

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

H5WE
Revision 2

LOCKHEED
L-286

July 23, 2012

TYPE CERTIFICATE DATA SHEET NO. H5WE

This data sheet which is a part of type certificate No. H5WE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder Lockheed Martin Aeronautics Company
86 South Cobb Drive
Marietta, GA 30063

Lockheed-California Company
A Division of Lockheed Aircraft Corporation
Burbank, California

I. Model 286 Normal Category Helicopter, approved June 30, 1966

Engine	United Aircraft of Canada PT6B-9		
Fuel (See Note 6)	Grade JP-1, JP-4, JP-5 Aviation Fuel conforming to P&WA Spec. 522		
Engine Limits	Shaft H.P.	Takeoff (5 min.)	Max. continuous
	Torque		
	Gas Generator RPM, N1		
	Output shaft RPM, N2		
	Turbine Inlet Temp.		
Transient Limits	Turbine Inlet Temp.		
	during Start (2 second limit) 1900°F (1038°C)		
	Gas Generator RPM, N1 (10 second limit) 38,500 (102.6%)		
	Output shaft RPM, N2 6853 (110%)		
Rotor limits and engine operating speeds	Power Off	Power On	
	Maximum 108% RPM	Maximum 104% RPM	
	Minimum 92% RPM	Minimum 100% RPM	
Airspeed limits	Density altitude	Vne (never exceed speed)	
	S.L. to 1500'	136 KCAS	
	10000'	103 KCAS	
		(Linear variation between 1500 & 10000 feet)	
Altitude limits	See FAA Approved Rotorcraft Flight Manual.		
C.G. Range	Most fwd 12000 in. lbs. at max. weight (4700 lbs. and below)		
(Hub offset moment about main rotor shaft centerline)	Most aft 0 in. lbs. at max. weight (4700 lbs.)		
	Most aft 17000 in. lbs. at reduced weight (4000 lbs. and below)		
	Lateral 8000 in. lbs. right and left (4700 lbs. and below)		
	(Linear aft longitudinal variation between 4700 & 4000 lbs.)		

Datum (Equipment arm 150' fwd of main rotor shaft centerline

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reference index)	(See Rotorcraft Flight Manual for weight and balance computation.)
Leveling means	Plumb bob at Fuselage Sta. 73.5
Maximum weight	4700 lbs.
Number of seats	2 (100.7" index arm), 3 (127.5" index arm)
Maximum cargo	200 lbs. - fwd LH seat (100.7" index arm) 740 lbs. - aft floor area (127.4" index arm) at 125 lb/sq. ft. max floor landing
Fuel capacity	520 lbs. - (151" index arm). See NOTE 1 for "unusable" fuel.
Oil capacity	Engine oil, 24 lbs. (210" index arm). Turbo Jet 35 Transmission oil, 14 lbs. (164" index arm) Turbo Jet 35
Other operating limitations	FAA Approved Rotorcraft Flight Manual. See NOTE 4 for Maintenance and NOTE 5 for Non-Icing Flight Limitations.
Service life	See NOTE 3 for list of Life Limited Components.
Main rotor blade movements (not to be used for rigging. Refer to Maintenance Manual for rigging procedure).	Collective pitch at 163" R, 15° up and 0° down Cyclic (measured with collective full up) Longitudinal $\pm 12^\circ$ tolerance + 1°, -0.50° Lateral $\pm 12^\circ$ tolerance +1°, -0.50°
Tail rotor blade movements	Collective 10° 11' (thrust to right) 14° 45' (thrust to left) (from neutral rig pin setting)
Serial numbers eligible	2001 and up
Certification basis	CAR 6 dated December 20, 1956, including Amendments 6-1 through 6-7. Type Certificate H5WE issued June 30, 1966. Date of Application of Type Certificate July 15, 1964.
Production basis	Production Certificate No. 600.
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the helicopter for certification. Lockheed Report 19208, Section IIA "Equipment List," contains a list of all required equipment that must be installed as well as optional equipment installations approved by the FAA.

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions, must be provided for each helicopter at the time of original airworthiness certification and at all times thereafter (except in the case of operators having an approved weight control system).

Fuel and oil capacities as indicated are total tank capacities over and above "Trapped Fuel and Oil." The indicated capacity of the fuel tank does not include "Unusable" fuel of 10 pounds which cannot be used safely in all flight attitudes, and which must be included in the empty weight.

NOTE 2. The following placard must be installed in the Pilot's Checklist:
"This helicopter must be operated in compliance with the operating limitations specified in the FAA Approved Rotorcraft Flight Manual."

For additional placards, see FAA Approved Rotorcraft Flight Manual.

NOTE 3. The retirement times of critical parts are listed in the following table. These values of retirement or service life cannot be increased without FAA Engineering Approval.

Life limited components removed when life limit has been reached must be destroyed or permanently marked to prevent return to service.

<u>Component</u>	<u>Part No.</u>	<u>Hours</u>
Main rotor blade	542492-1	1800
Main rotor cuff	541464-1	4500
Blade to cuff attach bolts	541628-3, -5	3900
Main rotor T.T. pack	542484	20,000
Tension-Torsion pack bolts	542277-3, 542487-3	4500
Main rotor hub (inc. hub shaft bolts, MS21250)	542446-1	4500*
Bearing, plain rod end (pitch link main rotor)	740286-101, -103	300
Inspect every 20 hours		
Main rotor pitch link rod end bearings (Southwest)	DREM 6-087, 6-092	50
Gyro assembly (inc. mounting bolts, MS21250)	542099-1	3600
Gyro support assembly	542209-1	9600
Gyro centering bearings (KAHR)	KSBY-7, -7G	***
Tail rotor cuff and blade (Parsons)	6570-1100-02 or -03	15,000
Tail rotor assembly (including Cuff)	6570-1100-04	8200
Tail rotor hub	542477-5	1800
Tail rotor trunion (inc. nut 542113 & cone 542115-3)	542111-5	12,000
Bearing, plain rod end (pitch link tail rotor)	740285-101, 740286-105	300
Tail rotor pitch link rod end bearings (Southwest)	AREM-5DUW & DREMS-6-092	50
Engine to Trans. Coupling (LORD)	LC-5038-1	**
Tail rotor drive shaft assemblies	541375-3, -5, -7, -9	4500
Tail rotor gear box	541384-1	1500
Mach. Inst. swash plate controls	541479-3	26,000
Roll spring, positive	541604-3	5000
Collective actuator (Bertea)	541580-2	19,500
Cyclic pitch actuator (Bertea)	541580-1	19,500
Cyclic roll actuator (Bertea)	541580-1	19,500
Tail boom	541363	12,800*

* *Inspect per Lockheed Report 19224, pages B-1 and B-2 at 2100 hours and thereafter at periods not to exceed 300 hours from the last inspection.*

** *Inspect every 100 hours and replace on conditions (Visual check for any deformation or deterioration of core).*

*** *Inspect every 50 hours per Lockheed Report 19224, page B-3.*

NOTE 4. This model helicopter must be serviced and maintained in conformance with instruction given by Lockheed-California Company in the Maintenance and Inspection Manual.

NOTE 5. This model helicopter is approved for flight in non-icing conditions only. See FAA Approved Rotorcraft Flight Manual.

NOTE 6. Phillips anti-icing fuel additive PFA-55MB may be used if concentration delivered to helicopter does not exceed 0.15% by volume. No fuel system anti-icing credit is allowed.

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