

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

H12NM
Revision 8
Rotorcraft Dev. Corp.
UH-1F
UH-1P
TH-1F
August 1, 2012

TYPE CERTIFICATE DATA SHEET NO. H12NM

This data sheet which is a part of Type Certificate No. H12NM 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 Rotorcraft Development Corporation
132 Skalkaho Hwy.
Hamilton, Montana 59840

Type Certificate Holder Record Garlick Helicopter Corporation transferred TC H12NM to Rotorcraft
Development Corporation on November 17, 2008.

TC transferred from Firefly Aviation to Garlick Helicopters January 10,
1996.

TC transferred from Western International to Firefly Aviation 1995.

I - Models UH-1F, UH-1P, TH-1F (Restricted Category Military Surplus Helicopter) Appvd. March 30, 1993

Engine General Electric T-58-GE-3

Fuel MIL-T-5624 (JP-4)
MIL-T-5624G (JP-5)
ASTM Type B (Jet B)
ASTM Type A-1 (Jet A-1)

Engine Limits	Torque Pressure (PSI)	Exhaust Gas Temp (°C) (T ₅)	Gas Gen Speed N _g (%)
Maximum (5 Min)	67 (1100 HP)	690	102.5
Max. Continuous	54 (888 HP)	635	Limited by EGT (T ₅)

	Power Off	Power On
Rotor Limits		
Maximum RPM	339	317
Maximum RPM	295	295

Airspeed Limits V_{NE} (Never Exceed Speed) is 120 knots IAS at a gross weight of 7000 lbs. or less at sea level standard day. For reduction of V_{NE} with density altitude and gross weight, see USAF T.O. 1H-1(U)F-1.
See USAF T.O. 1H-1(U)F-1 for additional airspeed limits

Page No.	1	2	3	4	5
Rev. No.	7	7	7	7	8

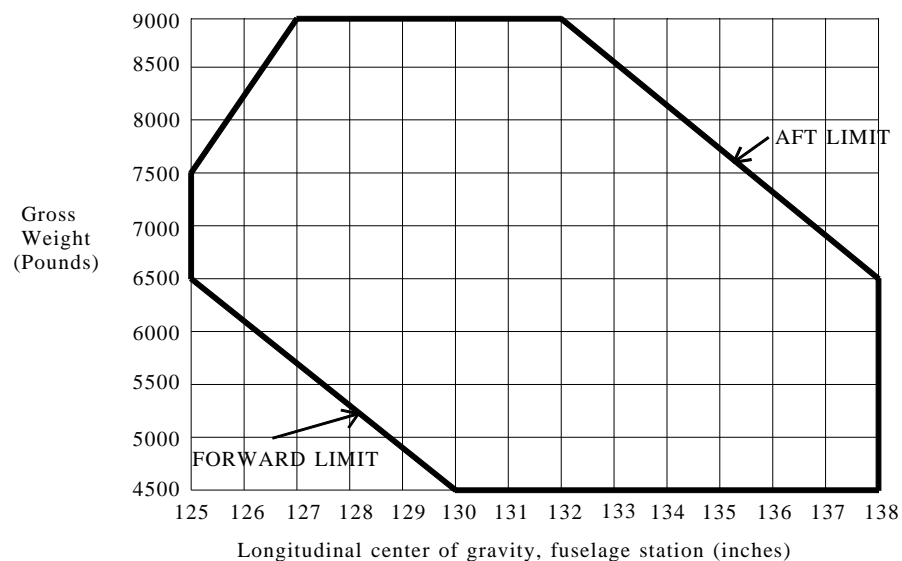
I - Models UH-1F, UH-1P, TH-1F (cont'd)

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:
 (+127.0) to (+132.0) at 9000 lbs.
 (+125.0) to (+135.7) at 7400 lbs.
 (+125.0) to (+138.0) at 6500 lbs.
 (+130.0) to (+138.0) at 4500 lbs.



Empty Weight (+130.0) to (+138.0)
 C.G. Range

Datum 7.6 inches aft of aircraft nose.

Leveling Means Drop plumb bob from "key hole" slot in upper left door sill.
 Reference T.O. 1H-1(U)F-5.

Maximum Weight 9000 lbs.

Minimum Crew Pilot

Maximum Passengers (See Note 14)

Maximum Baggage 400 lbs. in Tail Boom Compartment

Fuel Capacity Useable 243 Gallons (Total Fuel: 245 Gallons)

Oil Capacity 5.4 Gallons Total (0.8 unusable)

I - Models UH-1F, UH-1P, TH-1F (cont'd)

Rotor Blade Control Movements	Refer to USAF T.O. 1H-1(U)F-2-1
Approved Serial Nos.	US Military Surplus UH-1F, UH-1P (USAF 63-13163), or TH-1F (USAF 66-1246, 66-1238, 66-1233) helicopters as identified in Firefly Aviation Aircraft Status Report, dated December 20, 1995 or later FAA-Approved revision.
Certification Basis	FAR 21.25(a)(2) effective February 1, 1965, with Amendment 21-42, dated January 6, 1975. Type Certificate No. H12NM was issued March 30, 1993, for the purposes of:

(1) Agriculture Operations under FAR 21.25(b)(1)

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

(2) Forest and Wildlife Conservation Operations under FAR 21.25(b)(2).

Note: In accordance with FAR 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 FAR 36.1(a)(4) and defined under FAR 137.3

(3) External Load Operations.

Note: In accordance with FAR 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type certificate are only eligible for external load operations excepted by FAR 36.1(a)(4) and defined under FAR 133.1(b).

Any alteration to the helicopter 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, plus special conditions for turbine engine installations and 14 CFR 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.

Date of Application	March 23, 1992
Production Basis	None. No helicopters may be produced under this approval. (See Note 4) 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 that will include, as a Minimum, the inspections contained in the FAA Rotorcraft Directorate Restricted Category Conformity document dated September 25, 2001 or later FAA approved revisions.

I - Models UH-1F, UH-1P, TH-1F (cont'd)

Equipment The basic required equipment as prescribed in the following documents must be in each type helicopter for certification:

- (1) U.S. Air Force T.O. 1H-1(U)F-1, UH-1F Flight Manual.
- (2) Current Weight and Balance Report (see Note 3.)
- (3) USAF or US Army Maintenance Manuals required for maintenance.

NOTES

NOTE 1. Current weight and balance report, T.O. 1H-1(U)F-5S-5, including list of equipment included in certificated empty weight and loading instructions must be in each helicopter at time of original airworthiness certification, and at all times thereafter.

NOTE 2. The following placards must be prominently displayed in the cockpit in full view of the pilot.

THIS HELICOPTER MUST BE OPERATED IN ACCORDANCE WITH THE
RESTRICTED CATEGORY OPERATING LIMITATIONS OF FAR 91.39
AND WITH THE LIMITATIONS NOTED IN U.S. NAVY NAVAIR
01110HCA-1.

NOTE 3. Continued airworthiness of the UH-1F, UH-1P, and TH-1F helicopters eligible under this TCDS is contingent upon compliance with all applicable FAA AD's for the Bell Helicopter Textron, Inc., Model 204/205 series helicopters, the General Electric CT-58 (Military Model T-58-GE-3) engine, and any components installed thereon.

NOTE 4. In addition to the standard helicopter requirements, the following additional data and/or helicopter configuration requirements must be met for each individual model UH-1F, UH-1P, TH-1F helicopters upon application for an original Special Airworthiness Certificate:

- a) A completed application for airworthiness certificate, FAA Form 8130-6 that has correctly identified the type certificate holder's helicopter and its intended special purpose(s).
- b) Written confirmation from the certifying office that the affected serial number has been added to Garlick Helicopters Inc., type certificate.
- c) The application for airworthiness certification and the helicopter's registration certification match the information on Garlick Helicopter, Inc. data plate.
- d) FAA Airworthiness Directives (ADs), and USAF Time Compliance Technical Orders (TCTOs) must be reviewed for applicability and complied with accordingly. (See WIA Report WIA-002 for the list of applicable AD's and TCTOs for each approved serial number.)
- e) This aircraft must be serviced, maintained, inspected, repaired, and overhauled in accordance with the appropriate USAF Air Force documents. Component overhaul intervals and retirement times shall be in accordance with those documents, unless superceded by an applicable Airworthiness Directive.

NOTE 5. This aircraft is prohibited from carrying cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the aircraft owner/operator's business which is other than air transportation. (This note applies to aircraft that have the "Special Purpose" Carriage of Cargo.)

- NOTE 6. A Restricted Category aircraft may not be operated in a foreign country without the expressed
NOTE 5 (cont'd)
written approval of that country.
- NOTE 7. The following note must be placed under “exceptions” on all Export Certificates of Airworthiness for this aircraft. “This aircraft is Type Certificated in the Restricted Category and has not been determined to meet the international standards concerning the airworthiness of aircraft as provided for in Annex 8 to the Convention of International Civil Aviation, (Chicago Convention) of December 7, 1944
- NOTE 8. 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 military or civil replacement engine must have proper military or civil records and have the applicable FAA Airworthiness Inspection accomplished and is in an airworthy condition.
- NOTE 9. Helicopter shall be maintained in accordance with USAF T.O. 1H-1(U) F-2-1, “Organizational Maintenance”, and inspected in accordance with T.O. 1H-1(U) F-6, “Scheduled Inspection and Maintenance Requirements”, or other FAA approved inspection program.
- NOTE 10. Helicopter shall be operated in accordance with USAF T.O. 1H-1(U)F-1. The operational limits are noted in Section V.
- NOTE 11. This approval applies to basic surplus military UH-1F, UH-1P, TH-1F helicopters with no modifications except as required by Western International Aviation, Inc. Report WIA-001 dated February 26, 1993, or later FAA approved revision.
- NOTE 12. Limited Life schedule for helicopter components is included in USAF T.O. 1H-1(U)F-6.
- NOTE 13. Any Alteration to the type design of this aircraft may 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 (FSDO) managing the Field Approval or the FTW-AEG.
- NOTE 14. No person may be carried in this helicopter during flight unless that person is essential to the purpose of the flight

...END...