

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

R00004RC
Revision 1

JJASPP Engineering Services, LLC

UH-1H

February 25, 2013

TYPE CERTIFICATE DATA SHEET NO. R00004RC

This data sheet, which is a part of Type Certificate No. R00004RC 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 Holder **JJASPP Engineering Services, LLC.**
511 Harmon Terrace
Arlington, Texas 76010

I – Model UH-1H (Restricted Category Military Surplus Helicopter), Approved February 25, 2013

Engine Lycoming T53-L-13B (See NOTE 12. for approved alternate engines)

Fuel MIL-T-5624 (JP-4)
 Alternate Fuels: MIL-T-5624 (JP-5), MIL-T-83133 (JP-8)

Engine Limits

	Torque Pres. (psi)	Output Shaft Speed (rpm)	Exhaust Gas Temp. (deg. C)
Takeoff (30 min.)	50.0 (1100 SHP)	6,600 (100%)	625°C
Maximum Cont.	50.0 (1100 SHP)	6,600 (100%)	610°C

(See NOTES 2. and 3.)

Rotor Limits Power Off Power On
 Maximum 339 rpm Maximum 324 rpm
 Minimum 294 rpm Minimum 294 rpm

Continuous Operation 294 - 324 rpm

Airspeed Limits Roof Mounted Pitot Static:

Vne (never exceed speed) 124 knots (143 mph) up to and including 7500 lbs. G.W. sea level to 2000 feet (See NOTE 4. for specific airspeed operating limitations).

Nose Mounted Pitot Static:

Vne (never exceed speed) 119 knots (137 mph) up to and including 7500 lbs. G.W. sea level to 2000 feet (See NOTE 4. for specific airspeed operating limitations).

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C.G. Range	<p><u>Longitudinal C.G. Limits</u> (+134) to (+143) at 9,500 lbs. (+130) to (+144) at 8,600 lbs. and below</p> <p><u>Lateral C.G. Limits</u> 4.7 in. left from centerline of fuselage 6.5 in. right from centerline of fuselage See center of gravity charts in U.S. Army UH-1H Operator's Manual TM 55-1520-210-10 for specific loading.</p>
Empty Weight C.G. Range	See U.S. Army UH-1H Operator's Manual TM55-1520-210-10.
Datum	Station 0 (datum is located 7.60 inches aft of the most forward point of the fuselage nose section). See U.S. Army UH-1H Operator's Manual TM 55-1520-210-10.
Leveling Means	Plumb line from top of left main door frame to index plate on floor (see NOTE 1.).
Maximum Weight	9,500 lbs.
Minimum Crew	One (1) pilot
No. of Seats	See NOTE 10. (See U.S. Army UH-1H Operator's Manual TM-55-1520-210-10 for seat locations).
Fuel Capacity	208.5 gallons (+151.6) Usable fuel 206.5 gallons
Oil System	3.25 gallons (+173) Usable oil 1.5 gallons (included in capacity) See NOTE 1. for data on undrainable oil.
Rotor Blade and Control Movements	For rigging information refer to U.S. Army UH-1H Maintenance Manual TM 55-1520-210-23.
Serial No.'s Approved	U.S. Military Surplus UH-1H Helicopters as identified in JJASPP Engineering, LLC Report No. JJASPP-RC-001, dated September 21, 2012, or later FAA approved revisions. A current copy in on file at the Fort Worth Rotorcraft Certification Office, ASW-170.
Certification Basis	<p>14 CFR § 21.25(a)(2) effective February 1, 1965, including Amendments 21-1 through 21-42.</p> <p>Type Certificate R00004RC issued February 14, 2013, for the special purpose of External Load Operations under 14 CFR § 21.25(b)(7).</p> <p>Note: In accordance with 14 CFR § 36.1(a)(4), compliance with noise requirements was not shown. Therefore, aircraft certificated under this type certificate are only eligible for external load operations dispensing firefighting materials excepted by 14 CFR § 36.1(a)(4) and defined under 14 CFR § 133.1(b).</p> <p>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.</p> <p>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</p>

to meet the requirements of 14 CFR part 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 manufactured under this approval. Prior to adding serial numbers to this type certificate, each candidate helicopter must undergo a conformity inspection. The conformity inspection will be conducted in accordance with a Type Inspection Authorization, Part 1, or request for conformity using the conformity inspection guidelines contained in FAA Order 8110.56.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed in the helicopter prior to original airworthiness certification. In addition, the following items or equipment are required with each helicopter as specified:

- (a) Outside air temperature gauge
- (b) Engine tail pipe temperature gauge
- (c) The U.S. Army UH-1H Operator’s Manual TM 55-1520-210-10, dated 15 February 1988 or later FAA approved revisions.

NOTE 1. A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each helicopter at the time of original airworthiness certification. Refer to Chapter 6 of UH-1H Operator’s Manual TM 55-1520-210-10 and Maintenance Manual TM 55-1520-210-23, paragraph 1-36 for leveling means and weight and balance determination.

NOTE 2. Torque pressure output by the engine sensing system varies with individual engines. A calibration of this value is required of each engine and the value corresponding to take-off power is stamped on the engine data plate.

NOTE 3. Gas producer speeds, as shown under “Engine Limits”, are maximum permissible speeds. The gas producer speed for rated power outputs varies with individual engines and must be determined during engine calibration and is 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 outside air temperature in accordance with the schedule as shown on the Temperature Limit (GO-NO-GO TAKE-OFF) placard on the instrument panel.

NOTE 4. The following placards must be prominently displayed in the cockpit on the instrument panel and in full view of the pilot:

(a) UH-1H airspeed limitation placard as follows:

CALIBRATED AIRSPEED – KNOTS with Roof Mounted Pitot Static Tube			
WEIGHT	Up to 7,500 lbs.	8,500 lbs.	9,500 lbs.
DENSITY			
ALTITUDE (FT)			
SL to 2000	124	119	114
3000	121	116	111
6000	112	107	102
9000	102	97	92
12000	92	87	83
15000	81	76	-
18000	69	65	-

Up to 7500 lbs. gross weight use 6000 to 6600 rpm range

Over 7500 lbs. gross weight use 6400 to 6600 rpm range
REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE

CALIBRATED AIRSPEED – KNOTS with Nose Mounted Pitot Static Tube			
WEIGHT	Up to 7,500 lbs.	8,500 lbs.	9,500 lbs.
DENSITY			
ALTITUDE (FT)			
SL to 2000	112	107	103
3000	109	104	100
6000	100	95	91
9000	91	86	82
12000	82	77	73
15000	70	65	-
18000	58	-	-

Up to 7500 lbs. gross weight use 6000 to 6600 rpm range
Over 7500 lbs. gross weight use 6400 to 6600 rpm range
REDUCE AIRSPEED WHEN VIBRATION IS EXCESSIVE

- (b) External Loads: "External load operations Vne will be determined for each proposed external load application."
- (c) "VFR OPERATIONS ONLY"
- (d) Operating Limits: "This helicopter must be operated in compliance with the operating limitations specified in the operator's manual."
- (e) Restricted Category Operations: "This helicopter must be operated in accordance with the restricted category operating limitations of 14 CFR § 91.313 in addition to the limitations noted in the operator's manual."

NOTE 5. These helicopters must be serviced, maintained, inspected, repaired and overhauled in accordance with the documents specified in JJASPP Engineering, LLC Instructions for Continued Airworthiness Report No. JJASPP-ICA-12-005, Rev. IR, or later FAA accepted revision, or inspected in accordance with other FAA accepted inspection program. The TC Holder's Instructions for Continued Airworthiness Report is part of the TC Holder's Instructions for Continued Airworthiness.

Other maintenance methods, techniques and practices maybe used as an alternative to these manuals, provided the maintenance methods, techniques, and practices have been determined to be acceptable to the FAA.

NOTE 6. The following helicopter configuration and condition requirements must be met prior to original airworthiness certification of each UH-1H helicopter:

- (a) Each helicopter must pass a conformity inspection in accordance with JJASPP Engineering, LLC Engineering Configuration Report No. JJASPP-RC-12-001, dated September 19, 2012, or later FAA approved revision. The configuration report identifies the military maintenance work orders associated with each helicopter and provides a description of the modifications accomplished on each helicopter. In addition, each helicopter must pass an inspection for any possible hidden damage and the military records reviewed for acceptability of any repairs or alterations.
- (b) The maintenance, overhaul and modification records of each helicopter must be reviewed for military changes that may affect the airworthiness of the helicopter.
- (c) After the required inspections, the helicopter must be found to be in a good state of preservation, repair, and in a condition for safe operation.

(d) An FAA representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data following 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 TM 55-1520-242-MTF Maintenance Test Flight Manual, Army Model UH-1, EH-1 Helicopter, Change 1, dated December 19, 1986, as appropriate for each helicopter, or other FAA approved revisions.

- NOTE 7. This helicopter is prohibited from carrying cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the helicopter owner's/operator's business which is other than air transportation.
- NOTE 8. Restricted category aircraft may not operate be operated in a foreign country without express written approval of that country.
- NOTE 9. This helicopter 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 10. No person may be carried in this helicopter during flight unless that person is essential to the purpose of the flight.
- NOTE 11. 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 applicable FAA Airworthiness Inspection accomplished and is a condition for safe operation.
- NOTE 12. Honeywell (Lycoming) engine models T53-L-13, T53-L-13A and T53-L-13BA are approved for use as alternate engines under this type certificate. The alternate engine must have proper military records and have the applicable FAA Airworthiness Inspection accomplished and is a condition for safe operation.
- NOTE 13. An acceptable method of determining engine cycle counts from engine total operating time is contained in JJASPP Engineering, LLC Report No. JJASPP-RC-12-002, dated September 19, 2012, or later FAA approved revision. This method may be used to convert military operating hours to commercial equivalent cycles prior to original airworthiness certification.
- NOTE 14. The airworthiness directives listed in JJASP Engineering, LLC Report No. JJASPP-RC-12-003, Rev. IR, dated September 19, 2012, or later FAA approved revisions must be complied with as a prerequisite to original airworthiness certification.
- NOTE 15. Any alteration to the type design of this aircraft my require Instructions for Continued Airworthiness (ICA's). Changes to the type design by means of a Supplemental Type Certificate (STC) requiring ICA's or changes to existing ICA's must be submitted and reviewed by the Fort Worth Aircraft Evaluation Group (FTW-AEG). Type design changes by means of a Field Approval that require ICA's must have those ICA's reviewed by the Flight Standards District (Office) managing the Field Approval or the FTW-AEG.

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