (80 lb) fuel remair s (126 kias) or less.	of V_{NE} with gross we ing per tank, reduce a	ight and airspeed

C G RANGE



For effect of landing gear position, refer to loading section of Rotorcraft Flight Manual.

LATERAL CG LIMITS

Max. left CG: 8,9 cm (3.5 in) Max. right CG: 8,9 cm (3.5 in)

EMPTY WEIGHT CG RANGE.

None.

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MAXIMUM WEIGHT	4 763 kg(1	0 500 lb)	
MAXIMUM OPERATING (DENSITY) ALTITUDE	Enroute: 4 Take-off and	572 m (15 000 ft) d landing: 2 103 m (6 900 ft)	
TEMPERATURE OPERATI LIMITS	NG Maximum: Minimum:	ISA +36,7°C, not to exceed 48.9°(-34,4°C (-30°F)	C (120°F)
NUMBER OF SEATS	2 at 260.4 ((166.5 in) a	cm (102.5 in), 4 at 344.2 cm (135. nd 4 at 501.7 cm (197.5 in); or	5 in), 4 at 422.9 cm
	2 at 260.4 c 501.7 cm (1	m (102.5 in), 3 or 4 at 353.1 cm (13 97.5 in); or	39.0 in) and 3 or 4 at
	2 at 260.4 501.7 cm (1	cm (102.5 in), 2 at 381.0 cm (97.5 in).	150.0 in) and 4 at
MINIMUM CREW	2 (IFR) / 1 (VFR)	
MAXIMUM BAGGAGE	272 kg (600) lb).	
FUEL CAPACITY	1 084 liters 550.4 cm((286.4 US gal) [1 064 liters (281.2 216.7 in) (see Note 1).	2 US gal) usable] at
OIL CAPACITY	4,81 liters (*	1.27 US gal) per engine at 586.7 cm	ו (231.0 in).
DATUM	508.0 cm (2	200 in) forward of main rotor centroid	d.
LEVELING MEANS	Leveling pla frame of the	ate at STA 176, BL 35, L.H. and ple aft doorway.	umb line from upper
ROTOR BLADE CONTROL MOVEMENTS	- For rigging	information refer to Maintenance Ma	anual.
S/N's ELIGIBLE	76006, 760 thru 760268 760364, 76 eligible.	07, 760001 thru 760122, 760130 tl 3, 760270 thru 760298, 760300 th 60366, 760369 thru 760371, 76	nru 760261, 760263 ru 760302, 760304, 0373, 760374, are
II - <u>Model S-76C (Tra</u> (<u>Tra</u>	nsport Helicopter, C nsport Helicopter, C	category B), approved 10 October category A), approved 10 October	2002. 2002.
ENGINE	2 Turbom Turbomec	neca Arriel 1S1 or 2 Turbomec a Arriel 2S2. (See Note 15).	a Arriel 2S1 or 2
FUEL	Primary:	JP-4***, JP-5**, JP-8, Jet A*, J GB6537-94(RP-3)*	et A1*, Jet B*, and
	Fuels with limitation.	n anti-ice additive can be used w	without temperature
	* Fuels wi additive be	thout anti-ice additive shall be mixelow +4°C (40°F). (See Note 6.)	ed with appropriate
	*** Applica	able to Arriel 1S1 only	

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ENGINE LIMITS

(Sea Level Static / Standard Day)

OIL

5 cst synthetic oil for normal use. For approved types and brands, refer to S-76C Flight Manual, Sikorsky P/N SA4047-76C-1 (W/Arriel 1S1 engine configuration) or S-76C Flight Manual, SA 4047-76C-10 Sikorsky P/N (W/Arriel 2S1 engine configuration) for aircraft serial numbers prior to 760511 or Sikorsky P/N SA 4047-76C-14 (W/Arriel 2S1 engine configuration) for serial numbers 760511 and subsequent or S-76C Flight Manual, Sikorsky P/N SA 4047-76C-15 (W/Arriel 2S2 engine configuration) for serial numbers 607 and subsequent.

Arrie	1 1S1 Configuration	
	Engine	Transmission
	Torque Limits %	Torque Limits %
Take-off	104.0	100.0
Max. Continuous	104.0	100.0
OEI (2-1/2 min.)	127.0	136.0
OEI (Max. Continuous)	110.0	128.0
Transient		
- 20 sec. (OEI)	148.0	
- 20 sec.		
- 10 sec.		115.0
- 5 sec. (OEI)		150.0
- 5 sec. (Starting)		
	Gas Generator	Power Turbine
		lplot(TE)
	Speed Limits (IN1)	Iniel (15)
	speed Limits (N_1) rpm (%)	°C
Take-off	rpm (%) 100.0	°C 845
Take-off Max. Continuous	rpm (%) 100.0 100.0	°C 845 845
Take-off Max. Continuous OEI (2-1/2 min.)	speed Limits (N ₁) rpm (%) 100.0 100.0 102.7**	°C 845 845 885
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous)	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2*	°C 845 845 885 868
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient	Speed Limits (N ₁) rpm (%) 100.0 100.0 102.7** 102.2*	°C 845 845 885 868
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient - 20 sec. (OEI)	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2* 105.35***	°C 845 845 885 868 920
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient - 20 sec. (OEI) - 20 sec.	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2* 105.35*** 105.35***	°C 845 845 885 868 920
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient - 20 sec. (OEI) - 20 sec. - 10 sec.	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2* 105.35*** 105.35***	920
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient - 20 sec. (OEI) - 20 sec. - 10 sec. - 5 sec. (OEI)	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2* 105.35*** 105.35*** 	920
Take-off Max. Continuous OEI (2-1/2 min.) OEI (Max. Continuous) Transient - 20 sec. (OEI) - 20 sec. - 10 sec. - 5 sec. (OEI) - 5 sec. (Starting)	Speed Limits (N ₁) rpm (%) 100.0 102.7** 102.2* 105.35*** 105.35*** 	920 865

* Cockpit Gauge Biased to Read 101.2 %

** Cockpit Gauge Biased to Read 101.7 %

*** Cockpit Gauge Biased to Read 104.35%

ENGINE LIMITS

(Sea Level Static / Standard Day)

Arriel 2S1 Configuration

Engine Torque	Transmission
Limits %	Torque Limits %
103.7	100.0
103.7	100.0
103.7	100.0
134.6	136.0
126.7	136.0
116.7	128.0
160.4	
	115.0
	150.0
	Engine Torque Limits % 103.7 103.7 103.7 134.6 126.7 116.7 160.4

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ENGINE LIMITS (Cont.) (Sea Level Static / Standard Day)		Gas Generator Speed Limits (N ₁)	Power Turbine Inlet (T5) °C
	Take-off (5 minutes) 30 minute (see Note 13) Maximum Continuous OEI (30 second) OEI (2 minutes) OEI(Maximum Continuous) 20 sec Transient 10 sec Transient 10 sec Transient (starting) 5 sec Transient (OEI)	101.2 * 101.2 * 99.0 ** 105.8 **** 102.4 *** 101.2 * 102.3 ***	912 912 877 1000 941 912 865
	* Cockpit Gauge Biased to F ** Cockpit Gauge Biased to F *** Cockpit Gauge Biased to F **** Cockpit Gauge Biased to F	Read 100.0% Read 97.8% Read 101.2% Read 104.6 %	
	Arriel 2S2	2 Configuration	
		Engine Torque Limits %	Transmission Torque Limits %
	Take-off (5 minutes) 30 minute (see Note 13)	103.7 103.7	100.0 100.0
	Maximum Continuous OEI (30 second) OEI (2 minutes) OEI (Maximum Continuous)	103.7 134.9 127.0 115.0	100.0 136.0 136.0 128.0
	20 sec Transient	160.4	
	10 sec Transient		115.0
	5 sec Transient (OEI)		150.0
		Gas Generator Speed Limits (N ₁) rpm (%)	Power Turbine Inlet (T5) °C
	Take-off (5 minutes)	101.88 *	930
	30 minute (see Note 13)	101.88 *	930
	Maximum Continuous	99.71 **	893
	OFI (2 minutes)	102.38 ****	990 944
	OEI (Maximum Continuous)	101.28 *****	926
	20 sec Transient	102.98 *****	
	10 sec Transient		
	5 sec Transient (Starting)		840
	 Cockpit Gauge Biased t 	o Read 100.0% o Read 97.8% o Read 103.9% o Read 100.5 % o Read 99.4 % o Read 101.1 %	
	Engine torque 100%= 90.9 kgf-	m (657.6 foot-pou	unds)

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ROTOR LIMITS		Power Off	Power On
	Maximum	115% Nr (336 rpm)	108% N _r (316 rpm.), except 109%for less than20 seconds (w/2S1engine only) 108% N _r (316 rpm.), except with
			torque below 26%, then 110% Nr (w/1S1engine only)
	Minimum	91% Nr (266 rpm)	106% N_r (dual engine operation) 100% N_r (one engine inoperative) (OEI)
AIRSPEED LIMITS	Never exceed (V _{ne}): - Power on - Power off L. G. operation (V _{Io}): L. G. extended (V _{Ie}):		155 kcas (155 kias)* 136 kcas (136 kias)** 130 kcas (130 kias) 130 kcas (130 kias)
	* See Elight Manua	I for variations of V _M	with temperature and pressure

- See Flight Manual for variations of V_{NE} with temperature and pressure altitude.
 ** Below 26.2 kg (20 lb) fuel remaining per tenk, evoid sustained pitch down.
- ** Below 36.2 kg (80 lb) fuel remaining per tank, avoid sustained pitch down attitudes in excess of 5^o nose low.

CG RANGE



LATERAL CG LIMITS

Up to 5 171 kg (11 400 lb): ± 3.5 inches maximum Above 5 171 kg (11 400 lb): ± 2.5 inches maximum Below 4 899 kg (10 800 lb) (w/hoist load, hover only): ± 4.5 inches maximum.

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SIKORSKY	22 January 2009	ER-7906	S-07	Sheet 7/13
EMPTY WEIGHT CG RANG	E. None			
MAXIMUM WEIGHT	5 307 kg(1	11 700 lb)		
MAXIMUM OPERATING (DE ALTITUDE	ENSITY) With 1S1 e Enroute: 4	engine Configuration: 4 572 m (15 000 ft);	Take-off and la CAT B: 3 352 r CAT A: 1 524 r	nding: n (11 000 ft) n (5 000 ft)
	With 2S1 c	or 2S2 Engine config	uration:	
	Enroute: 4	4 572 m (15 000 ft);	Take-off and la CAT B: 4572 CAT A: 1524	nding: m (15 000ft) m (5 000 ft)
TEMPERATURE OPERATIN LIMITS	IG Maximum: Minimum:	ISA +36,7°C, not t -34,4°C (-30°F)	to exceed 48.9°	C (120°F)
NUMBER OF SEATS	2 cockpit 13 passen	ger maximum		
MINIMUM CREW	2 (IFR); 1	(VFR)		
MAXIMUM BAGGAGE	272 kg (60	0 lb)		
FUEL CAPACITY	1 084 liters	s (286.4 US gal) [1 0	64 liters (281.2 l	JS gal) usable]
OIL CAPACITY	4,81 liters	(1.27 US gal) per en	gine	
DATUM	508,0 cm (200 in) forward of m	ain rotor centroi	d
LEVELING MEANS	Leveling p upper fram	late at STA 176, BL 3 ne of the aft doorway	35, L.H. and plur	mb line from
ROTOR BLADE CONTROL MOVEMENTS	For rigging	information refer to	Maintenance Ma	anual.
S/N's ELIGIBLE	Sikorsky Number 10 760269, 7 760388 th 760398, 7 760411, 7 760431, 7 760463, 7 760634, 7 760634, 7 760647 th through 7 760693, 7 through 70 760716, 7 760738, 7 760780 an	Aircraft Corporation 05: 760375 through 760 760400 through 760 760400 through 760 760412, 760415, 76 760453, 760434 thro 760453, 760456, 76 760464, 760466 thr 760636, 760637, 760 760685, 760687 through 760 60707, 760709, 760 60718, 760719, 760 60728, 760730, 760 60742, 760744, 760 rd 760786 are eligible	a under Produ 0378, 760383 0392, 760394, 0402, 760405 0417 through 7 0ugh 760436, 7 0457, 760459 ough 760506, 0639, 760641, 7 0654 through 7 0054 through 7 0054 through 7 0700, 760702, 7 0710, 760712, 7 0721, 760722, 7 0732, 760733, 7 0749, 760752, 7 0	through 760386, 760396 through through 760408, 760424, 760426, 760438, 760440, through 760461, 760508 through 760643, 760645, 760657, 760659 760691 through 760703, 760705 760713, 760715, 760724, 760725, 760735, 760736, 760761, 760769,

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S/N's ELIGIBLE (Cont.) Keystone Helicopter Corporation for Production under Type Certificate Only: 760635, 760638, 760640, 760642, 760644, 760646, 760653 and 760658 are eligible.

Keystone Helicopter Corporation under Production Certificate Number 121NE:

760686*, 760690, 760694, 760701, 760704, 760708, 760711, 760714, 760717, 760720, 760723, 760726, 760729, 760731, 760734, 760737, 760739 through 760741, 760743, 760745 through 760748, 760750, 760751, 760753 through 760760, 760762 through 760768, 760770 through 760779, 760781 through 760785, 760787 and up are eligible.

* 760686 originally designated as eligible for production by Keystone Helicopter Corporation under Type Certificate Only and redesignated upon issuance of Production Certificate Number 121NE.

DATA IS PERTINENT TO ALL MODELS:

IMPORT ELIGIBILITY	A Brazilian Certificate of Airworthiness may be issued on the basis of a FAA Export Certificate of Airworthiness (or a third country Export Certificate of Airworthiness, in case of used rotorcraft imported from such country), including the following statement:
	"The rotorcraft covered by this certificate have been examined and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate № 7906 and in condition of safe operation".
	The ANAC Report H.10-0040-03, dated 20 June 2006 or further revision, contains the Brazilian requirements for the acceptance of this rotorcraft.
CERTIFICATION BASIS	Basic Certification Basis of the S-76A: RBHA 29 which endorses 14 CFR Part 29 including amendments 29-1 through 29-11; in addition, portions of amendments 29-12, specifically, 29.67, 29.71, 29.75, 29.141, 29.173, 29.175, 29.931, 29.1189(a)(2), 29.1555(c)(2), 29.1557(c), and 29.965 of amendment 29-13. Instruments Flight criteria (Interim) for S-76 dated 10 February 1977. FAA Special Conditions 29-82-NE-3 (Docket No. 17721), dated 27 March 1978. Partial Grant of Exemption from Section 29.811 (h) reviewed and accepted by ANAC. Exemption N° 25.42 (Docket Nº 17402) dated 09 January 1079 for the Model
	S-76A. Instruments Flight criteria (Interim) for S-76 dated 10 February 1977. FAA Special Conditions 29-82-NE-3 (Docket No. 17721), dated 27 March 1978.
	Partial Grant of Exemption from Section 29.811 (h) reviewed and accepted by ANAC. Exemption N° 2542 (Docket N° 17403) dated 09 January 1979 for the Model S-76A.

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CERTIFICATION BASIS (Cont.)	Equivalent Safety finding for RBHA/14 CFR Part 29.173(b).
	National environmental Act of 1969.
	Noise Control Act of 1969.
	Brazilian Requirements for Acceptance of Rotorcraft Model S-76A, Report Nr. H.10-004-1642 dated 26 July 1979, superseded by Report H.10-0040-02 dated 04 August 1999 and ANAC letter Nr. 753-IFI/79. Compliance with the following optional requirements has been established:
	 Ditching provisions RBHA/14 CFR Part 29.563, including 29.801 and 29.807(d) and excluding 29.1411, 29.1415, and 29.1561 of amdt. 29-12, when emergency flotation gear P/N 76076-02002 is installed. For overwater operations, compliance with the operating rules and RBHA/14 CFR Part 29.1411, 29.1415, and 29.1561 must be shown.
	 Cargo hook RBHA/14 CFR Part 29.865, including 29.25 of amdt. 29-12, when cargo hook system P/N 76255-02000 is installed. For external load operations, the applicable operating regulations RBHA/14 CFR Part 133 including Amdt 1-4 must be complied with by the Brazilian operator.
	In addition to the Basic Certification Basis, for the model S76C, (with Arriel 1S1 Engine Configuration): 29.1325 of amendment 29-24, amendment 29-26, specifically 29.67(a)(2)&(3)(b), 29.923(k), 29.1045(c), 29.1047(a)(4) and 29.1521(h); 29.811 of amendment 29-30, and amendment 36- 14 of 14 CFR Part 36, Appendix H.
	Special Condition No. 29-ASW-3 (Docket No. 91-ASW-1), dated 30 January 1992.
	In addition to the certification basis for the Arriel 1S1 engine configuration, for the Model S-76C (with Arriel 2S1 or 2S2 Engine Configuration): Amendment 29-34, specifically 29.67(a)(1)(i), 29.923(a),(b)(1)&(3), 29.1143(f), 29.1305(a)(24)&(25), 29.1521(i)&(j) and 29.1549(e) and Amendment 36-20 of 14 CFR Part 36, Appendix H.
	Special Conditions No. 29-ASW-16 (Docket No. 96-ASW-2) and No. 29-004-SC (Docket No. SW004).
	Brazilian Requirements for Acceptance of Rotorcraft Model S-76C, Report H.10-0040-04 dated 20 June 2006.
REQUIRED EQUIPMENT	The basic required equipment, as described in the applicable airworthiness regulations (see Certification Basis) must be installed in the rotorcraft for certification. In addition, the following items of equipment are required: Model S-76A: ANAC/FAA approved Rotorcraft Flight Manual, Model S-76A Helicopter (Publication SA 4047-76-1) - RFM approved by the FAA.
	 Special airspeed indicator approved specially for the model S-76A.

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REQUIRED EQUIPMENT (Cont.) Model S-76C equipped with Arriel 1S1 engines:

ANAC/FAA approved Rotorcraft Flight Manual, Model S-76C Helicopter (Publication SA 4047-76C-1).

Model S-76C equipped with Arriel 2S1 engines:

ANAC/FAA approved Rotorcraft Flight Manual, Model S-76C Helicopter (Publication SA 4047-76C-10) for aircraft serial numbers prior to 760511.

For aircraft serial numbers 760511 and subsequent, ANAC Approved Rotorcraft Flight Manual (Publication SA 4047-76 C-14).

Model S-76C equipped with Arriel 2S2 engines:

ANAC/FAA approved Rotorcraft Flight Manual, Model S-76C Helicopter (Publication SA 4047-76C-15) for aircraft serial numbers 760607 and subsequent.

Special airspeed indicator approved:

For use on S-76A only:

Aero Mechanism Part No. 8502C-S20LW, or Aerosonic Part No. 20020-11190, or Aerosonic Part No. 20020-11293 airspeed indicator.

For use on the S-76C: Aerosonic Part No. 20020-11293 airspeed indicator

NOTES:

- **NOTE 1** <u>Weight and Balance:</u> Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions, when necessary, must be provided for each rotorcraft at the time of original certification. See flight manual loading section for variations of fuel weight and moment-arm with variations of fuel and fuel quantity.
- NOTE 2 <u>Markings and Placards</u>: The following placard must be displayed in front of and in clear view of the pilot: "THIS HELICOPTER MUST BE OPERATED IN ACCORDANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE ANAC APPROVED ROTORCRAFT

OPERATING LIMITATIONS SPECIFIED IN THE ANAC APPROVED ROTORCRAFT FLT MAN. THE AIRWORTHINESS LIMITATIONS SECT OF THE ROTORCRAFT MAINTENANCE MANUAL MUST BE COMPLIED WITH."

All placards required in the approved flight manual must be installed in the appropriate locations.

In addition, all markings and placards for passenger information under normal or emergency conditions must be in Portuguese (or English and Portuguese). External markings for emergency operation of doors, normal ground operation of cargo doors and servicing operations must be in Portuguese (or bilingual). Marking and placards indicating maximum loads in cargo and baggage compartments must be also presented in Portuguese (or bilingual). A list of these placards for the rotorcraft and the respective translations acceptable to ANAC is provided in the Annex II to the report H.10-0040-04, dated 20 June 2006 or further revision.

NOTE 3 <u>Continuing Airworthiness</u>: Service Information, service bulletins, repair manuals, vendor manuals, rotorcraft flight manuals and maintenance manuals, which contain a statement that the document is FAA approved, are accepted by the ANAC and are considered ANAC approved. These approvals pertain to the type design only.

Any alteration to the type design of this rotorcraft may require instructions for Continued Airworthiness. These instructions must be submitted and accepted by the ANAC prior to approval for return to service.

Information essential to the proper maintenance of the helicopter is contained in the Sikorsky S-76A Maintenance Manual, Publication A 4047-76-2, and the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1 provided with each rotorcraft. The values of retirement (service) life contained in Chapter 4 of the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1 or inspection intervals cannot be increased without ANAC engineering approval.

For Model S-76A serial numbers 760295, 760296, 760297, 760298, 760300, and 760301:

Information essential to proper maintenance of the helicopter is contained in the Sikorsky S-76A Maintenance Manual SA 4047-76AA-2 and the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1 provided with each helicopter. The values of retirement (service) life contained in Chapter 4 of the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1 or inspection intervals cannot be increased without ANAC engineering approval. (See Note 10)

For Model S-76C:

Information essential to the proper maintenance of the helicopter is contained in the S-76C Maintenance Manual, Publication SA 4047-76C-2, and the Airworthiness Limitations and Inspection Requirements Sections, Chapters 4 and 5, of SA 4047-76C-2-1, provided with each helicopter. The values of retirement (service) life contained in Chapter 4 of the Maintenance Manual or inspection intervals cannot be increased without ANAC engineering approval. (See Note 10)

- **NOTE 4** The differences of the Brazilian aircraft in relation to the basic FAA type design are summarized below:
 - 1. The FAA approved Rotorcraft Flight Manual must include procedures related to the DC generator overtemperature warning light installation.
 - 2. Markings and placards in Portuguese language or bilingual (See Note 2).
 - 3. A DC generator overtemperature warning light.

NOTE 5 For Model S-76A only:

Mixture ratio: 1 part AVGAS grade 80/87 to 2 parts jet fuel (Jet A, Jet 1, or JP-5) by volume may be used for unrestricted periods of time. AVGAS grade 100/130 (100LL) with a maximum of 2.0 ml/gal lead content may be used in place of grade 80/87 in the same proportions with jet fuel for not over 300 hours during any overhaul period. Do not use above 4°C (40°F). Do not use AVGAS containing Tri-Cresyl-Phosphate (TCP).

NOTE 6 For Model S-76A model only:

MIL-T-5624 Grade JP-5 with anti-ice additive conforming to MIL-I-27686 (Philips Petroleum Company MB-55 or equivalent) in concentration of 0.035% to 0.15% by volume. ASTM D-1655 Jet A, or A1 with anti-ice additive conforming to MIL-I-27686 (Philips Petroleum Company MB-55 or equivalent) in concentration of 0.035% to 0.15% by volume. If the AVGAS/Jet Fuel mixture is added to JP-4 or Jet B, add anti-ice additive in concentration of 0.035% to 0.15% based only on the AVGAS/Jet Fuel volume added. If the jet fuel to be mixed with AVGAS is JP-5, Jet A, or Jet A1, to which anti-ice additive has not been added, add anti-ice additive in concentration of 0.035% to 0.15% based on entire volume.

For Model S-76C only:

Anti-icing protection additives meeting MIL-D-27686 or equivalent must be present in concentrations of 0.10% to 0.15% by volume.

- **NOTE 7** Overhaul is not authorized without an Overhaul manual for the specific component. In the interim, aircraft components may be overhauled by the manufacturer, utilizing new aircraft production tolerances or ANAC approved alterations.
- **NOTE 8** Alternate engine installations with Turbomeca Arriel 1S1 engines are approved under FAA STC SH568NE.
- **NOTE 9** Reserved.
- NOTE 10 Model S-76A:

When operated at gross weights above 4 672 kg (10 300 lb), the helicopter must comply with Revision 14 of the Airworthiness Limitations section, dated 14 May 1985, or subsequent ANAC approved revisions of the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1.

Model S-76C:

All helicopters must comply with the Airworthiness Limitations Section, Chapter 4, dated 19 March 1991, of Maintenance Manual SA 4047-76C-2-1, or subsequent FAA-approved revisions.

- **NOTE 11** Model S-76A: Alternate engine installations with Turbomeca Arriel 1S1 engines are approved under STC SH568NE(not in mixed engine configurations).
- **NOTE 12** Emissions control device Kit Part Number 76070-30603-011, installed in accordance with CSN 76-192, is approved for installation on the Model S-76C helicopter with the Turbomeca Arriel 1S1 engine installation. This device prevents the intentional discharge into the atmosphere of liquid fuel from the fuel nozzle manifolds resulting from the process of engine shutdown following normal flight or ground operations. The Model S-76C helicopter (Turbomeca Arriel 2S1 and 2S2 engines), without modification preclude the intentional discharge into the atmosphere of liquid fuel from the total fuel from the nozzle manifolds resulting from the process of engine shutdown.
- NOTE 13 The use of the 30 minute power rating requires Supplement No. 12 to the Model S76C Rotorcraft Flight Manual, document No. SA 4047-76C-10 or document No. SA 4047-76C-14 or Supplement No. 46 to the Model S76C Rotorcraft Flight Manual, document No. SA 4047-76C-15. Engine Airworthiness Limitations requirements are as specified in Type Certificate Data Sheet No. E00054EN.

- **NOTE 14** The Model S-76C (Turbomeca Arriel 2S1 and 2S2 engine) rotorcraft installation employ electronic engine controls commonly named Full-Authority Digital Electronic Controls (FADEC), and are recognized to be potentially more susceptible to electromagnetic interference (EMI) than rotorcraft containing non-electronic controls. EMI may be the result of radiated or conducted interference. For this reason, aircraft modifications that add or change systems that have the potential for EMI must be either qualified to an ANAC/FAA acceptable standard or tested at the time of installation for interference to the FADEC. This type of testing must employ the particular FADEC's internal diagnostic monitoring equipment as well as external diagnostic monitoring equipment, and must be FAA approved.
- **NOTE 15** Installation of Turbomeca Arriel 2S2 engines requires barrier filter P/N 76302-07800 or FAA-approved alternate.

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Gerente-Geral - Substituto, Certificação de Produto Aeronáutico (Acting Manager, Aeronautical Product Certificate)