

Date: December 15th, 2023 Registration: N280WR S/N: 1108 Hobbs: 444.9 AFTT: 1713.4

Engine SMOH:

This aircraft has been inspected IAW Enstrom F28/280 Series M.M. and Lycoming 360 Series O.M.M. Verified compliance with AD's through 12/15/2023. Complied with all applicable AD's, see A.D. List attached to this logbook. C/W all applicable SDB's, see attached SDB list in this logbook. Installed new air-filter BA-115 Serviced IAW with section 4 of the MM. Greased with Aeroshell 22, except for tail rotor grip bearings and U-block bearings greased with Aeroshell 14. Inspected and tested ELT per AD 2017-16-01. Found lower swashplate universal T bolt worn, replaced lower swashplate assembly with overhauled unit from EHC P/N 28-16101-101 S/N 15124-029. Replaced all three universal swashplate bolts 28-16129-2 and nuts. Fuel tanks found to be worn and flaking material. Removed and sent to EHC for repair, reinstalled after EHC repair. Blade tape found to be dry-rotted and molded. Removed blades and sent to EHC for repair. Reinstalled after EHC repair and tape removal. TR drive flex packs warped beyond limits. Removed and replaced with new flex packs. MR PC link rod ends worn, replaced with new. Cyclic bell-crank bushings worn, replaced with new. Collective walking beam bushings worn, replaced with new. Tail rotor gearbox chip detector leaking, replaced gasket. Main rotor vertical push/pull rod DU bushings worn, replaced with new. Found MR cyclic walking beams installed upside down. Verified this IS ACTUALLY the correct orientation Per Enstrom technical representative Bayard Dupond (in the late 70's Enstrom miss-manufactured several sets of cyclic walking beams with radius for vertical push-pull tubes on the opposite side from normal). Cyclic and collective found to be incorrectly rigged during initial hover checks (required nearly full aft and right cyclic to maintain hover). Re-rigged cyclic and collective. Ignition switch found to be bad, replaced with new switch. See maintenance defect report dated between 6/12/2023 and 12/15/2023 attached to this entry.

Tracked and balanced to .12@8:14 hover and .04ips @11:52 @ 100MPH. Great stick!

Blade Tab Settings		
Blade Number	Inboard Tab Setting	Outboard Tab Setting
#1	+3	+1
#2	-2	0
#3	+5	0

I certify that this aircraft has been inspected IAW 100hr/annual inspection and has been found to be in airworthy condition at this time.

END

Date: December 15th, 2023 Registration: N280WR S/N: 1108 Hobbs: 444.9 AFTT: 1713.4

Engine SMOH:

This engine has been inspected IAW Lycoming O.M.M 100 hour inspection checklist. Verified AD compliance through 12/15/2023. Complied with AD 2015-19-07 fuel injector line inspection. Compression checks – Cylinders all above 70/80 PSIG. Fuel injectors found clogged, replaced with new fuel injectors. Removed massive electrode spark plugs and installed new tempest fine wire spark plugs. Replaced one sniffer valve and installed new o-rings in two sniffer valves. Removed magneto and replaced with newly overhauled magneto from Quality Aircraft accessories. Found #1 cylinder was incorrectly installed with rocker arms swapped between intake and exhaust. Customer elected to have local A&P mechanic remove and replace the cylinder assembly (see prior work order and log entry). Idle mixture adjustment and fuel pressure found to be incorrect. Set idle mixture and fuel pressures per Enstrom MM and Lycoming OMM. See maintenance defect report dated between 6/12/2023 and 12/15/2023 attached to this entry.

Serviced engine with Aeroshell 100W. Operations checks good. I certify this engine has been inspected IAW a 100 hour inspection and found to be in airworthy condition at this time.

END

Maintenance Defect Report				Start Date: 6/12/2023	
Make:	Enstrom	S/N	1108	Completion Date: 12/15/2023	
Model	280C	AFTT	1713.4		
Defect #	Discrepancy	Hobbs	Corrective Action	MX Sign off	Date
1	Owner states that engine not making power and #1 cylinder is cold, no indication of firing.	444.9	Compression check good. Boroscope shows no signs of valve or valve seat damage. Pulled fuel injector to troubleshoot, problem persists (owner pulled injector prior to my arrival and tested. Issue persists.		12/15/2023
1a	Issue from #1 contin. (owner statement)	444.9	Pulled injector again and verified installation. Installation was correct but problem persists. (owner statement)		12/15/2023
2	Drained fuel system and found debris in tanks. Appears to be fine metal "grit" or shavings with the appearance of glitter.	444.9	Tanks found to be in bad shape and with the addition of the fuel contamination. Sent tanks to Enstrom for complete overhaul/repair.		12/15/2023
3	Fuel contamination from unknown source.	444.9	cleaned all lines, fitting, and flushed system systematically. Installed lines, fittings, and flow divider.		12/15/2023
4	TR Drive flex packs found warped beyond limits.	444.9	replaced flex packs		12/15/2023
5	MR PC link rod ends worn, suggest replacement	444.9	replaced PC link rod ends		12/15/2023
6	Cyclic bellcrank bushings worn on lat and long controls at seatback bellcrank	444.9	replaced bushings		12/15/2023
7	Collective walking beam bushings beginning to wear.	444.9	Replaced walking beam bushings		12/15/2023
8	Removed fuel tanks and shipped to EHC for Repair	444.9	repaired at EHC		12/15/2023
9	Fuel Nozzels improperly installed on all 4 (plumbers tape on NPT threads).	444.9	Customer requested to replace all 4 fuel nozzels		12/15/2023
10	Removed fuel nozzles, fuel lines from spider, removed spider, removed fuel inlet to spider.	444.9	cleaned all lines, fitting, and flushed system systematically. Installed lines, fittings, and flow divider.		12/15/2023
11	Massive Electrode plugs installed. Owner has elected to change/upgrade to fine wire plugs.	444.9	replaced with fine wire plugs		12/15/2023
12	Corrosion-X/ACF-50 treatment due	444.9	Performed at factory prior to blade shipment from repairs		12/15/2023
13	TT Straps due July 2024	444.9	Noted on component times sheet		12/15/2023
15	Review component times and logbooks	444.9	reviewed		12/15/2023
16	Sniffer valves need o-rings, qty. 2	444.9	installed new o-rings		12/15/2023
17	One sniffer valve worn and requires replacement just below turbocharger.	444.9	Replaced sniffer valve		12/15/2023
18	blade tape dry rotting, installed in 2019 by Enstrom. Remove and evaluate. Blade tape may be reinstalled IF there is not corrosion found on blades.	444.9	Shipped blades to EHC for inspection and repair as required.		12/15/2023
19	Mag points are found to be .012. Requires reset to .016 to .018.	444.9	Reset to .016 and .017 left and right gaps. Timed and installed on engine.		12/15/2023
20	Tail rotor gearbox chip detector housing leaking around crush gasket.	444.9	Replaced crash gasket and serviced.		12/15/2023
21	Customer requested oil analysis. Ordered kit. Oil change Not yet completed.	444.9	Raymond Butler and local A&P changed #1 cylinder, drained and serviced oil.		12/15/2023
22	AD/SIL/SDB lists to be generated	444.9	Generated		12/15/2023
23	#1 Cylinder found to be incorrectly installed with exhaust and intake rockers swapped. Damage found on both pushrod assemblies and rocker arms.	444.9	Customer elected to have a local mechanic remove the cylinder and install servicable cylinder assembly. This work was not performed by MHS.		12/15/2023
24	Magneto found to be malfunctioning	444.9	Removed magneto and replaced with freshly overhauled magneto from QAA.		12/15/2023

25	Ignition switch malfunctioning	444.9	Replaced with new TCM 10-257290-1	12/15/2023
	Lower swashplate assembly found to be loose on T bolt and incorrectly installed	444.9	Removed lower swashplate and installed overhauled unit from EHC.	12/15/2023
	Cyclic rigging and collective rigging found to be out of tolerance	444.9	Rigged cyclic and collective per EHC MM.	12/15/2023
	MX test flight required for cyclic/collective rigging, track and balance, idle mixture adjustment, and final checks.	444.9	Performed test flight. Set Auto RPM to 330RPM @ 60 KT's. Verified cyclic and collective rigging. Set idle Mixture and fuel pressures. Track and balance completed.	12/15/2023
	Transponder check due	444.9	Informed owner	12/15/2023
	Service IAW 25hr, 50hr, and 100hr	444.9	Serviced IAW MM	12/15/2023
	Inspect per 100hr/annual inspection	444.9	Inspected IAW MM	12/15/2023
	Inspect engine per Lycoming OMM 100hr inspection	444.9	Inspected IAW MM	12/15/2023
	Comply with SDB's	444.9	See SDBs list	12/15/2023
	Comply with AD's	444.9	See AD List	12/15/2023

1634.1 TTAF

08/06/2019

RMV & HAD REPAIRED & RPL BOTH GYROS

SN
T.A

07/24/2019 1634.1 TTAF
WORK ON FILE THIS STATION WO# 441
INSP AS PER CHECK LIST
TRACK & BAL M&TR SYS- CLN & WAX
GREASE AC
BLED DAMPERS & CHECK STRUT PRESURE
REVIEW & UPDATE TIME LIFE SHEET
RMV, BAL T/R ASSY & REINST.
COMP WITH APP. AD'S & SB'S (AS NOTED BELOW & REFER TO LISTS)
SERV TRGB W SPIREX #90 NO METAL FOUND
WASH & DRY AC
DEGREASE ENG & XMIS AREAS
RMV FLOOR DOORS, CLN, INSP & RPL
DRAIN ALL SUMPS
CONTROL CABLE TEN SATIS
CII XMIS OIL SERV W SPIREX #90 NO METAL
OR DISCOLORATION NOTED
AD760611 CW GREASE SPLT ND 1734.1
AD960602 CW NO RUST IN SPLT BNG (NR FOR UPDATED HOUSING)
AD822401 CW CLUTCH RIG SATIS ND 1734.1
AD2018-02-01 CW NOT REQ.DUE TO TT STRAP INST.
SB 0024 CW BLD BOND NO CHANGE
SB 0007 CW PINION TQ SATIS
SB 0014 CW MR NUT RETQ SATIS
SB 0062 CW COL. FRIC SATIS
SB 0072 CW NO LONGER REQUIRED
SB 0091 CW SPLT TIE RODS NOT LOOSE
SB 0095 CW IDLER STRAPS NOT CRACKED (NEW TYPE INSTALLED)
SB 0075 CW NO TR CABLE STRIKES
SB 0035 CW SPLT GREASED
SB 0013 CW BELT ROLLER CLR SATIS
SB 0077 CW DIE PEN TR SPINDLE NR THIS INST
SB 0105 CW DIE PEN COL. BELLCRANK ND 1934.1
SB 0119 CW MAGNAFLUX M/R SPINDLES (SEE AD 2018-02-01)NR TT STRAPS INST.
SB 0117 CW DR BELT EDGES SATIS THIS TIME
SB 0118 CW DIE PEN IDLER YOKE NO CR NOTED
SB 0119 CW MR SPINDLE INSP TT STRAP SYS. INST.
SB 0120 CW DIE PEN COL. SOCKETS NO CRACKS NOTED REINSPECT AT 100 HR.
SB 0121 CW SERVO WASHERS INST CORRECTLY
SB 0123 CW INST RESTRICTOR FITTING IN OIL PRES LINE
SB 0124 CW INSP LANDNG GEAR CLAMPS SATIS
SB 0125 CW CHECK T/R HARDWARE FOR TIGHTNESS
SB 0126 CW DIE PEN / INSP. CONTROL. BELLCRANK MTS-REINSP AT 100 HR.
SB 0127 CW NO CORROSION AT DAMP ROD END THREADS (NEW)
RPR BROKEN "L" DOOR HANDLE
RMV XPONDER HAD RECALIB & REINST.
RMV KX125 REDIO & RPL WITH SERVICABLE UNIT
RMV & FLUSH FUEL TANKS
RPL MISSING "O" RINGS IN OIL FILLER TUBE
CORRECTED MANY LINES & SAFTIES INSTALLED WRONG
RMV, HAD RECALIB & RPL EGT GAUGE
REVIEWED PREVIOUSLY INSTALLED TT STRAP KIT, CORRECTED FAULTS
REINSTALLED M/R BLDS & TRACK A/C
SET COL SPRING CAP.
INST. FACTORY OH DAMPERS
RERIG CLUTCH ASSY
UPDATE AD & SB LISTS
REVIEW TIME LIFE SHEET
RPL TACH DR "O" RINGS W NEW
ALL M/R BLADE TABS SET TO "O"
INST T/R PC LINK SAFTIES AS PER SB

27 Aug 2019 N280WR, Enstrom Helicopter
Corporation 280C, S/N 1108 TTIS 1,236. I find
that the aircraft meets the requirements for the
certification requested and have issued a standard
airworthiness certificate dated 27 Aug 2019. The
next Annual inspection is due 31 Aug 2020.

TEMPLE ELECTRONICS COMPANY, INC.
Performed bench tests required by 14CFR Part 91.413
in accordance with Appendix F of 14CFR Part 43.
Model KT-76A SN 100319 Ref. WO 0307
Date 6-4-2019 Inspector [REDACTED]
FAA REPAIR STATION XD1R60