## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A00004LA CDFFP OV-10A December 9, 1999

## TYPE CERTIFICATE DATA SHEET NO. A00004LA

This data sheet, which is part of Type Certificate No. A00004LA, prescribes the 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: California Department of Forestry and Fire Protection (CDFFP)

3841 Bazley Way Mather, CA 95655

I. Model OV-10A (Restricted Category) Approved December 9, 1999

( see NOTES Section)

Engines 1 Garrett T-76-418 (left) and 1 Garrett T-76-419 (right)

Fuel Aviation turbine fuels

JP-4 (MIL-T-5624) JP-5 (MIL-T-5624) JP-8 (MIL-T-83133)

Jet A-1 Jet B

(fuels shall conform to the specifications or subsequent revisions thereon)

Oil MIL-L-23699B, Mobil Jet 2, conforming to Airesearch Specification

EMS53110 type II

Engine Limits (RPM/Temp/Torque)

Starting 101%/815°c/na

Takeoff

(1 minute) 103%/580°c/2200 ft.-lbs. (5 minutes) 101%/580°c/2200 ft.-lbs. Max Continuous 101%/580°c/1878 ft.-lbs.

| Page | 1 | 2 | 3 | 4 | 5 |
|------|---|---|---|---|---|
| Rev. | - | ı | ı | ı | ı |

| Propeller & Propeller Limits    | 2 Hamilton Standard Three-Bladed Reversing  |   |                     |                |  |  |  |
|---------------------------------|---|---|---------------------|----------------|--|--|--|
|                                 | Hub Model   | 33LF-337 (left)<br>33LF-338 (right)<br>1015A-0-102R (left)<br>1016A-0-102 (right)<br>Maximum 102 inches |                     |                |  |  |  |
|                                 | Blade   |   |                     |                |  |  |  |
|                                 | Diameter  |   |                     |                |  |  |  |
|                                 |   | Minimum 102 inches  |                     |                |  |  |  |
|                                 | Pitch Settings (at 42 in  |   | +79.8°              |                |  |  |  |
|                                 |   |   | -5°                 |                |  |  |  |
|                                 |   | Reverse   | -16.3°              |                |  |  |  |
| Airspeed Limits (IAS)           | V <sub>mo</sub> (Maximum  | operating)  | 250 KTS             |                |  |  |  |
|                                 | V <sub>a</sub> (Maneuverii  | •   | 160 KTS             |                |  |  |  |
|                                 | V <sub>fe</sub> (Flaps exten  |   | 130 KTS             |                |  |  |  |
|                                 | V <sub>le</sub> (Landing ge   | ear extended)   | 158 KTS             |                |  |  |  |
| Center of Gravity (C. G.) Range | Fwd. 21.5% MAC @ or below 9,100 lbs. 22 % MAC @ or above 9,100 lbs and up to 11,000 lbs.  |   |                     |                |  |  |  |
|                                 | Aft 28.0% MAC   |   |                     |                |  |  |  |
| Datum                           | Sta. 00.0, forward edge of fuselage nose  |   |                     |                |  |  |  |
| Leveling Means                  | Rt. side of fuselage, $10 \times 32$ screw holes, per NAVAIR 01-1B-40, chart E, sheet $3$ |   |                     |                |  |  |  |
| Maximum Weights                 | Takeoff 11,000 lbs. Landing (except STOL) 11,000 lbs. STOL landing 10,000 lbs.            |   |                     |                |  |  |  |
| Minimum Crew                    | One pilot at sta. 80.0  |   |                     |                |  |  |  |
| Number of Seats                 | 1 at sta. 80.0<br>1 at sta. 126.0   |   |                     |                |  |  |  |
| Fuel Capacity                   | <u>Tank</u>   | Cap. Gal.   | Usable Gal.         | Station        |  |  |  |
|                                 | Wing Outboard (2)   | 75.3  | 72.4                | 198.0          |  |  |  |
|                                 | Wing Inboard (2)  | 133.6   | 129.7               | 198.0          |  |  |  |
|                                 | Center<br>Total   | 37.6<br>246.5   | 36.5<br>238.6       | 198.0<br>198.0 |  |  |  |
|                                 | (See Note 1)  | 240.3   | 230.0               | 170.0          |  |  |  |
| Oil Capacity                    | Engines and Tank  | Cap. Gal. (lbs.)  | Usable Gal. (lb     | s.) Station    |  |  |  |
| . ,                             | Left Engine + Left  | 2.25 (16.88)  | 1.60 (12.00)        |                |  |  |  |
|                                 | Tank Right Engine + Right tank  | 2.25 (16.88)  | 1.60 (12.00)        | 129.0          |  |  |  |
|                                 | Total (See Note 1)  | 4.50 (33.76)  | 3.20 (24.00)        | 129.0          |  |  |  |
| Maximum Operation Altitude      | 20,000 ft. (Operation oxygen equipment is in  |   | is permitted when r | required       |  |  |  |

See NAVAIR 01-OV10A/D-2-2.2

**Control Surface Movements** 

Serial Numbers Eligible: <u>Military S/N</u>

155402 155405 155427

155428 155445 155496

155400 67-14652 155429 67-14612

68-3825 68-3811 67-14615 155426

Certification Basis

FAR §21.25(a)(2), (b)(2), and amendment 47 of 14 CFR part 23. Restricted Category, issued for the special purpose of forest and wildlife conservation (fire fighting)

fighting).

14 CFR Part 36, Appendix G, through amendment 21.

TC A00004LA issued on December 9, 1999

Date of Application: May 11, 1995.

Production Basis

None.

Equipment

The basic required equipment as prescribed by NAVAIR 1B-40, Weight and Balance, must be installed in the aircraft for certification.

**NOTES** 

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. The certificated empty weight and corresponding center of gravity locations must include total oil capacity and unusable fuel.

Note 2

The following placards must be prominently displayed:

Placard No. 1:

"Restricted" as shown on CDFFP drawing 1600-1010.

Placard No. 2:

"This airplane must be operated in accordance with the restricted category operating limitations of FAR 91.313." in the cockpit in full view of the pilot, as shown on CDFFP drawing 1600-1014.

Note 2 (cont'd)

Placard No. 3:

"This airplane may be operated in Day, Night, VFR & IFR non-icing conditions, when the appropriate equipment is installed" in the cockpit in full view of the pilot, as shown on CDFFP drawing 1600-1014.

Placard No. 4:

A data plate must be provided for each airplane as prescribed by CDFFP drawing 1600-1013, pertaining to both the content and location.

The airplane(s) must be serviced, maintained, and inspected in accordance with the documents specified in California Department of Forest and Fire Protection, Instructions for Continued Airworthiness Report, Report No. 1601-11, dated December 8, 1999, as revised, or inspected in accordance with other FAA accepted inspection programs. The TC Holder's Instructions for Continued Airworthiness Report is part of the TC Holder's Instructions for Continued Airworthiness.

The aircraft shall be operated in accordance with the NATOPS Flight Manual NAVAIR 01-60GCB-1 and FAA approved CDFFP Airplane Flight Manual Supplement 1600-1002 dated December 8, 1999.

Prior to obtaining an original Airworthiness Certificate:

- A. Each airplane must pass a conformity inspection in accordance with Master Drawing List 1600-1001, Revision A, dated December 8, 1999, or later FAA approved revision. Equipment identified in Drawing 1600-1003, dated 12/8/99, or later FAA Approved revision, must be removed. The Master Minimum Equipment List for OV-10A must be approved by the operations ASI of the MKC-AEG FSDO, Aircraft Evaluation Group. The NAVAIR 01-OV10A/D-2-1 contains a complete description of OV-10A aircraft. All military maintenance work accomplished on that particular airplane should be documented in the log book by referencing the appropriate military log book. In addition, each airplane must pass an inspection for any possible hidden damage and the military records reviewed for acceptability of any repairs or alterations.
- B. The maintenance, overhaul, and modification records of each airplane must be reviewed for military changes that may affect the airworthiness of the airplane.
- C. After the required inspections, the airplane must be found to be in a good state of preservation, repair, and in a condition for safe operation.
- D. Each airplane must be in compliance with the military bulletins for the airframe and engine contained in OV-10 Technical Directive Index and T76 Technical Directive Index of the Instructions for Continued Airworthiness (ICA) Report No. 1601-11, dated December 8, 1999.
- E. The new airplane C.G. will have to be established in accordance with the Weight and Balance Report NAVAIR 1B-40

This aircraft is prohibited from carrying cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the special purpose operations of forest and wildlife conservation (fire fighting).

Note 3

Note 4

Note 5

Note 6

Restricted Category aircraft may not be operated in a foreign country without Note 7 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 Engine changes are allowed provided the replacement engine is of the same make and model as identified in this TCDS. The replacement engine must have proper military records and have the applicable FAA Airworthiness inspection accomplished. Note 10 Aircraft eligible for certification under this Type Certificate are limited to aircraft utilized by the State of California. Note 11 Any alteration to the type design of this aircraft may require instructions for continued airworthiness. These instructions must be submitted and accepted by the MKC-AEG FSDO, Aircraft Evaluation Group, prior to approval for return to service. Note 12 This aircraft is not permitted to operate in known icing conditions.

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