

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

H4EA Revision 4 ERICKSON AIR-CRANE INCORPORATED S-64E March 28, 2007
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TYPE CERTIFICATE DATA SHEET NO. H4EA

This data sheet, which is part of Type Certificate Number H4EA, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate (TC) Holder Erickson Air-Crane Incorporated, DBA Erickson Air-Crane
 3100 Willow Springs Road
 P. O. Box 3247
 Central Point, Oregon 97502

Type Certificate Holder Record Sikorsky Aircraft transferred TC H4EA to
 Erickson Air-Crane on February 13, 1992.

I - Model Number: S-64E (Restricted Category) Approved March 18, 1969

Engines 2 Pratt & Whitney JFTD12A-4A (T73-P-1)

Fuel Aviation Kerosene JP4 or JP5

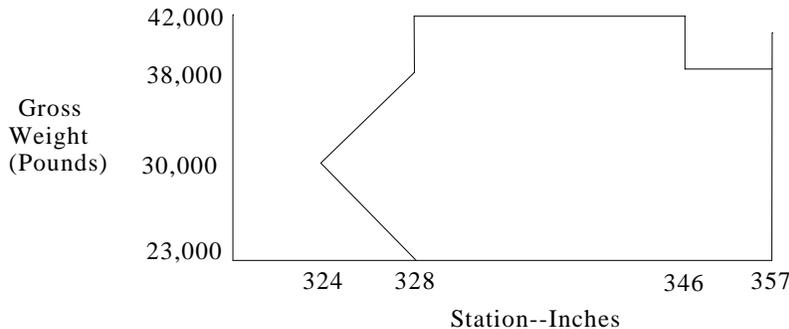
Engine limits (See NOTE 6)

	Shaft H.P.	Power Turbine Speed (N ₂)	Gas Gen. Speed (N ₁)	Power Turbine Inlet (T ₅)
Military Power (30 min.)	4500	105%	104%	688°C
Normal Continuous Cruise	4000	105%	104%	655°C

Rotor limits Max 110% N_r (204 r.p.m.)
 Min 90% N_r (167 r.p.m.)

Airspeed limits Never exceed: 99 knots between 38,000 lb. and 42,000 lb. gross weight
 115 knots up to 38,000 lb. gross weight

C.G. range 328.0 to 357.0 at 23,000 lb.
 324.0 to 357.0 at 30,000 lb.
 328.0 to 357.0 at 38,000 lb.
 328.0 to 346.0 at 38,000 lb.
 328.0 to 346.0 at 42,000 lb.



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Datum	336 inches forward of main rotor centroid.
Leveling means	Plumb line from top level plate inside cockpit aft door.
Maximum weight	42,000 lb.
Minimum crew	2 (pilot and co-pilot).
Number of seats	5: 2 at (+94.0), 1 at (+108.5), 1 at (+127.0), 1 at (+130.0).
Maximum cargo	See NOTE 5.
Fuel capacity	1356 gal. 454 gal. at (+280.0), 454 gal. at (+397.3), 448.5 gal. at (+461.3).
Oil capacity	2.8 gal. at (+234.0) (2 tanks 1.4 gal. each).
Rotor blade and control movements	For rigging information, see NOTE 8.
Other operating	See NOTE 4.
Serial numbers eligible	There are no eligible serial numbers at this time.
Certification basis	FAR 21.25(a)(2) effective February 1, 1965, including Amendments 21-1 thru 21-4. Type Certificate No. H4EA issued March 18, 1969, for the Special Purpose of carriage of external loads. Date of application for Type Certificate: February 26, 1969.
Equipment	Equipment necessary for the particular special-purpose operation must be installed (see NOTE 5).
Production basis	None. Prior to certification of each aircraft, an FAA representative must perform a detailed inspection for workmanship, materials, and conformity with approved technical data and a check of the flight characteristics.

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.

NOTE 2. The following placard must be prominently displayed in the cockpit in full view of the pilots:
 "THIS ROTORCRAFT MUST BE OPERATED IN ACCORDANCE WITH THE RESTRICTED
 CATEGORY OPERATING LIMITATIONS OF FAR 91.39"

NOTE 3. Service Life-Limited parts must be retired in accordance with the following schedule:

<u>Component</u>	<u>Part No.</u>	<u>Service Life (Hours)</u>
Upper plate	S6410-23011-101	4615
Lower plate	S6410-23009-101	4615
Spacer	S6410-23006-012	4175
Hub	S1510-23001-4	5275
Sleeve	S1510-23351	7300
Vertical hinge	S1510-23022	2800
Horizontal hinge pin	S1510-23099-1	1550
Scissors bracket, rotating	S6410-24069-011	4950
Upper link, rotating	S6410-24056-101	17,000
Lower link, rotating	S6410-24052-101	17,000
Damper assembly	S6410-26200-042	500
Damper upper bracket	S6410-26106-041	500
Damper lower bracket	S6410-26106-042	500
Main rotor blade	S6415-20101-043	5000
Main rotor shaft	S6435-20078-014	1100

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- NOTE 4. These helicopters must be operated in accordance with a Flight Manual comprised of the following:
- (1) Department of the Army Technical Manual No. TM 55-1520-217-10, "Operator's Manual, Army Model CH-54A Helicopters," dated January 1967; revised September 1968.
 - (2) Sikorsky Aircraft "S-64E Commercial Helicopter Supplement to TM 55-1520-217-10, Operator's Manual, CH-54A Helicopter," dated March 3, 1969.
 - (3) Department of the Army Technical Manual No. TM 55-1520-217-CL, "Operator's & Crewmember's Checklist, Army Model CH-54A Helicopters, Pilot's Checklist," dated October 1968.
 - (4) Sikorsky Aircraft "S-64E Commercial Helicopter Supplement to TM 55-1520-217-CL, Operator's and Crewmember's Checklist, CH-54A Helicopter," dated March 18, 1968.
 - (5) Winterization Program Supplement to TM-55-1520-217-10, Operator's Manual, CH-54A Helicopter.
- NOTE 5. Provisions for the carriage of external loads are available in the form of structural hard points on the fuselage and main landing gear; single and four-point hoists; and a four-point load-leveler suspension system. Information concerning the operating limitations with this equipment is contained in the Flight Manual.
- NOTE 6. Deleted February 1, 1970.
- NOTE 7. Prior to civil airworthiness certification, compliance with the following must be accomplished:
- Department of the Army Technical Bulletins:
- TB55-1520-217-20/1 dated June 26, 1967.
 - TB55-1520-217-20/2 dated April 25, 1963.
 - TB55-1520-217-20/4 dated May 24, 1968.
 - TB55-1520-217-30/1 dated September 4, 1968.
 - TB55-1520-217-30/2 dated July 12, 1968.
 - TB55-1520-217-30/3 dated August 26, 1968.
- NOTE 8. These helicopters must be serviced and maintained in compliance with the following:
- (1) Department of the Army Technical Manual No. TM 55-1520-217-20, "Organizational Maintenance Manual, CH-54A Helicopter," dated July 1967; revised January 1969.
 - (2) Sikorsky Aircraft "Maintenance Manual (Part I of II), Sikorsky Models S-64E Helicopter," dated December 1968.
 - (3) Sikorsky Aircraft "Maintenance Manual (Part I of II) (Appendix VI), Sikorsky Model S-64E Helicopter," dated December 1968.
 - (4) Department of the Army Technical Manual No. TM 55-1520-217-20 PMD, "CH-54A Helicopter, Preventive Maintenance Daily Inspection Checklist," dated August 1968; revised October 1968.
 - (5) Department of the Army Technical Manual No. TM 55-1520-217-20 PMI, "CH-54A Helicopter, Preventive Maintenance Intermediate Inspection Checklist," dated August 1968; revised November 1968.
 - (6) Department of the Army Technical Manual-No. TM 55-1520-127-20 PMP, "CH-54A Helicopter, Preventive Maintenance Periodic Inspection Checklist," dated August 1968; revised October 1968.
 - (7) Sikorsky Aircraft "S-64E Maintenance Manual, Commercial Aircraft Supplement to TM 55-1520-217-20 PMD, TM 55-1520-20 PMI, TM 55-1520-217-20 PMP, Preventive Maintenance Checklist, S-64E Helicopter."
 - (8) Department of the Army Technical Manual No. TM 55-1520-217-35, "DS, GS, and Depot Maintenance Manual, CH-54 Helicopter," dated July 1967; revised October 1968.
 - (9) Sikorsky Aircraft "Maintenance Manual (Part II of II), Sikorsky Model S-64E Helicopter," dated December 1968.

- (10) Department of the Army Technical Bulletin No. TM 11-1520-217-20, "Organizational Maintenance Manual, Electronic Equipment Configuration, Army Model CH-54A Helicopter," dated March 1967; revised November 1968.
- (11) Department of the Army Technical Manual No. TM 11-1520-217-35, "DS, GS, and Depot Maintenance Manual, CH-54A Helicopter," dated March 1967.

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