DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H7SO
Revision 14
Overseas Aircraft Support, Inc.
UH-1B, UH-1E, UH-1H, UH-1L, TH-1L
April 20, 2021

TYPE CERTIFICATE DATA SHEET NO. H7SO

This data sheet, which is part of Type Certificate No. H7SO, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the 14 Code of Federal Aviation Regulations (14 CFR).

Type Certificate Holder: Overseas Aircraft Support, Inc.
3151 E. Airport Loop, Road, Hangar #1
Show Low, Arizona 85929, Arizona 85901

Mailing Address Only
P. O. Box 898
Lakeside, Arizona 85929

Type Certificate Holder Record:
Change of Address April 20, 2021
JTBAM, Inc. Transferred to Overseas Aircraft Support, Inc. July 1, 2019
OAS Parts LLC Transferred TC H7SO to JTBAM, Inc. on February 22, 2018
Overseas Aircraft Support, Inc. Transferred TC H7SO to OAS Parts LLC March 27, 2013
Williams Helicopter Corporation Transferred TC H7SO to Overseas Aircraft Support on November 7, 2007
Scott Paper Company Transferred TC H7SO to Williams Helicopter Corporation on June 15, 1994
Offshores Construction Transferred TC H7SO to Scott Paper Company on July 12, 1990

I – Model UH-1B, (Restricted Category Rotorcraft) Approved April 24, 1998

Engine: 1 – Lycoming T53-L-11D (See Note 10 for alternate engines.)

Fuel: ASTM-D1655 (Jet A, Jet A-1, Jet B) (See Note 17 for alternate and emergency fuels)

Engine Limits

	Torque Pressure (PSI)	Output Horsepower (HP)	Output (RPM)	Exhaust Gas Temp (C°)	Gas Gen Speed N_1(%)
Takeoff (5 min.)	47.5	1100	6600	610	100.5
Max. Continuous	39.0	900	6600	590	100.5

See Notes 13, 14 and 15. Refer to The Department of the Army Technical Manual No. TM 55-1520-219-10 "Operator's Manual, Army Model UH-1B Helicopters" for additional limitation data.

Rotor Limits

	Power Off	Power On
Maximum R.P.M.	339	324
Minimum R.P.M.	295	294

Continuous operation 294 to 324 RPM

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Airspeed Limits

V_{NE} (never exceed speed) 120 knots up to and including 6600 lbs. Gross Weight, sea level to 2000 feet.

V_{NE} (never exceed speed) 112 knots up to 7200 lbs. Gross Weight, sea level to 2000 feet. Refer to TM55-1520-219-10 for additional limitation data. See Note 2 for specific operation airspeed limitation placards.

Other Limits

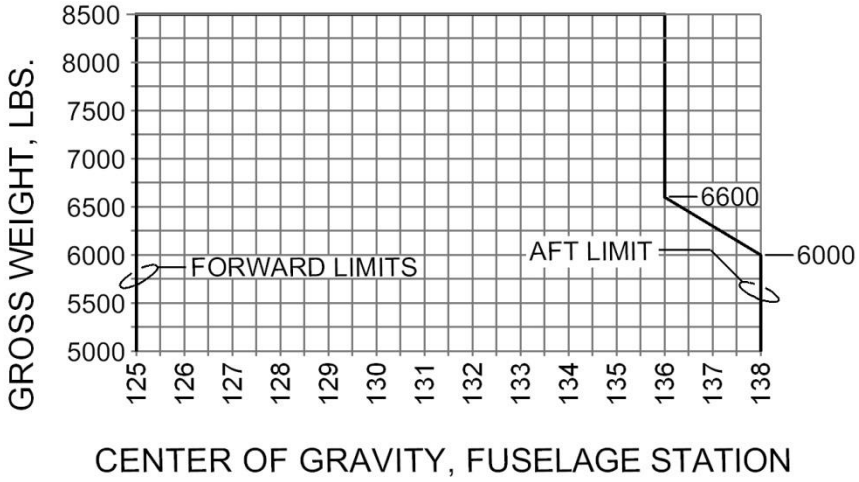
Flight hours are counted from takeoff to landing.

The helicopters approved under this type certificate are done so under the concept of limited exposure associated with escape from inadvertent ice encounters, and are prohibited against flight into known icing. The helicopters must be re-evaluated if certification to the General Ice Protection Airworthiness Regulations is requested.

Center of Gravity (C.G. Range)

Longitudinal C.G. Limits

(+125.0) to (+136.0) to 6600 lbs. and above
(+125.0) to (+136.4) to 6500 lbs.
(+125.0) to (+137.3) to 6250 lbs.
(+125.0) to (+138.0) to 6000 lbs. or less
Straight line variation between points given.



Lateral C.G. Limits plus or minus 4.7 inches from left centerline of fuselage.

Empty Weight C.G. Range

(+125.0) to (+138.0)

Datum

Station 0, datum is 7.6 inches aft of the most forward point of the fuselage nose section.

Leveling Means

Plumb line from top of left main door frame to index plate on cabin floor. See Note 1.

Maximum Weight

8,500 lbs.

Minimum Crew

1 (Pilot) at (+46.7)

No. of Seats

See Note 19. (Refer to TM55-1520-219-10 for additional data.)

Maximum Cargo

200 lbs. (150 lbs./sq. ft. maximum deck load.) Refer to TM55-1520-219-10 for additional data.

Fuel Capacity

168 U.S. gallons (+136). Useable fuel 160.5 U.S. gallons. Crashworthy fuel system not installed.
163 U.S. gallons (+136). Crashworthy fuel system installed.

Oil Capacity

3.25 gallons (+157.0)

Rotor Blade and Control Movements

For rigging information, refer to U.S. Army TM 55-1520-219-20 (Maintenance Manual).

II – Model UH-1E, (Restricted Category Rotorcraft) Approved May 12, 1989

Engine

1 – Lycoming T53-L-11D (See Note 10 for alternate engines)

Fuel

ASTM-D1655 (Jet A, Jet A-1, Jet B) (See Note 17 for alternate and emergency fuels)

Engine Limits

	Torque Pressure (PSI)	Output Horsepower (HP)	Output (RPM)	Exhaust Gas Temp (C°)	Gas Gen Speed N_1(%)
Max. Continuous	46	900	6600	620	101.5
30 Min. Operation	48	1000	6600	620-640	101.5
Max. Allowable	50	1100	6600	640	101.5

See Notes 13, 14 and 15. Refer to The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional limitation data.

Rotor Limits

	Power Off	Power On
Maximum RPM	339	324
Minimum RPM	295	294
Continuous Operation	294-324 RPM	

Airspeed Limits

V_{NE} (never exceed speed) 140 knots up to and including 6600 lb. G.W. Sea Level to 2000 ft.
Sideward and rearward flight airspeed limitation 30 knots.

Other Limits

Flight hours are counted from takeoff to landing.

The helicopters approved under this type certificate are done so under the concept of limited exposure associated with escape from inadvertent ice encounters, and are prohibited against flight into known icing. The helicopters must be re-evaluated if certification to the General Ice Protection Airworthiness Regulations is requested

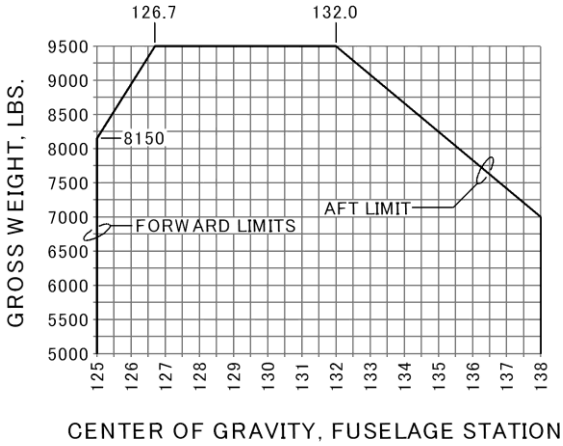
Center of Gravity (C.G. Range)

Longitudinal C.G. Limits

(+125.0) to (+138.0) at 7000 lbs and below.
(+125.0) to (+137.5) at 7250 lbs.
(+125.0) to (+136.7) at 7500 lbs.
(+125.0) to (+136.0) at 7750 lbs.
(+125.0) to (+135.5) at 8000 lbs.
(+125.0) to (+135.0) at 8250 lbs.

(+125.5) to (+134.4) at 8500 lbs.
(+125.5) to (+133.8) at 8750 lbs.
(+125.5) to (+133.2) at 9000 lbs.
(+125.5) to (+132.6) at 9250 lbs.
(+125.5) to (+132.0) at 9500 lbs.

Straight line variation between points given.



Lateral C.G. Limits plus or minus 7.5 inches from centerline of aircraft.

Empty Weight C.G. Range	(+125.0) to (+138.0)
Datum	Station 0, datum is 7.6 inches aft of the most forward point of the fuselage nose section.
Leveling Means	Plumb line from top of left main door frame to index plate on cabin floor.
Maximum Weight	9,500 lbs.
Minimum Crew	1 (Pilot) at (+46.7)
No. of Seats	See Note 19. (See NAVAIR 01-110HCA-1, "NATOPS Flight Manual).
Maximum Cargo	300 lbs. per sq. ft. of cargo area. (Refer to The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional limitation data.)
Fuel Capacity	242 U.S. gallons
Oil Capacity	3.25 U.S. gallons
Rotor Blade and Control Movements	For rigging information, refer to NAVAIR 01-110HCA-2 Maintenance Manual

III – Model UH-1H, (Restricted Category Rotorcraft) Approved September 20, 1996

Engine	1 – Lycoming T53-L-13B

Fuel	ASTM-D1655 (Jet A, Jet A-1, Jet B) (See Note 17 for alternate and emergency fuels)

Engine Limits

	Torque Pressure (PSI)	Output Horsepower (HP)	Output (RPM)	Exhaust Gas Temp (C°)	Gas Gen Speed N_1(%)
-Takeoff (30 min.)	50.0	1100	6600	610-625	101.5
Max Continuous	50.0	1100	6600	400-610	101.5

See Notes 13, 14 and 15. Refer to the Department of the Army Technical Manual No. TM 55-1520-10-10, "Operator's Manual, Army Model UH-1H/V Helicopters" dated 23 June 2005, Change 20 for additional limitation data.

Rotor Limits

	Power Off	Power On
Maximum R.P.M.	339	324
Minimum R.P.M.	294	294

Continuous Operation 294-324 RPM.

Airspeed Limits

Roof-mounted pitot static:

V_{NE} (never exceed speed) 124 knots up to 7500 lbs. Gross Weight, sea level to 2000 feet.
V_{NE} (never exceed 113 knots up to 9500 lbs. Gross weight, sea level to 2000 feet. Refer to Department of the Army Technical Manual No. TM55-1520-210-10, Chapter 5, Section V, for specific operating airspeed limitations. See Note 2 for specific operation airspeed limitation placards.

Nose-mounted pitot static:

V_{NE} (never exceed speed) 112 knots up to 7500 lbs. Gross Weight, sea level to 2000 feet.
V_{NE} (never exceed speed) 103 knots up to 9500 lbs. Gross Weight, sea level to 2000 feet. Refer to Department of the Army Technical Manual No. TM55-1520-210-10, Chapter 5, Section V, for specific operating airspeed limitations. See Note 2 for specific operation airspeed limitation placards.

Other Limits

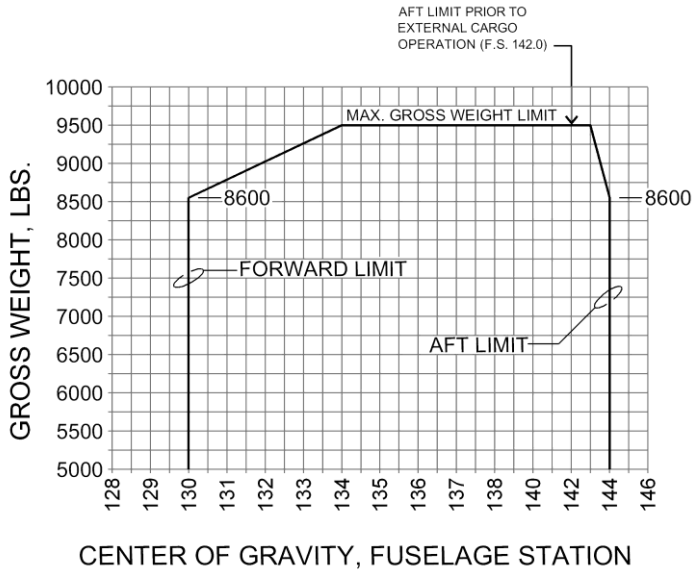
None

Center of Gravity (C. G. Range)

Longitudinal C.G.

(+130.0) to (+144.0) at 7000 lbs.
(+130.0) to (+144.0) at 8600 lbs.
(+130.0) to (+134.0) at 9500 lbs.
(+134.0) to (+143.0) at 9500 lbs.

Straight line variation between points given.



Lateral C.G. Limits plus or minus 7.5 inches

Empty Weight C.G. Range	(+130.0) to (+144.0)
Datum	Station 0, datum is 7.6 inches aft of the most forward point of the fuselage nose section.
Leveling Means	Plumb line from top of left main door frame to index plate on cabin floor. See Note 1.
Maximum Weight	9,500 lbs.
Minimum Crew	1 (Pilot) at (+46.7)
No. of Seats	See Note 19. Department of the Army Technical Manual No.TM55-1520-210-10).
Maximum Cargo	100 lbs. per sq. ft. of cargo area (Refer to Overseas Aircraft Support, Inc. Department of the Army Technical Manual No. TM55-1520-210-10).
Fuel Capacity	208.5 U.S. gallons (+151.6) Crashworthy system. 220.0 U.S. gallons (+151.6) Non-crashworthy system.
Oil Capacity	3.25 gallons (+173.0)
Rotor Blade and Control Movements	For rigging information, refer to U.S. Army TM 55-1520-210-23, Maintenance Manual

IV – Model UH-1L/TH-1L, (Restricted Category Rotorcraft) Approved May 12, 1989

Engine

1 – Lycoming T53-L-13B (See Note 10 for alternate engines)

Fuel

ASTM-D1655 (Jet A, Jet A-1, Jet B) (See Note 17 for alternate and emergency fuels)

Engine Limits

	Torque Pressure (PSI)	Output Horsepower (HP)	Output (RPM)	Exhaust Gas Temp (C°)	Gas Gen Speed N_1(%)
Takeoff (30 min.)	48	1000	6600	610-625	101.5
Max Cont.	46	900	6600	610	101.5
Max. Allowable	50	1100	6600	625	101.5

See Notes 12, 13 and 14. Refer to The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional limitation data.

Rotor Limits

	Power Off	Power On
Maximum R.P.M.	339	324
Minimum R.P.M.	295	294

Continuous Operation 294-324 RPM

Airspeed Limits

V_{NE} (never exceed speed) 140 knots up to and including 6600 lb. G.W. Sea Level to 2000 ft.
Sideward and rearward flight airspeed limitation 30 knots.
Refer to The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional limitation data. See Note 2 for specific operation airspeed limitation placards.

Other Limits

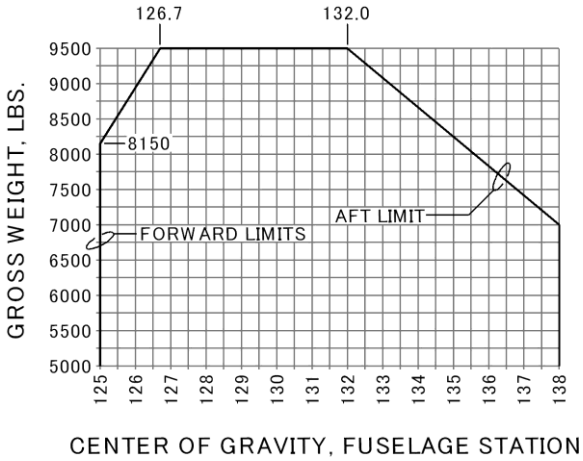
Flight hours are counted from takeoff to landing.

The helicopters approved under this type certificate are done so under the concept of limited exposure associated with escape from inadvertent ice encounters, and are prohibited against flight into known icing. The helicopters must be re-evaluated if certification to the General Ice Protection Airworthiness Regulations is requested.

Center of Gravity (C.G. Range)

Longitudinal C.G. Limits

(+125.0) to (+138.0) at 7000 lbs and below.
(+125.0) to (+137.5) at 7250 lbs.
(+125.0) to (+136.7) at 7500 lbs.
(+125.0) to (+136.0) at 7750 lbs.
(+125.0) to (+135.5) at 8000 lbs.
(+125.0) to (+135.0) at 8250 lbs.
(+125.5) to (+134.4) at 8500 lbs.
(+125.5) to (+133.8) at 8750 lbs.
(+125.5) to (+133.2) at 9000 lbs.
(+125.5) to (+132.6) at 9250 lbs.
(+125.5) to (+132.0) at 9500 lbs.
Straight line variation between points given.



Lateral C.G. Limits plus or minus 7.5 inches from centerline of aircraft

Empty Weight C.G. Range	(+125.0) to (+138.0)
Datum	Station 0, datum is 7.6 inches aft of the most forward point of the fuselage nose section.
Leveling Means	Plumb line from top of left main door frame to index plate on cabin floor.
Maximum Weight	9,500 lbs
Minimum Crew	1 (Pilot) at (+46.7)
No. of Seats	See Note 19. (Refer to the Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional data.)
Maximum Cargo	300 lbs. per sq. ft. of cargo area. (Refer to the Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970 for additional data.)
Fuel Capacity	242.0 U.S. gallons
Oil Capacity	3.25 U.S. gallons
Rotor Blade and Control Movements	For rigging information, refer to NAVAIR 01-110HCA-2 Maintenance Manual

DATA PERTINENT TO ALL MODELS

Serial Numbers Approved	Refer to Overseas Aircraft Support, Inc. Report No. OAS-001, Serial Number Approved Report, I.R. dated October 2, 2012, or later FAA approved revisions. A current copy is on file at the Los Angeles Aircraft Certification Office.
Certification Basis	Part 21 § 21.25(a)(2), effective February 1, 1965, including Amendments 21-1 through 21-42. Type Certificate No. H7SO for the special purpose of: 1) Agricultural operations under § 21.25(b)(1).

Note: In accordance with § 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certified under this type certificate are only eligible for agricultural operations excepted by § 36.1(a)(4) and defined under § 137.3.

2) Forest and Wildlife Conservation under § 21.25(b)(2)

Note: In accordance with § 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type certificate are only eligible for dispensing fire fighting materials excepted by § 36.1(a)(4) and defined under § 137.3.

3) External Load Operations under § 21.25(b)(7)

Note: In accordance with part § 36.1(a) (4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type 36.1(a) (4) and defined under § 133.1(b).

Any alteration to the aircraft for Special Purposes not identified above require further FAA approval and in addition, may require noise and/or flight testing.

General Note: Any subsequent modifications to the helicopters type certified under this Type Certificate are to have the certification basis for that modification established under 14 CFR 21.101 published June 7, 2000 which became effective June 10, 2003. Otherwise non-significant modifications are to meet the requirements of 14 CFR 29 airworthiness standards, transport category, Amendment 1, effective August 12, 1965 and 14 CFR 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.

Production Basis

None. No helicopter may be produced under this approval. Each helicopter must pass a conformity inspection in accordance with this TCDS, plus any additional special instructions attached to the Request for Conformity, FAA 8120-10. In addition a check, by the type certificate holder, of the flight characteristics in accordance with all applicable portions of Section II of the U.S. Army Technical Manual TM55-1520-242-MTF Maintenance Test Flight Manual, Army Model UH-1, Change 5, dated 18 July, 2005 as appropriate for each aircraft, or other FAA approved manual must be accomplished.

Equipment

The basic required equipment necessary for the particular special purpose operation must be installed for certification. Each helicopter is required to incorporate modifications as specified in Overseas Aircraft Support, Inc. Engineering Configuration Report, Report No. OAS-005, IR, dated October 2, 2012, or later FAA approved revisions.

UH-1H Model: The Department of the Army Technical Manual No. TM 55-1520-210-10, “Operator’s Manual, Army Model UH-1H/V Helicopters” dated 23 June 2005, Change 20, must be available in each UH-1H helicopter for ccertification. For UH-1H model rotorcraft with a replacement instrument panel installed in accordance with service instruction number OAS-SI-UH-1001, dated October 19, 2001 or later FAA approved revision, Avionics RFM Supplement No. OAS-SI-UH-1001, dated October 19, 2011 or later FAA approved revision must be available in for certification.

UH-1B Model : The Department of the Army Technical Manual No. TM 55-1520-219-10, "Operator's Manual, Army Model UH-1B Helicopters" dated 28 July 1982, Change 19, must be available in each UH-1B helicopter for Certification.

UH-1E, UH-1L, TH-1L Models: The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970, must be available in each UH-1E, UH-1L, TH-1L helicopter for certification.

NOTE 1

Overseas Aircraft Support, Inc. OAS-006, Weight and Balance/List of Equipment Report, IR, dated October 19, 2012, or later FAA approved revisions and loading instructions when necessary, must be provided for each helicopter at the time of original airworthiness certification.

UH-1H Model: Refer to The Department of the Army Technical Manual No. TM 55-1520-210-10, "Operator's Manual, Army Model UH-1H/V Helicopters" dated 23 June 2005, Change 20, Chapter 6 and Maintenance Manual TM 55-1520-210-23, Paragraph 1-36 for leveling means and weight and balance determination for UH-1H models.

UH-1B Model : Refer to The Department of the Army Technical Manual No. TM 55-1520-219-10, "Operator's Manual, Army Model UH-1B Helicopters" dated 28 July 1982, Change 19, Chapter 7 and Maintenance Manual TM 55-1520-219-20, Paragraph 1-36 for leveling means and weight and balance determination for UH-1B models.

UH-1E, UH-1L, TH-1L Models: Refer to The Department of the Navy NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970, Section I, Part 4 and Maintenance Manual NAVAIR 01-110HCA-2, Paragraph 1-52 for leveling means and weight and balance determination for UH-1E, UH-1Land TH-1L models.

NOTE 2

The following placards, as shown on Overseas Aircraft Support Helicopters, Inc Drawing No. OAS-MECH-021, Rev IR , dated April 26, 2012, or later FAA approved revision, must be prominently displayed in the cockpit in full view of the pilot(s) as appropriate:

PLACARD No. 1 – UH-1B

OPERATING LIMITATIONS								
CALIBRATED AIR SPEED - KNOTS								
GROSS WEIGHT	6600	LBS	7200	LBS	8000	LBS	8500	LBS
RPM	6400	6600	6400	6600	6400	6600	6400	6600
DENSITY ALTITUDE								
S.L. TO 2000 FT	120	120	109	112	95	101	86	95
3000 FT	116	116	105	108	92	97	82	92
6000 FT	102	106	92	97	77	86	68	80
9000 FT	90	94	79	86	65	76	--	--
12,000 FT	77	84	66	75	--	--	--	--
15,000 FT	64	72	--	--	--	--	--	--
18,000 FT	51	61	--	--	--	--	--	--
FROM 0 TO 70 KNOTS USE 6000 TO 6600 RPM RANGE FROM 70 TO 120 KNOTS USE 6400 TO 6600 RPM RANGE								

REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE
EXTERNAL LOAD OPERATION: V_{NE} IS 60 KTS. CAS UNLESS FURTHER RESTRICTED BY THE OPERATING LIMITS CHARTS ABOVE.

PLACARD No. 1 – UH-1E, UH-1L, TH-1L

OPERATING LIMITATIONS								
CALIBRATED AIR SPEED - KNOTS								
GROSS WEIGHT	6600 LBS OR LESS		7200 LBS		8000 LBS		8500 LBS	
RPM	6400	6600	6400	6600	6400	6600	6400	6600
DENSITY ALTITUDE								
S.L. TO 2000 FT	120	120	109	112	95	101	86	95
3000 FT	116	116	105	108	92	97	82	92
6000 FT	102	106	92	97	77	86	68	80
90000 FT	90	94	79	86	65	76	--	--
12000 FT	77	84	66	75	--	--	--	--
15000 FT	64	72	--	--	--	--	--	--
18000 FT	51	61	--	--	--	--	--	--
FROM 0 TO 70 KNOTS USE 6000 TO 6600 RPM RANGE FROM 70 TO 120 KNOTS USE 6400 TO 6600 RPM RANGE REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE								

PLACARD No. 1 – UH-1L, TH-1L WITH 540 ROTOR SYSTEM

OPERATING LIMITATIONS			
CALIBRATED AIR SPEED - KNOTS			
GROSS WEIGHT	7500 LB	8500 LB	9500 LB
AIRSPEED POWER ON	140	130	125
DECREASE AIR SPEED 3 KNOTS/1000 FT ABOVE 3000 FT REDUCE AIR SPEED WHEN VIBRATION IS EXCESSIVE			
RPM LIMITS			
POWER ON 314 TO 324 RPM (6400 TO 6600 RPM_E) POWER OFF 300 TO 339 RPM (6100 TO 6900 RPM_E)			

PLACARD No. 1 – UH-1H

CALIBRATED AIR SPEED – KNOTS With Roof Mounted Pitot Static				
GROSS WEIGHT	6600 LB	7500 LB	8500 LB	9500 LB
SL TO 2000 FT	120	120	115	110
3000 FT	117	117	112	107
6000 FT	108	108	103	98
9000 FT	98	98	94	--
12000 FT	89	89	84	--
15000 FT	78	78	--	--
18000 FT	65	65	--	--
UP TO 7500 LB GW USE 6000 TO 6600 RPM RANGE OVER 7500 LB GW USE 6400 TO 6600 RPM RANGE POWER OFF 294 TO 339 ROTOR RPM REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE				

	CALIBRATED AIR SPEED – KNOTS With Nose Mounted Pitot Static			
GROSS WEIGHT	6600 LB	7500 LB	8500 LB	9500 LB
SL TO 2000 FT	112	112	108	103
3000 FT	109	109	105	100
6000 FT	101	101	96	90
9000 FT	92	92	86	82
12000 FT	80	80	75	71
15000 FT	68	68	63	--
UP TO 7500 LB GW USE 6400 TO 6600 RPM RANGE OVER 7500 LB GW USE 6400 TO 6600 RPM RANGE POWER OFF 294 TO 339 ROTOR RPM REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE				

PLACARD No. 2 – UH-1B

THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER OPERATORS MANUAL. REFER TO TM 55-1520-219-10 UH-1B ROTORCRAFT FLIGHT MANUAL FOR OPERATING LIMITS AND RESTRICTIONS.

PLACARD No. 2 - UH-1H

THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER OPERATORS MANUAL. REFER TO OVERSEAS AIRCRAFT SUPPORT, INC. UH-1H ROTORCRAFT FLIGHT MANUAL RFM-UH1H-2010-10 OR U.S. ARMY TECHNICAL MANUAL NO. TM 55-1520-10-10 FOR OPERATING LIMITS AND RESTRICTIONS.

PLACARD No. 2 – UH-1E, UH-1L, TH-1L

THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED HELICOPTER OPERATORS MANUAL. REFER TO NAVAIR 01-110HCA-1 UH-1E, UH-1L, TH-1L ROTORCRAFT FLIGHT MANUAL FOR OPERATING LIMITS AND RESTRICTIONS.

PLACARD No. 3 – UH-1B, UH-1E, UH-1H, UH-1L, TH-1L

THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF 14 CFR PART 91 § 91.313

PLACARD No. 3 – UH-1B, UH-1E, UH-1H, UH-1L, TH-1L

EXTERNAL LOADS OPERATIONS: Vne WILL BE DETERMINED FOR EACH PROPOSED EXTERNAL LOAD APPLICATION.

PLACARD NO. 4 – UH-1B, UH-1E, UH-1H, UH-1L, TH-1L

VFR OPERATIONS ONLY

PLACARD No. 5 – UH-1E, UH-1L, TH-1L

TURN ON ENGINE DE-ICE WHEN OPERATING IN VISIBLE MOISTURE AT TEMPERATURES BELOW 32 DEGREES F (0 DEGREES C).

The Builder's Data Plate required by part 45, § 45.13 must be installed in accordance with Overseas Aircraft Support, Inc, Drawing No. OAS-MECH-020, Revision IR, dated April 26, 2012, or later FAA approved revisions.

NOTE 3 The helicopter(s) must be serviced, maintained, inspected, repaired, and overhauled in accordance with the documents specified in Overseas Aircraft Support, Inc. Instructions for Continued Airworthiness Report No. OAS-003, IR, dated October 19, 2012, or later FAA accepted revision, or inspected in accordance with other FAA accepted inspection program. The service life limited parts overhaul and retirements intervals for these helicopters is specified in Overseas Aircraft Support, Inc. Instructions for Continued Airworthiness Report No. OAS-003, IR, dated October 19, 2012, or later FAA approved revisions. A FAA approved copy must accompany each helicopter on delivery. The TC Holder's Instructions for Continued Airworthiness Report is part of the TC holder's Instructions for Continued Airworthiness.

NOTE 4 This helicopter must be operated in accordance with the applicable Flight Manual :

UH-1B Model: Department of the Army Technical Manual No. TM 55-1520-219-10, "Operator's Manual, Army Model UH-1B Helicopter" dated 16 January 1969, Changes 19 dated 28 July 1982.

UH-1E, UH-1L, TH-1L Models: Department of the Navy Technical Manual NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970.

UH-1H Model: Department of the Army Technical Manual No. TM 55-1520-210-10, "Operator's Manual, Army Model UH-1H/V Helicopters" dated February 15, 1988, dated 23 June 2005, Change 20. For UH-1H model rotorcraft with a replacement instrument panel installed in accordance with service instruction number OAS-SI-UH-1001, dated October 19, 2001 or later FAA approved revision, Avionics RFM Supplement No. OAS-SI-UH-1001, dated October 19, 2011 or later FAA approved revision.

NOTE 5 Prior to civil airworthiness certification, Overseas Aircraft Support, Inc. Report No. OAS-005, Engineering Configuration Report, IR, dated October 2, 2012 or later FAA approved revisions, must be incorporated.

NOTE 6 This aircraft is prohibited from carrying internal cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the aircraft owners/operator's business that is other than air transportation.

NOTE 7 Restricted category aircraft may not be operated in a foreign country without express written approval of that country.

NOTE 8 This aircraft has not been shown to meet the requirements of the applicable comprehensive and detailed Airworthiness Code as provided by Annex 8 to the Convention on International Civil Aviation.

NOTE 9 Military to Civil or Military to Military engine changes are allowed provided the replacement engine is of the same make and model as identified in this TCDS. The replacement engine must have proper military records and have the applicable FAA Airworthiness inspections accomplished.

NOTE 10

UH-1B Only: Lycoming engine models T53-L-11 (S/N suffix "A"), T53-L-11B and T53-L-11C are approved for use as alternate engines under this Type Certificate. Engines identified in this note will be maintained on a 1200 hr. (T53-L-11C, 1800 hr.) overhaul schedule and in accordance with the applicable U.S. Army Maintenance, Overhaul and Parts Manuals, applicable to that engine.

UH-1E Only: The UH-1E model helicopter is eligible with a Lycoming T53-L-13/13A/13B engine installed in accordance with NAVAIR 01-110HCA-2 installation instructions, and when the engine instruments are marked according to NAVAIR 01-110HCA-1 for the respective engines on the UH-1L/TH-1L helicopters.

NOTE 11

For Models UH-1E / UH-1L / TH-1L

The T53-L-13B engines in these installations are rated to an output torque value equivalent to 1400 SHP at 6600 RPM take-off and 1250 SHP continuous; however the transmission is restricted to a maximum of 1100 SHP at 6600 RPM (50 PSI torque).

The T53-L-13 and T53-L-13A engines are limited to 97% gas producer speed or 24,400 RPM. An aircraft equipped with the T53-L-13B engine is not limited by this power plant restriction; therefore the pilot must ascertain which engine is installed prior to start. Performance charts have been included in the Department of the Navy Technical Manual NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970.

NOTE 12

For Model UH-1H

The T53-L-13B gas turbine power plant in these installations is rated to an output torque value equivalent to 1400 SHP at 6600 RPM take-off and 1250 SHP continuous; however the transmission is restricted to a maximum of 1100 SHP at 6600 RPM (50 PSI torque).

NOTE 13

Torque pressure output by the engine torque sensing system varies with individual engines. The calibration of this value is required on each engine and the value corresponding to take-off power is stamped on the engine data plate.

NOTE 14

Gas producer speeds as shown under "Engine Limits" are maximum permissible speeds. The gas producer speed for rated power varies with individual engines and must be determined during engine calibration and stamped on the engine data plate. The rated gas producer speed shown on the temperature limit placard installed on the instrument panel must correspond to the engine data plate gas producer speed. Gas producer speed limits also vary with OAT in accordance with the schedule as shown on the Temperature Limits (GO-NO-GO TAKE-OFF) placard on the instrument panel or Health Indicator Test (HIT) results, as applicable.

NOTE 15

Maximum permissible exhaust gas temperature varies with ambient temperature as described in the "Operator's Manual". Check engine EGT by use of Health Indicator Test (HIT) prior to take-off see Department of the Army Technical Manual No. TM 55-1520-210-10, "Operator's Manual, Army Model UH-1H/V Helicopters" dated February 15, 1988, dated 23 June 2005, Change 20, and HIT EGT Log for the aircraft.

NOTE 16

The Airworthiness Directives (AD's) and Safety of Flight messages for the helicopter and engines contained in Overseas Aircraft Support, Inc. Report No. OAS-002, Airworthiness Directives and Safety of Flight Compliance, IR, dated October 2, 2012 or later FAA approved revision must be complied with prior to original certification.

NOTE 17

Alternative and emergency fuels are listed in the Rotorcraft Flight Manual, as applicable to helicopter model.

UH-1B Model: Department of the Army Technical Manual No. TM 55-1520-219-10, "Operator's Manual, Army Model UH-1B Helicopter" dated 16 January 1969, Changes 19 dated 28 July 1982.

UH-1E, UH-1L, TH-1L Models: Department of the Navy Technical Manual NAVAIR 01-110HCA-1, "NATOPS Flight Manual Navy Models UH-1E, UH-1L, TH-1L & HH-1K Helicopters" dated 15 December 1970.

UH-1H Model: Department of the Army Technical Manual No. TM 55-1520-210-10, "Operator's Manual, Army Model UH-1H/V Helicopters" dated February 15, 1988, dated 23 June 2005, Change 20.

NOTE 18

Any alteration to the type design of this aircraft may require Instructions for Continued Airworthiness. These instructions must be submitted to and accepted by the FTW-AEG, Aircraft Evaluation Group Office prior to approval for return to service.

NOTE 19

No person may be carried in this helicopter during fight unless that person is essential to the purpose of the flight.

NOTE 20

The aircraft noise was not shown to comply with the noise requirements in 14 CFR Part 36.

NOTE 21

Helicopters that do not have documentation showing that they were surplus from an Armed Force of the United States are not eligible for certification under this type certificate. Engines and appliances that do not have documentation showing that they were surplus from an Armed Force of the United States are not eligible for installation on a helicopter under this type certificate.

NOTE 22

In addition to the standard helicopter requirements, the following additional data and/or helicopter configuration requirements must be met for each individual Overseas Aircraft Support, Inc. helicopter upon application for an original Special Airworthiness Certificate:

1. A completed Application for Airworthiness Certificate, FAA Form 8130-6 that correctly identifies the type certificate holder's helicopter and its intended special purpose(s).
2. Written confirmation from the certifying office that the affected serial number(s) has been added to this Type Certificate.
3. The application for airworthiness certification and the helicopter's registration certificate must match the information of the Overseas Aircraft Support, Inc. Data Plate.
4. The documents specified in Section III of the FAA accepted Overseas Aircraft Support, Inc. Instructions for Continued Airworthiness Report OAS-003, dated October 19, 2012, or later FAA accepted revisions are with the helicopter.
5. The conditions and limitations specified in this Type Certificate Data Sheet are met.