OFFICE OF THE NATIONAL COMMANDER
CIVIL AIR PATROL
UNITED STATES AIR FORCE AUXILIARY
MAXWELL AIR FORCE BASE, ALABAMA 36112-6332

15 March 2004

MEMORANDUM FOR ALL COMMANDERS

SUBJECT: Aircraft Maintenance (Revised 15 March 2004)

1. As I travel to the various regions, wings and units around the country, I have become aware of and concerned about the aircraft maintenance that is being performed on our 530 aircraft by our members.

2. We have had a number of potentially disastrous situations caused by faulty maintenance where our members performed maintenance or helped in the performance of maintenance and we did not have recourse against an established business carrying liability insurance against damage to aircraft due to faulty maintenance.

3. I am aware that the Federal Aviation Regulations (FARs) permit a pilot to perform certain preventive maintenance on aircraft owned or operated by that pilot. In addition, I know that the FARs permit a person to perform maintenance on an airplane under the supervision of a holder of a mechanic or repairman certificate if the supervisor personally observes the work being done to the extent necessary to ensure that it is being done properly. Never the less, because CAP operates a large fleet of aircraft and the aircraft are flown by many different pilots, it is essential that the quality of the work performed on our aircraft be backed by deeper pockets than most of our members can provide.

4. For these reasons, preventive maintenance on CAP owned aircraft by CAP members who are serving as CAP volunteers and not as employees of a certified mechanic or repairman under contract with CAP will limit their preventive maintenance to the following work, provided it does not involve complex assembly operations:

a. Removal, installation, and repair of landing gear tires.
b. Servicing landing gear shock struts by adding oil, air, or both.
c. Replacing defective safety wiring or cotter keys
d. Lubrication not requiring disassembly other than removal of nonstructural items such as cover plates, cowlings, and fairings.
   Note: Oil and filter changes are included. CAP members who perform oil changes must be a FAA certified mechanic or have received training from an FAA certified mechanic. Members who are not FAA mechanics must also be certified in writing by the wing commander. Engine logbook entries are required. Exxon/Mobil lubricants may be purchased at a discount from the following site: http://store.yahoo.com/eofcorp-store/index.html
e. Replacing hydraulic fluid in the hydraulic reservoir.
f. Refinishing decorative coating of fuselage, wings, tail group surfaces (excluding balanced control surfaces), fairings, cowlings, landing gear, cabin, or cockpit interior when removal or disassembly of any primary structure or operating system is not required.

g. Applying preservative or protective material to components where no disassembly of any primary structure or operating system is involved and where such coating is not prohibited or is not contrary to good practices.
h. Repairing upholstery and decorative furnishings of the cabin or cockpit interior when the repairing does not require disassembly of any primary structure or operating system or interfere with an operating system or affect the primary structure of the aircraft.
i. Making small simple repairs to fairings, non-structural cover plates, cowlings, and small patches and reinforcements not changing the contour so as to interfere with proper airflow.
j. Replacing safety belts.
k. Replacing seats or seat parts with replacement parts approved for the aircraft, not involving disassembly of any primary structure or operating system.
l. Replacing bulbs, reflectors, and lenses of position and landing lights.
m. Replacing wheels and skis where no weight and balance computation is involved.
n. Replacing any cowling not requiring removal of the propeller or disconnection of flight controls.
o. Replacing or cleaning spark plugs and setting of spark plug gap clearance
p. Replacing any hose connection except hydraulic connections.
q. Cleaning or replacing fuel and oil strainers or filter elements.
r. Replacing and servicing batteries.
s. Replacement or adjustment of nonstructural standard fasteners incidental to operations.
t. Updating self-contained, front instrument panel-mounted Air Traffic Control (ATC) navigational software data bases (excluding those of automatic flight control systems, transponders, and microwave frequency distance measuring equipment (DME) provided no disassembly of the unit is required and pertinent instructions are provided. Prior to the unit's intended use, an operational check must be performed in accordance with applicable sections of part 91 of the FARs.

5. All permitted preventive maintenance must be recorded in the aircraft or engine logbook and will include the preventive maintenance performed, the date it was performed, and the name of the member performing the preventive maintenance.

6. Members who are also FAA certified mechanics or repairmen may be contracted to perform maintenance of CAP owned aircraft provided they are in the business of providing aircraft maintenance or are employees of a company in the business of providing aircraft maintenance and the business is adequately insured with liability insurance as is customary in the aircraft maintenance industry.

Richard L. Bowling

RICHARD L. BOWLING
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Commander