SECTION 4. CORROSION PREVENTIVE MAINTENANCE

6-50. GUIDELINES: ALL AIRCRAFT. Corrosion prevention depends on a comprehensive prevention and control plan, implemented from the start of operation of an aircraft, which includes:

a. Adequately-trained personnel in

(1) recognition of corrosion-inducing conditions;

(2) corrosion identification techniques;

(3) corrosion detection, cleaning, and treating; and

(4) lubrication and preservation of aircraft structure and components.

b. Inspection for corrosion on a scheduled basis.

c. Thorough cleaning, inspection, lubrication, and preservation at prescribed intervals.

d. Prompt corrosion treatment after detection.

e. Accurate record-keeping and reporting of material or design deficiencies to the manufacturer and the Federal Aviation Administration (FAA).

f. Use of appropriate materials, equipment, and technical publications.

g. Maintenance of the basic finish systems.

h. Keeping drain holes and passages open and functional. Sealants, leveling compounds, miscellaneous debris, or corrosion inhibitors should not block drain paths.

i. Replacing deteriorated or damaged gaskets and sealants (using non-corrosive type sealants) to avoid water intrusion and entrapment that leads to corrosion.

j. Minimizing the exposure of aircraft to adverse environments by keeping the aircraft in a hangar.

k. Periodic and frequent inspection of areas where there are foamed plastics or other absorbent material.

l. Daily draining of fuel cavities to remove accumulated water and other foreign matter.

m. Daily wipe-down of exposed critical surfaces of hydraulic cylinders.

6-51. GUIDELINES: AIRCRAFT OPERATING OVER SALT WATER. In addition to the inspection and treatment prescribed above, the following treatment shall be applied:

a. Remove all traces of salt water and salt water residue by thoroughly washing the aircraft with fresh water.

(1) After drying, coat the propeller, hubs, blades and other unpainted or unprotected parts of the engine and its installation parts by spraying or rubbing lightly with corrosion preventive compound, Specification MIL-C-16173, Grade 4.

(2) Apply this mixture on parts that move or require some lubrication and on all fittings subject to corrosion such as landing gear retracting plungers, control surface hinges, control cables, exposed rivets and bolts, and other similar parts not protected by

paint. Apply with a cloth or a soft brush soaked in the mixture.

(3) Wipe off excess mixture. When applying the mixture take care that as little as possible is deposited on exhaust pipes or collector rings to avoid a fire hazard when the engine is started. Keep the ignition wires, propeller anti-icer feed hose, tires, and other rubber parts free of the mixture.

b. Where maximum corrosion protection is desired on stationary parts, use exterior surface corrosion preventive compound, Specification MIL-C-16173, grade I.

c. Wipe the exposed portion of the landing gear shock strut piston with a cloth soaked in the applicable hydraulic fluid.

d. Most parts of landing gear wheels are made from magnesium or aluminum alloys which corrode rapidly unless carefully protected. When the aircraft operates near salt water and off coral beaches, the corrosion can be very rapid. Inspect wheels to determine the paint condition.

e. Refinish portions of a wheel where paint has deteriorated, peeled, or chipped.

f. Except for friction and bearing surfaces, apply a protective coating to all parts of wheels and brake assemblies.

6-52.—6-62. [RESERVED.]