

1H2  
Revision 4  
VERTICAL AVIATION  
S-52-2  
(Military YH-18A)  
S-52-3  
(Military HO5S-1)  
October 23, 2019

|          |   |   |   |   |
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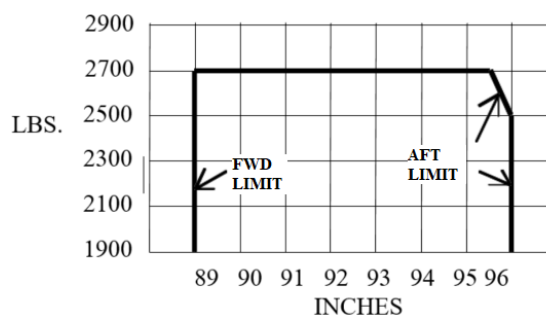
C.G. range

(S-52-2)

(+89) to (+95.5) at 2700 lbs.

(+89) to (+96.0) at 2500 lbs. or less

Straight line variation between points given



(S-52-3) (+88) to (+94)

Empty weight C.G. range

None

Datum

91 in. forward of centerline main rotor shaft

Leveling means

Main rotor shaft perpendicular

Maximum weight

2700 lbs.

No. of seats

4 (Two at +50 and two at +87)

Maximum baggage

|                            |          |       |
|----------------------------|----------|-------|
| Footwell, RH               | 100 lbs. | (+68) |
| Footwell, LH               | 100 lbs. | (+68) |
| Aft passenger position, RH | 200 lbs. | (+87) |
| Aft passenger position, LH | 200 lbs. | (+87) |

Fuel capacity

(S-52-2) 61 gals. (+89.5); (S-52-3) 57 gals. (+89.5)

Oil capacity

(S-52-2) 3.1 gals. (+108); (S-52-2) 3.5 gals. (+108)

Rotor blade movements

For rotor rigging information see Erection and Maintenance Manual and applicable Service Information Circulars.

Serial Nos. eligible

(S-52-2) 52005, 52006, 52008  
(S-52-3) 52009 through 52095

Required equipment

In addition to the pertinent required basic equipment specified in CAR 6, the following items of equipment must be installed:  
Items 101, 102, 201(a), 202, 205(a), 206, 302, 303, 401

Datum

91 in. forward of centerline main rotor shaft

Leveling means

Main rotor shaft perpendicular

Maximum weight

2700 lbs.

No. of seats

4 (Two at +50 and two at +87)

Maximum baggage

|                            |          |       |
|----------------------------|----------|-------|
| Footwell, RH               | 100 lbs. | (+68) |
| Footwell, LH               | 100 lbs. | (+68) |
| Aft passenger position, RH | 200 lbs. | (+87) |
| Aft passenger position, LH | 200 lbs. | (+87) |

|                       |   |
|-----------------------|---|
| Fuel capacity         | (S-52-2) 61 gals. (+89.5); (S-52-3) 57 gals. (+89.5)  |
| Oil capacity          | (S-52-2) 3.1 gals. (+108); (S-52-2) 3.5 gals. (+108)  |
| Rotor blade movements | For rotor rigging information see Erection and Maintenance Manual and applicable Service Information Circulars.   |
| Serial Nos. eligible  | (S-52-2) 52005, 52006, 52008<br>(S-52-3) 52009 through 52095  |
| Required equipment    | In addition to the pertinent required basic equipment specified in CAR 6, the following items of equipment must be installed:<br>Items 101, 102, 201(a), 202, 205(a), 206, 302, 303, 401. |

#### Specifications Pertinent to All Models

|                     |   |
|---------------------|---|
| Certification basis | Type Certificate No. 1H2<br>(Combination CAR 06, March 1, 1950, and CAR 6, January 15, 1951)                              |
| Production basis    | Production Certificate No. 105  |
| Equipment:          | A plus (+) or minus (-) sign preceding the weight of an item indicates the net weight change when that item is installed. |

#### Engine and Engine Accessories - Fuel and Oil System

|  |                |
|--|----------------|
| 101. Starter (Eclipse Pioneer) AN4116R1, Direct cranking     | 20 lbs. (+131) |
| 102. Oil cooler & attaching parts (Harrison Radiator 10439B) | 9 lbs. (+128)  |

#### Landing Gear

|   |                |
|---|----------------|
| 201. 2 Main wheel-brake assemblies, 5.00-5, Type III,<br>(a) Goodyear Model L5HBM<br>Wheel Assembly No. 9520265<br>Brake Assembly No. 9520425 | 8 lbs. (+106)  |
| 202. 2 Main wheel 6 ply-rating tires, 5.00-5, Type III, with regular tubes  | 11 lbs. (+106) |
| 205. 2 Nose wheels, 10.00, Type I<br>(a) Firestone Model B0200  | 4 lbs. (+36)   |
| 206. 2 Nose wheel 8 ply-rating tires, 10.00, Type I, channel tread, with regular tubes  | 5 lbs. (+36)   |

#### Electrical Equipment

|  |                |
|--|----------------|
| 301. Deleted - March 10, 1952            |                |
| 302. Battery, AN 3151, 24V               | 47 lbs. (+6)   |
| 303. Generator, Eclipse-Pioneer 1298-1   | 23 lbs. (+133) |
| 304. Two landing lights, Grimes D-3150-4 | 3 lbs. (+34)   |
| 305. Position Lights, AN3033-3, -4       | Neglect weight |
| 306. Tail light, Grimes S                | Neglect weight |

#### Interior Equipment

|   |  |
|---|--|
| 401. CAA Approved Helicopter Flight Manual dated January 31, 1952 |  |
|---|--|

- NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions must be in each helicopter at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system). When changes are made to the helicopter which affect weight and balance, see instructions contained in Section IV of the Flight Manual.
- NOTE 2. The following placards must be displayed on the instrument panel in full view of the pilot:
- (a) "This helicopter must be operated in compliance with the operating limitations specified in the CAA Approved Rotorcraft Flight Manual."
  - (b) "Acrobatic and Instrument Flight Prohibited."
  - (c) "Decrease Vne 4 knots per thousand feet of altitude above sea level."
  - (d) "15 minute fuel supply remains when red light is on."
- The following placard must be displayed on controls cover between rear passenger positions:
- (a) "Maximum cargo weight 600#
    - (1) Each footwell 100#
    - (2) Each rear passenger position 200#
- For loading instructions see section 4 of the Flight Manual."
- NOTE 3. Information essential to the proper maintenance of the helicopter including retirement of critical parts is included in the manufacturer's service instructions provided with each helicopter.
- NOTE 4. Information regarding modifications to be accomplished prior to civil certification of Military Models YH- 18A and HO5S-1 should be obtained from Sikorsky Aircraft. Specific conversion details for the Model HO5S-1 are provided in Sikorsky SPECIAL SERVICE INSTRUCTION NO. 101.

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