DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

TR7BO
Revision 6
Kaman
MODEL K-1200

March 23, 2020

TYPE CERTIFICATE DATA SHEET NO. TR7BO

This data sheet, which is part of Type Certificate Number TR7BO, 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 — Kaman Aerospace Corporation
P.O. Box 2
Bloomfield, Connecticut 06002

I. MODEL — Model K-1200 (Normal Category Rotorcraft), Approved August 30, 1994 .

ENGINES — 1 Honeywell (Textron Lycoming) T5317A-1 (TCDS E17EA)

FUEL — Grades JP-4, JP-5 and JP-8. Jet A, Jet A-1, Jet B, and PRC No. 3.
See Notes 4 and 5.

OIL — Engine - Type MIL-L-7808 or MIL-L-23699. See Note 6.

Transmission - Dexron II or Dexron III

ENGINE LIMITS — SEA LEVEL STATIC/STANDARD DAY

	Engine Torque Pressure	Gas Generator Speed (25,150 r.p.m.=100%)	Exhaust Gas Temperature (T9)
Takeoff	65 psi	26,400 r.p.m.(105%)	648°C
Maximum Continuous	61 psi	25,400 r.p.m.(101%)	626°C

TRANSMISSION LIMITS — TORQUE PRESSURE

	NO EXTERNAL LOAD	WITH EXTERNAL LOAD
Takeoff	40 psi	58 psi (0 - 25 Knots) 45 psi (> 25 Knots)
Maximum Continuous	40 psi	45 psi (0 - 80 Knots)

ROTOR LIMITS

POWER OFF
Maximum 100% N_r (260 r.p.m.)
Minimum 75% N_r (195 r.p.m.)

POWER ON
Maximum 105% N_r (273 r.p.m.)
Minimum 100% N_r (260 r.p.m.) ≤ 7,000 pounds
Minimum 104% N_r (270 r.p.m.) > 7,000 pounds
Minimum 104% N_r (270 r.p.m.) for operations above 10,000 feet density altitude

Maximum 100% N_r (260 r.p.m.) for ground extended operations

TRANSMISSION LIMITS	TORQUE PRESSURE
AIRSPEED LIMITS	
V_{NE} (never exceed) Power On	No External Load: 100 KIAS, S.L. to 5,000 feet density altitude. Decrease 3 knots/1,000 ft. above 5,000 ft. density altitude. 90 KIAS, S.L. to 8,000 feet density altitude. Decrease 3 knots/1,000 ft. above 8,000 ft. density altitude. (IFR, See Note 9) 70 KIAS (with HEC, See Note 10) With External Load: 80 KIAS, S.L. to 5,000 feet density altitude. Decrease 3 knots/1,000 ft. above 5,000 ft. density altitude.
V_{NE} Power Off	80 KIAS, S.L. to 5,000 feet density altitude. Decrease 3 knots/1,000 feet above 5,000 feet density altitude.
MAXIMUM GROUNDSPEED	25 knots (nose wheel locked) 10 knots (nose wheel unlocked)

CENTER OF GRAVITY (C.G.) RANGE

C.G.	GROSS WEIGHT	LATERAL C.G. LIMITS
167.0 inches	5,000 to 12,000 pounds	± 1.25 inches
169.5 inches	12,000 pounds	± 1.25 inches
171.0 inches	7,000 pounds	± 1.25 inches
172.0 inches	6,000 to 5,000 pounds	± 1.25 inches

Straight-line variation between points shown.

EMPTY WEIGHT C.G. RANGE	None
DATUM	6.265 inches forward of nose.
LEVELING MEANS	No leveling plate; level at cockpit door sill per instructions in Section 08-00-00 of Kaman Model K-1200 K-MAX Maintenance and Servicing Instructions, Manual KMM.
MAXIMUM WEIGHT	No External Load: 7,000 pounds (See Notes 7, 8, and 11) With External Load: 12,000 pounds
MINIMUM CREW	1 at 108.0 inches
NUMBER OF SEATS	1 at 108.0 inches
MAXIMUM BAGGAGE	500 pounds; 100 lbs./sq. ft.
FUEL CAPACITY	228.5 gals. (219.5 usable) at 161.83 (See Note 1)
OIL CAPACITY	3.21 gals.
MAXIMUM OPERATING (DENSITY) ALTITUDE	15,000 feet (day/night VFR) 12,000 feet (IFR)
AMBIENT TEMPERATURE LIMITS	-32°C (-25.6°F) to +49°C (+120°F)
ROTOR BLADE CONTROL MOVEMENTS	For rigging information, refer to Section 67-00-00 of Kaman Model K-1200 K-MAX Maintenance and Servicing Instructions, Manual KMM.
MANUFACTURER'S SERIAL NUMBERS	A94-0002, A94-0004 and up are eligible.

CERTIFICATION BASIS

Type Certificate No. TR7BO: Issued August 30, 1994, Application on July 30, 1990: FAR, Part 27, effective February 1, 1965, and amendments 27-1 through 27-28.

Equivalent safety finding for FAR 27.173(b) Static Logitudinal Stability.

FAR, Part 36, effective December 1, 1969, and amendments 36-1 through 36-20.

Production rotorcraft modification additional requirements as follows:

Induction System Icing Protection: Compliance has been established with the falling and blowing snow requirements of FAR 27.1093(b)(1)(ii).

Restricted Category FAR 21.25(a)(1). See Note 7.

Maximum weight of 6,500 pounds: Grant of Exemption from FAR 27.1(a), Exemption No. 6433 (Regulatory Docket No. 009SW), dated April 25, 1996. See Note 8.

Airworthiness Criteria for Helicopter Instrment Flight: Compliance has been established with with instrument flight rules (IFR) operational requirements of Appendix B to FAR 27. See Note 9.

External Loads: Compliance has been established with the personnel carrying device system (PCDS) applicable portions of FAR 27.865, Amendment 27-36 for human external cargo (HEC). See Note 10.

Maximum weight of 7,000 pounds without external load: Approved June 23, 2005. Compliance has been established with FAR, Part 27, effective February 1, 1965, and Amendments 27-1 through 27-37 except FAR 27.561(c), 27.865(b)(3)(ii) and 27.1365(c). See Note 11.

Avionics, Loud Hailer, Anti-collision Lights, and Lateral and Longitudinal Trim Actuators Replacement: Approved June 30, 2017. Compliance has been established with 27.1309(a)(b)(c) and 27.1316(a)(1)(2)(b) as amended by Amendment 27-46, 27.1317(a)(1)(2)(3)(4)(b)(c)(d)(1)(2)(3) as amended by Amendment 27-42, and A27.4 as amended by Amendment 27-47. Effective at Serial Number A94-0039 and subsequent.

Parking Brake Replacement: Approved June 30, 2017. Compliance has been established with 27.1309(a)(c) as amended by Amendment 27-46. Effective at Serial Number A94-0039 and subsequent.

Helicopter fuel system safety per FAA Reauthorization Act of 2018 Section 317, enacted October 05, 2018: Approved March 23, 2020. Compliance has been established with 49 U.S.C. §44737 (2018) [27.952(a)(1)(2)(3)(5)(6)(c)(f)(g), 27.963(g) and 27.975(b) as amended by Amendment 27-30]. Effective at Serial Number A94-0053 and subsequent.

In-Service rotorcraft modification additional requirements as follows:

Service Bulletins and other service information, when FAA approved, will carry a statement to that effect.

PRODUCTION BASIS

Production Certificate No. 117NE.

EQUIPMENT

The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis), must be installed in the helicopter for certification. In addition, the following FAA approved rotorcraft flight manual is required: Kaman K-1200 Helicopter Rotorcraft Flight Manual.

- NOTES -

NOTE 1: A current weight and balance report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be provided for each helicopter at the time of original certification.

See FAA-approved Rotorcraft Flight Manual loading section for fuel weight and moment-arm variations with fuel type and fuel quantity.

NOTE 2: All placards required in the FAA-approved Rotorcraft Flight Manual must be installed in the appropriate locations. The following placard must be displayed in front of and in clear view of the pilot:

"THIS AIRCRAFT MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE FAA APPROVED FLIGHT MANUAL."

NOTE 3: Information essential to the proper maintenance of the helicopter is contained in the Kaman Model K-1200 K-MAX Maintenance and Servicing Instructions, Manual KMM, provided with each helicopter. The values of retirement (service) life contained in Chapter 4 or inspection intervals cannot be increased without FAA engineering approval.

NOTE 4: See Section 10 of the FAA-approved Rotorcraft Flight Manual for the complete listing of approved Jet A, Jet A-1, Jet B, Mil-T-5624 and all equivalent fuels. Equivalent fuel: MIL-T-83133, Grade JP-8, may also be used. Use of kerosene fuels (JP-4 or JP-5) should be avoided when starting at ambient temperatures below -12°C (10°F). Commercial fuels made to conform to ASTM Specification D 1655 do not contain anti-icing additives unless specified by bulk purchaser. Care must be taken with these fuels with respect to water contamination and flight conditions.

NOTE 5: Anti-icing, anti-corrosion and biocidal additives specified in Section 10 of the FAA-approved Rotorcraft Flight Manual may be used singly or in any combination. The specified additives should not be added to fuel MIL-T-5624, Grades JP-4 and JP-5, or to fuel MIL-T-83133, Grade JP-8, since they are already present in these fuels.

NOTE 6: Approved engine oil brands are listed in Section 10 of the FAA-approved Rotorcraft Flight Manual

NOTE 7: The helicopter is certificated in the Restricted Category (Approved June 9, 1995), under FAR 21.25, for the special operations of:

- Agriculture as defined in FAR 137.3;
- Dispensing of fire fighting materials; and
- Carrying external loads as defined in FAR 133.1(b).

The special purpose operations may be conducted in the Restricted Category at maximum weights above 6,000 pounds up to and including 6,500 pounds. The aircraft marking requirements of FAR 45.21 and 45.23 applicable to the Restricted Category must be met.

NOTE 8: Grant of Exemption No. 6433, dated April 25, 1996, allows increase in maximum gross weight from 6,000 pounds to 6,500 pounds while maintaining the original Normal Category rotorcraft certification. The exemption is subject to the following conditions and limitations:

- The design of the helicopter cannot be changed to add passengers as part of the gross weight increase.
- Prior to exercising the privileges of this exemption, each K-1200 helicopter (for which exemption is sought) and all modifications made to it, must meet the requirements established in the current certification basis, at the increased gross weight. This includes any special requirements for certification; i.e., equivalent levels of safety and special conditions that may have been issued to complete certification.
- All operations above 6,000 pounds must be limited to agricultural operations as defined in FAR 137.3; dispensing fire fighting materials; or carrying external loads as defined in FAR 133.1(b); unless a part 36 noise test is conducted prior to increasing the gross weight above 6,000 pounds.

NOTE 9: Operation under the instrument flight rules (IFR) of Appendix B of FAR 27 approved May 14, 1999 for Serial Numbers A94-0002 through A94-0038 only. See FAA-approved Rotorcraft Flight Manual for limitations, operational requirements, required equipment, and weight-and-balance considerations.

NOTE 10: A personnel carrying device system (PCDS) for carrying human external cargo (HEC) was approved February 13, 1998. The PCDS is limited to carriage of personnel defined in FAR 133.35(a). See FAA-approved Rotorcraft Flight Manual for limitations, operational requirements, and weight-and-balance considerations.

NOTE 11: Original certification basis limited maximum weight to 6,000 pounds or less. Restricted Category (see Note 7) permitted operation to 6,500 pounds pending Grant of Exemption No. 6433 (see Note 8). FAR, Part 27, amendment 37, changed the maximum weight to 7,000 pounds or less. Maximum weight of 7,000 pounds without external load approved June 23, 2005.

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