DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H1NE
Revision No 48

Sikorsky
Models S-76A
S-76B
S-76C
S-76D
January 29, 2021

TYPE CERTIFICATE DATA SHEET NO. H1NE

This data sheet, which is part of Type Certificate (TC) Number H1NE, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

TYPE CERTIFICATE (TC) HOLDER: Sikorsky Aircraft Corporation
6900 Main Street
Stratford, CT 06497-9129

I. MODEL NUMBER	**S-76A (Transport Helicopter, Category B), Approved November 21, 1978** **(Transport Helicopter, Category A), Approved January 9, 1979**

ENGINES: 2 Allison Engine Company Model 250-C30, or 2 Model 250-C30S, or 1 each Model 250-C30 and Model 250-C30S. (See Note 11.)

FUEL: PRIMARY: JP-4/JP-5**/JP-8/Jet A**/Jet A1**/Jet B/GB6537-94(RP-3)**

ALTERNATE: **AVGAS/Jet A, A1, or JP5 mixture.
Do not use above 4^{O}C (40^{O}F). (See Note 5.)

** For operations below 4^{O}C (40^{O}F), anti-ice additive required. (See Note 6.)

ENGINE LIMITS

	SEA LEVEL STATIC / STANDARD DAY		
	TORQUE LIMITS	GAS GENERATOR SPEED LIMITS (N1)	POWER TURBINE INLET(T5)
Takeoff (5 minutes)	104.6%	53,550 (105.0%)	768 Deg C
Maximum Continuous	104.6%	53,550 (105.0%)	768 Deg C
OEI (30 minutes)	104.6%	53,550 (105.0%)	798 Deg C
OEI (2-1/2 minutes)	111.2%	53,550 (105.0%)	826 Deg C
16 second transient (OEI)	111.2% to 155.0%	- - -	- - -
10 second Transient (Starting)	- - -	53,550 (105.0%) to 54,060 (106%)	826 to 927 Deg C

OUTPUT SHAFT (N_2)

Normal Range: 95% to 107%

Maximum Continuous: Varies linearly from 114% at flight autorotation to 107.1% at 2½-minute power.

Maximum 15-second: Varies linearly from 119% at flight autorotation to 109% at 2½-minute power.

Page	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rev	48	20	23	20	20	24	21	21	21	48	48	44	44	44	44	47	48	45	41	43	40	48	48

Engine torque

100% = 564 foot-pounds

See Flight Manual for T5 (power turbine inlet temperature) limits and power turbine (N2) speed limits.

ROTOR LIMITS

POWER OFF
Maximum 115% N_r (336 r.p.m.)
Minimum 87% N_r (255 r.p.m.)
POWER ON
Maximum 107% N_r (313 r.p.m.)
Minimum 100% N_r (dual engine operation)
Minimum 96% N_r (one engine inoperative) (OEI)

AIRSPEED LIMITS

V_{NE} (never exceed) Power On:

155 knots (CAS), 155 knots (IAS). See Flight Manual for variations of V_{NE} with gross weight and density altitude.

V_{LE}/V_{LO} (gear extended, gear operating):

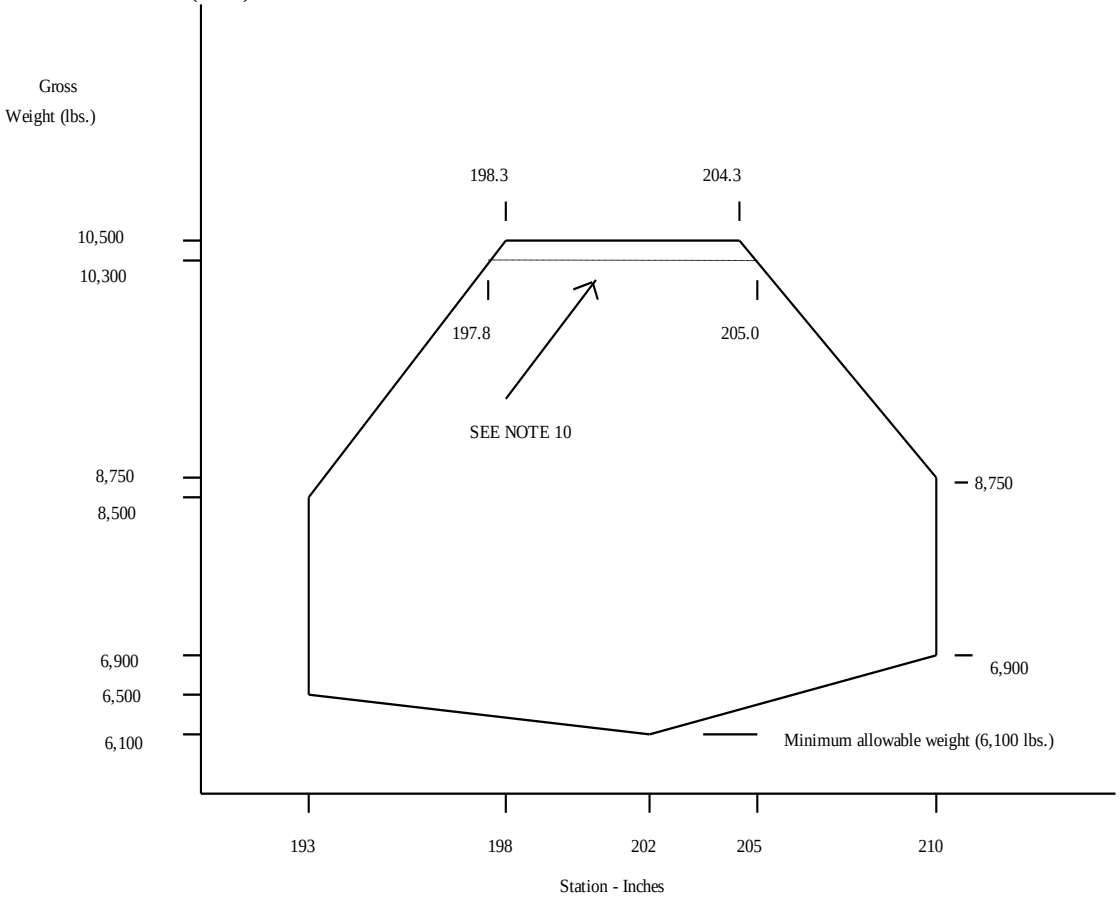
130 knots (CAS), 130 knots (IAS).

V_{NE} Power Off:

135 knots (CAS), 141 knots (IAS).

Below 80 lbs. fuel remaining per tank, reduce airspeed to 120 knots (CAS), 126 knots (IAS) or less.

CENTER OF GRAVITY (C.G.) RANGE



For effect of landing gear position, refer to loading section of flight manual.

LATERAL C.G. LIMITS	± 3.5 inches maximum
EMPTY WEIGHT C.G. RANGE	None
DATUM	200 inches forward of main rotor centroid
LEVELING MEANS	Leveling plate at STA 176, BL 35, L.H. and plumb line from upper frame of the aft doorway
MAXIMUM WEIGHT	10,500 lbs
MINIMUM CREW	2 (IFR) 1 (IFR) when appropriately equipped and operating to approved flight manual or flight manual supplement. (See Note 15.) 1 (VFR)
NUMBER OF SEATS	2 cockpit 13 cabin maximum
MAXIMUM BAGGAGE	600 lbs.
FUEL CAPACITY	286.4 gals. (281.2 usable) at (216.7) (See Note 1.)
OIL CAPACITY	1.27 gals. per engine at (231.0)
MAXIMUM OPERATING (DENSITY) ALTITUDE	
Enroute Takeoff and landing	15,000 feet 6,900 feet or 11,000 feet (for helicopters incorporating Sikorsky Kit P/N 76070-30005)
AMBIENT TEMPERATURE LIMITS:	-34.4°C (-30°F) to ISA +36.7°C; not to exceed 48.9°C (120°F)
ROTOR BLADE CONTROL MOVEMENTS	For rigging information refer to Maintenance Manual.
MANUFACTURER'S SERIAL NUMBERS	76006, 76007, 760001 thru 760122, 760130 thru 760261, 760263 thru 760268, 760270 thru 760298, 760300 thru 760302, 760304, 760364, 760366, 760369 thru 760371, 760373, 760374 are eligible.

II. MODEL NUMBER	**S-76B (Transport Helicopter, Category B), Approved October 31, 1985 (Transport Helicopter, Category A), Approved February 3, 1987**
ENGINES	2 Pratt & Whitney Canada (PWC) Model PT6B-36 (Category B only, reference S-76B Flight Manual, Supplement No. 2) or 2 PWC Model PT6B-36A or 2 PWC Model PT6B-36B (reference S-76B Flight Manual, Supplement No. 11)
FUEL	JP-4***/ JP-5**/JP-8/Jet A*/Jet A1*/GB6537-94(RP-3)* Fuels with anti-ice additive can be used without temperature limitation. *Fuels without anti-ice additive shall be mixed with appropriate additive below +4°C (40°F). (See Note 6.) ** Not to be used below -26°C (-15°F). *** JP4 not to be used above 10,000 feet pressure altitude.
OIL	PWA 521, Type I or II Low temperature limits for starting: Type I oil usable to -54°C (-65°F) Type II oil usable to -40°C (-40°F) For approved oil brands, see PWC Service Bulletin No. 11001

ENGINE AND TRANSMISSION LIMITS

	SEA LEVEL STATIC / STANDARD DAY			
	ENGINE TORQUE LIMITS	TRANSMISSION TORQUE LIMITS	GAS GENERATOR SPEED LIMITS(N1)	POWER TURBINE INLET (T5)
	FOR MODEL PWC PT6B-36			
Takeoff (5 minutes)	133.0 %	100.0 %	100.0 %	816 deg C
Maximum Continuous	120.0 %	100.0 %	100.0 %	776 deg C
OEI (2-1/2 minutes)	141.0 % *	136.0 %	101.6 %	850 deg C
OEI (30 minutes)	133.0 %	128.0 %	100.0 %	816 deg C
15 second Transient	- - -	- - -	- - -	870 deg C
10 second Transient	152.0 % *	105.0 %	101.8 %	- - -
5 second Transient (OEI)	- - -	150.0 % *	- - -	- - -
5 second Transient (Starting)	- - -	- - -	- - -	940 deg C
2 second Transient(Starting)	- - -	- - -	- - -	1090 deg C
	* EEC will limit available single-engine torque to 136 %			

	FOR MODEL PWC PT6B-36A			
Takeoff (5 minutes)	133.0 %	100.0 % **	100.0 %	816 deg C
Maximum Continuous	120.0 %	100.0 % **	100.0 %	776 deg C
OEI (2-1/2 minutes)	- - -	136.0 % *	- - -	- - -
OEI (30 minutes)	141.0 % *	128.0 %	101.6 %	844 deg C
10 second Transient	152.0 % *	115.0 % **	101.8 %	870 deg C
5 second Transient (OEI)	- - -	150.0 % *	- - -	- - -
5 second Transient (Starting)	- - -	- - -	- - -	940 deg C
2 second Transient (Starting)	- - -	- - -	- - -	1090 deg C
	* EEC will limit available single-engine torque to 136 % ** EEC will limit available dual-engine torque to total of 202 %			

	FOR MODEL PWC PT6B-36B			
Takeoff (5 minutes)	133.0 %	100.0 %**	102.6 %	816 deg C
Maximum Continuous	120.0 %	100.0 %**	102.6 %	776 deg C
OEI (2-1/2 minutes)	- - -	136.0 %*	- - -	- - -
OEI (30 minutes)	141.0 %*	128.0 %	104.2 %	844 deg C
10 second Transient	152.0 %*	115.0 %**	104.7 %	- - -
10 second Transient	- - -	- - -	- - -	870 deg C
5 second Transient (OEI)	- - -	150.0 %*	- - -	- - -
5 second Transient (Starting)	- - -	- - -	- - -	940 deg C
2 second Transient(Starting)	- - -	- - -	- - -	1090 deg C
	* EEC will limit available single-engine torque to 136 % ** EEC will limit available dual-engine torque to total of 202 %			

ROTOR LIMITS

POWER OFF
Maximum 115% N_r (336 r.p.m.)
Minimum 91% N_r (266 r.p.m.)
POWER ON
Maximum 108% N_r (316 r.p.m.) except with torque below 26%, then 110% Nr
Minimum 106% N_r (dual engine operation)
Minimum 100% N_r (one engine inoperative) (OEI)

AIRSPEED LIMITS

V_{NE} (never exceed) Power On: 155 knots (IAS). See Flight Manual for variations of V_{NE} with temperature and pressure altitude.

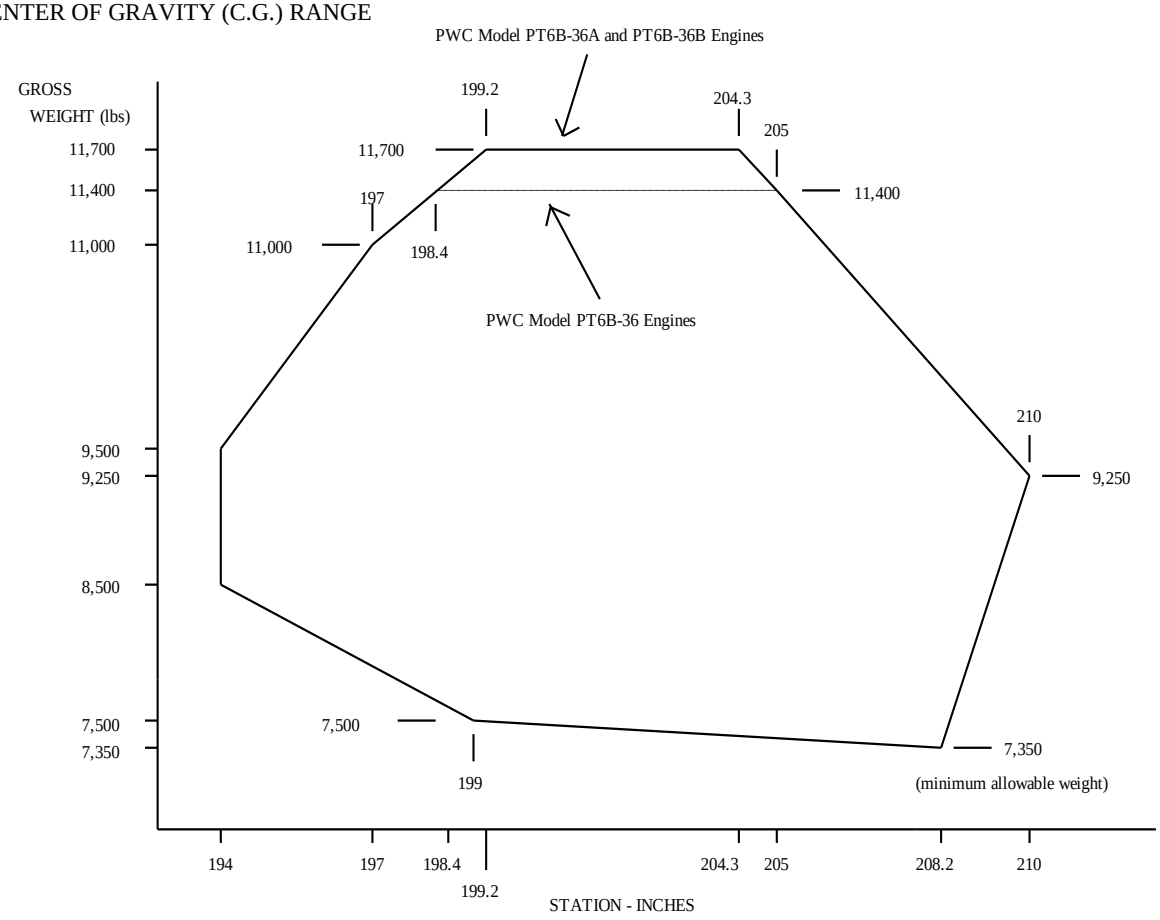
With PT6B-36A, or PT6B-36B, V_{NE} above 10,000 feet density altitude at actual gross weights greater than 11,000 pounds is BROC (best-rate-of-climb) airspeed.

V_{LE}/V_{LO} (gear extended/gear operating): 130 knots (IAS)

V_{NE} Power Off: 136 knots (IAS)

Below 80 lbs. fuel remaining per tank, avoid sustained pitch down attitudes in excess of 5^{o} nose low.

CENTER OF GRAVITY (C.G.) RANGE



For effect of landing gear position, refer to loading section of flight manual.

LATERAL C.G. LIMITS

Up to 11,400 lbs: $\pm$3.5 inches maximum
Above 11,400 lbs: $\pm$2.5 inches maximum

EMPTY WEIGHT C.G. RANGE

None

DATUM

200 inches forward of main rotor centroid

LEVELING MEANS

Leveling plate at STA 176, BL 35, L.H. and plumb line from upper frame of the aft doorway

MAXIMUM WEIGHT

With PWC PT6B-36 engines: 11,400 pounds
With PWC PT6B-36A engines: 11,700 pounds
With PWC PT6B-36B engines: 11,700 pounds

MINIMUM CREW

2 (IFR)
1 (IFR) when appropriately equipped and operating to approved flight manual or flight manual supplement (See Note 15.)
1 (VFR)

NUMBER OF SEATS

2 cockpit
13 cabin maximum

MAXIMUM BAGGAGE

600 lbs.

FUEL CAPACITY

286.4 gals. (281.2 usable) at (216.7) (See Note 1.)

OIL CAPACITY

2.0 gals. per engine

MAXIMUM OPERATING (DENSITY) ALTITUDE

		PT6B-36	PT6B-36A	PT6B-36B
Enroute		10,000 feet	15,000 feet	15,000 feet
Takeoff and Landing	Cat. B:	10,000 feet	15,000 feet	15,000 feet
	Cat. A:	- - -	5,000 feet	5,000 feet

AMBIENT TEMPERATURE LIMITS

-34.4^{O}C (-30^{O}F) to ISA +38^{O}C not to exceed 49^{O}C (120^{O}F)
with bleed air Environmental Control Unit (ECU) off or not installed.

-34.4^{O}C (-30^{O}F) to ISA +35^{O}C not to exceed 43^{O}C (109^{O}F)
with bleed air ECU on.

ROTOR BLADE CONTROL MOVEMENTS

For rigging information, refer to Maintenance Manual.

MANUFACTURER'S SERIAL NUMBERS

76005, 760262, 760299, 760303, 760310 thru 760363, 760365, 760367, 760368, 760372, 760379 thru 760382, 760387, 760391, 760393, 760395, 760399, 760403, 760404, 760409, 760410, 760413, 760414, 760416, 760425, 760427 through 760430, 760433, 760437, 760439, 760441 through 760445, 760447 through 760452, 760454, 760455, 760458, 760462, 760465, 760507, 762976 are eligible.

III. MODEL NUMBER **S-76C (Transport Helicopter, Category B), Approved March 15, 1991**
(Transport Helicopter, Category A), Approved April 12, 1991

ENGINES

2 Turbomeca Arriel 1S1
or
2 Turbomeca Arriel 2S1
or
2 Turbomeca Arriel 2S2 (See Note 16.)

FUEL

JP-4***/JP-5**/JP-8/Jet A*/Jet A1*/Jet B*/GB6537-94(RP-3)*

Fuels with anti-ice additive can be used without temperature limitation.
* Fuels without anti-ice additive shall be mixed with appropriate additive below +4^{O}C (40^{O}F). (See Note 6.)
** Not to be used below -26^{O}C (-15^{O}F).
*** Applicable to Arriel 1S1 only

OIL

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

ENGINE AND TRANSMISSION LIMITS

Arriel 1S1 Configuration				
SEA LEVEL STATIC / STANDARD DAY				
	ENGINE TORQUE LIMITS	TRANSMISSION TORQUE LIMITS	GAS GENERATOR SPEED LIMITS(N1)	POWER TURBINE INLET (T5)
Takeoff	104.0 %	100.0 %	100.0 %	845 deg C
Maximum Continuous	104.0 %	100.0 %	100.0 %	845 deg C
OEI(2-1/2 minutes)	127.0 %	136.0 %	102.7 %**	885 deg C
OEI (Maximum Continuous))	110.0 %	128.0 %	102.2 %*	868 deg C
20 second Transient (OEI)	148.0 %	- - -	105.35 %***	920 deg C
20 second Transient	- - -	- - -	105.35 %***	- - -
10 second Transient	- - -	115.0 %	- - -	- - -
5 second Transient (OEI)	- - -	150.0 %	- - -	- - -
5 second Transient(Starting)	- - -	- - -	- - -	865 deg C
* Cockpit gauge biased to read 101.2 %				
** Cockpit gauge biased to read 101.7 %				
*** Cockpit gauge biased to read 104.35 %				

Arriel 2S1 Configuration				
SEA LEVEL STATIC / STANDARD DAY				
	ENGINE TORQUE LIMITS	TRANSMISSION TORQUE LIMITS	GAS GENERATOR SPEED LIMITS(N1)	POWER TURBINE INLET (T5)
Takeoff (5 minutes)	103.7 %	100.0 %	101.2 %*	912 deg C
30 minute (see Note 13)	103.7 %	100.0 %	101.2 %*	912 degC
Maximum Continuous	103.7 %	100.0 %	99.0 %**	877 deg C
OEI (30 second)	134.6 %	136.0 %	105.8 %****	1000 deg C
OEI (2 minutes)	126.7 %	136.0 %	102.4 %***	941 deg C
OEI (Maximum Continuous)	116.7 %	128.0 %	101.2 %*	912 deg C
20 second Transient	160.4 %	- - -	102.3 %***	- - -
10 second Transient	- - -	115.0 %	- - -	- - -
10 second Transient (starting)	- - -	- - -	- - -	865 deg C
5 second Transient(OEI)	- - -	150.0 %	- - -	- - -
* Cockpit gauge biased to read 100.0 %				
** Cockpit gauge biased to read 97.8 %				
*** Cockpit gauge biased to read 101.2 %				
**** Cockpit gauge biased to read 104.6 %				

	Arriel 2S2 Configuration			
	SEA LEVEL STATIC / STANDARD DAY			
	ENGINE TORQUE LIMITS	TRANSMISSION TORQUE LIMITS	GAS GENERATOR SPEED LIMITS(N1)	POWER TURBINE INLET (T5)
Takeoff (5 minutes)	103.7 %	100 %	101.88 %*	930 deg C
30 minute (see Note 13)	103.7 %	100 %	101.88 %*	930 deg C
Maximum Continuous	103.7 %	100 %	99. 71 %**	893 deg C
OEI (30 second)	134.9 %	136 %	105.89 %***	996 deg C
OEI (2 minutes)	127.0 %	136 %	102.38 %****	944 deg C
OEI (Maximum Continuous)	115.0 %	128 %	101.28 %*****	926 deg C
20 second Transient	160.4 %	- - -	102.98 %******	- - -
10 second Transient	- - -	115.0 %	- - -	- - -
10 second Transient (starting)	- - -	- - -	- - -	840 deg C
5 second Transient(OEI)	- - -	150.0 %	- - -	- - -

* Cockpit gauge biased to read 100.0 %
** Cockpit gauge biased to read 97.8 %
*** Cockpit gauge biased to read 103.9 %
**** Cockpit gauge biased to read 100.5 %
***** Cockpit gauge biased to read 99.4 %
****** Cockpit gauage biased to read 101.1%

Engine Torque 100% = 657.6 foot-pounds

ROTOR LIMITS

POWER OFF
Maximum 115% N_r (336 r.p.m.)
Minimum 91% N_r (266 r.p.m.)
POWER ON
Maximum 108% N_r (316 r.p.m.) except 109% for less than 20 seconds (w/2S1 engine only)
Maximum 108% N_r (316 r.p.m.) except with torque below 26%, then 110% Nr (w/1S1 engine only)
Minimum 106% N_r (dual engine operation)
Minimum 100% N_r (one engine inoperative) (OEI)

AIRSPEED LIMITS

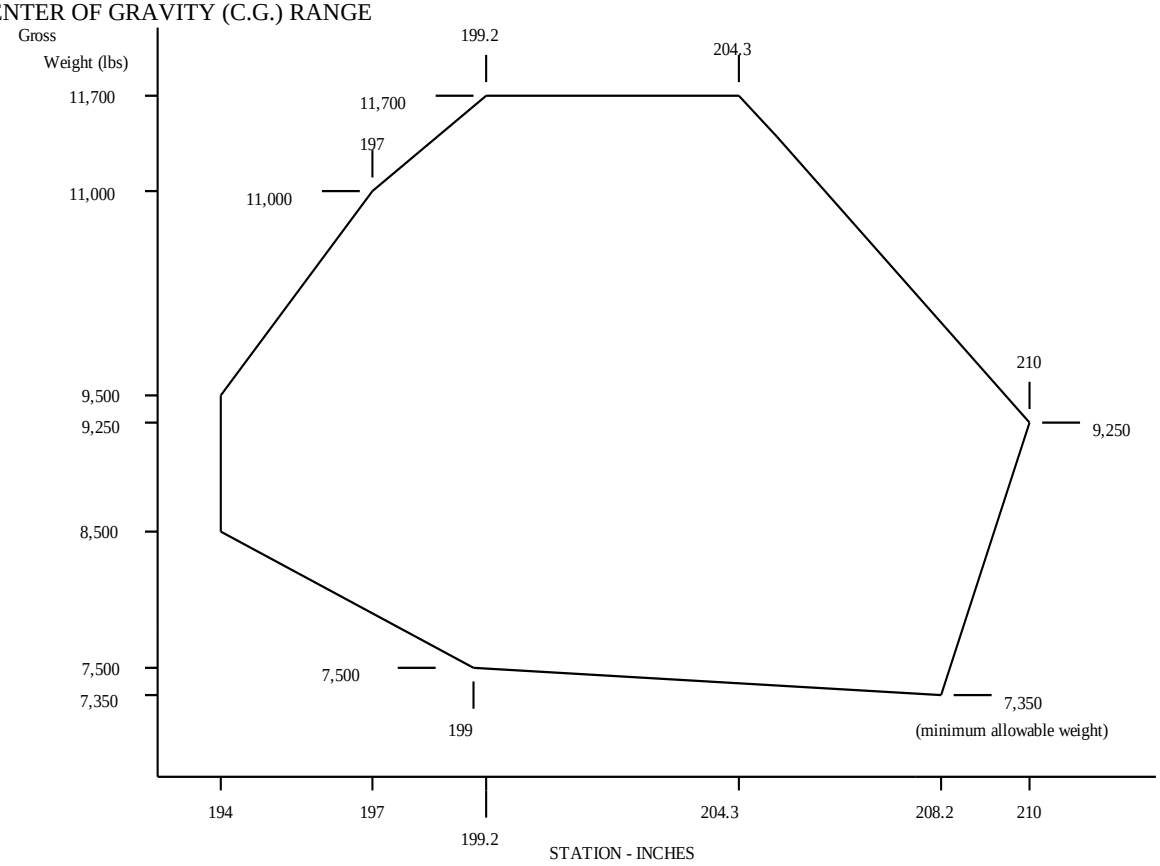
V_{NE} (never exceed) Power On: 155 knots (IAS). See Flight Manual for variations of V_{NE} with temperature and pressure altitude.

V_{LE}/V_{LO}(gear extended/gear operating): 130 knots (IAS)

V_{NE} Power Off: 136 knots (IAS)

Below 80 lbs. fuel remaining per tank, avoid sustained pitch down attitudes in excess of 5^{o} nose low.

CENTER OF GRAVITY (C.G.) RANGE



For effect of landing gear position, refer to loading section of flight manual.

LATERAL C.G. LIMITS	Up to 11,400 lbs:	±3.5 inches maximum
	Above 11,400 lbs:	±2.5 inches maximum
	Below 10,800 lbs (w/hoist load, hover only):	±4.5 inches maximum
EMPTY WEIGHT C.G. RANGE	None	
DATUM	200 inches forward of main rotor centroid	
LEVELING MEANS	Leveling plate at STA 176, BL 35, L.H. and plumbline from upper frame of the aft doorway	
MAXIMUM WEIGHT	11,700 lbs.	
MINIMUM CREW	2 (IFR) 1 (IFR) when appropriately equipped and operating to approved flight manual or flight manual supplement (See Note 15.) 1 (VFR)	
NUMBER OF SEATS	2 cockpit 13 cabin maximum	
MAXIMUM BAGGAGE	600 lbs.	
FUEL CAPACITY	286.4 gals. (281.2 usable) at (216.7) (see Note 1)	
OIL CAPACITY	1.27 gals. per engine	

MAXIMUM OPERATING (DENSITY) ALTITUDE

With 1S1 Engine Configuration

Enroute		15,000 feet
Takeoff and landing	Cat. B:	11,000 feet
	Cat. A:	5,000 feet

With 2S1 or 2S2 Engine Configuration

Enroute		15,000 feet
Takeoff and landing	Cat. B:	15,000 feet
	Cat. A:	5,000 feet

AMBIENT TEMPERATURE LIMITS: -34.4^{O}C (-30^{O}F) to ISA +37^{O}C; not to exceed 49^{O}C (120^{O}F)

ROTOR BLADE CONTROL MOVEMENTS For rigging information refer to Maintenance Manual.

MANUFACTURER'S SERIAL NUMBERS Sikorsky Aircraft Corporation under Production Certificate Number 105: 760269, 760375 through 760378, 760383 through 760386, 760388 through 760390, 760392, 760394, 760396 through 760398, 760400 through 760402, 760405 through 760408, 760411, 760412, 760415, 760417 through 760424, 760426, 760431, 760432, 760434 through 760436, 760438, 760440, 760446, 760453, 760456, 760457, 760459 through 760461, 760463, 760464, 760466 through 760506, 760508 through 760634, 760636, 760637, 760639, 760641, 760643, 760645, 760647 through 760652, 760654 through 760657, 760659 through 760685, 760687 through 760689, 760691 through 760693, 760695 through 760700, 760702, 760703, 760705 through 760707, 760709, 760710, 760712, 760713, 760715, 760716, 760718, 760719, 760721, 760722, 760724, 760725, 760727, 760728, 760730, 760732, 760733, 760735, 760736, 760738, 760742, 760744, 760749, 760752, 760761, 760769, 760794, 760797, 760805 through 760822 are eligible.

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 760793, 760795, 760796, 760798 through 760804 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.

IV. MODEL NUMBER	**S-76D (Transport Helicopter, Category B), Approved October 12, 2012 (Transport Helicopter, Category A), Approved December 19, 2013**

ENGINES 2 Pratt and Whitney Canada PW210S

FUEL

ISSUING AUTHORITY	TYPE (1)	SPECIFICATION	FUEL TEMPERATURE RANGE (2)
Commercial	Jet A	ASTM D1655	–40°C (–40°F) to 52°C (126°F)
	Jet A-1	ASTM D1655	–40°C (–40°F) to 52°C

			(126°F)
	No. 3 Jet Fuel	PRC GB6537	–40°C (–40°F) to 52°C (126°F)
Military	JP-5	MIL-DTL-5624	–40°C (–40°F) to 52°C (126°F)
	JP-8	MIL-DTL-83133	–40°C (–40°F) to 52°C (126°F)

NOTES:

1. Any approved fuel or mixture of approved fuels may be used. Refer to the Pratt & Whitney Canada PW210S Maintenance Manual for a complete list of acceptable and alternate/emergency fuels.

2. Fuel anti-icing additive must be used below 4°C (40°F) for fuels supplied without anti-icing additive. See Note 6.

OIL

Brand	Supplier
AeroShell Turbine Oil 500 AeroShell Turbine Oil 560	Shell Oil Company
BP Turbo Oil 2380	Air BP
Castrol 5000	Castrol Ltd.
Mobil Jet Oil II	Exxon Mobil Chemical Company
Turbonycoil 600 II	Nyco S.A.

POWERPLANT LIMITS

OPERATING CONDITION	TIME	ENGINE TORQUE LIMIT (%)	ITT (°C)	N_G (%)	N_P (%)
TAKEOFF AEO	5 MIN	**100 (1)**	**932-924 (1)(2)**	**100.0 (1)**	108
HIP AEO (3)	30 MIN	**100 (1)**	**924 (1)**	**100.0 (1)**	108
MAXIMUM CONTINUOUS AEO	--	**100 (1)**	886	98.8	108
TRANSIENT AEO	20 SEC	136	980	101.8	118
30 SEC OEI	30 SEC	**140 (1)**	**1006 (1)**	**102.7 (1)**	108
2 MIN OEI	2 MIN	**136 (1)**	**980 (1)**	**101.8 (1)**	108
MAXIMUM CONTINUOUS OEI	--	**128 (1)**	**924 (1)**	**100.0 (1)**	108
TRANSIENT OEI	5 SEC	145 (30 SEC OEI)	1015 (30 SEC OEI)	103.3 (30 SEC OEI)	115
		141 (2 MIN OEI)	989 (2 MIN OEI)	102.3 (2 MIN OEI)	
	20 SEC	136 (Max Cont OEI)	980 (Max Cont OEI)	101.8 (Max Cont OEI)	118
GROUND IDLE	20 SEC	--	790	--	--
	--	--	760	--	--

OPERATING CONDITION	TIME	ENGINE TORQUE LIMIT (%)	ITT (°C)	N_G (%)	N_P (%)
STARTING	2 SEC	--	825	--	--
	60 SEC	--	750 (4)	--	--

NOTES:

1. Shaded boxes with bold numbers denote EEC controlled limiter values.
2. When the ITT increases above 886°C, the Takeoff and Maximum Continuous OEI ITT limits will decrease from 932°C to 924°C over a 3 minute period. The limits increase back to 932°C when the ITT decreases below 886°C.
3. Hovering at Increased Power (HIP): Use of Takeoff limits during hover operations in excess of 5 minutes.
4. ITT limiting occurs at 740°C. An automatic abort will be commanded (on ground only) if the ITT reaches 765°C.
5. Limit in parentheses refers to currently selected OEI limit.

Engine Torque 100% = 657.6 foot-pounds

DRIVE SYSTEM LIMITS

APPROVED GEARBOX OILS

TYPE	LOW TEMPERATURE LIMIT
BP Turbo Oil 25 (Preferred)	–40°C / –40°F
Other Approved DOD-PRF-85734 Oils	–40°C / –40°F

MAIN GEARBOX TORQUE

ALL ENGINES OPERATING (AEO)		
MGB TORQUE (%)	**NO INSPECTION REQUIRED**	**INSPECTION REQUIRED**
0% to 100%	Continuous	
100% to 115%	≤10 SEC	>10 SEC
>115%		Any Occurrence

ONE ENGINE INOPERATIVE (OEI)		
MGB TORQUE (%)	**NO INSPECTION REQUIRED**	**INSPECTION REQUIRED**
0% to 128%	Continuous	
128% to 136%	≤2 MIN	>2 MIN
136% to 140%	≤30 SEC	>30 SEC
140% to 150%	≤5 SEC	>5 SEC
>150%		Any Occurrence

MGB OIL PRESSURE

Maximum: 120 PSI

Cautionary: 90 PSI to 120 PSI

Normal: 50 PSI to 90 PSI

Cautionary: 20 PSI to 50 PSI

Minimum: 20 PSI

MGB OIL TEMPERATURE (see Note 22)

With v303 Software	With v400 Software
Maximum: 135°C	Maximum: 135°C
Cautionary: 120°C to 135°C	Cautionary: 115°C to 135°C
Normal: 15°C to 120°C	Normal: 15°C to 115°C
Cautionary: –20°C to 15°C	Cautionary: –20°C to 15°C
Minimum: –20°C	Minimum: –20°C

ROTOR LIMITS

POWER OFF
Maximum: 115% Normal: 91% to 115% Minimum 91% Transient Minimum: 74% Transient Minimum at touchdown while executing an autorotative landing: 68%
POWER ON
Maximum: 115% Cautionary: 108% to 115% Normal Operating Rotor Speed (AEO): 106% to 108% Cautionary (AEO): 91% to 106% Normal Operating Rotor Speed (OEI above best rate of climb airspeed): 106% to 108% Normal Operating Rotor Speed (OEI up to best rate of climb airspeed): 100% to 108% Cautionary (OEI): 91% to 100% Transient Minimum: 91% Transient Minimum at touchdown during an OEI landing: 68%

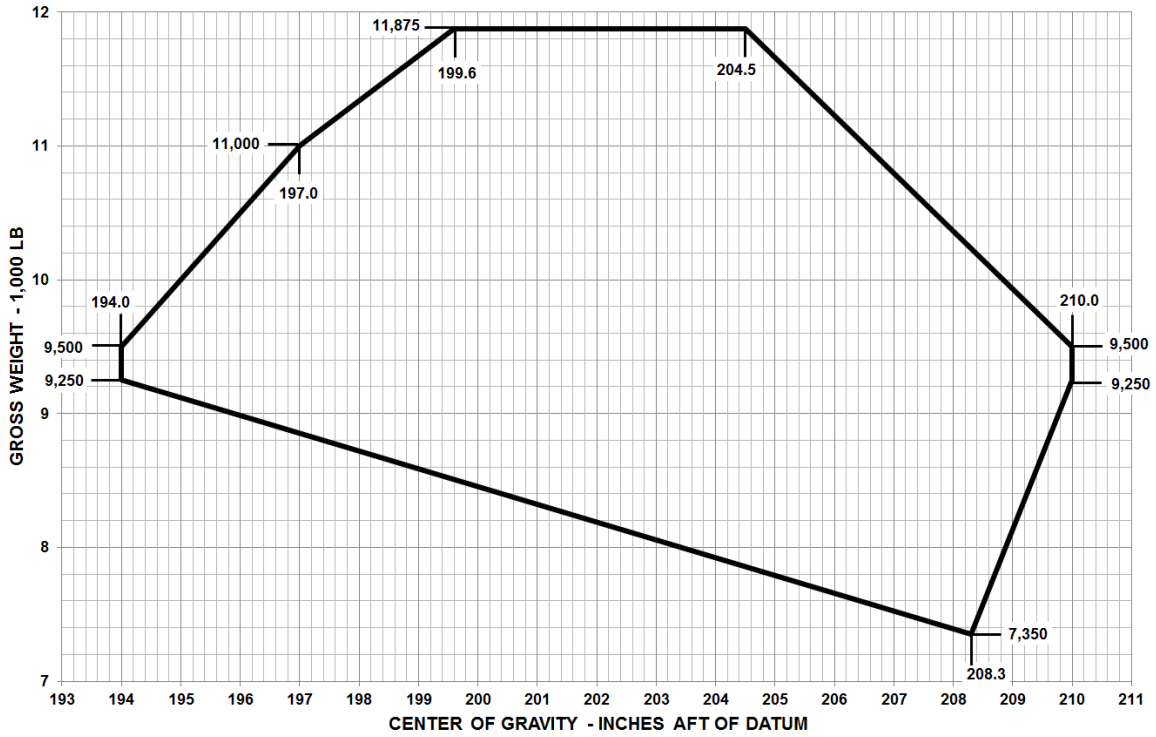
AIRSPEED LIMITS

V_{NE} (never exceed) Power On:	155 knots (IAS). See Flight Manual for variations of $V_{NE\ PWR\ ON}$ with density altitude.
V_{NE}(gear extended/gear operating):	130 knots (IAS)
V_{NE} Power Off:	136 knots (IAS). See Flight Manual for variation of $V_{NE\ PWR\ OFF}$ with density altitude.

CENTER OF GRAVITY (C.G.) RANGE

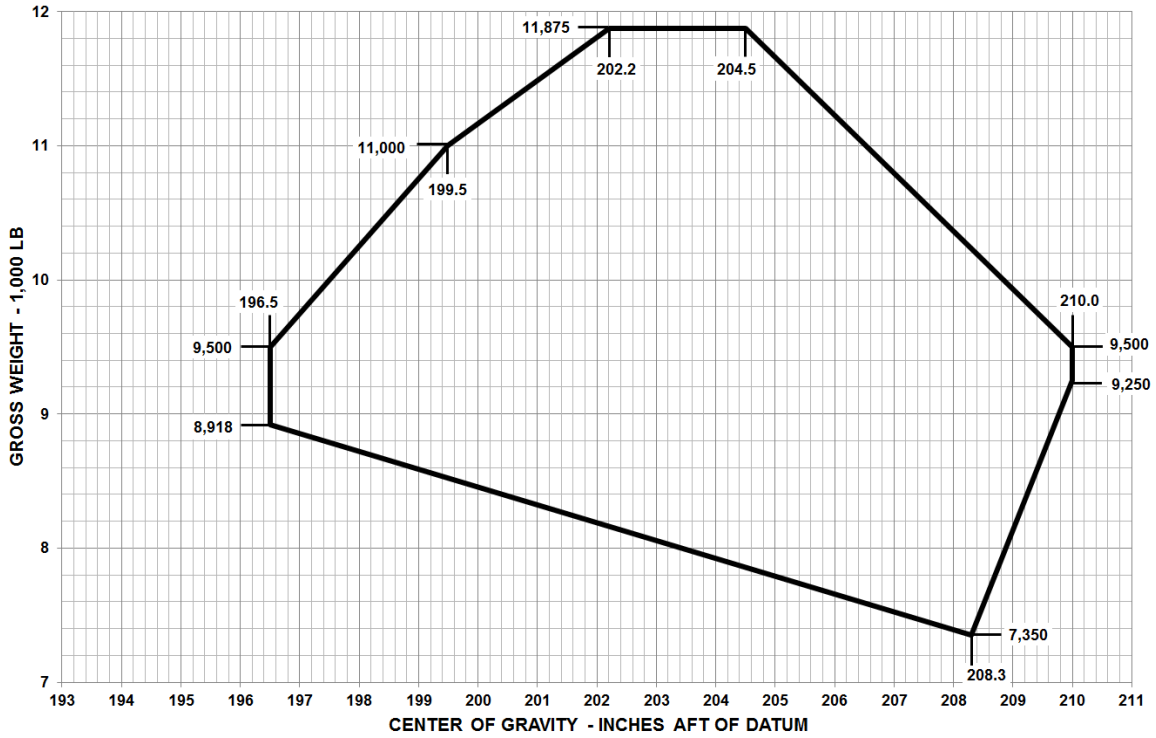
CENTER OF GRAVITY LIMITS AT VARIOUS GROSS WEIGHTS
FOR LATERAL CG UP TO AND INCLUDING ± 1 INCH

NOTE: DATUM IS 200 INCHES FORWARD OF ROTOR CENTROID



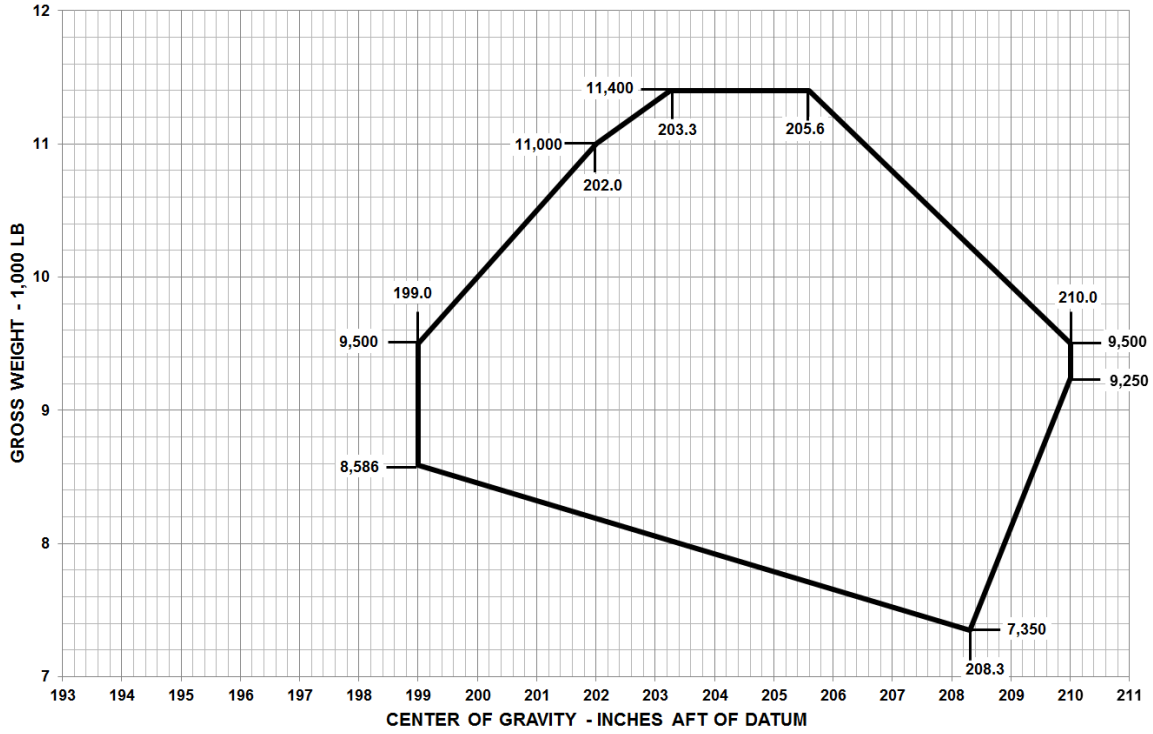
CENTER OF GRAVITY LIMITS AT VARIOUS GROSS WEIGHTS
FOR LATERAL CG GREATER THAN ± 1 INCH UP TO AND INCLUDING ± 2.5 INCHES

NOTE: DATUM IS 200 INCHES FORWARD OF ROTOR CENTROID



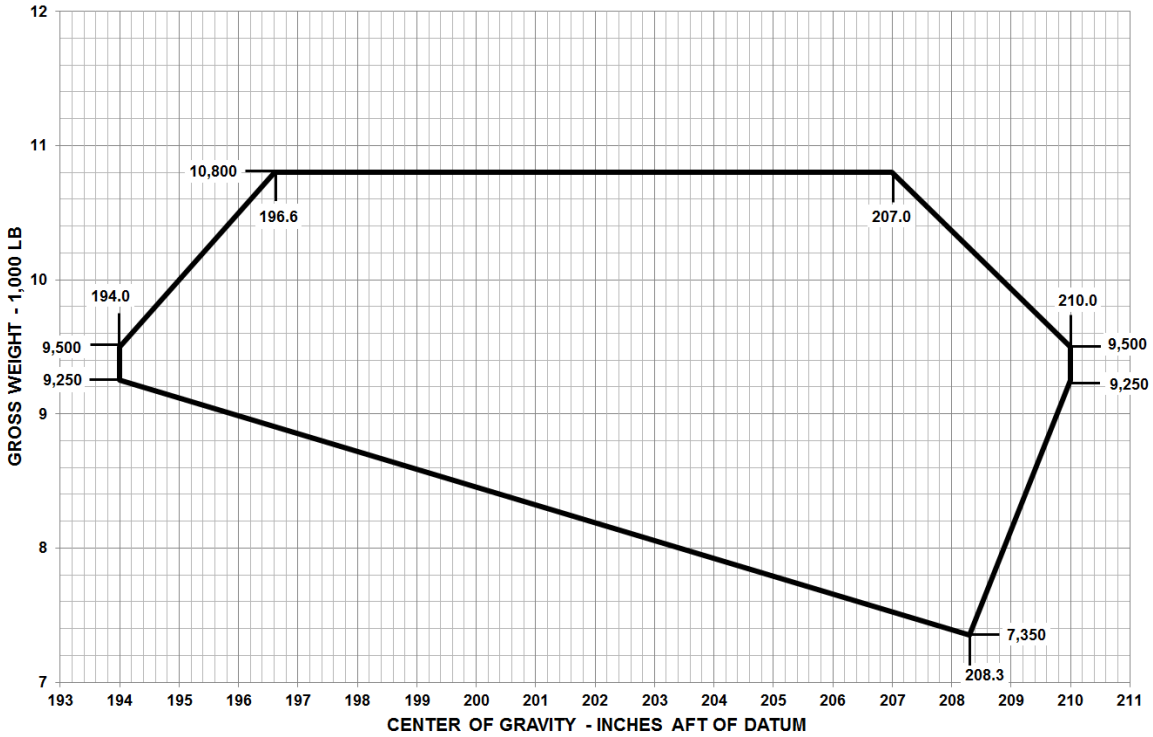
CENTER OF GRAVITY LIMITS AT VARIOUS GROSS WEIGHTS
FOR LATERAL CG GREATER THAN ± 2.5 INCHES UP TO AND INCLUDING ± 3.5 INCHES

NOTE: DATUM IS 200 INCHES FORWARD OF ROTOR CENTROID

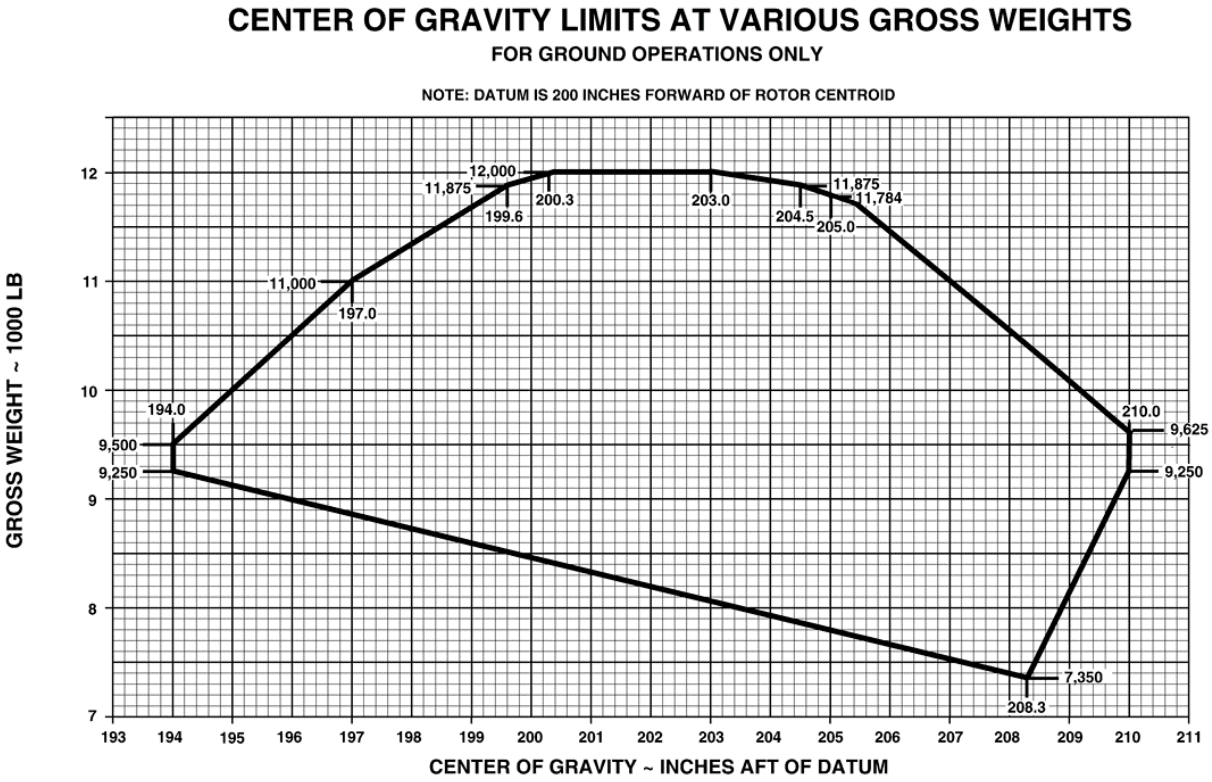


CENTER OF GRAVITY LIMITS AT VARIOUS GROSS WEIGHTS
FOR LATERAL CG GREATER THAN ± 3.5 INCHES UP TO AND INCLUDING ± 4.5 INCHES

NOTE: DATUM IS 200 INCHES FORWARD OF ROTOR CENTROID



Note: For the above charts, the effect of landing gear retraction on center of gravity need not be considered. The limits depicted in the diagrams are appropriate for flight with main landing gear extended or retracted.



LATERAL C.G. LIMITS	Up to 11,400 lbs: ±3.5 inches maximum 11,400 lbs – 11,875 lbs ±2.5 inches maximum 11,875 lbs – 12,000 lbs (Ground Only) ±1.9 inches maximum SAR (Below 10,800 lbs, hover) ±4.5 inches maximum
EMPTY WEIGHT C.G. RANGE	None
DATUM	200 inches forward of main rotor centroid
LEVELING MEANS	Leveling plate at STA 176, BL 35, L.H. and plumbline from upper frame of the aft doorway
MAXIMUM WEIGHT	11,875 lbs. (takeoff) 12,000 lbs. (ground operations)
MINIMUM CREW	1 (IFR) 1 (VFR) 3 (SAR; 2 Pilots, 1 Hoist Operator)
NUMBER OF SEATS	2 cockpit 12 cabin maximum
MAXIMUM BAGGAGE	600 lbs.
FUEL CAPACITY	Aircraft 761004 through 761036: 298 gals. (290 gals. usable) at (216.8) (See Note 1.) Aircraft 761037 and subsequent: 292 gals. (284 gals. usable) at (219.5) (See Note 1.)

OIL CAPACITY	1.281 gal/engine
MAXIMUM OPERATING (DENSITY) ALTITUDE	Enroute: 15,000 feet Takeoff and landing: Cat. B: 12,700 feet Cat. A: 3,000 feet Horizontal, 5,000 feet Vertical
AMBIENT TEMPERATURE LIMITS:	-35°C (-31°F) to ISA + 34°C (not to exceed 45°C / 113°F), see Note 22. -35°C (-31°F) to ISA + 37°C (not to exceed 52°C / 126°F), see Notes 22, 23
ROTOR BLADE CONTROL MOVEMENTS	For rigging information refer to Maintenance Manual.
MANUFACTURER'S SERIAL NUMBERS	Sikorsky Aircraft Corporation under Production Certificate Number 105: 761004 and up are eligible.

THE FOLLOWING DATA IS PERTINENT TO THE S-76A, B & C MODELS OF THIS SERIES

CERTIFICATION BASIS

Type Certificate No. H1NE

Model S-76A (Basic Certification Basis):

FAR Part 29, February 1, 1965, and 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), portions of amendment 29-13, specifically 29.965, and portions of amendment 29-21, specifically 29.1, 29.79, 29.1517, and 29.1587.

Instrument flight criteria (interim) for S-76 dated February 10, 1977.

Special Conditions 29-82-NE-3 (Docket No. 17721), dated March 27, 1978.

Partial Grant of Exemption from FAR 29.811(h), Exemption No. 2542 (Docket No. 17403), dated January 9, 1979, for the Model S-76A;.

Equivalent safety finding for FAR 29.173(b).

National Environmental Act of 1969.

Noise Control Act of 1972.

Compliance with the following optional requirements has been established: Ditching provisions FAR 29.563 including 29.801 and 29.807(d) of amendment 29-12 and excluding 29.1411, 29.1415, and 29.1561 when emergency flotation gear, P/N 76076-02002, is installed. For over-water operations, compliance with the operating rules and FAR 29.1411, 29.1415, and 29.1561 must be shown.

Cargo hook FAR 29.865 including 29.25 of amendment 29-12, when cargo hook system, P/N 76255-02000, is installed. For external load operations, FAR 133, including Amendments 1-4.

In addition to the basic certification basis, for the Model S-76B: Portions of Amendment 29-24, specifically 29.1325(f); equivalent safety finding for FARs 29.1013(e), 29.1203(a), 29.1181(a)(6), and 29.1189(a).

Partial Grant of Exemption from FAR 29.811(h), Exemption No. 2542 (Docket No. 17403), dated July 3, 1985.

In addition to the basic certification basis, for the Model S-76C (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 FAR 36, Appendix H.

Special Condition No. 29-ASW-3 (Docket No. 91-ASW-1), dated January 30, 1992

In addition to the basic certification basis, for the Model S-76C (with Arriel 2S1 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, 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 FAR 36, Appendix H.

Special Conditions No. 29-ASW-16 (Docket No. 96-ASW-2), dated August 26, 1996 and No. 29-004-SC (Docket No. SW004) dated June 17, 1998.

In addition to the basic certification basis, for the Model S-76C (with Arriel 2S2 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, 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 FAR 36, Appendix H.

Special Conditions No. 29-ASW-16 (Docket No. 96-ASW-2), dated August 26, 1996 and No. 29-004-SC (Docket No. SW004), dated June 17, 1998.

THE FOLLOWING DATA IS PERTINENT TO THE S-76D MODEL OF THIS SERIES

CERTIFICATION BASIS Model S-76D Certification Basis

14CFR 29 through Amendment 29-52 as follows:
29.2, 29.21, 29.25, 29.27, 29.29, 29.31, 29.33, 29.45, 29.49, 29.51, 29.53, 29.55, 29.59, 29.60, 29.61, 29.62, 29.63, 29.64, 29.65, 29.67, 29.71, 29.73, 29.75, 29.77, 29.79, 29.81, 29.83, 29.85, 29.87, 29.141, 29.143, 29.151, 29.161, 29.171, 29.173, 29.175, 29.177, 29.181, 29.231, 29.235, 29.239, 29.241, 29.251, 29.301, 29.303, 29.305, 29.307 (main and tail rotor blades only), 29.309, 29.321, 29.337, 29.339, 29.341, 29.351, 29.361, 29.395, 29.397, 29.399, 29.401, 29.403, 29.411, 29.413, 29.471, 29.473, 29.475, 29.477, 29.479, 29.481, 29.483, 29.485, 29.493, 29.547, 29.549, 29.551, 29.561(a)(d), 29.563, 29.571 (main and tail rotor blades only), 29.601, 29.602, 29.603, 29.605, 29.607, 29.609, 29.610, 29.611, 29.613, 29.619, 29.621, 29.623, 29.629, 29.653, 29.659, 29.661, 29.663, 29.672, 29.673, 29.674, 29.675, 29.681, 29.683, 29.685, 29.687, 29.691, 29.695, 29.723, 29.725, 29.727, 29.729, 29.731, 29.733, 29.735, 29.771, 29.773, 29.775, 29.777, 29.779, 29.783, 29.801, 29.803, 29.805, 29.807, 29.809, 29.811, 29.812(a)(c)(d)(e)(f), 29.813(c)(2), 29.831, 29.851, 29.853, 29.855, 29.861, 29.863, 29.865 (except (c)(6), see Special Condition), 29.871, 29.873, 29.877, 29.901, 29.903, 29.907, 29.917, 29.921, 29.931, 29.939, 29.951, 29.953, 29.954, 29.955, 29.959, 29.961, 29.965, 29.969, 29.971, 29.977, 29.993, 29.995, 29.997, 29.999, 29.1011, 29.1013, 29.1015, 29.1017, 29.1019, 29.1021, 29.1023, 29.1027, 29.1041, 29.1043, 29.1045, 29.1047, 29.1049, 29.1091, 29.1093, 29.1103, 29.1121, 29.1123, 29.1141, 29.1143, 29.1145, 29.1151, 29.1163, 29.1165, 29.1181, 29.1183, 29.1185, 29.1187, 29.1189, 29.1191, 29.1193, 29.1194, 29.1195, 29.1197, 29.1199, 29.1201, 29.1203, 29.1301, 29.1303, 29.1305, 29.1307, 29.1309 (new avionics, AFCS, and Electrical Power Generation and Distribution System only), 29.1317, 29.1321, 29.1322, 29.1323, 29.1325, 29.1327, 29.1329, 29.1331, 29.1333, 29.1335, 29.1337, 29.1351, 29.1353, 29.1355, 29.1357, 29.1359, 29.1363, 29.1381, 29.1383, 29.1385, 29.1387, 29.1389, 29.1391, 29.1393, 29.1395, 29.1397, 29.1401, 29.1411, 29.1413, 29.1415, 29.1431, 29.1435, 29.1457, 29.1459, 29.1461, 29.1501, 29.1503, 29.1505, 29.1509, 29.1517, 29.1519, 29.1521, 29.1523, 29.1525 ,29.1527, 29.1529, 29.1541, 29.1543, 29.1545, 29.1547, 29.1549, 29.1551, 29.1553 ,29.1555, 29.1557, 29.1559, 29.1561, 29.1565,

29.1581, 29.1583, 29.1585, 29.1587, 29.1589, A29.1, A29.2, A29.3, A29.4, B29.1, B29.2, B29.3, B29.4, B29.5, B29.6, B29.7, B29.8, B29.9, C29.1, E29.1

Except:
29.1 at 29-21, 29.307 at 29-4 (all but main and tail rotor blades), 29.391 at 29-0, 29.561(b)(c) at 29-0, 29.561(c) at 29-29 (for engine installation only), 29.571 at 29-20 (all but main and tail rotor blades only), 29.625 at 29-0, 29.671 at 29-0, 29.785 at 29-0, 29.787 at 29-12, 29.865 at 29-12 (External Cargo Hook only), 29.908 at 29-13, 29.923(a)(b1)(b3) at 29-34, 29.923(c) - (o) at 29-26, 29.927 at 29-3, 29.963 at 29-26, 29.967 at 29-0, 29.973 at 29-0, 29.975 at 29-26, 29.1309 at 29-14 (all but new avionics, AFCS, and Electrical Power Generation and Distribution System)
Not Adopted:
29.427, 29.497, 29.501, 29.505, 29.511, 29.519, 29.521, 29.562, 29.631, 29.679, 29.737, 29.751, 29.753, 29.755, 29.757, 29.812(b), 29.815, 29.833, 29.859, 29.935, 29.952, 29.957, 29.979, 29.991, 29.1001, 29.1025, 29.1101, 29.1105, 29.1107, 29.1109, 29.1125, 29.1142, 29.1147, 29.1157, 29.1159, 29.1399, 29.1419, 29.1433, 29.1439, 29.1522, D29.1

Equivalent Safety Findings:
Number TD1509BO-R-S-1 for 14CFR Part 29.1401(d) at amendment 29-11; Anticollision light system installed in accordance with Sikorsky Drawing 33776-92603.

Number AT01847BO-R-P-1 for 14CFR Part 29.1305 at amendment 29-40 and 14CFR Part 29.1549 at amendment 29-34; Use of a Power Limit Indicator (PLI) as the primary means for indicating/setting power.

Special Conditions:
No. 29-004-SC (Docket No. SW004), dated June 17, 1998.
No. 29-036-SC (Docket No. FAA-2011-1026), dated December 09, 2014.

14CFR 36 through Amendment 36-30 as follows:
36.801, 36.803, 36.805, H36.1 - H36.305

Ditching:
If emergency flotation gear, P/N 33776-92709, is installed, then compliance has also been shown to Amendment 29-52 of 29.563, 29.801 (b), (c), (d) and (e) and 29.807 (b) and (d). For over-water operations, compliance with the operating rules and 29.1411, 29.1415, and 29.1561 must be shown.

THE FOLLOWING DATA IS PERTINENT TO ALL MODELS OF THIS SERIES

PRODUCTION BASIS

Sikorsky Aircraft Corporation
Production Certificate Number 105

EQUIPMENT

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis), must be installed in the helicopter for certification. In addition, the following items of equipment are required:

(a) Model S-76A: FAA approved Rotorcraft Flight Manual, Model S-76A Helicopter (Publication SA 4047-76-1)

Model S-76B: FAA approved Rotorcraft Flight Manual, Model S-76B Helicopter (Publication SA 4047-76B-1).

In addition:
For aircraft equipped with PT6B-36 engines, Supplement No. 2 (Publication SA 4047-76B-1)

For aircraft equipped with PT6B-36B engines, Supplement No. 11 (Publication SA 4047-76B-1)

Model S-76C equipped with Arriel 1S1 engines: FAA approved Rotorcraft Flight Manual, Model S-76C Helicopter (Publication SA 4047-76C-1).

Model S-76C equipped with Arriel 2S1 engines: 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 FAA Approved Rotorcraft Flight Manual (Publication SA 4047-76C-14).

Model S-76C equipped with Arriel 2S2 engines: FAA approved Rotorcraft Flight Manual, Model S-76C Helicopter (Publication SA 4047-76C-15) for aircraft serial numbers 760607 and subsequent.

Model S-76D: FAA approved Rotorcraft Flight Manual, Model S-76D Helicopter (Publication SA S76D-RFM-000).

(b) DELETED

(c) 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-76B and S-76C:
Aerosonic Part No. 20020-11293 airspeed indicator.

N O T E S

NOTE 1: Current weight and balance report, including list of equipment included in certificated empty weight, and loading instructions, when necessary, must be provided for each helicopter 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: All placards required in the approved rotorcraft flight manual must be installed in the appropriate locations. 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 LIMITS SPECIFIED IN THE FAA APPROVED ROTORCRAFT FLIGHT MANUAL. THE AIRWORTHINESS LIMITATIONS SECTION OF THE ROTORCRAFT MAINTENANCE MANUAL MUST BE COMPLIED WITH."

NOTE 3: For Model S-76A: Information essential to the proper maintenance of the helicopter is contained in the Sikorsky S-76A Maintenance Manual, Publication SA 4047-76-2, 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 FAA engineering approval. See Note 10.

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 FAA engineering approval. (See Note 10.)

For Model S-76B: Information essential to the proper maintenance of the helicopter is contained in the Sikorsky S-76B Maintenance Manual, Publication SA 4047-76B-2, and the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76B-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 4047-76B-2-1 or inspection intervals cannot be increased without FAA 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 FAA engineering approval. (See Note 10.)

For Model S-76D: Information essential to the proper maintenance of the helicopter is contained in the S-76D Maintenance Manual, Publication SA S76D-AMM-000, and the Airworthiness Limitations and Inspection Requirements Sections, Chapters 4 and 5, of SA S76D-AWL-000, 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 FAA engineering approval. (See Note 10.)

NOTE 4: DELETED

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^{o}C (40^{o}F). Do not use AVGAS containing Tri-Cresyl-Phosphate (TCP).

NOTE 6: For Model S-76A 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, A1, or GB6537-94 (RP3) 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-76B only: Anti-icing protection additives meeting MIL-D-27686 or equivalent must be present in concentrations of 0.035% to 0.15% by 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.

For Model S-76D only: The following additives and concentrations are applicable:

Anti-Icing Additives	
Additive (Trade Name)	Max. Concentration Allowed (% by Volume)
Diethylene Glycol Monomethyl Ether as defined in MIL-DTL-85470 or ASTM D4171 Type III	0.15%
Ethylene Glycol Monoethyl Ether (Fluid I) as defined in GOST 8313	0.15%
Mixture of 50% Ethylene Glycol Monoethyl Ether (Fluid I) and 50% Methyl Alcohol (Fluid I-M) as defined in TU 6-10-1458	0.3%

NOTE 7: DELETED

NOTE 8: Initial Type Certification Data Sheet No. H1NE for Model S-76A was not published. No airworthiness certificates were issued, based on Data Sheet No. H1NE (No Revision).

NOTE 9: Model S-76A helicopters have been approved for the Luftfahrt-Bundesamt (LBA). This LBA configuration must include a modification in accordance with Sikorsky Aircraft Drawing No. 76080-55007, Kit Modification, LBA, PL Sheet 1 of 1, Rev (-), FD Sheet 1 of 1, Rev (-). This is an LBA special requirement and is not approved for FAA airworthiness certification.

NOTE 10: Model S-76A: When operated at gross weights above 10,300 pounds, the helicopter must comply with Revision 14 of the Airworthiness Limitations section, dated May 14, 1985, or subsequent FAA-approved revisions of the Airworthiness Limitations and Inspection Requirements Manual SA 4047-76-2-1.

Model S-76B: All helicopters must comply with Airworthiness Limitations section, dated June 7, 1988, or subsequent FAA-approved revisions of Airworthiness Limitations and Inspection Requirements Manual SA 4047-76B-2-1.

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

Model S-76D: All helicopters must comply with the Airworthiness Limitations Section, Chapter 4, dated October 11, 2012, of Manual SA S76D-AWL-000, or subsequent FAA-approved revisions.

NOTE 11: Model S-76A: Alternate engine installations with Turbomeca Arriel 1S or 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-76B, and Model S-76C helicopter with Turbomeca Arriel 2S1 and 2S2 engines and the Model S-76D with Pratt & Whitney Canada PW210S engines, without modification preclude the intentional discharge into the atmosphere of liquid 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. Approved procedures for the use of the 30 minute power rating for the Arriel 2S2 engine configuration must be published in the Model S76C Rotorcraft Flight Manual, document no. SA 4047-76C-15 prior to the use of this rating. Engine Airworthiness Limitations requirements are as specified in Type Certificate Data Sheet No. E00054EN. For the Model S-76D, use of the 30 minute power rating is addressed in Rotorcraft Flight Manual SA S76D-RFM-000; Engine Airworthiness Limitations requirements are as specified in Type Certificate Data Sheet No. E00083EN.

NOTE 14: The Model S-76B (Pratt & Whitney PT6B-36 engine) and Model S-76C (Turbomeca Arriel 2S1 and Arriel 2S2 engines) rotorcraft installations 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 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.

The Model S-76D (Pratt & Whitney Canada PW210S engines) rotorcraft employs electronic engine controls that are recognized to be more susceptible to Electromagnetic Interference (EMI) than manual (non-electronic) controls used on other rotorcraft. EMI may be the result of radiated or conducted interference. For this reason, modifications that add or change systems that have the potential for EMI, must either be qualified to an FAA acceptable standard or tested at the time of installation for interference to the engine controls. This type of testing must employ the particular engine control's diagnostic techniques and external diagnostic techniques. This testing must be accomplished in accordance with an FAA Engineering approved alternate test plan.

NOTE 15: 1-pilot IFR is approved for Models S-76A, S-76B, S-76C, and S-76D when appropriately equipped and operating in accordance with a flight manual or flight manual supplement that allows such operation. For Models S-76A, S-76B, and S-76C, 1-pilot IFR operation requirements include installation of an SPZ-7000 Digital Automatic Flight Control System by STC or an SPZ-7600 Digital Automatic Flight Control System by STC or as optional equipment. The following Honeywell Flight Manual Supplements relate to 1-pilot IFR operations with the SPZ-7000:

Model S-76A SA 4047-76-1 Honeywell Supp No. 27-5130-14-03
Model S-76A SA 4047-76-1 Honeywell Supp No. 27-5120-19-01 (S-76A Arriel)
Model S-76B SA 4047-76B-1 Honeywell Supp No. 27-5120-10-01

The following Sikorsky Flight Manuals and Supplements relate to 1-pilot IFR operations with the SPZ-7600:

Model S76C Rotorcraft Flight Manual document no. SA 4047-76C-14
Model S76C Rotorcraft Flight Manual document no. SA 4047-76C-15
Model S-76A SA 4047-76-1 Supp S-38
Model S-76C SA 4047-76C-1 Supp S-15
Model S-76C+ SA 4047-76C-10 Supp S-15
Model S-76C+ SA 4047-76C-10 Supp 88

NOTE 16: Installation of Turbomeca Arriel 2S2 engines requires barrier filter P/N 76302-07800 or FAA-approved alternate.

NOTE 17: DELETED

NOTE 18: DELETED

NOTE 19: DELETED

NOTE 20: Model S-76D, Serial Number 761004 through 761050: If an aircraft does not have Sikorsky drawing 76080-70002 installed, Rotorcraft Flight Manual Supplement No. D01 is required.

NOTE 21: DELETED

NOTE 22: Model S76D: Refer to Rotorcraft Flight Manual, SA S76D-RFM-000 Revision 5 or later FAA approved revision, Part 1, Section 2 for Cold Weather Procedures**.**

NOTE 23: Model S-76D: High Temperature Kit Sikorsky drawing 33776-94664-011 must be installed for operation at ambient temperatures above 45°C (113°F)

.....END.....