

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

R0013DE  
Sky Aviation Corp.  
CH-46E  
Revision 3  
October 9, 2015

TYPE CERTIFICATE DATA SHEET R0013DE

This data sheet, which is a part of Type Certificate No. R0013DE, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the 14 Code of Federal Aviation Regulations (14 CFR).

Type Certificate Holder: Sky Aviation Corp.  
1444 Airport Rd  
Worland, WY 82401

Type Certificate Holder Record: N/A

I Model CH-46E (Restricted Category Rotorcraft) Approved July 8, 2015. (See NOTES Section)

Engines (2) General Electric T58-GE-16A

Fuel Jet A, Jet A-1, Jet B, JP-4, JP-5, JP-8. Alternative and emergency fuels are listed in Sky Aviation Corp. SA-120 "CH-46E Rotorcraft Flight Manual", Rev. Original, dated June 26, 2015, or later FAA approved revisions.

Engine and  
Transmission Limits

Rating	Torque (% Q)	Gas Gen. Speed (% Ng)	Power Turbine Speed (% N <sub>p</sub> )	Power Turbine Inlet Temp (T <sub>5</sub> )
<b>Dual Engine Limits</b>				
Take-Off (5 Min.)	100%	103%	109%	835
Military Power (30 Min.)	100%	-----	-----	805
Normal Continuous	100%	103%	109%	785
Maximum Transient	114%	103%	123%	950
<b>One Engine Limits</b>				
One Engine Inop (10 Min.)	123%	103%	109%	899
One Engine Inop (30 Min.)	123%	-----	109%	854
Normal Continuous	123%	103%	109%	816
Maximum Transient	142%	103%	123%	943

Refer to Sky Aviation Corp. SA-120, "CH-46E Rotorcraft Flight Manual", Rev. IR, dated June 26, 2015, or later FAA approved revisions, for additional limitation data.

Rotor Speed Limits

	<u>Power Off</u>	<u>Power On</u>
Minimum	88% r.p.m.	88% r.p.m.
Maximum	125% r.p.m.	125% r.p.m.

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Airspeed Limits

**INDICATED NEVER EXCEED SPEED  
VS DENSITY ALTITUDE  
(CGI INOPERATIVE)**

**ENGINE: T58-GE-16 A  
ROTOR RPM: 100 PERCENT  
(264 Nr)**

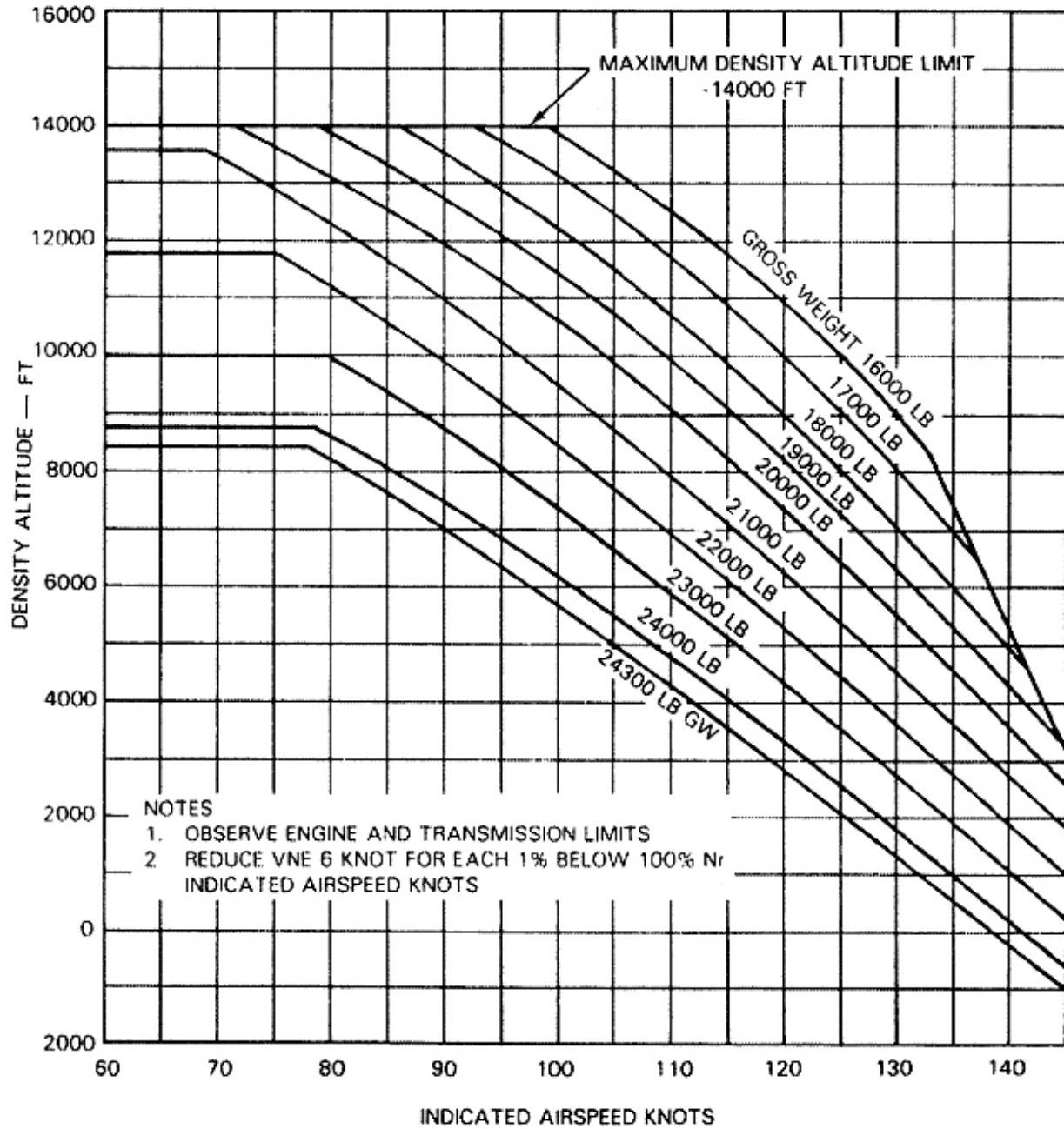


Figure 1

Refer to Sky Aviation Corp., SA-120 "CH-46E Rotorcraft Flight Manual", Rev. IR, dated June 26, 2015, or later FAA approved revisions, for abnormal conditions.

Weight & CG Envelope

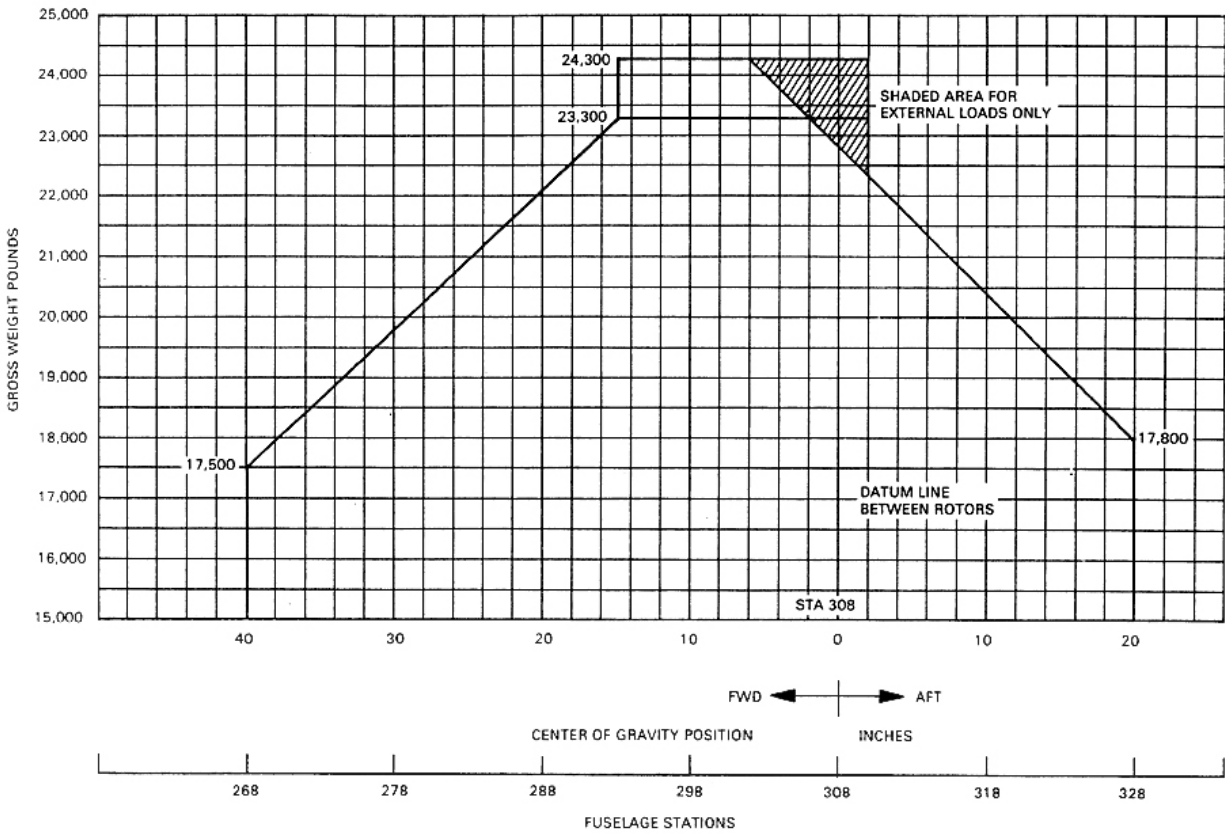


Figure 2

Refer to Sky Aviation Corp., SA-120 “CH-46E Rotorcraft Flight Manual”, Rev. IR, dated June 26, 2015, for specific C.G. range and limits.

Datum	Station 0 (Datum is 28.25 inches forward of the forward most point of the nose section).
Empty Weight C.G. Range	The current empty weight, moment/1000, and center of gravity for each helicopter is available in the relevant maintenance records for that helicopter.
Leveling Means	Plumb bob from top of forward door opening.
Maximum Weight	24,300 lbs.
Cargo Hook Limitations.	10,000 pounds.
Minimum Crew	2– (1) pilot, (1) copilot both at 82 inches from reference datum
Maximum Cargo	Refer to Sky Aviation Corp., SA-120 “CH-46E Rotorcraft Flight Manual”, Rev. Original, Dated June 26, 2015, or later FAA approved revisions, for various configurations.

Fuel Capacity	6887 lb. (1028 Gallons) Refer to Sky Aviation Corp., SA-120 "CH-46E Rotorcraft Flight Manual", Rev. Original, Dated June 26, 2015, or later FAA approved revisions, for various configurations.
Oil Capacity	7.5 gal. (3.75 Gal per engine). See Note 1 for data on system fuel and oil.
Rotor Blade and Control Movements	For rigging information, refer to U.S. Navy A1-H46AE-140-000 Technical Manual, Flight Control Systems, Navy Model CH/HH-46E Helicopters.
Other Limits	This helicopter must be operated in accordance with the following: <ul style="list-style-type: none"> <li>(1) Sky Aviation Corp. Report No.SA-120, "CH-46E Rotorcraft Flight Manual", Rev. Original, dated June 26, 2015, or later FAA approved revisions.</li> <li>(2) Sky Aviation Corp. Report No. SA-122, Functional Check Flight Manual for the CH-46E Helicopter dated June 26, 2015, or later FAA accepted revisions.</li> <li>(3) Sky Aviation Corp. Report No. SA-121, CH-46E Crewmember's Checklist dated June 26, 2015, or later FAA accepted revisions.</li> </ul>
Serial No. Approved	U.S. military surplus CH-46E helicopters as identified in Type Certificate Data Sheet R0013DE Approved Serial Number List, Sky Aviation Corp., Report Number SA-105, Rev. Original dated June 26, 2015, or later FAA approved revisions.
Certification Basis	Part 21 § 21.25(a)(2) and FAR 21.25 (b)(1)(2)(7) Rotorcraft External Load Operations and Carriage of Cargo – incidental to the operator's business.  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 § xx7.3 and xx3.1(b).  Any alteration to the aircraft for Special Purposes not identified above may require further FAA approval and in addition, may require noise and/or flight testing and additional Instructions for Continued Airworthiness.  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 part 21 § 21.101 published June 7, 2000 which became effective June 10, 2003. Otherwise non-significant modifications are to meet the requirements of 14 CFR part 29 Airworthiness Standards, Transport Category, Amendment 1, effective August 12, 1965 and 14 CFR part 29 § 29.1529, Instructions for Continued Airworthiness, Amendment 20, effective September 11, 1980.
Date of Application	October 24, 2014
Production basis	None. No helicopters may be produced under this approval. Each helicopter must pass a conformity inspection in accordance with this TCDS, plus any additional special instructions attached to FAA Form 8120-10, Request for Conformity. In addition, a check by the Type Certificate holder or its agent, of the flight characteristics in accordance with applicable portions of the SA-122 CH-46E FCF Functional Check Flight Manual for Sky Aviation Corp. Model CH-46E helicopters.
Equipment	The basic required equipment necessary for the particular special purpose operation must be installed for certification.
<b>NOTES:</b>	
NOTE 1.	A current weight and balance report including a list of equipment included in the certified empty weight, and loading instructions when necessary, must be provided for each helicopter at the time of original airworthiness certification.

- NOTE 2. The following placards must be prominently displayed in the cockpit in full view of the pilots:
- Placard No. 1
- THIS HELICOPTER MUST BE OPERATED IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED ROTORCRAFT OPERATIONS MANUAL AND THE RESTRICTED CATEGORY OPERATING LIMITATIONS OF 14 CFR PART 91.313.
- NOTE 2 Continued Placard No. 2
- VFR OPERATIONS ONLY.
- NOTE 3. The helicopter(s) must be serviced, maintained, inspected, repaired and overhauled in accordance with the requirements specified in Sky Aviation Corp. Report No.SA-103, Instructions for Continued Airworthiness, Rev. Original, dated June 26, 2015, or later FAA accepted revision, or inspected in accordance with other FAA accepted inspection programs.
- The Military Document Supplement for the Maintenance Manual, SA-104 defines non applicable portions of the Military Manuals
- The service life limited parts overhaul and retirement intervals for these helicopters is specified in Sky Aviation Corp. Component Overhaul Schedule Airworthiness Limitations Schedule Report. SA-110, Rev. Original, dated June 25, 2015, or later FAA approved revision. A FAA approved/accepted copy must accompany each helicopter on delivery.
- Service-life-limited components may be extended as defined in the appropriate maintenance manual with approval from the Primary Maintenance Inspector.
- The certification life limits for the helicopter, its engine and appliances were based on satisfactory service history as designed and operated by the military. Therefore, to operate and maintain the aircraft to the original acceptance criteria, and maintain it is safe for intended use requirement, operational time tracking is required on certain critical components.
- NOTE 4. Any alteration to the Type Design of this Rotorcraft may require additional Instructions for Continued Airworthiness. These instructions must be submitted and accepted by the FAA Fort Worth Aircraft Evaluation Group (FTW-AEG), and Airworthiness Limitations approved, if changed, by the Certificate Management Aircraft Certification Office, (CMACO), prior to approval for return to service.
- NOTE 5. The Airworthiness Directives, Technical Directives and Safety of Flight (SOF) messages for the helicopter and engines contained in Sky Aviation, Corp. Report No. SA-106, Rev. Original, dated June 26, 2015, or later FAA approved revisions, must be complied with prior to original airworthiness certification.
- NOTE 6. Sky Aviation Corp. Report SA-101, Demodification Configuration Report, Rev. Original, dated May 2, 2015, identifies the de-configuration of the aircraft. Addition of equipment and airframe changes necessary for the special purpose helicopter are contained in the Service Instruction Compliance Report SA-111.
- NOTE 7. The builder's data plate required by 14 CFR Part 45 § 45.11 must be installed in accordance with Sky Aviation Corp. Drawing SA-1002, Rev. Original, dated April 20, 2105 or later FAA approved revisions.
- NOTE 8. No person may be carried in this helicopter during flight unless that person is essential to the purpose of the flight.

- NOTE 9. A Restricted Category helicopter may not be operated in a foreign country without the express written approval of that country.
- NOTE 10. 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 on International Civil Aviation.
- NOTE 11. All training, checking and currency requirements for pilots and crewmembers for the designation of Sky Aviation Corp. CH-46E Restricted Category aircraft will be accomplished in accordance with the Flight Standardization Board (FSB) report "Sky Aviation Corp. CH-46E" report, as revised. For further information regarding this training requirement please contact the Fort Worth Aircraft Evaluation Group.

**END**