## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H2GL Teryjon Aviation, Inc. Fast Kat I (Bell, U.S. Army OH-13S)

December 30, 1980

## TYPE CERTIFICATE DATA SHEET NO. H2GL

This data sheet which is a part of Type Certificate No. H2GL 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 Teryjon Aviation, Inc.

Rt. 1, Box 94A St. Peter, MN 56082

## I - Fast Kat I (Bell, U.S. Army Model OH-13S) (Restricted Category), Approved May 1, 1980.

Engine Lycoming 0-435-A1F

Fuel 100/130 min. octane aviation gasoline

Engine limits Maximum Continuous

Sea level 24.1 in. Hg, 3200 RPM (220 HP) to 22.9 in Hg at 5300 feet.

(straight line manifold pressure variation with altitude) Takeoff (2 minutes) 27.7 in Hg, 3200 RPM (260 HP)

Carburator &

Carburator Setting Marvel-Schebler

MA4-5AA

(Setting 10-4025-12)

Airspeed limits VNE 60 mph (52 knots)

Sea level to 6000 feet with 3000 to 3200 RPM.

Above 6000 feet decrease VNE 5 mph (4 knots) per 1000 feet.

Spraying at airspeeds below 20 mph is prohibited.

Spraying while hovering or in sideward or rearward flight is prohibited.

Power Off (Rotor-Tach) Power On (Engine-Tach)

Rotor limits & Operational Maximum 370 rpm Maximum 3200 rpm

Engine limits Minimum 322 rpm Minimum 3000 rpm

C.G. range (-3.0) to (+4.0)

Empty weight C.G. range See TM 55-1520-204-10, "Operators Manual," Chapter 12, Section IV.

Datum & Station "O" - Centerline of weld cluster just forward of leveling lugs.

Leveling means Leveling lugs lower left hand longeron aft of mast and adjacent cross tube.

Maximum weight 2850 lbs.

No. of seats 3 (Pilot and 2 passengers)

Cabin Loading Maximum allowable 550 pounds.

Minimum allowable 150 pounds.

Fuel capacity 30 gal. (+5) (Usable 28.5 gal.) Oil capacity 3.0 gal. (+12) (Usable 1.0 gal.)

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Rotor Blade and For rigging information refer to

Control movements Maintenance Manual TM 55-1520-204-20.

Serial Nos. Eligible All U.S. Army serial numbers.

Certification Basis FAR 21.25 (a)(2)

Certificate Number H2GL

Issued May 1, 1980 for the special purpose of: Agricultural spraying.

Date of Application 25 February 1980.

Production Basis None. No OH-13S helicopters may be produced. OH-13S helicopters modified to Fast

Kat I helicopters may be produced in accordance with the type certificate. Prior to original certification of each aircraft, an FAA representative must perform an inspection for workmanship, materials and conformity with the approved type design. A check of

flight characteristics must be performed.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations

(see Certification Basis) must be installed in the aircraft for certification except compass is optional. Equipment for the special purpose must be installed.

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 aircraft at the time of original certification and at all times thereafter.

NOTE 2. The following placard must be installed in a clear view of the pilot.

"This helicopter must be operated in compliance with the operating limitations specified in Department of the Army Technical Manual, TM 55-1520-204-10, as amended by the FAA approved supplement thereto."

NOTE 3. Prior to airworthiness certification of the OH-13S helicopter compliance with the Fast Kat I conversion list must be accomplished.

NOTE 4. The helicopter must be maintained and serviced in compliance with TM55-1520-225-20 dated October 1, 1969, "Organizational Maintenance Manual Army Model OH-13 Helicopters," "through change 3 dated January 22, 1971.

These values of retirement or service life cannot be increased without FAA Engineering approval.

			Retirement
		Overhaul	or
Component	Part Number	Interval	Service Life
		Hours	Hours
Engine	O-435-25A	1200	
Engine Mount	47-642-171-115		3000
Main Rotor Blade Assy.	47-110-250-21		5000
Main Rotor Blade Grip	47-120-252-7		5000
Main Rotor Hub Yoke	47-120-177-1		5000
Main Rotor Drag Brace	47-110-372-1		2500
Gimbal Ring47-120-104-23		4800	
Γail Rotor Blade	47-642-117-1		2500
Гail Rotor Hub Yoke	47-641-104-5		2500
Collective Sleeve Assy.	47-150-117-13 & -15		5000
Scissors Arm Assy.	47-150-249-5		5000
Fan Belt	47-661-041 thru -7		600
Fan Belt	47-661-041-9		900
Transmission	47-620-600-25	1200	
Transmission Shear Screw	47-620-485-9		1200
Tail Rotor Gearbox	47-640-065-41	1200	

NOTE 5. The helicopter must be operated in accordance with FAR 91.39 and agricultural operations must be conducted under FAR Part 137.