

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

R00004SE
Croman Corporation SH-3H
December 8, 2014 Revision 2

TYPE CERTIFICATE DATA SHEET NO R00004SE

This data sheet, which is part of Type Certificate R00004SE, 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: Croman Corporation
801 Ave. "C"
White City, OR 97503

Type Certificate Holder Record: TC issued to Croman Corp. on June 2, 2004

Model SH-3H (Military Surplus, Restricted Category), Approved June 2, 2004

Engine: Two (2) General Electric T58-GE-402.

Fuel: Aviation Kerosene, JP4, JP5, or Jet A fuels are acceptable, but whenever a change is made, readjustment of the fuel control to appropriate setting must be made.

Engine Limits: Engine Limits for T58-GE-402 Engine.

Refer to FAA-Approved Rotorcraft Flight Manual.

Rotor Limits: Normal 91% to 112.5%
Maximum 117%

Airspeed Limits: V_{ne} (Never exceed) speed 120 Knots IAS.

Other Limits: 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 helicopter must be re-evaluated if certification to the General Ice Protection Airworthiness Regulations is requested.

C.G. Range: Refer to FAA-Approved Rotorcraft Flight Manual.

Datum: 267.4 inches forward of main rotor centroid.

Leveling Means: Leveling plates on sill and upper frame of cargo door.

Maximum weight: 21,000 lbs.

Minimum Crew: Two (2): Pilot and Copilot.

No. Seats: Two (2) at Sta. +147.0 (Pilot and Copilot); one (1) at Sta. +336; one (1) at Sta. + 348; one (1) at Sta. +370 (fold Down Crewmember Seats).

Maximum Cargo: Refer to Navy Flight Manual NAVAIR 01-230 HLH-1 and to Note 6.

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Fuel Capacity: 848 Gal. Total (347 Gal. at Sta 215.3, 148 Gal. at Sta. 263.7, 353 Gal. at Sta. 317.3) (Trapped/Unusable-3.1 gal.)

Oil Capacity: 6.0 Gal. Total (2 tanks 3 Gal. Each at 181.0) (Trapped/unusable 0.67 Gal. Ref. NAVAIR 01-1B-40 Chart A)

Rotor Blade & Control Movements: For rigging information, see note 3.

Serial No. Approved: Refer to Croman Corporation Report No. CC100, "SH-3H Eligible Serial Numbers," Revision 0, dated February 12, 2003, or later FAA-approved revision. A current copy is on file at the Seattle Aircraft Certification Office.

Certification Basis: FAR 21.25(a)(2), effective February 1, 1965, including Amendments 21-1 through 21-37. Type Certificate R00004SE issued June 2, 2004, for the Special Purpose of:

(1) External Load Operations under FAR 21.25(b)(7).

Note: In accordance with FAR 36.1(a)(4), compliance with the noise requirements was not shown for AST Inc. Model UH-1F. 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 and 14 CFR 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.

Production Basis: None. No helicopter may be produced 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 a request for conformity. Also, a check by the type certificate holder of the flight characteristics in accordance with all applicable portions NATOPS Functional Check Flight Checklist NAVAIR 01-230 HLH-1F, dated August 15, 1997, or later FAA-approved revision, as appropriate for each aircraft, or other FAA approved manual.

Date of Application: February 18, 2003.

Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations must be installed on each helicopter for certification. In addition, the following is required:

- (a) U.S. Navy Flight Manual NAVAIR 01-230, HLH-1, dated January 15, 1991, or later FAA-approved revision must be available in each helicopter.
- (b) The special purpose equipment and documents must be available in or on each helicopter.
- (c) Modification as specified in Croman Corporation SH-3H Configuration Report No. CCSH-3H-CONFIGREP-01, Revision IR, dated February 11, 2004,

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or later FAA-approved revision.

- (d) Croman Corporation Rotorcraft Flight Manual Supplement RFMS-SH3H-2 dated June 22, 2005, or later FAA-approved revision must be available in each helicopter.

NOTE 1 A current weight and balance report including a 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 certification. Refer to U.S. Navy Flight Manual NAVAIR 01-230 HLH-1, dated January 15, 1991, or later FAA-approved revision.

NOTE 2 The following placards must be prominently displayed in the cabin in clear view of the pilot:

Placard No. 1 "THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATION SPECIFIED IN THE APPROVED HELICOPTER OPERATION'S MANUAL. REFER TO U.S. NAVY FLIGHT MANUAL NAVAIR 01-230 HLH-1.

Placard No.2 "THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF FAR 91.313."

Placard No. 3. "EXTERNAL LOAD OPERATIONS: V_{ne} WILL BE DETERMINED FOR EACH PROPOSED EXTERNAL LOAD APPLICATION"

Placard No. 4. "NO PERSON MAY BE CARRIED IN THIS HELICOPTER UNLESS HE IS A FLIGHT CREWMEMBER, FLIGHT CREWMEMBER TRAINEE, OR HE PERFORMS AN ESSENTIAL FUNCTION IN CONNECTION WITH THE MISSION OR IS NECESSARY FOR THE WORK ACTIVITY DIRECTLY ASSOCIATED WITH THE OPERATION."

Placard No. 5 "VFR OPERATIONS ONLY"

The Type Certificate holder's data plate required by part 45, § 45.13, must be installed in accordance with Croman Corporation SH-3H Eligible Serial Numbers Report No. CC100, Revision 0, dated February 12, 2003, or later FAA-approved revision.

NOTE 3 Aircraft shall be serviced, maintained, inspected, and overhauled in accordance with Croman Corporation Instruction for Continued Airworthiness Report No. CCSH-3HICAR-1, Revision 0, dated September 8, 2003, or later FAA-accepted revision.

NOTE 4 Prior to obtaining an original Airworthiness Certificate:

- A. Each helicopter must satisfactorily pass an inspection for conformity, possible hidden damage, and for workmanship and materials used in making any repairs and 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. Modifications and changes of equipment which affect the safety or performance of the helicopter must be approved by the FAA.
- C. After the required inspections, the aircraft must be found to be in a good state of preservation, repair, and in a condition for safe operation.

NOTE 5 The Maximum Allowable Operating Time (MAOT) schedule for service life limited part overhaul and retirement intervals are specified in Croman Corporation Instructions for Continued Airworthiness Report No. CCSH-3HICAR-1, Revision 0, dated September 8, 2003, or later FAA-accepted revision.

NOTE 6 This aircraft is prohibited from carrying cargo for compensation or hire. Carriage of cargo is

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limited to such cargo that is incidental to the aircraft owner/operator's business, which is other than air transportation.

- NOTE 7 Restricted category aircraft may not be operated in a foreign country without the express written approval of that country.
- NOTE 8 This aircraft 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 9 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 10 Aircraft shall be operated in accordance with U.S. Navy Flight Manual NAVAIR 01-230 HLH-1, dated January 15, 1991, or later FAA-approved revision, and Croman Corporation Rotorcraft Flight Manual Supplement RFMS-SH3H-2, dated June 22, 2005, or later FAA-approved revision, and is limited to VFR Operations only.
- NOTE 11 Continued Airworthiness of the SH-3H series helicopters listed by serial number in this TCDS is contingent upon compliance with all FAA airworthiness directives as listed in Croman Corporation's SH-3H Airworthiness Directive Report No. CCSH-3HADR-1, Revision 1, dated December 12, 2003, or later FAA-approved revision.
- NOTE 12 Helicopters that do not have documentation showing they were surplus from an Armed Force of the United States are not eligible for certification under this type certificate. Engines and appliances that do not have documentation showing they were surplus from an Armed Force of the United States are not eligible for installation on a helicopter under this type certificate. Helicopter(s), engine(s), and appliance(s) that have records indicating time-in-service by a foreign military or a foreign government will be presumed to be ineligible for certification or installation under this type certificate. This presumption may be overcome by the applicant substantiating, to the satisfaction of the FAA, through documentation, tests, computations, evaluations, analyses, or other means or methods that the helicopter, engine, or appliance, during its time-in-service by the foreign military or foreign government, was maintained by an extent and in a manner equal to that of an Armed Force of the United States.
- NOTE 14 No person may be carried in this helicopter during flight unless that person is essential to the purpose of the flight.
- NOTE 15 Any alteration to the type design of this aircraft may require Instructions for Continued Airworthiness. If so, these instructions must be submitted and accepted by the FAA Fort Worth Evaluation Group (FTW -AEG), prior to approval for return to service.
- NOTE 16 Total power for two engine operation is limited to 2,500 hp. For takeoff, maximum continuous total power for two engine operation is limited to 2100 hp. These engine power limitations are due to the main gearbox rating.
- NOTE 17 The 86% Engine Torque limit is due to the maximum continuous main gearbox rating.
- NOTE 18 Overspeed limits for the T58-GE-402 engine:
108% N_0 not to exceed 15 seconds. If less than 15 seconds, corrective action is required to bring RPM within limits. If more than 15 seconds, overspeed inspection is required

108% - Not allowed
- NOTE 19 For the T58-GE-402 Engine: Maximum allowable at all power levels($\pm 1\%$); oscillations may be higher in access drive mode. Limits do not apply during autorotations.

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