DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

H1CE Revision 41 **ENSTROM** F-28 F-28A 280 F-28C F-28C-2 F-28C-2R 280C F-28F F-28F-R 280F 280FX TH-28 480 480B July 11, 2019

TYPE CERTIFICATE DATA SHEET NO. H1CE

This data sheet, which is part of Type Certificate No. H1CE, prescribes 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: The Enstrom Helicopter Corporation

2209 22nd Street

Menominee, Michigan 49858-3515

I - Model F-28 Helicopter, 3 PCLH (Normal Category), Approved April 15, 1965

Engine Lycoming HIO-360-C1A or HIO-360-C1B

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2700 rpm (195 hp.)

RPM limits Engine (Power On) 2700 maximum, 2500 minimum

Rotor (Power Off) 385 maximum, 315 minimum

Airspeed limits (IAS) Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
							100				
Alt.	-20	0	20	40	60	80	100				
SL	100	100	100	100	100	96	91				
2000	100	100	100	97	91	86	81				
4000	100	99	92	86	81	77	73				
6000	93	87	82	77	73	69	66				
8000	83	78	73	69	66	63	60				
10000	74	70	66	63	60						

Altitude limits Avoid operational areas as shown in Approved Rotorcraft Flight Manual.

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Rev. No.	41	36	36	36	36	36	36	32	36	40	40	40	40	40	40	40	37	37	37	40
Page No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Rev. No.	39	31	24	34	40	40	37	36	38	40	27	30	35	33	37	32	39	40	36	41
Page No.	41																			
Rev. No.	40																			

C.G. Limits Longitudinal (+92.0) to (+98.0)

Maximum weight 1950 lbs.

No. of seats 3 (+62.0)

Maximum baggage 60 lb. (+135.0)

Fuel capacity 30 gal. (+98); See NOTE 1 for data on unusable fuel.

Oil capacity 2 gal. (+96.0); See NOTE 1 for data on undrainable oil.

Rotor blade and

control movements For rigging information, refer to Maintenance Manual.

Stabilizer setting Fixed, non-adjustable.

Serial Nos. eligible 3 thru 14 (See NOTE 29 for ineligible serial numbers table)

II - Model F-28A Helicopter, 3 PCLH (Normal Category), Approved May 28, 1968

Engine Lycoming H1O-360-C1A or HIO-360-C1B

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum, 313 minimum

Airspeed limits (IAS) Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	112	112	112	112	112	104	98				
2000	112	112	112	105	98	92	87				
4000	112	106	99	92	87	83	80				
6000	100	93	88	83	79	75	72				
8000	89	84	79	75	71	68					
10000	80	75	71	68	65						
12000	72	68	65	62							

Altitude limits Maximum operating: 10,000 feet density altitude

Maximum for takeoff and landing: 7,000 feet density altitude

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal (+92.0) to (+98.0)

Maximum weight 2150 lb.

No. of seats 3 (+62.0)

Maximum baggage 60 lb. (+135.0)

Fuel capacity 30 gal. (+98) Std.; 42 gal. (+96.7) Opt.; See NOTE 1 for data on unusable fuel.

Oil capacity 2 gal. (+96.0); See NOTE 1 for data on undrainable oil.

Page 3 of 41 H1CE

Rotor blade and

control movements For rigging information, refer to Maintenance Manual.

Stabilizer setting Fixed, 4° TE up relative to WL.

Serial Nos. eligible 15 and subsequent (See NOTE 29 for ineligible serial numbers table)

III - Model 280 Helicopter, 3 PCLH (Normal Category), Approved September 13, 1974

Engine Lycoming HIO-360-C1A or HIO-360-C1B

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum, 313 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	112	112	112	112	112	104	98				
2000	112	112	112	105	98	92	87				
4000	112	106	99	92	87	83	80				
6000	100	93	88	83	79	75	72				
8000	89	84	79	75	71	68					
10000	80	75	71	68	65						
12000	72	68	65	62							

Altitude limits Maximum operating: 10,000 feet density altitude

Maximum for takeoff and landing: 7,000 feet density altitude

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal: (+92.0) to (+98.0)

Lateral: 1250 in-lbs. left or right

Maximum weight 2150 lb.

No. of seats 3 (+62.0)

Maximum baggage 60 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 2 gal. (+96.0); See NOTE 1 for data on undrainable oil.

Rotor blade and

control movements For rigging information, refer to Maintenance Manual.

Stabilizer setting Fixed, 6° TE up relative to WL.

Serial Nos. eligible 1002 and subsequent (See NOTE 29 for ineligible serial numbers table)

IV - Model F-28C Helicopter, 3 PCLH (Normal Category), Approved December 8, 1975 (See NOTE 4)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD Engine.)

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS) Never Exceed Speeds - Miles Per Hour

Press.	Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100			
SL	112	112	112	112	112	104	98			
2000	112	112	112	104	99	92	87			
4000	112	106	99	92	88	83	80			
6000	100	95	88	83	79	75	72			
8000	89	84	79	75	72	69	65			
10000	81	76	72	69	65	62				
12000	73	69	66	63	58					

Altitude limits Maximum operating 12,000 ft. density altitude.

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal: (+92) to (+94.7) for weights between 2000 and 2200 lbs.

(+92) to (+98.0) for weights below 2000 lbs.

Lateral: Maximum approved asymmetric moment +3700 to -1700 in-lbs.

at 2200 lbs. (See approved Flight Manual for schedule with

weight.)

Maximum weight 2200 lb.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 4° TE up relative to WL.

Serial Nos. eligible 304, 331 and subsequent (See NOTE 29 for ineligible serial numbers table)

Page 5 of 41 H1CE

V - Model 280C Helicopter, 3 PCLH (Normal Category), Approved December 8, 1975 (See NOTE 4)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD engine.)

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	117	117	117	117	117	109	102				
2000	117	117	117	109	103	97	92				
4000	117	111	103	97	93	88	85				
6000	105	100	93	88	84	80	77				
8000	94	89	84	80	77	74	70				
10000	86	81	77	74	70	67					
12000	78	74	71	68	63						

Altitude limits Maximum operating 12,000 ft. density altitude.

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal: (+92) to (+94.7) for weights between 2000 and 2200 lbs.

(+92) to (+98.0) for weights below 2000 lbs.

Lateral: Maximum approved asymmetric moment +3700 to -1700 in-lbs.

at 2200 lbs. (See approved Flight Manual for schedule with

weight.)

Maximum weight 2200 lb.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 6° TE up relative to WL.

Serial Nos. eligible 1020, 1023 and subsequent (See NOTE 29 for ineligible serial numbers table)

<u>VI - Model 280C Helicopter</u>, 3 PCLH (Normal Category), Modified per NOTE 5, Approved September 23, 1977 (This version of the Model 280C differs from the basic Model 280C in that the installation of items listed on Enstrom Specification Drawing Number 28-100005 permits operation at a gross weight of 2350 lbs.)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD engine).

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum; 2750 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	117	117	117	117	117	117	117				
2000	117	117	117	117	117	114	109				
4000	117	117	117	115	110	105	96				
6000	117	116	111	105	96	87	78				
8000	112	107	96	87	78	69	60				
10000	99	88	78	69	59						
12000	81	70	60								

Altitude limits Maximum operating 12,000 ft. density altitude.

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal: (+92.0) to (+94.6) at 2350 lbs.

(+92.0) to (+96.7) at 2200 lbs.

(+92.0) to (+100.0) at 2000 lbs. & below See Flight Manual for schedule with weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

at 2350 lbs. See Flight Manual for schedule with weight.

Maximum weight 2350 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 6° TE up relative to WL.

Serial Nos. eligible All approved 280C Models (See NOTE 29 for ineligible serial numbers table)

Page 7 of 41 H1CE

<u>VII - Model F-28C Helicopter, 3 PCLH (Normal Category), Modified per NOTE 5, Approved April 21, 1978 (See NOTES 12 & 14)</u>

(This version of the Model F-28C differs from the basic Model F-28C in that installation of items listed on Enstrom Specification Drawing Number 28-100005 permits operation at a gross weight of 2350 lbs.)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD Engine.)

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS) Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	112	112	112	112	112	112	112				
2000	112	112	112	112	112	109	104				
4000	112	112	112	110	105	100	91				
6000	112	111	106	101	91	82	73				
8000	107	102	91	82	73	64	55				
10000	94	83	73	64	54						
12000	76	65	55								

Altitude limits Maximum operating 12,000 ft. density altitude.

Refer to Flight Manual for height-velocity diagram.

C.G. limits Longitudinal: (+92.0) to (+94.6) at 2350 lbs.

(+92.0) to (+96.7) at 2200 lbs.

(+92.0) to (+100.0) at 2000 lbs. & below See Flight Manual for schedule with weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

at 2350 lbs. See Flight Manual for schedule with weight.

Maximum weight 2350 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil. (engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 4° TE up relative to WL.

Serial Nos. eligible All approved F-28C Models (See NOTE 29 for ineligible serial numbers table)

VIII - Model F-28C/280C Helicopter, 3 PCLH (Restricted Category), Modified per NOTE 6, Approved May 5, 1978, or NOTE 8, Approved July 28, 1982 (See NOTES 12 & 14)

(This version is for agricultural operation or external load operation up to 2600 lbs. GW.)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD Engine.)

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.								
Alt.	-20	0	20	40	60	80	100			
SL	85	85	85	85	85	85	85			
1000	85	85	85	85	85	83	82			
2000	85	85	85	84	83	82	81			
3000	85	85	84	83	82	81	80			
4000	85	84	83	82	81	80				
5000	84	83	82	81	80					
6000	83	82	81	80						

Altitude limits 6000 ft. density altitude

C.G. limits Longitudinal: (+96.5) to (+98.0) at 2600 lbs.

(+92.9) to (+99.0) at 2000 lbs.

(Straight line variation between data points.)

Lateral: -3180 to -1855 in.-lbs. above 2350 lbs.

Maximum weight 2600 lbs.

Maximum weight per

dispersal tank 350 lbs.

Maximum baggage 108 lbs. (+135.0)

Fuel 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting F-28C: Fixed, 4° TE up relative to WL.

280C: Fixed, 6° TE up relative to WL.

Serial Nos. eligible All approved F-28C & 280C Models (See NOTE 29 for ineligible serial

numbers table)

Page 9 of 41 H1CE

IX - Model F-28C/280C Helicopter, 3 PCLH (Normal Category), Modified per NOTE 7, Approved June 20, 1978 (See NOTES 12 & 14)

(This version is for operation with inflatable floats.)

Engine Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or

Rotomaster (Hartzell Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13

regarding -E1BD Engine.)

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 2900 rpm, 36.5 in. Hg manifold pressure (205 hp.)

RPM limits Engine (Power On) 2900 maximum, 2750 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	100	100	100	100	100	100	100				
2000	100	100	100	100	100	97	93				
4000	100	100	100	97	93	88	82				
6000	100	98	94	88	82	75	68				
8000	95	90	82	75	68	62	55				
10000	84	77	69	62	55						
12000	70	63	55								

Altitude limits 12,000 ft. density altitude.

C.G. limits Longitudinal: (+92.0) to (+94.6) at 2350 lbs.

(+92.0) to (+98.5) at 2070 lbs.

See Flight Manual for schedule with weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

at 2350 lbs. See Flight Manual for schedule with weight.

Maximum weight 2350 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil. (engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting F-28C: Fixed, 6° TE up relative to WL, per Dwgs 28-17326 and 28-20000.

280C: Fixed, 6° TE up relative to WL, Trim tab per Dwgs 28-17326 and

28-200003.

Serial Nos. eligible All approved F-28C & 280C Models (See NOTE 29 for ineligible serial

numbers table)

X - Model F-28F/280F Helicopter, 3 PCLH (Normal Category), Approved December 31, 1980 (See NOTE 14, 35 thru 38, 48, 59, 60, 64, 65, 71, and 72)

(Models F-28F/280F are similar to F-28C/280C except for increased horsepower engine, improved turbocharger and the addition of throttle correlator.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts Number 2524858-A, -1,

-2, -3, -4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum; 2900 minimum

Rotor (Power Off) 385 maximum; 332 minimum

F28F Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Ī	Press.		Outside Air Temperature, °F.									
	Alt.	-20	0	20	40	60	80	100				
Ī	SL	112	112	112	112	112	112	112				
	2000	112	112	112	112	112	109	105				
	4000	112	112	112	110	105	100	91				
	6000	112	111	106	100	90	81	73				
	8000	107	102	92	82	73	64	55				
	10000	94	84	74	65	55						
	12000	76	65	56								

280F Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outside Air Temperature, °F.									
Alt.	-20	0	20	40	60	80	100				
SL	117	117	117	117	117	117	117				
2000	117	117	117	117	117	114	109				
4000	117	117	117	115	110	105	96				
6000	117	116	111	105	96	87	78				
8000	112	107	96	87	78	69	60				
10000	99	88	78	69	59						
12000	81	70	60								

Altitude limits 12,000 ft. density altitude.

C.G. limits Longitudinal: (+92.0) to (+94.6) at 2350 lbs.

(+92.0) to (+100.0) at 2000 lbs.

See Flight Manual for schedule with weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

at 2350 lbs. See Flight Manual for schedule with weight.

Maximum weight 2350 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Page 11 of 41 H1CE

Stabilizer Setting Fixed, 6° TE up relative to WL.

Serial Nos. eligible F-28F Models: 506, 507, and 509 thru 743 (See NOTE 29 for ineligible serial

numbers table)

280F Models: 1212, 1500 and subsequent (See NOTE 29 for ineligible serial

numbers table)

XI - Model F-28F/280F Helicopter, 3 PCLH (Restricted Category), Modified per NOTE 6, Approved December 31, 1980, or NOTE 8, Approved December 31, 1980 (See NOTE 14, 35 thru 38, 48, 59, 60, 64, 65, 71, and 72) (This version is for agricultural operation or external load operation up to 2600 lbs. GW.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Part Number 2524858-A or -1,

-2, -3, -4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum, 2900 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits (IAS)

Never Exceed Speeds - Miles Per Hour

Press.		Outsic	le Air'	Гетре	rature,	°F.	
Alt.	-20	0	20	40	60	80	100
SL	85	85	85	85	85	85	85
1000	85	85	85	85	85	83	82
2000	85	85	85	84	83	82	81
3000	85	85	84	83	82	81	80
4000	85	84	83	82	81	80	69
5000	84	83	82	81	80	68	57
6000	83	82	81	80	68	60	
7000	82	81	79	68	60		
8000	81	80	69	61			
9000	80	72	59				

Altitude limits 9,000 ft. density altitude.

C.G. limits Longitudinal: (+96.5) to (+98.0) at 2600 lbs.

(+92.0) to (+98.3) at 2350 lbs. (+92.0) to (+98.6) at 2000 lbs.

(Straight line variation between data points.)

Lateral: -1620 to -3250 in.-1bs. above 2350 lbs.

Maximum weight 2600 lbs.

Maximum weight per

dispersal tank 350 lbs.

Maximum baggage 108 lb. (+135.0)

Fuel 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil. (engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 6° TE up relative to WL.

Serial Nos. eligible All approved F-28F & 280F Models (See NOTE 29 for ineligible serial numbers

table)

XII - Model F-28F/280F Helicopter, 3 PCLH (Normal Category), Modified per NOTE 7, Approved December 31, 1980 (See NOTE 14 and 35 thru 38, 48, 59, 60, 64, 65, 71, and 72)

(This version is for operation with inflatable floats.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1 Part Number 2524858-A or -1,

-2, -3, -4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum, 2900 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits Never exceed 100 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual Supplement No. 2 for V_{NE} reductions with altitude and gross weight and for Restricted Category operations between 2350 lbs. and 2600 lbs.

Altitude limits 12,000 ft. density altitude at or below 2350 lbs. gross weight. See

FAA-approved Rotorcraft Flight Manual Supplement No. 2 for altitude reductions with gross weight and for Restricted Category operations

between 2350 lbs. and 2600 lbs.

C.G. limits Longitudinal: Maximum Fwd. C.G. is +92.0 in. at all G.W. up to 2350 lbs.

Maximum Aft C.G. is +98.5 in.at G.W. up to 2070 lbs. and

decreasing linearly to +94.6 in. at 2350 lbs.

See FAA-approved Rotorcraft Flight Manual Supplement No. 2 for schedule with gross weight and for Restricted Category

operations between 2350 lbs. and 2600 lbs.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

above 2025 lbs. See FAA-approved Rotorcraft Flight Manual Supplement No. 2 for schedule with gross weight and for Restricted Category operations between 2350 lbs. and 2600 lbs.

Maximum weight 2350 lbs. - Normal Category, 2600 lbs. - Restricted Category

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Page 13 of 41 H1CE

Stabilizer Setting F-28F: Fixed, 6° TE up relative to WL.

280F: Fixed, 6° TE up relative to WL, Trim tab per Dwg 28-17326.

Serial Nos. eligible All approved F-28F & 280F Models (See NOTE 29 for ineligible serial numbers

table)

XIII - Model F-28F/280F Helicopter, 3PCLH (Normal Category), Originally Manufactured in Compliance with or Modified Per NOTE 16, Approved July 1, 1984 (See NOTE 14, 35 thru 38, 48, 59, 60, 64, 65, 71, and 72)

(This version of the model F-28F/280F differs from the basic model F-28F/280F in that the installation of the items described in Enstrom Specification Drawing 28-100015 permits Normal Category operation at gross weights up to 2600 lbs. There are four gross weight/center of gravity envelopes for this version, each of which corresponds to a different V_{NE} altitude envelope.)

Engine Lycoming HIO-360-F1AD with Rajay 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1, Parts Number 2524858-A, -1,

-2, -3, -4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum; 2900 minimum

Rotor (Power Off) 385 maximum; 332 minimum

F-28F Airspeed limits Never exceed 112 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual

for V_{NE} reductions with altitude and gross weight.

280F Airspeed limits Never exceed 117 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual

for V_{NE} reductions with altitude and gross weight.

Altitude limits 12,000 ft. density altitude at or below 2350 lbs. gross weight. See

FAA-approved Rotorcraft Flight Manual for altitude reductions with

gross weight.

C.G. limits Longitudinal: Maximum Forward C.G. is +92.0 in. at all G.W. up to 2350 lbs.

decreasing linearly to +96.3 in. at 2600 lbs.

Maximum Aft C.G. is +100.0 in. at all G.W. up to 2000 lbs.

decreasing linearly to +98.0 in. at 2600 lbs.

See FAA-approved Rotorcraft Flight Manual for schedule with

gross weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

above 2050 lbs. See FAA-approved Rotorcraft Flight Manual

for schedule with gross weight.

Maximum weight 2600 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity 10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting F-28F: S/N 506, 507, and 509 thru 743

Fixed, 6° TE up relative to WL.

S/N 744 and subsequent

Fixed, 3°30' TE up relative to WL. 280F: Fixed, 6° TE up relative to WL.

Serial Nos. Eligible All approved F-28F & 280F Models (See NOTE 29 for ineligible serial numbers

table)

XIV - Model F-28F/280F Helicopter, 3 PCLH (Normal Category), Originally Manufactured in Compliance with or Modified per NOTES 7 and 16, Approved July 1, 1984 (See NOTE 14, 35 thru 38, 48, 59, 60, 64, 65, 71, and 72) (This version of the model F-28F/280F differs from the basic model F-28F/280F in that the installation of the items described in Enstrom Drawing 28-17326 and Enstrom Specification Drawing 28-100015 permits operation with floats up to 2600 pounds gross weight in the normal category. There are three gross weight/center of gravity envelopes for this version, each of which corresponds to a different $V_{\rm NE}$ /altitude envelope.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1 Parts List 2524858-A, -1, -2, -3,

-4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum; 2900 minimum

Rotor (Power Off) 385 maximum; 332 minimum

Airspeed limits Never exceed 100 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual Supplement No. 2 for V_{NE} reductions with altitude and gross weight.

Altitude limits 12,000 ft. density altitude at or below 2350 lbs. gross weight. See

FAA-approved Rotorcraft Flight Manual Supplement No. 2 for altitude

reductions with gross weight.

C.G. limits Longitudinal: Maximum Fwd. C.G. is +92.0 in. at all G.W. up to 2350 lbs. and

decreasing linearly to +96.5 in. at 2600 lbs.

Maximum Aft C.G. is +98.5 in. at all G.W. up to 2070 lbs. and

decreasing linearly to +98.0 in. at 2600 lbs.

See FAA-approved Rotorcraft Flight Manual Supplement No. 2

for schedule with gross weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

above 2025 lbs. See FAA-approved Rotorcraft Flight Manual

for schedule with gross weight.

Maximum weight 2600 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Page 15 of 41 H1CE

Oil capacity (engine sump)

10 qts. (+96.0); See NOTE 1 for undrainable oil.

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting F-28F: S/N 506, 507, and 509 thru 743.

Fixed, 6° TE up relative to WL. S/N 744 and subsequent

Fixed, 3°30' TE up relative to WL.

280F: Fixed, 6° TE up relative to WL, Trim tab per Dwg 28-17326.

Serial Nos. Eligible All approved F-28F & 280F Models (See NOTE 29 for ineligible serial numbers

table)

XV – Model 280FX Helicopter, 3PCLH (Normal Category), Approved January 14, 1985 (See NOTES 6, 8, 35 thru 38, 48, 59, 60, 64, 65, 71, and 72)

(This model 280FX differs from the basic model 280F in that the helicopter is equipped with a redesigned inlet airscoop, tail rotor driveshaft fairings, a redesigned and relocated horizontal stabilizer equipped with vertical endplates, a cockpit annunciator panel, and a graphic engine monitor. This model is approved for normal category operations at 2600 lbs. There are four gross weight/center of gravity envelopes for this version, each of which corresponds to a different V_{NE} /altitude envelope.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1 Parts List 2524858-A, -1, -2, -3,

-4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum; 2900 minimum

Rotor (Power Off) 385 maximum; 334 minimum

Airspeed limits Never exceed 117 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual

for V_{NE} reductions with altitude and gross weight.

Altitude limits 12,000 ft. density altitude at or below 2350 lbs. gross weight. See

FAA-approved Rotorcraft Flight Manual for altitude reductions with

gross weight.

C.G. limits Longitudinal: Maximum Fwd. C.G. is +92.0 in. at all G.W. up to 2350 lbs. and

decreasing linearly to +96.3 in. at 2600 lbs.

Maximum Aft C.G. is +100.0 in. at all G.W. up to 2000 lbs. and

decreasing linearly to +98.0 in. at 2600 lbs.

See FAA-approved Rotorcraft Flight Manual for schedule with

gross weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

above 2025 lbs. See FAA-approved Rotorcraft Flight Manual

for schedule with gross weight.

Maximum weight 2600 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lbs. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Oil capacity (engine sump)

10 qts. (+96.0); See NOTE 1 for data on undrainable oil.

Control system rigging Refer to Maintenance Manual

Stabilizer setting Fixed, 3°30' TE up relative to WL.

Serial Nos. eligible 2001 and subsequent (See NOTE 29 for ineligible serial numbers table)

XVI – Model 280FX Helicopter 3PCLH (Normal Category), Originally Manufactured in Compliance with or Modified per NOTE 7, Approved July 12, 1985 (See NOTES 35 thru 38, 48, 59, 60, 64, 65, 71, and 72)

(This version of the model 280FX differs from the basic model 280FX in that installation of the items described in Enstrom Drawing 28-17326, 28-20119, and Enstrom Specification Drawing 28-100015 permits operation with floats up to 2600 pounds gross weight in the normal category. There are three gross weight/center of gravity envelopes for this version, each of which corresponds to a different V_{NE} /altitude envelope.)

Engine Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster (Hartzell

Engine Technologies) Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix (Precision Airmotive LLC) RSA-5AB1 Parts Number 2524858-A, -1,

-2, -3, -4, or -5 fuel injector.

Fuel 100/130 min. or 100LL min. grade aviation gasoline.

Engine limits For all operations: 3050 rpm, 39.0 in. Hg manifold pressure (225 hp.)

RPM limits Engine (Power On) 3050 maximum; 2900 minimum

Rotor (Power Off) 385 maximum; 334 minimum

Airspeed limits Never exceed 100 mph IAS for standard sea level day at or below

2350 lbs. gross weight. See FAA-approved Rotorcraft Flight Manual Supplement No. 2 for V_{NE} reductions with altitude and gross weight.

Altitude limits 12,000 ft. density altitude at or below 2350 lbs. gross weight. See

FAA-approved Rotorcraft Flight Manual Supplement No. 2 for altitude

reductions with gross weight.

C.G. limits Longitudinal: Maximum Fwd. C.G. is +92.0 in. at all G.W. up to 2350 lbs.

and decreasing linearly to +96.5 in. at 2600 lbs.

Maximum Aft C.G. is +98.5 in. at all G.W. up to at 2070 lbs.

and decreasing linearly to +98.0 in. at 2600 lbs.

See FAA-approved Rotorcraft Flight Manual Supplement No. 2

for schedule with gross weight.

Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs.

above 2025 lbs. See FAA-approved Rotorcraft Flight Manual

for schedule with gross weight.

Maximum weight 2600 lbs.

No. of seats 3 (+62.0)

Maximum baggage 108 lb. (+135.0)

Fuel capacity 42 gal. (+96.7); See NOTE 1 for data on unusable fuel.

Page 17 of 41 H1CE

Oil capacity 10 qts. (+96.0); See NOTE 1 for undrainable oil.

(engine sump)

Control System Rigging Refer to Maintenance Manual.

Stabilizer Setting Fixed, 3°30' TE up relative to WL.

Serial Nos. eligible 2001 and subsequent (See NOTE 29 for ineligible serial numbers table)

XVII - Model TH-28 Helicopter, 3PCLH (Normal Category), Approved September 11, 1992 (See NOTE 20) (The TH-28 is a derivative of the 280FX with a turbine engine, a larger cabin, a taller landing gear with aerodynamic fairings, a larger diameter tail rotor, and larger horizontal and vertical stabilizers.)

Engine Allison 250-C20W

Fuel Aviation Turbine Fuels ASTM D1655, Jet A or A1; ASTM D6615, Jet B; MIL-

T-5624, JP-4 or JP-5; or MIL-DTL-83133, Grade JP-8.

Engine limits Torque Pressure Output Shaft Speed Turbine Outlet Temp. Gas Gen Speed
Takeoff (5 min.) 67 psi (285 HP) 103% (6196 RPM) 810°C 105% (53,519 RPM)
Max. Continuous 60 psi (256 HP) 103% (6196 RPM) 737°C 105% (53,519 RPM)

Rotor limits Power Off Power On

Maximum 385 RPM Maximum 365 RPM Minimum 334 RPM Minimum 357 RPM

Airspeed limits Never exceed 140 mph (122 knots) IAS for standard sea level day at

maximum gross weight. See FAA-approved Rotorcraft Flight Manual

for V_{NE} with altitude.

Altitude limits 13,000 feet max. height density altitude. For reduction in take-off

and landing altitude with gross weight, see FAA-approved

Rotorcraft Flight Manual.

C.G. limits Longitudinal: Maximum Forward C.G. is +134.0 in. at all G.W. up to 2200 lbs.

decreasing linearly to +136.35 in. at 2850 lbs.

Maximum Aft C.G. is +143.0 in. at all G.W. up to 2500 lbs.

decreasing linearly to +141.5 in. at 2850 lbs. Maximum asymmetric moment \pm 7500 in-lbs.

Maximum Weight 2850 lbs.

Minimum crew One (1) at (+99.1 in.) station.

Lateral:

Passengers 1 at (+99.1), and 1 at (+113.1).

Maximum baggage Not applicable.

Fuel Capacity 90.0 gallons Total at (+144.6 in.); See NOTE 1 for data on unusable fuel.

Oil Capacity 12.0 pints (12.6 lbs.) at (+153.0 in.).

Control System Rigging Refer to Maintenance Manual.

Stabilizer setting Fixed, 1.5° TE down relative to WL.

Serial Nos. eligible S/N 3004 and subsequent (See NOTE 29 for ineligible serial numbers table)

XVIII -Model 480 Helicopter, 5PLCH (Normal Category), Approved November 10, 1993 (See NOTES 19 thru 24, 26, 27, 44, 51, and 63)

(The 480 is a derivative of the TH-28 having five-place seating, a smaller instrument panel, removable right-seat controls, a footrest for the front right seat, a baggage box, and an optional aft battery location.)

Engine Allison 250-C20W

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Fuel Aviation Turbine Fuels ASTM D1655, Jet A or A1; ASTM D6615, Jet B; MIL-

T-5624, JP-4 or JP-5; or MIL-DTL-83133, Grade JP-8.

 Engine limits
 Torque Pressure
 Output Shaft Speed
 Turbine Outlet Temp.
 Gas Gen Speed

 Takeoff (5 min.)
 67 psi (285 HP)
 103% (6196 RPM)
 810°C
 105% (53,519 RPM)

 Max. Continuous
 60 psi (256 HP)
 103% (6196 RPM)
 737°C
 105% (53,519 RPM)

Rotor limits Power Off Power On

Maximum 385 RPM Maximum 365 RPM Minimum 334 RPM Minimum 357 RPM

Airspeed limits Never exceed 140 mph (122 knots) IAS for standard sea level day at

maximum take-off gross weight. See FAA-approved Rotorcraft Flight

Manual for V_{NE} reductions with altitude.

Altitude limits 13,000 feet max. height density altitude. For reduction in take-off and landing

altitude with gross weight, See FAA-approved Rotorcraft Flight Manual.

C.G. limits Longitudinal: Maximum Forward C.G. is +134.0 in. at all G.W. up to 2200 lbs.

decreasing linearly to +136.35 in. at 2850 lbs.

Maximum Aft C.G. is +143.0 in. at all G.W. up to 2500 lbs.

decreasing linearly to +141.5 in. at 2850 lbs. Maximum asymmetric moment \pm 7500 in-lbs.

Maximum Weight 2850 lbs.

Minimum crew One (1) at (+99.1 in.) station.

Lateral:

Passengers 1 at (+89.0 in.), and 3 at (+113.1 in.); or 1 at (+99.1 in.) and 1 at (+113.1 in.).

Maximum baggage 150 lbs. at (+192.0 in.)

Fuel Capacity 90.0 gallons Total at (+144.6 in.); See NOTE 1 for data on unusable fuel.

Oil Capacity 12.0 pints (12.6 lbs.) at (+153.0 in.).

Control System Rigging Refer to Maintenance Manual.

Stabilizer setting Fixed, 1.5° TE down relative to WL.

Serial Nos. eligible S/N 5002 thru 5016 (See NOTE 19 for 5-place seating retrofit eligibility and

NOTE 29 for ineligible serial numbers table)

Page 19 of 41 H1CE

XIX - Model 480 Helicopter, 5PLCH (Normal Category), Originally Manufactured in Compliance with or Modified per NOTE 25, Approved August 12, 1996 (See NOTES 19 thru 24, 26, 27, 44, 51, and 63)

(This version of the model 480 differs from the basic model 480 in that installation of the items listed in Enstrom Drawing 4230002 permits operation with increased main rotor rpm and torque limits.)

Engine Allison 250-C20W

Fuel Aviation Turbine Fuels ASTM D1655, Jet A or A1; ASTM D6615, Jet B; MIL-

T-5624, JP-4 or JP-5; or MIL-DTL-83133, Grade JP-8.

Engine limitsTorque PressureOutput Shaft SpeedTurbine Outlet Temp.Gas Gen SpeedTakeoff (5 min.)68 psi (289 HP)103% (6196 RPM)810°C105% (53,519 RPM)Max. Continuous63 psi (268 HP)103% (6196 RPM)737°C105% (53,519 RPM)

Rotor limits Power Off Power On

Maximum 385 RPM Maximum 372 RPM Minimum 334 RPM Minimum 365 RPM

Airspeed limits Never exceed 144 mph (125 knots) IAS for standard sea level day at

maximum take-off gross weight. See FAA-approved Rotorcraft Flight

Manual Supplement No. 6 for V_{NE} reductions with altitude.

Altitude limits 13,000 feet max. height density altitude. For reduction in take-off and landing

altitude with gross weight, See FAA-approved Rotorcraft Flight Manual.

C.G. limits Longitudinal: Maximum Forward C.G. is +134.0 in. at all G.W. up to 2200 lbs.

decreasing linearly to +136.35 in. at 2850 lbs.

Maximum Aft C.G. is +143.0 in. at all G.W. up to 2500 lbs.

decreasing linearly to +141.5 in. at 2850 lbs. Maximum asymmetric moment \pm 7500 in-lbs.

Lateral: Maximum asymmetric moment \pm 7500 in

Maximum Weight 2850 lbs.

Minimum crew One (1) at (+99.1 in.) station.

Passengers 1 at (+89.0 in.), and 3 at (+113.1 in.); or 1 at (+99.1 in.) and 1 at (+113.1 in.).

Maximum baggage 150 lbs. at (+192.0 in.)

Fuel Capacity 90.0 gallons Total at (+144.6 in.); See NOTE 1 for data on unusable fuel.

Oil Capacity 12.0 pints (12.6 lbs.) at (+153.0 in.).

Control System Rigging Refer to Maintenance Manual.

Stabilizer setting Fixed, 1.5° TE down relative to WL.

Serial Nos. eligible S/N 5002 thru 5042, and 5044 (See NOTE 19 for 5-place seating retrofit

eligibility, NOTE 28 for conversion kit eligibility & NOTE 29 for ineligible

serial numbers table)

XX - Model 480B Helicopter, 5PLCH (Normal Category), Approved February 8, 2001 (See NOTES 20 thru 24, 26, 27, 30 thru 34, 39 thru 47, 50 thru 58, 61 thru 63, and 66 thru 70)

(The 480B is derivative of the 480 having increased gross weight and power limits.)

Engine Rolls-Royce 250-C20W

Fuel Aviation Turbine Fuels ASTM D1655, Jet A or A1; ASTM D6615, Jet B; MIL-

T-5624, JP-4 or JP-5; or MIL-DTL-83133, Grade JP-8.

 Engine limits
 Torque Pressure
 Output Shaft Speed
 Turbine Outlet Temp.
 Gas Gen Speed

 Takeoff (5 min.)
 72 psi (305 HP)
 103% (6196 RPM)
 810°C
 105% (53,519 RPM)

 Max. Continuous
 65 psi (276 HP)
 103% (6196 RPM)
 737°C
 105% (53,519 RPM)

Rotor limits <u>Power Off</u> <u>Power On</u>

Maximum 385 RPM Maximum 372 RPM Minimum 334 RPM Minimum 365 RPM

Airspeed limits Never exceed 144 mph (124 knots) IAS for standard sea level day at

maximum take-off gross weight. See FAA-approved Rotorcraft Flight

Manual for V_{NE} changes with altitude and gross weight.

Altitude limits 10,000 feet max. height density altitude at 3,000 lbs. gross weight. 13,000 feet

max. height density altitude at and below 2,850 lbs. gross weight. For reduction in take-off and landing altitude with gross weight, See FAA-approved Rotorcraft

Flight Manual.

C.G. limits Longitudinal: Maximum Forward C.G. is +134.0 in. at all G.W. up to 2200 lbs.

decreasing linearly to +136.9 in. at 3,000 lbs.

Maximum Aft C.G. is +143.0 in. at all G.W. up to 2500 lbs.

decreasing linearly to +140.95 in. at 3,000 lbs.

Lateral: Maximum asymmetric moment \pm 7500 in-lbs.

Maximum Weight 3,000 lbs.

Minimum crew One (1) at (+99.1 in.) station.

Passengers 1 at (+89.0 in.), and 3 at (+113.1 in.); or 1 at (+99.1 in.) and 1 at (+113.1 in.);

or 1 at (+101.0 in.) and 2 at (+113.1 in.) (See NOTE 34).

Maximum baggage 150 lbs. at (+192.0 in.)

Fuel Capacity 90.0 gallons Total at (+144.6 in.); See NOTE 1 for data on unusable fuel.

Oil Capacity 12.0 pints (12.6 lbs.) at (+153.0 in.).

Control System Rigging Refer to Maintenance Manual.

Stabilizer setting Fixed, 1.5° TE down relative to WL.

Serial Nos. eligible Enstrom Helicopter Corporation production approval: S/N 5043, 5045 and

subsequent. Chongqing General Aircraft Industry Co., Ltd. (CGAI) production approval: CE5001 and subsequent. (See NOTE 28 for conversion kit eligibility

and NOTE 29 for ineligible serial numbers table.)

Page 21 of 41 H1CE

Data Pertinent to All Models

Datum

Piston-powered Models - 100 inches forward of the center of the main rotor hub and the centerline of the rotorcraft.

Turbine-powered Models - 143.3 inches forward of main rotor hub centerline.

Leveling Means

Lower longeron of pylon section.

Certification Basis

Piston-powered Models - Part 6 of the Civil Air Regulation effective December 20, 1956, as amended by 6-1 thru 6-5; and 14 CFR 21.25 (a) (1) effective February 1, 1965 for special purpose of agricultural operation per 14 CFR 21.25(b). See NOTE 6 for portions of Part 6 of the Civil Air Regulations considered inappropriate for restricted category operations. In addition, the F-28F, 280F, and 280FX Models have demonstrated compliance with 14 CFR 36, amendment 20 (Appendix J), effective September 11, 1992.

Application for Type Certificate dated July 26, 1962. Type Certification No. H1CE issued April 15, 1965.

Turbine-powered Models - Federal Aviation Regulation 14 CFR Part 27, effective February 1, 1965, as amended by 27-1 thru 27-23, effective October 3, 1988; 14 CFR 27.337, 27.351, 27.395, 27.401, 27.501, 27.613, 27.629, 27.663, 27.685, 27.727, 27.783, 27.861, and 27.865 (a) as amended by 27-26, effective April 5, 1990; 14 CFR 27.775 as amended by 27-27, effective October 22, 1990; 14 CFR 27.2 as amended by 27-28, effective September 16, 1991; and 14 CFR Part 36, amendment 20 (Appendix J), effective September 11, 1992.

NOTE: Originally certificated to Part 6 of the Civil Air Regulation effective December 20, 1956, as amended by 6-1 thru 6-5; Federal Aviation Regulation 14 CFR Part 27, amendment 23, effective October 3, 1988, for the turbine engine installation, induction system, fuel system, lubrication system, and airworthiness limitations; 14 CFR Part 27, amendment 26, effective April 5, 1990, for the landing gear; and 14 CFR Part 36, amendment 20 (Appendix J), effective September 11, 1992. The original Type Design Data was reexamined and found to comply with 14 CFR 27 on December 2, 1994.

Application for Type Certificate dated November 17, 1988. Type Certificate No. H1CE amended September 11, 1992; Reissued February 8, 2001.

Production Basis

TC Holder: The Enstrom Helicopter Corporation in Menominee, Michigan. Production Certificate No. 319CE (See NOTE 49 for applicable model effectivity and compliance requirements.)

Licensee: Chongqing General Aircraft Industry Co., Ltd. (CGAI) in the People's Republic of China (PRC). Production Certificate No. PC0033A-XN. Model effectivity is Enstrom Model 480B with serial number eligibility CE5001 and subsequent.

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 following items of equipment are required:

F-28 Models:

(a) FAA Approved Rotorcraft Flight Manual dated April 15, 1965, or later FAA approved revision is required.

HICE Page 22 of 41

F-28A Models:

- (a) FAA Approved Rotorcraft Flight Manual dated May 21, 1968; Reprinted June 1, 1972, or later FAA approved revision is required.
- (b) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated June 6, 1969, or later FAA approved revision is required; (For External Loads) see NOTE 8.
- (c) FAA Approved Rotorcraft Flight Manual Supplement No. 2 dated June 6, 1969, or later FAA approved revision is required; (For Float Landing Gear) see NOTE 7.
- (d) FAA Approved Rotorcraft Flight Manual Supplement No. 3 dated February 27, 1970, or later FAA approved revision is required; (For External Litter) see NOTE 10.
- (e) FAA Approved Rotorcraft Flight Manual Supplement No. 4 dated April 3,1975, or later FAA approved revision is required; (For External Auxiliary Fuel Tank) see NOTE 11.

280 Models:

- (a) FAA Approved Rotorcraft Flight Manual dated September 13, 1974, or later FAA approved revision is required.
- (b) Deleted
- (c) Deleted

F-28C Models:

- (a) FAA Approved Rotorcraft Flight Manual dated December 8, 1975; reissued December 21, 1976, or later FAA approved revision is required.
- (b) FAA Approved Rotorcraft Flight Manual dated April 20, 1978, or later FAA approved revision is required; (Modified for increased gross weight) See NOTE 5.
- (c) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated May 5, 1978, or later FAA approved revision is required; (For Agricultural Kit to 2600 lbs. - Restricted Category) See NOTE 6.
- (d) FAA Approved Rotorcraft Flight Manual Supplement No. 2 dated June 16, 1978, or later FAA approved revision is required; (For Float Landing Gear) See NOTE 7.
- (e) FAA Approved Rotorcraft Flight Manual Supplement No. 3 dated July 28, 1978, or later FAA approved revision is required; (For External Loads) See NOTE 8.
- (f) FAA Approved Rotorcraft Flight Manual Supplement No. 4 dated July 28, 1978, or later FAA approved revision is required; (For Snowshoes) See NOTE 9.
- (g) FAA Approved Rotorcraft Flight Manual Supplement No. 5 dated June 26, 1981, or later FAA approved revision is required; (For Right Side Pilot Configuration) See NOTE 14.
- (h) FAA Approved Rotorcraft Flight Manual Supplement No. 7 dated June 26, 1981, or later FAA approved revision is required; (For Electric Clutch Actuator).

Page 23 of 41 H1CE

- (i) FAA Approved Rotorcraft Flight Manual Supplement No. 8 dated November 20, 1981, or later FAA approved revision is required; (For Emergency Float Landing Gear) See NOTE 7.
- (j) FAA Approved Rotorcraft Flight Manual Supplement No. 9 dated June 30, 1981, or later FAA approved revision is required (For Throttle Correlator).
- (k) Deleted
- (l) FAA Approved Rotorcraft Flight Manual Supplement No. 11 dated September 23, 1983, or later FAA approved revision is required; (For Auxiliary Fuel Tank) See NOTE 17.

280C Models:

- (a) FAA Approved Rotorcraft Flight Manual dated December 8, 1975; reissued December 21, 1976, or later FAA approved revision is required.
- (b) FAA Approved Rotorcraft Flight Manual dated September 23, 1977, or later FAA approved revision is required; (Modified for increased gross weight) See NOTE 5.
- (c) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated May 5, 1978, or later FAA approved revision is required; (For Agricultural Kit to 2600 lbs. - Restricted Category) See NOTE 6.
- (d) FAA Approved Rotorcraft Flight Manual Supplement No. 2 dated May 19, 1978, or later FAA approved revision is required; (For Float Landing Gear) See NOTE 7.
- (e) FAA Approved Rotorcraft Flight Manual Supplement No. 3 dated July 28, 1978, or later FAA approved revision is required; (For External Loads) See NOTE 8.
- (f) FAA Approved Rotorcraft Flight Manual Supplement No. 4 dated July 28, 1978, or later FAA approved revision is required; (For Snowshoes) See NOTE 9.
- (g) FAA Approved Rotorcraft Flight Manual Supplement No. 8 dated November 20, 1981, or later FAA approved revision is required; (For Emergency Float Landing Gear) See NOTE 7.
- (h) FAA Approved Rotorcraft Flight Manual Supplement No. 9 dated June 30, 1981, or later FAA approved revision is required; (For Throttle Correlator).
- (i) FAA Approved Rotorcraft Flight Manual Supplement No. 11 dated September 23, 1983, or later FAA approved revision is required; (For Auxiliary Fuel Tank) See NOTE 17.

HICE Page 24 of 41

F-28F & 280F Models:

- (a) FAA Approved Rotorcraft Flight Manual dated December 31, 1980, or later FAA approved revision is required.
- (b) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated December 31, 1980, or later FAA approved revision is required; (For Agricultural Kit to 2600 lbs. Restricted Category) See NOTE 6.
- (c) FAA Approved Rotorcraft Flight Manual Supplement No. 2 dated December 31, 1980, or later FAA approved revision is required; (For Float Landing Gear) See NOTE 7.
- (d) FAA Approved Rotorcraft Flight Manual Supplement No. 3 dated December 31, 1980, or later FAA approved revision is required; (For External Loads) See NOTE 8.
- (e) FAA Approved Rotorcraft Flight Manual Supplement No. 4 dated December 31, 1980, or later FAA approved revision is required; (For Snowshoes) See NOTE 9.
- (f) FAA Approved Rotorcraft Flight Manual Supplement No. 6 dated June 26, 1981, or later FAA approved revision is required; (For Right Side Pilot Configuration) See NOTE 14.
- (g) Deleted
- (h) FAA Approved Rotorcraft Flight Manual Supplement No. 8 dated November 20, 1981, or later FAA approved revision is required; (For Emergency Float Landing Gear) See NOTE 7.
- (i) Deleted
- (j) FAA Approved Rotorcraft Flight Manual Supplement No. 11 dated September 23, 1983, or later FAA approved revision is required; (For Auxiliary Fuel Tank) See NOTE 17.
- (k) FAA Approved Rotorcraft Flight Manual Supplement No. 12 dated July 16, 1986, or later FAA approved revision is required; (For Muffler Installation) See NOTE 18.
- (l) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-028 dated November 7, 2008, or later FAA approved revision is required; (For Nav/Com Transceiver) See NOTE 35. (F-28F only)
- (m) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-029 dated November 14, 2008, or later FAA approved revision is required; (For Altitude Data System) See NOTE 36. (F-28F only)
- (n) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-031 dated December 5, 2008, or later FAA approved revision is required; (For Navigation System) See NOTE 37. (F-28F only)
- (o) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-032 dated December 8, 2008, or later FAA approved revision is required; (For XM WX Satellite Weather/Radio Receiver) See NOTE 38. (F-28F only)
- (p) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-056 dated January 16, 2014, or later FAA approved revision is required; (For NAV/COM System) See NOTE 48. (F-28F only)

Page 25 of 41 H1CE

- (q) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-069 dated July 27, 2015, or later FAA approved revision is required; (For Navigation System with MD200-306 CDI) See NOTE 59. (F-28F only)
- (r) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-070 dated July 27, 2015, or later FAA approved revision is required; (For Transponder with ADS-B Out) See NOTE 60. (F-28F only)
- (s) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-074 dated December 6, 2017, or later FAA approved revision is required; (For Nav/Com Transceiver) See NOTE 64 and 65. (F-28F only)
- (t) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-080 dated March 28, 2019, or later FAA approved revision is required; (For GMA 350Hc Audio Panel) See NOTE 71. (F-28F only)
- (u) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-081 dated March 28, 2019, or later FAA approved revision is required; (For GTX 345 Transponder) See NOTE 72. (F-28F only)

280FX Models:

- (a) FAA Approved Rotorcraft Flight Manual dated January 11, 1985, or later FAA approved revision is required.
- (b) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated January 11, 1991, or later FAA approved revision is required; (For Agricultural Kit) See NOTE 6.
- (c) FAA Approved Rotorcraft Flight Manual Supplement No. 2 dated July 12, 1985, or later FAA approved revision is required; (For Float Landing Gear) See NOTE 7.
- (d) FAA Approved Rotorcraft Flight Manual Supplement No. 3 dated January 11, 1985, or later FAA approved revision is required; (For External Loads)
- (e) FAA Approved Rotorcraft Flight Manual Supplement No. 4 dated May 11, 1989, or later FAA approved revision is required; (For Snowshoes) See NOTE 9.
- (f) Deleted
- (g) FAA Approved Rotorcraft Flight Manual Supplement No. 11 dated January 11, 1985, or later FAA approved revision is required; (For Auxiliary Fuel Tank) See NOTE 17.
- (h) FAA Approved Rotorcraft Flight Manual Supplement No. 12 dated July 16, 1986, or later FAA approved revision is required; (For Muffler Installation) See NOTE 18.
- FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-028 dated November 7, 2008, or later FAA approved revision is required; (For Nav/Com Transceiver) See NOTE 35.
- (j) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-029 dated November 14, 2008, or later FAA approved revision is required; (For Altitude Data System) See NOTE 36.

- (k) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-031 dated December 5, 2008, or later FAA approved revision is required; (For Navigation System) See NOTE 37.
- FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-032 dated December 8, 2008, or later FAA approved revision is required; (For XM WX Satellite Weather/Radio Receiver) See NOTE 38.
- (m) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-056 dated January 16, 2014, or later FAA approved revision is required; (For Nav/Com System) See NOTE 48.
- (n) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-069 dated July 27, 2015, or later FAA approved revision is required; (For Navigation System with MD200-306 CDI) See NOTE 59.
- (o) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-070 dated July 27, 2015, or later FAA approved revision is required; (For Transponder with ADS-B Out) See NOTE 60.
- (p) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-074 dated December 6, 2017, or later FAA approved revision is required; (For Nav/Com Transceiver) See NOTE 64 and 65.
- (q) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-080 dated March 28, 2019, or later FAA approved revision is required; (For GMA 350Hc Audio Panel) See NOTE 71.
- (r) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-081 dated March 28, 2019, or later FAA approved revision is required; (For GTX 345 Transponder) See NOTE 72.

TH-28 Models:

(a) FAA Approved Rotorcraft Flight Manual dated September 11, 1992, or later FAA approved revision is required. For Cargo Hook operations see NOTE 20.

480 Models

- (a) FAA approved Rotorcraft Flight Manual dated June 7, 1993, or later FAA approved revision is required.
- (b) FAA approved Rotorcraft Flight Manual Supplement No. 1 dated June 1, 1994, or later FAA approved revision is required; (For Cargo Hook) See NOTE 20.
- (c) FAA approved Rotorcraft Flight Manual Supplement No. 2 dated June 1, 1994, or later FAA approved revision is required; (For Snowshoes) See NOTE 21.
- (d) FAA approved Rotorcraft Flight Manual Supplement No. 3 dated June 1, 1994, or later FAA approved revision is required; (For External Fuel Filter) See NOTE 22.
- (e) FAA approved Rotorcraft Flight Manual Supplement No. 4 dated June 1, 1994, or later FAA approved revision is required; (For Baggage Box Extension) See NOTE 23.

Page 27 of 41 H1CE

- (f) FAA approved Rotorcraft Flight Manual Supplement No. 5 dated August 12, 1996, or later FAA approved revision is required; (For Camera Door) See NOTE 24.
- (g) FAA approved Rotorcraft Flight Manual Supplement No. 6 dated August 12, 1996, or later FAA approved revision is required; (For Increased Rotor Speeds and Torque Limits) See NOTE 25.
- (h) FAA approved Rotorcraft Flight Manual Supplement No. 7 dated November 27, 1996, or later FAA approved revision is required; (For Air Conditioning) See NOTE 26.
- (i) FAA approved Rotorcraft Flight Manual Supplement No. 8 dated January 23, 1998, or later FAA approved revision is required; (For Pop-out Floats) See NOTE 27.
- (j) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-042 dated February 24, 2011, or later FAA approved revision is required; (For Powerline Detection System) See NOTE 44.
- (k) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-055 dated May 1, 2013, or later FAA approved revision is required; (For Navigation System) See NOTE 63.
- (l) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-059 dated May 14, 2014 or later FAA approved revision is required; (For Pulse Landing Light) See NOTE 51.

480B Models:

- (a) FAA approved Rotorcraft Flight Manual dated February 9, 2001, or later FAA approved revision is required.
- (b) FAA approved Rotorcraft Flight Manual Supplement No. 1 dated February 9, 2001, or later FAA approved revision is required; (For Cargo Hook) See NOTE 20.
- (c) FAA approved Rotorcraft Flight Manual Supplement No. 2 dated February 9, 2001, or later FAA approved revision is required; (For Snowshoes) See NOTE 21.
- (d) FAA approved Rotorcraft Flight Manual Supplement No. 3 dated February 9, 2001, or later FAA approved revision is required; (For External Fuel Filter) See NOTE 22.
- (e) FAA approved Rotorcraft Flight Manual Supplement No. 4 dated February 9, 2001, or later FAA approved revision is required; (For Baggage Box Extension) See NOTE 23.
- (f) FAA approved Rotorcraft Flight Manual Supplement No. 5 dated February 9, 2001, or later FAA approved revision is required; (For Camera Door) See NOTE 24.
- (g) FAA approved Rotorcraft Flight Manual Supplement No. 6 dated September 5, 2003, or later FAA approved revision is required; (For Popout Floats) See NOTE 27.
- (h) FAA approved Rotorcraft Flight Manual Supplement No. 7 dated September 9, 2004, or later FAA approved revision is required; (For Air Conditioning) See NOTE 26.

- (i) FAA approved Rotorcraft Flight Manual Supplement No. 8 dated June 6, 2006, or later FAA approved revision is required; (For Camera Mount) See NOTE 30.
- (j) FAA approved Rotorcraft Flight Manual Supplement No. 9 dated June 6, 2006, or later FAA approved revision is required; (For Searchlight) See NOTE 31.
- (k) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-025 Revision -, dated February 11, 2008, is required; (For Nose-Mounted Camera) See NOTE 32.
- (1) FAA approved Rotorcraft Flight Manual Supplement No. 10 dated February 14, 2008, or later FAA approved revision is required; (For EFIS) See NOTE 33.
- (m) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-036 dated October 21, 2009, or later FAA approved revision is required; (For 2+2 Seating Configuration) See NOTE 34.
- (n) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-027 dated November 5, 2008, or later FAA approved revision is required; (For Traffic Advisory System) See NOTE 39.
- (o) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-030 dated November 18, 2008, or later FAA approved revision is required; (For NAV/COM Transceiver) See NOTE 40.
- (p) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-035 dated March 9, 2009, or later FAA approved revision is required; (For Altitude Data System) See NOTE 41.
- (q) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-038 Revision 1, dated November 10, 2011, is required; (For TACAN System) See NOTE 42.
- (r) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-040 dated September 10, 2010, or later FAA approved revision is required; (For VHF Communication Radio System, UHF Communication Radio System, and Audio System) See NOTE 43.
- (s) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-042 dated February 24, 2011, or later FAA approved revision is required; (For Powerline Detection System) See NOTE 44.
- (t) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-043 dated January 25, 2011 or later FAA approved revision is required; (For Partial Wide Instrument Panel) See NOTE 45.
- (u) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-048 dated January 25, 2011 or later FAA approved revision is required; (For Dual Channel Audio Controller and Audio Mixing Amplifier) See NOTE 46.
- (v) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-049 dated May 8, 2012 or later FAA approved revision is required; (For EHSI) See NOTE 47.

Page 29 of 41 H1CE

(w) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-051 dated June 5, 2014 or later FAA approved revision is required; (For Audio Panel) See NOTE 50.

- (x) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-059 dated May 14, 2014 or later FAA approved revision is required; (For Pulse Landing Light) See NOTE 51.
- (y) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-060 dated June 5, 2014 or later FAA approved revision is required; (For Integrated Flight Deck) See NOTE 52.
- (z) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-061 dated June 5, 2014 or later FAA approved revision is required; (For Traffic Advisory System) See NOTE 53.
- (aa) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-062 dated June 5, 2014 or later FAA approved revision is required; (For XM WX Satellite Weather/Radio Receiver) See NOTE 54.
- (ab) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-063 dated November 12, 2014 or later FAA approved revision is required; (For NAV/COM Transceiver) See NOTE 55.
- (ac) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-064 dated August 7, 2014 or later FAA approved revision is required; (For Navigation System) See NOTE 56.
- (ad) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-065 dated August 7, 2014 or later FAA approved revision is required; (For Mode A/C Transponder) See NOTE 57.
- (ae) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-068 dated February 18, 2015 or later FAA approved revision is required; (For GPS/NAV/COM (NAV Disabled) See NOTE 58.
- (af) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-071 dated October 20, 2015 or later FAA approved revision is required; (For Radar Altimeter) See NOTE 61.
- (ag) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-024 dated April 30, 2013 or later FAA approved revision is required; (For External Load Interface Kit) See NOTE 62.
- (ah)FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-055 dated May 1, 2013, or later FAA approved revision is required; (For Navigation System) See NOTE 63.
- (ai) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-067 dated March 23, 2018, or later FAA approved revision is required; (For Vision 1000) See NOTE 66.
- (aj) FAA approved Rotorcraft Flight Manual Supplement No. 28-AC-075 dated March 22, 2018, or later FAA approved revision is required; (For Integrated Flight Deck, Configuration P/N 4220650-3) See NOTE 67.

- (ak) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-076 dated October 1, 2018, or later FAA approved revision is required; (For GMA 350Hc) See NOTE 68.
- (al) FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-078 dated December 19, 2018, or later FAA approved revision is required; (For GTX 345 Transponder) See NOTE 69.
- (am)FAA Approved Rotorcraft Flight Manual Supplement No. 28-AC-079 dated December 19, 2018, or later FAA approved revision is required; (For MD200 Series CDI) See NOTE 70.

All Models:

- (a) Each rotorcraft must be furnished with a Maintenance Manual applicable to that model.
- NOTE 1. A current weight and balance report, including list of equipment included in certificated empty weight and loading instructions when necessary, must be provided for each helicopter at the time of original certification. This is in accordance with 14 CFR 27.29.

For piston-engine powered models, the certificated empty weight and corresponding center of gravity locations must include unusable fuel of 0.3 gal. (+98) for 30 gal. tanks, 2.0 gal. (+94) for 42 gal. tanks; and undrainable oil of 4 lbs. (+96).

For turbine-engine powered models, certificated empty weight and corresponding center of gravity locations must include unusable fuel as tabulated below:

Model	Fuel Bladder Part Number	<u>Unusable Fuel</u>
TH-28	4122000	1.8 gal. at +143.4 in.
	4122009-1 & -2	0.3 gal. at +143.4 in.
	4122009-1, -2, & -4	0.3 gal. at +143.4 in.
480	4122009-1, -2, & -4	0.3 gal. at +143.4 in.
	4122052-1 & -2	1.7 gal. at +143.4 in.
480B	4122052-1 & -2	1.7 gal. at +143.4 in.

NOTE 2. All placards required by either the FAA-approved Rotorcraft Flight Manual, the applicable operating rules, or the certification basis must be installed as specified. This is in accordance with 14 CFR 27.1541 thru 27.1565.

The following placard must be displayed in front of and in clear view of the pilot:

"This helicopter must be operated in compliance with operating limitations specified in the Approved Rotorcraft Flight Manual."

NOTE 3. Retirement items and mandatory inspection items are contained in the pertinent model Maintenance Manual. The retirement times of critical parts are listed in Table 1 and Table 2, and the mandatory inspection items are listed in Table 3 of this Type Certificate data sheet. The values of retirement times of service life cannot be increased without FAA Engineering Approval.

Enstrom Models F-28C and 280C helicopters are eligible for Restricted Category operation at a gross weight up to 2600 lbs. when configured in accordance with NOTE 6 and/or NOTE 8. Enstrom Models F-28F and 280F helicopters are eligible for operation at a gross weight up to 2600 lbs. in both the Normal and Restricted categories when configured in accordance with the following:

Category	<u>Usage - Configuration Requirement</u>
Restricted	Agricultural Spraying - configured per NOTE 6.
Restricted	Floats - configured per NOTE 7.
Restricted	External Cargo - configured per NOTE 8

Page 31 of 41 H1CE

Normal

Configured per NOTE 16

Once the helicopter is operated at a gross weight in excess of 2350 lbs. up to the maximum authorized 2600 lbs., the service life requirements for 2600 lbs. must be used.

The following special notations augment the Service Life Tables specifying limitations and/or special conditions associated with authorized Gross Weights and service lives. Table 1 applies to all piston powered models. Table 2 applies to all turbine powered models.

- A Retire from service 5 calendar years from date of installation or package opening, or 8 years from date of manufacture, whichever occurs first.
- $\Delta\Delta$ Retire from service 5 calendar years from date of manufacture all Lamiflex bearings serial number 5997 and prior.

Retire from service 5 calendar years from date of installation* or 8 calendar years from date of manufacture, whichever occurs first, all Lamiflex bearings serial numbers 5998 and subsequent. *Note: Date of installation is defined as the date the Lamiflex bearing packaging is opened.

- + No Time limit. Remove Component on condition per Maintenance Manual inspection criteria.
- ++ Right hand installations only (28-16300); left hand installations are on condition.
- ° Inspect daily per Airworthiness Directive 79-10-06R1.
- ** On Condition when used with grease fitting.
- * Retire from service 24 months after date of installation or 1200 hours, whichever occurs first.
- Retire from service 15 years from the original test date marked on the manufacture's label.
- Mours reduced to 3,969 hrs. on aircraft that were equipped with elastomeric damper, P/N J-23717-2.
- ± Detail part contained in assembly P/N 4112034-3.
- ◆◆ Detail part contained in assembly P/N 4166024-1 and -3 (-15) and P/N 4166024-103 (-23), respectively.
- N/A Not approved for installation.

Table 1. Service Life Limits - Hours

		Model	F-28	F-28A	280	F	-28C, 280	С	F-28F	, 280F	280FX
Part Number	Old Part Number	Component Wt. lbs.	1950	2150	2150	2200	2350	2600	2350	2600	2600
ECD018-11	202SZZ	Bearing, Belt Idler Pulley	600	600	600	600	600	600	600	600	600
ECD014-11, -13	Z99606X3B 6308-2RS	Bearing, Upper Jack Strut	600**	600**	600**	600**	600**	600**	+	+	+
28-13401-1	CL40526-1 thru -7 (Formsprag)	Clutch	1200	1200	1200	1200	1200	1200	N/A	N/A	N/A
RJ0328		Turbo Charger Model 301E10-2	N/A	N/A	N/A	1000	1000	1000	N/A	N/A	N/A
RJ0332		Turbo Charger Model 325E10-2	N/A	N/A	N/A	2000	2000	2000	2000	2000	2000
103574-00		Turbo Charger Model 3BT2EE10J2	N/A	N/A	N/A	2000	2000	2000	2000	2000	2000
600700-00	103574-00	Turbo Charger Model 3BT5EE10J2	N/A	N/A	N/A	2000	2000	2000	2000	2000	2000
ECD009-11, -13	5201SBKZZ	Bearing, Lower Swashplate	1200**	1200**	1200**	1200**	1200**	1200**	1200**	1200**	+
ECD013-11, 13	Z993L13X3B 6013-RS	Bearing Upper Swashplate	1200**	1200**	1200**	1200**	1200**	1200**	1200**	1200**	+
28-16119-1, -3		Universal Housing, Lower Swashplate	+	+	+	20,560	17,700	17,700	17,700	17,700	17,700
28-15120-1		Tail Rotor Blade, 3.3 in. cord	N/A	4500++	4500++	N/A	N/A	N/A	N/A	N/A	N/A
28-150002-1		Tail Rotor Blade, 4.4 in. cord	N/A	N/A	N/A	3100	3100	3100	3100	3100	3100
28-15202-13		Tail Rotor Spindle (3.3 in. cord T/R Assy)	7500	7500	7500	7500	N/A	N/A	N/A	N/A	N/A
28-150064-11, - 13		Tail Rotor Spindle (4.4 in. cord T/R Assy)	N/A	N/A	N/A	1200	1200	1200	1200	1200	1200
28-150074-11, - 13		Tail Rotor Spindle (4.4 in. cord T/R Assy)	N/A	N/A	N/A	1200	1200	1200	1200	1200	1200
28-150044-1,-3		Tail Rotor Blade Grip	N/A	N/A	N/A	6200	6200	6200	6200	6200	6200
28-150013-1		Tail Rotor Blade Grip	N/A	N/A	N/A	3100°	3100°	3100°	N/A	N/A	N/A
28-13609-1		Coupling, Tail Rotor Driveshaft	1200	1200	1200	1200	1200	1200	1200	1200	N/A
28-01041-3	A005-1992 (Dana)	Coupling, Flex Pack Assembly	1200	1200	1200	1200	1200	1200	1200	1200	1200

Page 33 of 41 H1CE

Table 1. Service Life Limits - Hours

		M	lodel	F-28	F-28A	280	F	F-28C, 2800	C	F-28F	, 280F	280FX
Part Number	Old Part Number	Component Wt	lbs.	1950	2150	2150	2200	2350	2600	2350	2600	2600
ECD074-1, -2	XR-137-2YL, -2R	Tail Rotor Gear set		1200	1200	1200	1200	1200	1200	1200	1200	1200
ECD100 (All dash numbers)		Tail Rotor Gear set		1200	1200	1200	1200	1200	1200	1200	1200	1200
ECD101-1, -2		Tail Rotor Gear set		1200	1200	1200	1200	1200	1200	1200	1200	1200
28-14283-1		Drag Link		+	+	+	+	+	13,750	+	13,750	13,750
28-14282-11		Main Rotor Spindle		+	19,000	19,000	19,000	19,000	19,000	N/A	N/A	N/A
28-14320-12, -15		Thrust Bearing (Lamiflex)		ΔΔ	ΔΔ	ΔΔ	ΔΔ	ΔΔ	ΔΔ	ΔΔ	ΔΔ	ΔΔ
NAS1611-333		Tachometer Drive Belt (O-Ring)		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ

Page 34 of 41

<u>Table 2. Service Life Limits – Hours</u>

	Model	TH-28	480	480B
Part Number	Component Wt. lbs.	2850	2850	3000
ECD084-1	Tension-Torsion Strap	1,200*	1,200*	1,200*
ECD100 (All dash numbers)	Tail Rotor Gear Set	1,000	1,200	1,000
ECD101 -1, -2	Tail Rotor Gear Set	1,000	1,200	1,000
ECD4000 (All dash numbers)	Drive Belt	5,500	5,500	5,500
ECD4056 (All dash numbers)	Bearing Lower Pulley Assembly	1,200	1,200	1,200
20368	Reservoir Cylinder (Pop Out Floats)	N/A	*	•
28-13106-3	Ring Gear Carrier	2,500	2,500	2,500
28-13108 (All dash numbers)	Main Rotor Ring Gear and Pinion Set	3,700	3,700	2,300
28-14207-9	Pitch Change Bellcrank Assembly	3,130	3,130	N/A
28-14280-1	Main Rotor Hub Plate (Upper)	5,000	5,000	N/A
28-14280-3	Main Rotor Hub Plate (Upper)	+	+	N/A
28-14280-5	Main Rotor Hub Plate (Upper)	+	+, ∞	4,592 ∞
28-14281-1	Main Rotor Hub Plate (Lower)	5,000	5,000	N/A
28-14281-3	Main Rotor Hub Plate (Lower)	+	+	N/A
28-14281-5	Main Rotor Hub Plate (Lower)	+	+, ∞	4,592 ∞
28-14320-15	Thrust Bearing (Lamiflex)	ΔΔ	ΔΔ	N/A
28-150074-11, -13	Tail Rotor Spindle	1,200	1,200	1,200
4110006-17, -18	Pylon/Keel Attachment Plate	10,000	10,000	N/A
4112034-11±	Vibration Absorber Beam (Tailcone)	3,835	3,835	3,835
4130002-11	Ring Gear Carrier	1,200	1,200	N/A
4130045 (All dash numbers)	Main Rotor Ring Gear and Pinion Set	3,700	3,700	2,300
4131003 (All dash numbers)	Splined Driveshaft, Overrunning Clutch	3,500	3,500	3,500
4166024-15, -23◆◆	Vibration Absorber Beam (Cyclic Control System)	1,200	1,200	1,200

Table 3. Mandatory Inspection Items

Part Number	Component	Model					
		TH-28	480	480B			
4130060 (All dash numbers)	Main Rotor Transmission	Not Applicable	Not Applicable	600 Hrs*			
		* Temporary restriction pending data analysis from the component tear-down inspections. Components must be returned to Enstrom Helicopter Corporation for the tear-down inspection or field-inspected in accordance with Service Information Letter (SIL) T-064.					

NOTE 4. The "C" Model Turbocharger conversions must be accomplished by the Enstrom Helicopter Corporation in accordance with Enstrom Service Information Letter 0049, and are eligible for Models:

F-28A: S/N 003 thru 303 and 305 thru 330.

280: S/N 1002 thru 1019 including 1021 and 1022.

- NOTE 5. Enstrom Model F-28C and 280C helicopters are eligible for increased gross weight to 2350 lbs. if requirements of Enstrom Specification Drawing Number 28-100005 are complied with at the time of original manufacture or retrofitted at a later date and logged accordingly.
- NOTE 6. Enstrom Model F-28C, F-28F, 280C, 280F, and 280FX helicopters are certified for multiple certificate operation at a gross weight up to 2600 lbs. for restricted category operation when equipped with Agricultural Kit as specified on Enstrom drawing 28-22620 and installed in accordance with Enstrom Helicopter Corporation Report No. DO-280, Owner & Operator Manual for Wet/Dry Ag Kit 83100. F-28C and 280C Model helicopters must be converted to the 2350 lbs. configuration (see NOTE 5) and operated within the limitations specified in the Flight Manual Supplement. The helicopter may be returned to normal category operation upon the removal of the agricultural kit. A logbook entry shall be made when these conversions are accomplished.

The following portions of Part 6 of the Civil Air Regulations were considered inappropriate for the intended agricultural operations:

CAR 6.100(c), 6.113(b) (c), 6.114, 6.116, and 6.123(b) (3).

The following paragraphs of CAR 6 were demonstrated at near sea level and 7,500 feet density altitude conditions only:

CAR 6.121(d) and 6.123(b) (4).

NOTE 7. Model F-28C, 280C, F-28F, 280F, and 280FX helicopters are eligible for the installation of inflatable floats, P/N D-24780 in accordance with Enstrom drawing 28-17326. When so equipped, F-28C and 280C Models may be operated up to 2350 lbs. GW in the normal category; and F-28F and 280F Models may be operated up to 2350 and 2600 lbs. GW in the normal and restricted categories, respectively (see NOTE 3). F-28F and 280F Models configured per NOTE 16, and 280FX Models may be operated up to 2600 lbs. GW in the normal category. Model F-28A helicopters are eligible for the installation of inflatable floats, P/N 23D24409, in accordance with Enstrom drawing 28-17301, and may be operated in the normal category up to 2150 lbs. GW. Each helicopter so equipped is approved for amphibious operations within the limitations prescribed by Flight Manual Supplement No. 2 for that model. A logbook entry shall be made when changing category of operation for Models F-28F and 280F helicopters.

See NOTE 6 for portions of Part 6 of the Civil Air Regulations considered inappropriate for restricted category operations at gross weights between 2350 and 2600 lbs. The helicopter must be operated within the restricted category limitations prescribed in the appropriate Flight Manual Supplement.

Model F-28C, 280C, F-28F, and 280F helicopters are approved for inflatable floats. These model helicopters are eligible for the installation of inflatable floats, P/N 23D24409, in accordance with Enstrom drawing 28-17301. When so equipped, the helicopter must be operated within the normal category limitations prescribe in Flight Manual Supplement No. 8. Helicopters equipped with float, P/N 23D24409, are limited to 2150 lbs. GW for amphibious operations and must be placarded to so indicate. This provision excludes amphibious operations, yet allows emergency water landings at gross weights over 2150 lbs.

- NOTE 8. Model F-28A, F-28C, F-28F, 280C, 280F, and 280FX helicopters are eligible for installation of a cargo hook in accordance with Enstrom drawing 28-22000 for the transportation of external cargo. The helicopter must be operated within the limitations prescribed in the appropriate Flight Manual Supplement. The maximum external load permitted on the cargo hook is 1,000 lbs. The Enstrom models F-28C and 280C (when converted to the 2,350 lbs. gross weight per NOTE 5) and F-28F, 280F, and 280FX helicopters are certificated for multiple certificate operation at a gross weight up to 2,600 lbs. for restricted category cargo hook operation. A logbook entry shall be made when changing category of operation.
 - See NOTE 6 for portions of Part 6 of the Civil Air Regulations considered inappropriate for restricted category operations at gross weights between 2,350 and 2,600 lbs.
- NOTE 9. Model F-28C, F-28F, 280C, 280F, and 280FX helicopters are eligible for the installation of Snowshoe Kit No. 28-22400 when operated within the prescribed limitations of the Flight Manual Supplement. Models F28A and 280 are eligible for the installation of Snowshoe Kit No. 28-22400 when operated within the prescribed limitations of the basic Rotorcraft Flight Manual.
- NOTE 10. The Model F-28A helicopter is eligible for the installation of an external litter in accordance with Enstrom drawing 28-22115 when operated within the prescribed limitations of the Flight Manual Supplement.
- NOTE 11. The Model F-28A helicopter is eligible for the installation of an externally mounted auxiliary fuel tank in accordance with Enstrom drawing 28-22500 when operated within the prescribed limitations of the Flight Manual Supplement.
- NOTE 12. Enstrom Model F-28C-2 helicopters have a serial number that contains a dash 2 suffix. These models have a cabin structure containing a one-piece windshield, a 280 console and other product improvements defined by Enstrom Report No. DO-282, Definition of Enstrom Model F-28C-2 Helicopter. These models shall be operated within the prescribed limitations of the Enstrom F-28C Operator's Manual and FAA Approved Rotorcraft Flight Manual, as well as the F-28C-280C Maintenance Manual, except as noted otherwise.
- NOTE 13. Enstrom Model F-28C (S/N 304 and 331 thru 480) and 280C (S/N 1020 and 1023 thru 1183) helicopters are eligible for installation of a Lycoming Model HIO-360-E1BD engine, which has been modified in accordance with STC No. SE100GL and is equipped with a Bendix RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See Enstrom Service Information Letter No. 0091, Rev. A). All limitations and conditions for the Model F-28C and 280C helicopters remain applicable.
- NOTE 14. Model F-28C-2 and F-28F helicopters are eligible for installation of a "Right Hand Pilot in Command" Kit (Kit No. 28-01002-3). These helicopters, when so configured, will be identified with a serial number dash R suffix. Eligible helicopters, when so equipped, will have a dash R model designation (F-28C-2R or F-28F-R). Models F-28C-2 and F-28C-2R shall be operated within the prescribed limitations of the Enstrom F-28C Operator's Manual and FAA Approved Rotorcraft Flight Manual and respective Flight Manual Supplement, as well as the F-28C-280C Maintenance Manual, except as noted otherwise. Model F-28F-R shall be operated within the prescribed limitations of the Enstrom F-28F Operator's Manual and FAA Approved Rotorcraft Flight Manual and respective Flight Manual Supplement, as well as the Enstrom F-28F and 280F Series Maintenance Manual, except as noted otherwise.

NOTE 15. Deleted

NOTE 16. Enstrom Model F-28F and 280F helicopters are eligible for increased gross weight to 2600 pounds in the normal category if the helicopter complies with the requirements of Enstrom Specification Drawing No. 28-100015 at the time of original manufacture or are retrofitted at a later date and logged accordingly. In accordance with Enstrom Service Information Letter 0130, Models eligible for retrofitting are:

All F-28F helicopters prior to S/N 731. All 280F helicopters prior to S/N 1516, except 1506. Page 37 of 41 H1CE

- NOTE 17. Enstrom Models F-28C, 280C, F-28F, 280F, and 280FX are eligible for installation of an internal auxiliary fuel tank per Kit No. 28-01009. When so equipped, the helicopter must be operated within the prescribed limitations of the respective Flight Manual Supplement.
- NOTE 18. Enstrom Models F-28F, 280F, and 280FX are eligible for installation of Wall-Colomony Muffler P/N ENX-0001 or P/N 28-12577-1 in place of the standard tailpipe. When so equipped, the helicopter must be operated within the prescribed limitations of the respective Flight Manual Supplement. No further modification to the rotorcraft is required.
- NOTE 19. Enstrom Model 480, S/N 5001 was certificated June 7, 1993, with 4-place seating. It is eligible for 5-place seating when retrofitted in conformance with Enstrom drawing 4119775 "Aft Bench Seat Installation," and 4192034 "Battery Installation."
- NOTE 20. Enstrom Models TH-28, 480, and 480B are eligible for installation of Cargo Hook Kit No. 4220024. When so equipped, the TH-28 must be operated within the prescribed limitations of Chapter 4 of the Flight Manual, and the 480 and 480B must be operated within the prescribed limitations of Flight Manual Supplement No.1.
- NOTE 21. Enstrom Models 480 and 480B are eligible for installation of Snowshoe Kit No. 4220016 when operated within the prescribed limitations of Flight Manual Supplement No. 2.
- NOTE 22. Enstrom Models 480 and 480B are eligible for installation of External Fuel Filter Kit No. 4220035 when operated within the prescribed limitations of Flight Manual Supplement No. 3.
- NOTE 23. Enstrom Models 480 and 480B are eligible for installation of Baggage Box Extension Kit No. 4220029 when operated within the prescribed limitations of Flight Manual Supplement No. 4.
- NOTE 24. Enstrom Models 480 and 480B are eligible for installation of Camera Door Kit No. 4220079 when operated within the prescribed limitations of Flight Manual Supplement No. 5.
- NOTE 25. Enstrom Model 480 is eligible for installation of Increased Rotor Speed Kit No. 4230002 when operated within the prescribed limitations of Flight Manual Supplement No.6. This kit also requires oil cooling system installation, P/N 4129100-3, and installation of the ring gear carrier, P/N 28-13106-6, in the main rotor transmission.
- NOTE 26. Enstrom Models 480 and 480B are eligible for installation of Air Conditioning System Kit No. 4220176 when operated within the prescribed limitations of Flight Manual Supplement No. 7; and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 1.
- NOTE 27. Enstrom Models 480 and 480B are eligible for installation of Pop-Out Floats Kit No. 4220091 when operated within the prescribed limitations of Flight Manual Supplements No. 8 and No. 6, respectively; and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 2.
- NOTE 28. Enstrom Model 480, Serial Number 5014, 5039 thru 5042, and 5044 are eligible for conversion to Model 480B when equipped in accordance with Enstrom 480B Conversion Kit No. 4230026.

NOTE 29. Helicopter serial numbers listed in Table 4 are ineligible for certification in any category.

Table 4. Ineligible Serial Numbers

Model	Serial Numbers
F-28	003, 004, 006
F-28A	016, 018, 038, 070, 098, 104, 124, 140, 145, 211, 219, 226, 232, 246, 251, 265, 284, 298, 303, 312, 330
F-28C	344, 347, 360, 386, 387, 395, 397, 398, 409, 418, 419, 437, 464
F-28C2	460-2, 471-2, 474-2, 490-2, 496-2
F-28F	700, 708, 710, 712, 744, 769, 817
280	1006, 1008
280C	1035, 1044, 1046, 1113, 1142, 1166, 1183, 1199
280F	1507, 1512
280FX	2002, 2016, 2041, 2060, 2070, 2080, 2086, 2087, 2101, 2118, 2145
TH-28	3003, 3005, 3006
480	5005, 5021, 5023, 5028, 5035
480B	5093, 5102, 5110, 5122, 5191, 5199, 5205

- NOTE 30. Enstrom Model 480B is eligible for installation of Nose Positioned Camera Mount Kit No. 4220180-5 when operated within the prescribed limitations of Flight Manual Supplement No. 8.
- NOTE 31. Enstrom Model 480B is eligible for installation of Searchlight Kit No. 4220056-1 or -3 when operated within the prescribed limitations of Flight Manual Supplement No. 9.
- NOTE 32. Enstrom Model 480B is eligible for installation of Gyrocam, No. 4220552 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-025 Revision -, dated February 11, 2008, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 3.
- NOTE 33. Enstrom Model 480B is eligible for installation of Chelton Flight Systems EFIS, No. 4220500 when operated within the prescribed limitations of Flight Manual Supplement No. 10, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 4.
- NOTE 34. Enstrom Model 480B is eligible for installation of 2+2 Seating Configuration, No. 4230042 (approved November 4, 2009) when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-036.
- NOTE 35. Enstrom Models F-28F and 280FX are eligible for installation of NAV/COM Transceiver, No. 28-22069 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-028, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 36. Enstrom Models F-28F and 280FX are eligible for installation of Altitude Data System, No. 28-22090 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-029, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 37. Enstrom Models F-28F and 280FX are eligible for installation of Navigation System, No. 28-22037/28-22050 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-031, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.

Page 39 of 41 H1CE

- NOTE 38. Enstrom Models F-28F and 280FX are eligible for installation of XM WX Satellite Weather/Radio Receiver, No. 28-22082 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-032, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 39. Enstrom Model 480B is eligible for installation of Traffic Advisory System, No. 4220569 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-027, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 40. Enstrom Model 480B is eligible for installation of NAV/COM Transceiver, No. 4220558 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-030, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 41. Enstrom Model 480B is eligible for installation of Altitude Data System, No. 4220561 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-035, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 42. Enstrom Model 480B is eligible for installation of TACAN System, No. 4220615 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-038 Revision 1, dated November 10, 2011, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement JGSDF Specific Configuration Avionics, latest revision.
- NOTE 43. Enstrom Model 480B is eligible for installation of VHF Communication Radio, No. 4220611; UHF Communication Radio, No. 4220612; and Audio System, No. 4220613 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-040, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement JGSDF Specific Configuration Avionics, latest revision.
- NOTE 44. Enstrom Models 480 and 480B are eligible for installation of Powerline Detection System, No. 4220576 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-042, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 45. Enstrom Model 480B is eligible for installation of the Partial Wide Instrument Panel, No. 4220602 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-043, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 6, latest revision.
- NOTE 46. Enstrom Model 480B is eligible for installation of Dual Channel Audio Controller and Audio Mixing Amplifier, No. 4220529 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-048, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 47. Enstrom Model 480B is eligible for installation of the EHSI, No. 4220609 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-049, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement JGSDF Specific Configuration Avionics, latest revision or with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 48. Enstrom Models F-28F and 280FX are eligible for installation of NAV/COM System, No. 28-22063 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-056, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 49. Production Certificate No. 319CE was previously No. 319. Refer to Service Information Letter (SIL) 0181 and SIL T-059 for applicable model effectivity and compliance requirements.

Page 40 of 41

- NOTE 50. Enstrom Model 480B is eligible for installation of the Audio Panel, No. 4220672 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-051, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 51. Enstrom Model 480 and 480B are eligible for installation of the Pulse Landing Light, No. 4199005-111 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-059, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual, latest revision.
- NOTE 52. Enstrom Model 480B is eligible for installation of the Integrated Flight Deck, No. 4220650 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-060, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 8, latest revision.
- NOTE 53. Enstrom Model 480B is eligible for installation of the 800 Traffic Advisory System, No. 4220656 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-061, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 8, latest revision.
- NOTE 54. Enstrom Model 480B is eligible for installation of the XM WX Satellite Weather/ Radio Receiver, No. 4220660 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-062, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 8, latest revision.
- NOTE 55. Enstrom Model 480B is eligible for installation of the NAV/COM Transceiver, No. 4220638 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-063, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 56. Enstrom Model 480B is eligible for installation of the Navigation System, No. 4220639 and No. 4220644 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-064, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 57. Enstrom Model 480B is eligible for installation of the Mode A/C Transponder, No. 4220512 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-065, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 58. Enstrom Model 480B is eligible for installation of the GPS/NAV/COM (NAV Disabled), No. 4220639 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-068, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 59. Enstrom Models F-28F and 280FX are eligible for installation of the Navigation System with MD200-306 CDI, No. 28-22112 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-069, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 60. Enstrom Models F-28F and 280FX are eligible for installation of the Transponder with ADS-B Out, No. 28-22028 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-070, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 61. Enstrom Model 480B is eligible for installation of the Radar Altimeter, No. 4220517 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-071, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 62. Enstrom Model 480B is eligible for installation of the External Load Interface Kit, No. 4220130 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-024, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 7, latest revision.

Page 41 of 41 H1CE

- NOTE 63. Enstrom Models 480 and 480B are eligible for installation of the Navigation System, No. 4220534/4220535 when operated within the prescribed limitations of Flight Manual Supplement No. 28-AC-055, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 64. Enstrom Models F-28F and 280FX are eligible for installation of the Nav/Com Transceiver, No. 28-22063 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-074, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 65. Enstrom Models F-28F and 280FX are eligible for installation of the Course Deviation Indicator, No. 28-22095 when maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 66. Enstrom Model 480B is eligible for installation of the Vision 1000, No. 4220641 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-067, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 67. Enstrom Model 480B is eligible for installation of the Integrated Flight Deck, Configuration P/N 4220650-3, Standby Attitude Module, No. 4220677, and DME, No. 4220686 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-075, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 8, latest revision.
- NOTE 68. Enstrom Model 480B is eligible for installation of the GMA 350Hc Audio Panel, No. 4220672 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-076, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 69. Enstrom Model 480B is eligible for installation of the GTX 345 Transponder, No. 4220645 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-078, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 70. Enstrom Model 480B is eligible for installation of the MD200 Series CDI, No. 4220574 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-079, and maintained in accordance with Enstrom TH-28/480 Series Maintenance Manual Supplement No. 5, latest revision.
- NOTE 71. Enstrom Models F-28F and 280FX are eligible for installation of the GMA 350Hc Audio Panel, No. 28-22048 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-080, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.
- NOTE 72. Enstrom Models F-28F and 280FX are eligible for installation of the GTX 345 Transponder, No. 28-22028 when operated within the prescribed limitations of the Flight Manual Supplement No. 28-AC-081, and maintained in accordance with Enstrom F-28F/280F Series Maintenance Manual Supplement No. 1, latest revision.