- CHAPTER 6 -

INSTRUCTIONS FOR GROUND CREW

6.1 Tanks

6.1.1 Fuel

Not inferior to 80 octane and not having more than 4 c.c. T.E.L. per Imp. Gal.

CAUTION: Do not use alcohol blended fuel.

The fuel cells are located in each wing root at the leading edge. Each fuel tank has a capacity of approximately 13.5 Imp.Gal. (61 litres) but is normally filled to the 12-1/2 gallon (57 litres) mark to give a total supply of 25 Imp.Gal. (114 litres). The quantity which may be carried in each tank when Major 10 equipped aircraft are operated with a crew of two and full military equipment, may be limited as indicated in para. 4.1.4 (g). Each tank has a filler cap and contents gauge on the upper surface of the wing leading edge and the tanks are filled independently.

The fuel gauges are graduated with two scales, the larger white figures showing the contents when the aircraft is in the flying attitude and the smaller green figures indicating the contents in the tail-down attitude.

6.1.2 Oil

Condition	Viscosity	Specification
Tropical	120	3-GP-120 or D.E.D. 2472 C/O
Temperate	100	3-GP-100 " " B/O
Winter (Moderate)	80	3-GP- 80 " " A/O
Winter (Arctic)	60	3-GP- 60 " " D/O

The tank has a capacity of 2-2/3 Imp.Gal. (12.0 litres) for oil plus a 1 gallon (4.5 litres) air space. The tank cannot be overfilled. It is mounted on the firewall and access to the combined filler cap and dip stick is gained through a quick release panel in the oil tank cooling shroud at the starboard side.

6.2 Prior to Starting the Engine

i) Remove control-locking devices.
ii) Chock wheels.
iii) Check switches and instruments.
iv) Check location of hand fire extinguisher in front cockpit.

6.3 Picketing

Picketing eyes are provided under the wing; the tailwheel yoke provides a point of attachment at the rear. A rope size of 3/4" diameter is recommended.

6.4 Parking

i) Lock all main flight controls (Chapter 3).
ii) Tether aircraft and chock wheels.
iii) Fit engine, propeller, windscreen and pitot-head covers. A wing cover is advantageous under winter conditions.

6.5 Jacking and Slinging

Jacking and slinging points are indicated in Plate 6.1.

6.6 Cleaning the Aircraft

If the potential life of the airframe is to be achieved, it must be maintained scrupulously clean. The exterior fuselage should be cleaned approximately once every day or at least every three days of service.

The landing gear, flap cut-outs, areas behind the exhaust stacks, battery compartment and the like should be cleaned daily.

The engine and engine installation should be cleaned at least as often as every major inspection to remove accumulated oil and other soil.

Cleaning agents containing abrasive compounds must not be used in any circumstances.

6.6.1 The exterior may be cleaned with a recognized proprietary aircraft cleaning compound, and if performed frequently, only polishing will be required.

6.6.1.1 For example, the proprietary material "Klad Polish" (See references at end of Chapter) can be applied by hand with a rag, sponge or mechanically operated tool. The sponge can be used repeatedly, rags should be changed as often as they become dirty. Rubbing should be continued in application until polish turns black and surface feels smooth and free from drag. The polish is then allowed to dry. The dry powder is then easily whisked off with clean cloths.

6.6.1.2 It is desirable to apply wax to the polished surface in order to avoid oxidation and to reduce the required frequency of polishing. "Klad Wax", for example, may be applied with a soft cloth. Use sparingly and do not rub in. Merely spread a thin coat and rub lightly with a clean cloth when it starts to dry.

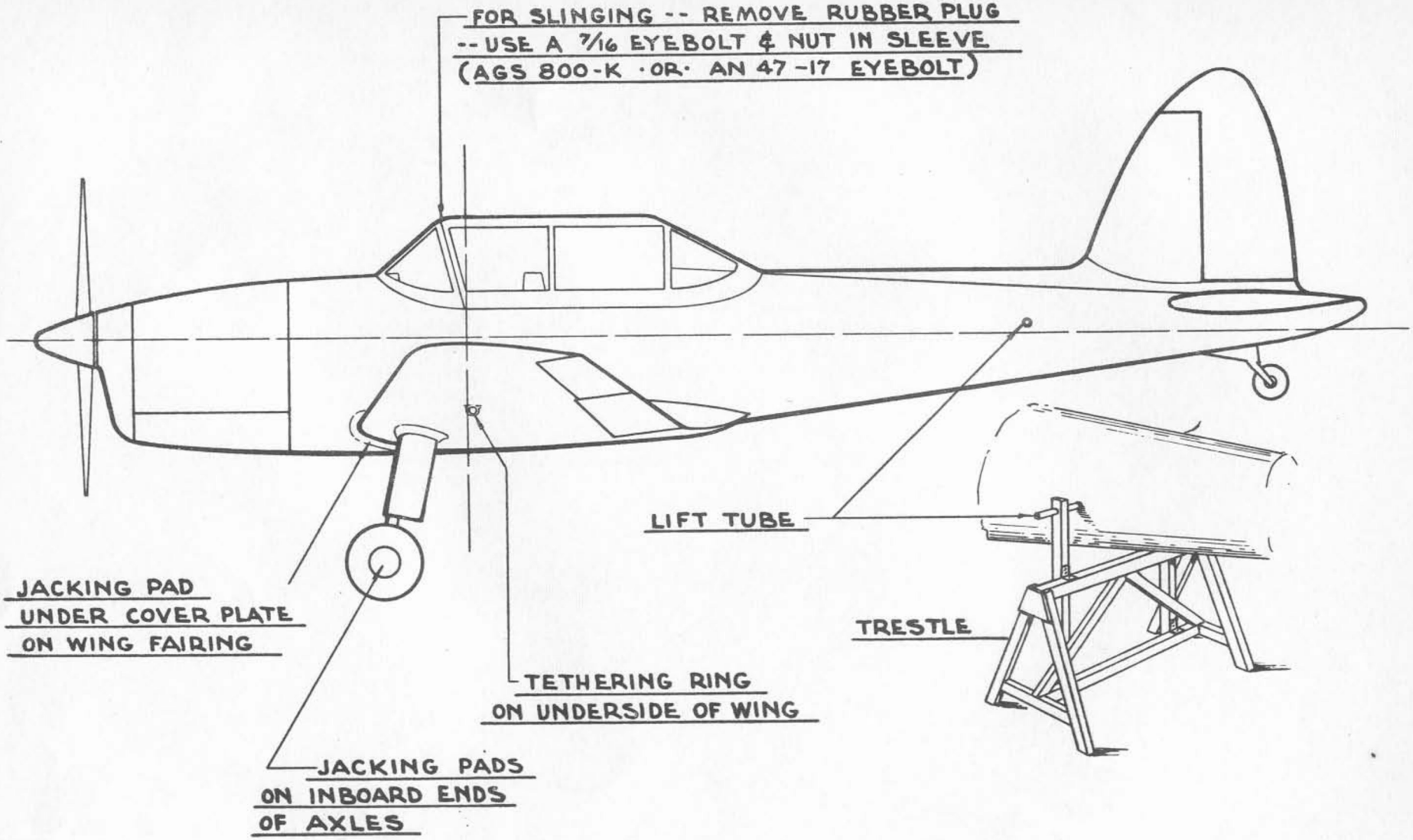
One operation may be saved by spraying Klad Wax on the gray powder left after the polish dries. Then as the powder is wiped off, the Wax spreads and produces a hard coating.

6.6.2 For cleaning the engine, a number of proprietary compounds are suitable. These can be dissolved in a petroleum base solvent and applied as a spray or mopped on the surface, allowed to remain for 10-15 minutes, and then hosed down with water or blown off with compressed air, followed by wiping with a clean rag. The engine should be grounded and all electrical accessories masked to prevent their saturation with water.

6.6.3 The windshield and canopy should be cleaned with mild soap and water. A clean grit-free soft cloth, sponge or chamois may be used. Grease and oil may be removed with a soft cloth saturated with kerosene, white gasoline or hexane. Do not use aviation or ethyl gasoline, acetone, benzine, carbon tetrachloride, fire extinguisher fluids or lacquer thinners.

CHAPTER 6 PUBLICATIONS and REFERENCES

Item	Manufacturer	Canadian Agent	Reference
Cleaning Compounds, etc.	R.M.Hollingshead Corp., Camden, New Jersey.	R.M.Hollingshead Corp., 1130 Bay Street, Toronto, Canada	Catalogue entitled "Aviation Chemicals" also Mort Gooch Maintenance Manual #1 Polish



J.W.S.

DHC 1 CHIPMUNK ··· TETHERING, SLINGING, JACKING PLATE Nº 6.1