

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

H1CE
Revision 24
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
October 17, 2008

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

I - Model F-28 Helicopter, 3 PCLH, 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. Alt.	Outside Air Temperature, °F.						
	-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.

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Rev. No.	24	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	24	24	24	24
Page No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35					
Rev. No.	24	24	24	24	24	24	24	24	23	22	24	24	24	24	24					

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)

II - Model F-28A Helicopter, 3 PCLH, Approved May 28, 1968

Engine	Lycoming H1O-360-C1A or H1O-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. Alt.	Outside Air Temperature, °F.						
	-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.
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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.

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)

III - Model 280 Helicopter, 3 PCLH, 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. Alt.	Outside Air Temperature, °F.						
	-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), 40 gal. usable. See NOTE 1.
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)

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

Engine	Lycoming HIO-360-E1AD or HIO-36-E1BD with Rajay Model 301E10-2 or Rotomaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix 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.)																																																																							
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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.)																																																																							
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Maximum baggage	108 lb. (+135.0)																																																																							
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Stabilizer Setting	Fixed, 4° TE up relative to WL.																																																																							
Serial Nos. eligible	304, 331 and subsequent (See NOTE 29)																																																																							

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

Engine	Lycoming HIO-360-E1AD or HIO-360-E1BD with Rajay Model 301E10-2 or Rotormaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13 regarding -E1BD engine.)																																																																							
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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)																																																																							

VI - Model 280C Helicopter, 3 PCLH, 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 Rotormaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13 regarding -E1BD engine).																																																																							
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Altitude limits	Maximum operating 12,000 ft. density altitude. Refer to Flight Manual for height-velocity diagram.																																																																							
C.G. limits	<p>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.</p> <p>Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs. at 2350 lbs. See Flight Manual for schedule with weight.</p>																																																																							
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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)																																																																							

VII - Model F-28C Helicopter, 3 PCLH, Modified as per Note 5, Approved April 21, 1978 (See NOTES 12 & 14)
 (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 Rotormaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix RSA-5AB1, Parts List 2524712-1, -2, -3, -5, -6, -7, -8, -9, or -10 fuel injector. (See NOTE 13 regarding -E1BD Engine.)																																																																							
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Serial Nos. eligible	All approved F-28C Models (See NOTE 29)																																																																							

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 Rotormaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix 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)	<p style="text-align: center;">Never Exceed Speeds - Miles Per Hour</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Press. Alt.</th> <th colspan="7">Outside Air Temperature, °F.</th> </tr> <tr> <th>-20</th> <th>0</th> <th>20</th> <th>40</th> <th>60</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>SL</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> </tr> <tr> <td>1000</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>85</td> <td>83</td> <td>82</td> </tr> <tr> <td>2000</td> <td>85</td> <td>85</td> <td>85</td> <td>84</td> <td>83</td> <td>82</td> <td>81</td> </tr> <tr> <td>3000</td> <td>85</td> <td>85</td> <td>84</td> <td>83</td> <td>82</td> <td>81</td> <td>80</td> </tr> <tr> <td>4000</td> <td>85</td> <td>84</td> <td>83</td> <td>82</td> <td>81</td> <td>80</td> <td></td> </tr> <tr> <td>5000</td> <td>84</td> <td>83</td> <td>82</td> <td>81</td> <td>80</td> <td></td> <td></td> </tr> <tr> <td>6000</td> <td>83</td> <td>82</td> <td>81</td> <td>80</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Press. Alt.	Outside Air Temperature, °F.							-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			
Press. Alt.	Outside Air Temperature, °F.																																																																							
	-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), 40 gal. usable. See NOTE 1																																																																							
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	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)																																																																							

IX - Model F-28C/280C Helicopter, 3 PCLH 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 Rotormaster Model 3BT5EE10J2 turbocharger per STC SE100GL and Bendix 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, 2570 minimum Rotor (Power Off) 385 maximum; 332 minimum																																																																							
Airspeed limits (IAS)	<p style="text-align: center;">Never Exceed Speeds - Miles Per Hour</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Press. Alt.</th> <th colspan="7">Outside Air Temperature, °F.</th> </tr> <tr> <th>-20</th> <th>0</th> <th>20</th> <th>40</th> <th>60</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>SL</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>2000</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>97</td> <td>93</td> </tr> <tr> <td>4000</td> <td>100</td> <td>100</td> <td>100</td> <td>97</td> <td>93</td> <td>88</td> <td>82</td> </tr> <tr> <td>6000</td> <td>100</td> <td>98</td> <td>94</td> <td>88</td> <td>82</td> <td>75</td> <td>68</td> </tr> <tr> <td>8000</td> <td>95</td> <td>90</td> <td>82</td> <td>75</td> <td>68</td> <td>62</td> <td>55</td> </tr> <tr> <td>10000</td> <td>84</td> <td>77</td> <td>69</td> <td>62</td> <td>55</td> <td></td> <td></td> </tr> <tr> <td>12000</td> <td>70</td> <td>63</td> <td>55</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Press. Alt.	Outside Air Temperature, °F.							-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				
Press. Alt.	Outside Air Temperature, °F.																																																																							
	-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	<p>Longitudinal: (+92.0) to (+94.6) at 2350 lbs. (+92.0) to (+98.5) at 2070 lbs. See Flight Manual for schedule with weight.</p> <p>Lateral: Maximum approved asymmetric moment +3700 to -3250 in.-lbs. at 2350 lbs. See Flight Manual for schedule with weight.</p>																																																																							
Maximum weight	2350 lbs.																																																																							
No. of seats	3 (+62.0)																																																																							
Maximum baggage	108 lb. (+135.0)																																																																							
Fuel capacity	42 gal. (+96.7), 40 gal. usable. See NOTE 1																																																																							
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	F-28C: Fixed, 6° TE up relative to WL, per Dwgs 28-17326 and 28-2000. 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)																																																																							

X - Model F-28F/280F Helicopter, 3 PCLH, Approved December 31, 1980 (See NOTE 14)

(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 Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1, Parts Number 2524858-A, -1, -2, -3, or -4 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

Press. Alt.	Outside Air Temperature, °F.						
	-20	0	20	40	60	80	100
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. Alt.	Outside Air Temperature, °F.						
	-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), 40 gal. usable. See NOTE 1
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, 6° TE up relative to WL.

Serial Nos. eligible F-28F Models: 506, 507, and 509 thru 743 (See NOTE 29)
280F Models: 1212, 1500 and subsequent (See NOTE 29)

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)

(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 Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1, Part Number 2524858-A or -1, -2, -3, or -4 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)

Press. Alt.	Never Exceed Speeds - Miles Per Hour						
	Outside Air Temperature, °F.						
	-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: -3180 to -1855 in.-lbs. 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), 40 gal. usable. See NOTE 1

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, 6° TE up relative to WL.

Serial Nos. eligible All approved F-28F & 280F Models (See NOTE 29)

XII - Model F-28F/280F Helicopter, 3 PCLH Modified per Note 7, Approved December 31, 1980 (See NOTE 14)
(This version is for operation with inflatable floats.)

Engine	Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1 Part Number 2524858-A or -1, -2, -3, or -4 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), 40 gal. usable. See NOTE 1
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	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)

XIII - Model F-28F/280F Helicopter, 3PCLH, Originally Manufactured in Compliance with or Modified Per Note 16, Approved July 1, 1984 (See NOTE 14)

(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 Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1, Parts Number 2524858-A, -1, -2, -3, or -4 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), 40 gal. usable. See NOTE 1.
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	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)

XIV - Model F-28F/280F Helicopter, 3 PCLH, Originally Manufactured in Compliance with or Modified per Notes 7, and 16, Approved July 1, 1984 (See NOTE 14)

(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_{NE} /altitude envelope.)

Engine	Lycoming HIO-360-F1AD with Rajay Model 325E10-2 or Rotomaster Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1 Parts List 2524858-A, -1, -2, -3, or -4 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), 40 gal. usable. See NOTE 1
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)

XV - Model 280FX Helicopter, 3PCLH, Approved January 14, 1985 (See NOTES 6 & 8)

(This model 280FX differs from the basic model 280F in that the helicopter is equipped with landing gear fairings, 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 Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1 Parts List 2524858-A, -1, -2, -3, or -4 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 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), 40 gal. usable. See NOTE 1
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)

XVI - Model 280FX Helicopter 3PCLH, Originally Manufactured in Compliance with or Modified per Note 7, Approved July 12, 1985

(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 Model 3BT5EE10J2 turbocharger per STC SE484GL and Bendix RSA-5AB1 Parts Number 2524858-A, -1, -2, -3, or -4 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 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), 40 gal. usable. See NOTE 1
Oil capacity (engine sump)	10 qts. (+96.0) See NOTE 1 for 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)

XVII - Model TH-28 Helicopter, 3PCLH, 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 Mil-DTL-5624, Grade JP-4 or JP-5; Aviation Turbine Fuels ASTM D1655 Jet A or A-1 (or Allison Spec. EMS-64) or ASTM D6615 Jet B; Mil-DTL-83133, Grade JP8; JP-1 or Diesel #1 fuel conforming to ASTM D1655, Jet A.

Engine limits	<u>Torque Pressure</u>	<u>Output Shaft Speed</u>	<u>Turbine Outlet Temp.</u>	<u>Gas Gen Speed</u>
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	<u>Power Off</u>	<u>Power On</u>
	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.
Lateral: Maximum asymmetric moment \pm 7500 in-lbs.

Maximum Weight 2850 lbs.

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

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

Maximum baggage Not applicable.

Fuel Capacity 90.0 gallons Total (607 lbs) at (+144.6 in.); 0.3 gallon unusable. See NOTE 1

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)

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

(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

Fuel Mil-DTL-5624, Grade JP-4 or JP-5; Aviation Turbine Fuels ASTM D1655 Jet A or A-1 (or Allison Spec. EMS-64) or ASTM D6615 Jet B; Mil-DTL-83133, Grade JP8; JP-1 or Diesel #1 fuel conforming to ASTM D1655, Jet A.

Engine limits	<u>Torque Pressure</u>	<u>Output Shaft Speed</u>	<u>Turbine Outlet Temp.</u>	<u>Gas Gen Speed</u>
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	<u>Power Off</u>	<u>Power On</u>
	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.
Lateral: Maximum asymmetric moment \pm 7500 in-lbs.

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 (607 lbs) at (+144.6 in.); 0.3 gallon unusable. See NOTE 1

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 NOTES 19 & 29)

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

(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 Mil-DTL-5624, Grade JP-4 or JP-5; Aviation Turbine Fuels ASTM D1655 Jet A or A-1 (or Allison Spec. EMS-64) or ASTM D6615 Jet B; Mil-DTL-83133, Grade JP8; JP-1 or Diesel #1 fuel conforming to ASTM D1655, Jet A.

Engine limits	<u>Torque Pressure</u>	<u>Output Shaft Speed</u>	<u>Turbine Outlet Temp.</u>	<u>Gas Gen Speed</u>
Takeoff (5 min.)	68 psi (289 HP)	103% (6196 RPM)	810°C	105% (53,519 RPM)
Max. Continuous	63 psi (268 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 (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.
Lateral: Maximum asymmetric moment \pm 7500 in-lbs.

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 (607 lbs) at (+144.6 in.); 0.3 gallon unusable. See NOTE 1

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 NOTES 19, 28, & 29)

XX - Model 480B Helicopter, 5PLCH, Approved February 8, 2001 (See NOTES 20 thru 24,26,and 30 thru 33)
(The 480B is derivative of the 480 having increased gross weight and power limits.)

Engine Rolls-Royce 250-C20W

Fuel Mil-DTL-5624, Grade JP-4 or JP-5; Aviation Turbine Fuels ASTM D1655 Jet A or A-1 (or Allison Spec. EMS-64) or ASTM D6615 Jet B; Mil-DTL-83133, Grade JP8; JP-1 or Diesel #1 fuel conforming to ASTM D1655, Jet A.

Engine limits	<u>Torque Pressure</u>	<u>Output Shaft Speed</u>	<u>Turbine Outlet Temp.</u>	<u>Gas Gen Speed</u>
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.).

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

Fuel Capacity 90.0 gallons Total (607 lbs) at (+144.6 in.); 0.3 gallon unusable. See NOTE 1

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 5043, 5045 and subsequent (See NOTES 28 & 29)

Data Pertinent to All Models

Datum	<p>Piston-powered Models - 100 inches forward of the center of the main rotor hub and the centerline of the rotorcraft.</p> <p>Turbine-powered Models - 143.3 inches forward of main rotor hub centerline.</p>
Leveling Means	Lower longeron of pylon section.
Certification Basis	<p>Piston-powered Models - Part 6 of the Civil Air Regulation effective December 10, 1956, as amended by 6-1 thru 6-5; and FAR 21.25 (a) (1) effective February 1, 1965 for special purpose of agricultural operation per FAR 21.25(b). See NOTE 6. In addition, the F-28F, 280F, and 280FX Models have demonstrated compliance with FAR 36, amendment 20 (Appendix J), effective September 11, 1992.</p> <p>Application for Type Certificate dated July 26, 1962. Type Certification No. H1CE issued April 15, 1965.</p> <p>Turbine-powered Models - Federal Aviation Regulation FAR Part 27, effective November 24, 1964, as amended by 27-1 thru 27-23, effective September 2, 1988; FAR 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; FAR 27.775 as amended by 27-27, effective October 22, 1990; FAR 27.2 as amended by 27-28, effective August 16, 1991; and FAR Part 36, amendment 20 (Appendix J), effective September 11, 1992.</p> <p><u>NOTE:</u> Originally certificated to Part 6 of the Civil Air Regulation effective December 20, 1956, as amended by 6-1 thru 6-8; Federal Aviation Regulation FAR Part 27, amendment 23, effective September 2, 1988, for the turbine engine installation, induction system, fuel system, lubrication system, and airworthiness limitations; FAR Part 27, amendment 26, effective April 5, 1990, for the landing gear; and FAR Part 36, amendment 20 (Appendix J), effective September 11, 1992. The original Type Design Data was reexamined and found to comply with FAR 27 on December 2, 1994</p> <p>Application for Type Certificate dated November 17, 1988. Type Certificate No. H1CE amended September 11, 1992; Reissued February 8, 2001.</p>
Production Basis	Production Certificate No. 319
Equipment:	<p>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:</p> <p><u>F-28 Models:</u></p> <p>(a) FAA Approved Rotorcraft Flight Manual dated April 15, 1965, or later FAA approved revision is required.</p> <p><u>F-28A Models:</u></p> <p>(a) FAA Approved Rotorcraft Flight Manual dated May 21, 1968; Reprinted June 1, 1972, or later FAA approved revision is required.</p> <p>(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.</p>

- (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) FAA Approved Rotorcraft Flight Manual Supplement No. 1 dated November 21, 1978, or later FAA approved revision is required; (For External Loads) see NOTE 8.
- (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).
- (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.

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) FAA Approved Rotorcraft Flight Manual Supplement No. 7 dated June 26, 1981, or later FAA approved revision is required; (For Electric Clutch Actuator)
- (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.

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.

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.
- (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.

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 Pop-out 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 dated February 11, 2008, or later FAA approved revision is required; (For Gyrocam) See NOTE 32.
- (l) FAA approved Rotorcraft Flight Manual Supplement No. 10 dated February 14, 2008, or later FAA approved revision is required; (For Chelton Flight Systems, EFIS) See NOTE 33.

All Models:

- (a) Each rotorcraft must be furnished with a Maintenance Manual applicable to that model.

NOTE 1. 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. For piston-engine powered models, the certificated empty weight and corresponding center of gravity locations must include unusable fuel of 2.0 lbs. (+98) for 30 gal. tanks, 12.0 lbs. (+94) for 40 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:

<u>Model</u>	<u>Fuel Bladder Part Number</u>	<u>Unusable Fuel</u>
TH-28	4122000	12.0 lbs. at +143.4 in.

	4122009, No Rev., -1 & -2	12.0 lbs. at +143.4 in.
	4122009, Rev. A, -1, -2, & -4	2.0 lbs. at +143.4 in.
480, 480B	4122009, Rev A, -1, -2, & -4	2.0 lbs. at +143.4 in.
	4122052, No Rev., -1 & -2	11.4 lbs. at +143.4 in.

NOTE 2. 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."

See FAA Approved Rotorcraft Flight Manual for additional operation limitations and placard.

NOTE 3. Information essential for the proper maintenance of the helicopter is contained in the pertinent model Maintenance Manual. The retirement times of critical parts are listed in Table 1 and Table 2 of this Type Certificate data sheet. These 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:

<u>Category</u>	<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
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.

- △ Retire from service 5 calendar years from date of installation or package opening, or 8 years from date of manufacture, whichever occurs first.
- △△ 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, which ever 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.
- N/A Not approved for installation.

Table 2. Service Life Limits – Hours

	Model	TH-28	480	480B	
Part Number	Component	Wt. lbs.	2850	2850	3000
ECD 084-1	Tension-Torsion Strap		1,200*	1,200*	1,200*
ECD 100 (All dash numbers)	Tail Rotor Gear Set		1,000	1200	1,000
ECD 101 -1, -2	Tail Rotor Gear Set		1,000	1200	1,000
ECD 4000 (All dash numbers)	Drive Belt		5,500	5,500	5,500
ECD 4056 (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		2,400	2,400	2,400
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		3130	3130	N/A
28-14207-101	Pitch Change Bellcrank Assembly		15,000	15,000	15,000
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		1200	1200	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

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 Agrinautics 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 Air Cruiser 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 Air Cruiser 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, 280F, and 280FX helicopters are approved for interchangeable floats. These model helicopters are eligible for the installation of Air Cruiser 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 (Chadwick 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.
- 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) and must be operated within the prescribed limitation of their respective Flight Manual Supplement.
- 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.
- NOTE 17. Enstrom Models F-28C, 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 Model F-28F, 280F, and 280FX are eligible for installation of Wall-Colomony Muffler P/N ENX-0001 in place of the standard tailpipe. 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 Model 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 Model 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 Model 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 Model 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 Model 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 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 Maintenance Manual Supplement No. 2.
- NOTE 28. Enstrom Model 480, Serial Number 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 3 are ineligible for certification in any category.

Table 3. Ineligible Serial Numbers

Model	Serial Numbers
F-28	
F-28A	0145, 0284, 0211, 0219
F-28C	0347, 0386, 0395, 0418, 0419
F-28C2	0440-2, 0460-2, 0490-2
F-28F	0710, 0744
280	
280C	1004, 1035, 1046, 1113, 1142
280F	1507
280FX	2070, 2080, 2087
TH-28	3005
480	5005, 5021, 5023, 5035
480B	

- 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, and maintained in accordance with Enstrom TH-28/480 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 Maintenance Manual Supplement No. 4.

NOTE 34. Any changes to the type design of these helicopters by means of a amended type certificate (TC), supplemental type certificate (STC), or amended STC, requiring instructions for continued airworthiness (ICA's) must be submitted thru the project aircraft certification office (ACO) for review and acceptance by the Fort Worth -Aircraft Evaluation Group (FTW-AEG), Flight Standards District Office (FSDO) prior to the aircraft delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft, whichever occurs later, as prescribed by Title 14 CFR 21.50. Type design changes (major repairs or alterations) by means of a FAA Form 337 (field approval) that require ICA's must have those ICA's reviewed by the field approving FSDO.

...END...