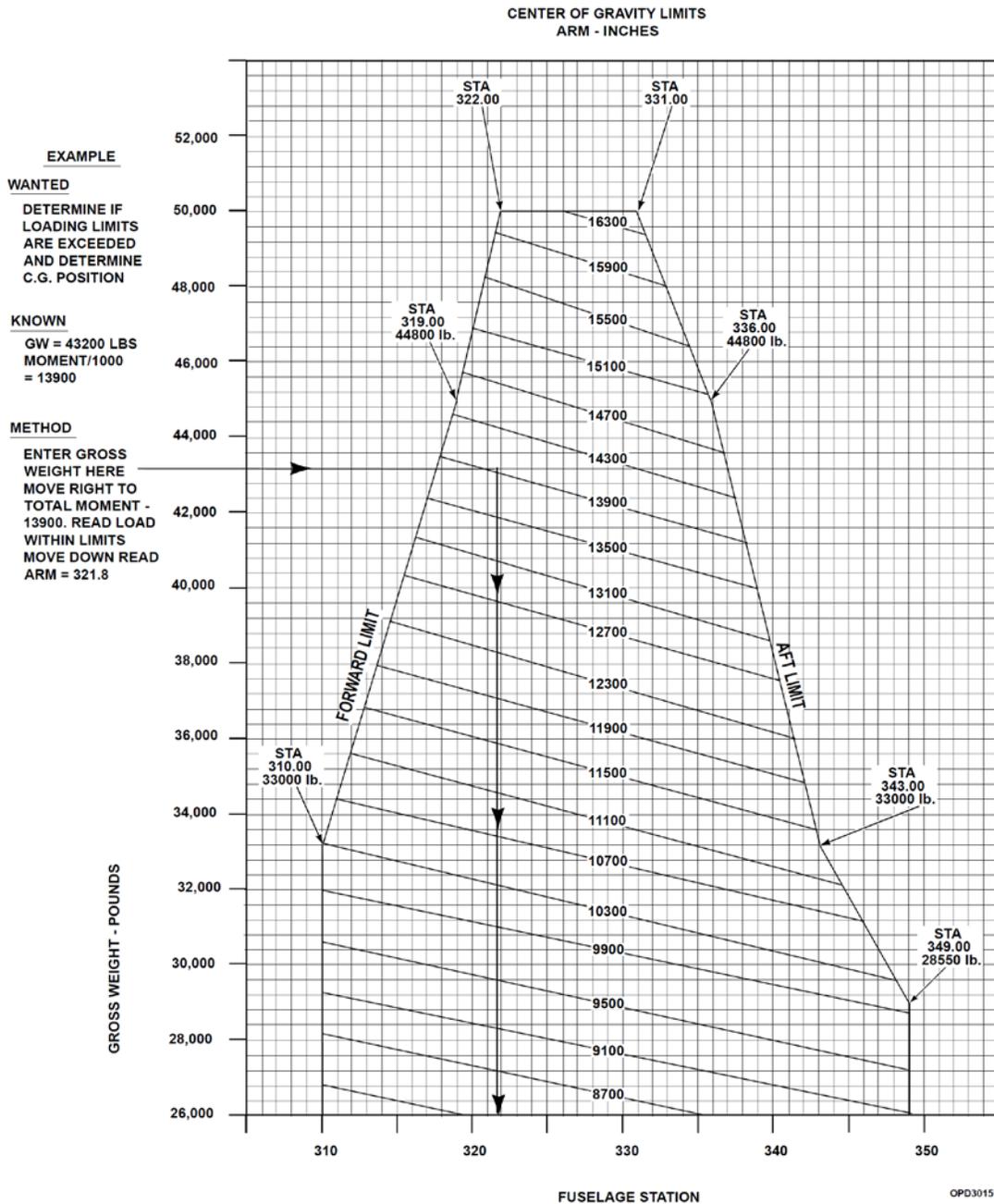


C.G. range

Most forward C.G. Sta. +310.00
 Most Aft C.G. Sta. +349.00
 (+322.00) to (+331.00) at 50,000 lb.
 (+319.00) to (+336.00) at 44,800 lb.
 (+310.00) to (+343.0) at 33,000 lb.
 (+310.00) to (+349.0) at 28,550 lb. or less



Empty weight C.G. range

None

Datum	Station 0 (datum is 21.5 inches forward of the most forward point of the nose section)
Leveling means	Plumb bob hook at top of main cabin door interior trim forward of Sta. 150. Plumb target under main cabin door sill forward of Sta. 150 at BL 48.3. Plumb line from upper hook to target.
Maximum weight	50,000 lb.
Cargo Hook Limitations	The limits presented below are structural limitations only. a. The structural limit of the forward and aft hook is 17,000 pounds each. b. The maximum single load that can be suspended as a tandem load from the forward and aft hooks is 25,000 pounds. c. The center cargo hook is limited to a maximum load of 26,000 pounds.
Minimum Crew	3 (1 pilot, 1 copilot, 1 flight crewmember) 2 (1 pilot, 1 copilot) if Modification C47EK018-9 is installed, maintained per Note 14
No. of Seats	See Columbia Helicopters, Inc., Configuration Report, Restricted Category Type Certificate, Model CH-47D Helicopter, document 14-RDE-0635, revision A, dated August 29, 2014, or later FAA approved revisions.
No. of Passengers	None (see Note 10)
Maximum Compartment Weights	Refer to the appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5 for various configurations.
Fuel Capacity	1028 gal. (total); 278 gal. (Left Main Tank) Sta. +317.30 274 gal. (Right Main Tank) Sta. +317.30 122 gal. (Left Fwd Aux Tank) Sta. +214.00 119 gal (Right Fwd Aux Tank) Sta. +214.00 118 gal. (Left Aft Aux Tank) Sta. +414.00 117 gal. (Right Aft Aux Tank) Sta. +414.00 Unusable fuel; 1) 4.0 gal. Sta. +316.00 2) 5.8 gal. Sta. +357.00 The full tank usable fuel weight will vary depending upon fuel specific weight. See the appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5.
Oil capacity	3.75 gal. per engine, Sta. +480.7 These are maximum capacities which include residual and trapped oil/fuel. Servicing capacities will be less. See the appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5.
Rotor Blade and Control Movements	For rigging information see Note 3.
Serial No. Approved	U.S. Military Surplus CH-47D helicopters as identified in Columbia Helicopters, Inc., Serial Number Report, Restricted Category Type Certificate, Model CH-47D Helicopter, document 14-RDE-0630, revision A, dated September 23, 2014 or later FAA approved revision.
Date of Application	April 30, 2014
Certification basis	Part 21 § 21.25(a)(2) for the special purpose of: 1) Forest and Wildlife Conservation Operations under § 21.25(b)(2). Note: In accordance with § 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type certificate are

only eligible for aerial dispensing of liquids and forest conservation material excepted by § 36.1(a)(4) and defined under § 137.3.

2) Other Special-Purpose Operations under § 21.25(b)(7). Includes external load operations for the carriage of cargo external to the fuselage.

Note: In accordance with § 36.1(a)(4), compliance with the noise requirements was not shown. Therefore, aircraft certificated under this type certificate are only eligible for carrying external loads excepted by § 36.1(a)(4) and defined under § 133.1(b).

Any alteration to the aircraft for Special Purposes not identified above require further FAA approval and in addition, may require noise and/or flight testing.

This aircraft approved for Day or Night VFR operations only. Flight into known icing conditions is prohibited.

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. Non-significant modifications are to meet the requirements of 14 CFR § 29 dated February 1, 1965, including Amendments 29-1 through 29-20 and 14 CFR § 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.

Production basis

None. No helicopters may be produced under this approval. No helicopter serial number may be added to this type certificate unless approved by the cognizant Aircraft Certification Office.

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 appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5 is required with each helicopter.

NOTES

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 in each helicopter at the time of original airworthiness certification and at all times thereafter. The certified empty weight and corresponding C.G. locations must include unusable fuel. Refer to the appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5.

NOTE 2. The following placards must be displayed in front of and in clear view of the pilots:

Placard No. 1

THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED ROTORCRAFT FLIGHT MANUAL.

Placard No. 2

THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF 14 CFR PART 91 § 91.313.

NOTE 3. These helicopters must be serviced, maintained, inspected, repaired, and overhauled in compliance with the documents specified in Columbia Helicopters, Inc., Applicable ICA, CH-47D Helicopter, document 47D-8, Revision 0, dated May 6, 2015, or later FAA approved revision (supersedes Columbia Helicopters, Inc., Continued Airworthiness Report, Restricted Category Type Certificate, Model CH-47D Helicopter, document 14-RDE-0636, Revision A, dated December 17, 2014) or in accordance with any other FAA accepted maintenance program. Retirement times and FAA required inspections are listed in FAA approved Airworthiness Limitations Section dated May 6, 2015, or later FAA-approved revision (supersedes Section 2 of 14-RDE-0636, Revision A, dated December 17, 2014). An FAA approved/accepted copy must accompany each helicopter on delivery.

- NOTE 4. The builder's data plate must be installed in accordance with Columbia Helicopters, Inc., Serial Number Report, Restricted Category Type Certificate, Model CH-47D Helicopter, document 14-RDE-0630, revision A, dated September 23, 2014 or later FAA approved revision.
- NOTE 5. This helicopter must be operated in accordance with Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual 47-1, revision 0, dated October 15, 2014, or later FAA approved revision, unless Modification C47EK018-9 is installed and maintained in accordance with Note 14. If C47EK018-9 is installed and maintained in accordance with Note 14, the aircraft must be operated in accordance with Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual 47D-1A, revision 0, dated March 17, 2016, signed March 31, 2016, or later FAA approved revision.
- NOTE 6. This helicopter is prohibited from carrying cargo for compensation or hire. Carriage of cargo is limited to such cargo that is incidental to the helicopter owners/operator's business, which is other than air transportation.
- NOTE 7. A restricted category helicopter may not be operated in a foreign country without the express written approval of that country.
- NOTE 8. This helicopter has not been shown to meet the requirements of the applicable comprehensive and detailed Airworthiness Code as provided by Annex 8, to the Convention of the International Civil Aviation Organization.
- NOTE 9. The U.S. Army Safety Messages for the helicopter and engine contained in Columbia Helicopters, Inc., Configuration Report, Restricted Category Type Certificate, Model CH-47D Helicopter, document 14-RDE-0635, revision A, dated August 29, 2014, or later FAA approved revision, must be complied with prior to original airworthiness certification.
- NOTE 10. No person may be carried in this helicopter during flight unless that person is essential to the purpose of flight.
- NOTE 11: Alternative and emergency fuels are listed in Chapter 8 of the appropriate Columbia Helicopters, Inc., CH-47D Rotorcraft Flight Manual per Note 5.
- NOTE 12: Any alteration to the type design of this aircraft may require Instructions for Continued Airworthiness. Changes to the type design by means of a Supplemental Type Certificate requiring ICAs or changes to existing ICAs must be submitted and received by the Fort Worth Evaluation Group (FTW-AEG). Type design changes by means of an FAA Field Approval that require ICA's must have those ICA's reviewed by the Flight Standards District Office managing the Field Approval or the FTW-AEG.
- NOTE 13: No helicopter may obtain a Restricted Category Airworthiness Certificate under this type certificate unless it is included in the "Serial No. Approved" list above.
- NOTE 14: Modification C47EK018-9 reduces the required crew from three to two. For two crew operation, this modification must be installed, maintained, and operated, respectively, in accordance with:
- a) Drawing C47EK018, Revision -, dated March 24, 2016, or later FAA approved revision,
 - b) Maintenance Manual Supplement 47D-2-20, Revision 0, dated March 2, 2016, or later FAA accepted revision, and
 - c) Rotorcraft Flight Manual 47D-1A, revision 0, dated March 17, 2016, signed March 31, 2016, or later FAA approved revision.

...END...