PRE–FLIGHT, THRU–FLIGHT & POST FLIGHT

INSPECTION WORK CARDS

FOR

PT–6 AIRCRAFT

ELECTRICAL

PUBLISHED UNDER AUTHORITY
OF THE ACAS MAINTENANCE OF THE
BANGLADESH AIR FORCE

APRIL 1995

AMENDMENT RECORD SHEET

Art No	Amendment Incorporated	Signature & Date

PRE FLIGHT, THRU FLIGHT, POST FLIGHT AND SPECIAL INSPECTIONS WORK CARDS.

BAF SERIES

PT–6 AIRCRAFT

INSTRUCTION

1. It is the responsibility of all personnel to report any unserviceability of item assembly and make necessary entry in AFTO Form 781A.

2. A visual inspection includes checking for all types of wear, damage, corrosion, security, chaffing, in fact for the complete well-being of the particular item in addition to cleanliness.

3. A Functional check is where the operation of the item or service in question is required to determine its serviceability.

4. Suggestion affecting changes are to be forwarded to ACAS (M) Air HQ, Dhaka.

INTRODUCTION

1. The Pre-Flight Inspection will be accomplished prior to the first flight of the day. The inspection consists of checking the aircraft for flight preparedness by performing visual examination and to find that no defect or mal-adjustment exists that could cause accident or aborted missions.

2. It is the responsibility of all personnel to report about any unserviceable item or assembly and make necessary entry in AFTO Form-781A.

3. A Functional check is where the operation of the item or service in question is required to determing its serviceablity.

SECTION I– Pre-Flight.

To be accomplished prior to the first flight of the day.

SECTION II– Between Flight

To be accomplished after each flight when another flight is anticipated during the day.

SECTION III– Post-Flight.

To be accomplished after the last flight of the day.

SECTION IV– Special Inspection.

4. Suggestion affecting changes are to be forwarded to ACAS (M) Air HQ, Dhaka.

NOTE — If for some particular reason the "Inspection after the last flight of the day" has not been carried out, it is imperative that it be performed before the first flight of the following day.

SECTION–1

PRE-FLIGHT INSPECTION

WORK CARDS

PT–6 AIRCRAFT

INTRODUCTION

1. The Pre-Flight Inspection will be accomplished prior to the first flight of the day. The inspection consists of checking the aircraft for flight preparedness by performing visual examination and operational checks of certain components to ensure no defect or mal-adjustment exists that could cause accident or aborted missions.

PRE-FLIGHT INSPECTION

PREPARATION

1. AFTO Form 781 for reported discrepancies.
2. Auxiliary power source available.
3. Fire extinguisher available.
4. Remove necessary panels, doors and hatches.
5. All switches are set to 'OFF'.

A. BATTERY COMPARTMENT

1. Battery panel for damage, crack, and security. Lock buttons (fastener) for serviceablity. Ensure the head cut of the fastener is in line with the marking of the aircraft skin.
2. Battery surrounding area for any sign of spillage of electrolyte.
3. Battery mounting for play and cleanliness.
4. Battery connections for looseness and security.
5. Battery outlets for blockage.
6. Battery securing lockpins are secured.
7. Battery for voltage (24 volts on load).

8. Electrolyte level (4–4.5mm) above the separator (if low, top up with distilled water).

B. EXTERIOR OF THE AIRCRAFT

1. All navigation lights for damage, crack, cleanliness and security.

2. Landing and taxi lights for damage, cleanliness and security.

3. Fuselage lights for damage, cleanliness and security.

C. INTERIOR OF THE AIRCRAFT

1. Accessible wiring, cleating, components, casing for signs of burning, damage, deterioration, chaffing and security.

2. Electrical panels for looseness and security.

3. Check all electrical cables are properly cleated and aircraft/engine controls are free from obstruction.

D. POWER ON CHECK (Both the Cockpits).

1. Socket panel for serviceability and proper locking.

2. Auxiliary static ground connection installed, power connected.

Progress report on instl of 02xCB ldg
and taxi lt ckt of PT-6 ac:
Both the CB (10A&5A) must be kept "ON" psn during
pre and thru flt insp of all the modified PT-6 ac.
Auth: (A) 00.03.2600.026.47.003.96.038 (Engg task)/56A dt 10 Dec 12.
(B) 00.03.0000.076.49.002.11.001/5A dt 25 Apr 13.

4. Navigation lights for illumination.

5. Landing gear lights for operation.

E. **ELECT.** Check the following :

1. During starting AV meter reverse current may show 15 amps for few sec.

2. Generator warning light will go off at 1000 $\pm$ 50 RPM

3. After 1600 RPM generator voltage 27.5 $\pm$ 1.

4. Battery charging current should not exceed 3 - 5 amps.

N.B. : Detail G/run procedure is laid down in maint manual Vol-1, Appendix-II.

PRE-FLIGHT INSPECTION

FINAL OPERATION

1. All switches are set to 'OFF'.
2. Auxiliary static ground connection removed.
3. Power disconnected.
4. External power socket cover closed and secured.
5. All previously removed panels, doors and hatches reinstalled and checked for security.
6. Make Pre-Flight entries in AFTO Form -781.
7. On completion of pre flt insp, make sure no foreign object or tools are left in the cockpit. Close the canopy, use canopy cover during summer.

SECTION–1I

AFTER FLIGHT & THRU FLIGHT INSPECTION

WORK CARDS

PT–6 AIRCRAFT

INTRODUCTION

1. Thru Flight Inspection will be accomplished after each flight when another flight is anticipated during the day. The inspection consists of checking the aircraft to determine if it is suitable for another flight by performing visual examination and operational checks of certain components to assure that no defects exist which would be detrimental to further flight.

THRU-FLIGHT INSPECTION

ELECTRICAL

PREPARATION

1. AFTO Form 781 for reported discrepancies.
2. Fire extinguisher available.
3. Remove necessary panels, doors and hatches.
5. All switches are set to 'OFF' position.

BATTERY COMPARTMENT

1. Battery panel for damage, crack, and security.
2. Battery lock Pins for serviceability & security.
3. Ensure the head cut of the fasteners is in line with the marking of the ac skin.

EXTERIOR OF THE AIRCRAFT

1. All navigation light, Bug lights and landing lights for damage, cracks, cleanliness and security.

INTERIOR OF THE AIRCRAFT

1. Accessible wiring, cleating, components, casing for signs of burning, damage, deterioration, Chaffing and security.

2. Electrical panels for looseness and security.

3. L/G signal light box for serviceability and security.

4. Check L/Gear signal light and Gen Signal light for serv.

FINAL OPERATION

1. All previously removed panels, doors and hatches reinstalled and checked for security.

2. Make thru flt entries in AFTO Form 781.

SECTION–1II

POST FLIGHT INSPECTION

WORK CARDS

PT–6 AIRCRAFT

INTRODUCTION

1. The Post-Flight Inspection will be accomplished after the last flight of the day. This inspection consists of checking the aircraft to determine if it is suitable for another flight by performing visual examination of certain components, areas or systems to assure that no defect exists which would be detrimental to further flight.

POST FLIGHT INSPECTION

PREPARATION

1. AFTO Form 781 for reported discrepancies.
2. Auxiliary power source available.
3. Fire extinguisher available.
4. Necessary panels, doors and hatches removed.
5. All switches are set to 'OFF'.

A. BATTERY COMPARTMENT

1. Battery panel for damage, crack, and security.
2. Battery surroundings area for any sign of spillage of electrolyte.
3. Battery mounting for play and cleanliness.
4. Battery connections for looseness and security.
5. Battery outlets for blockage.
6. Battery security lockpins are secured.
7. Electrolyte level (4–4.5mm) above the separator (if low, top up with distilled water).

B. **EXTERIOR OF THE AIRCRAFT**

1. Check the following :

a. All navigation lights for damage, crack, cleanliness and security.

b. Landing and taxi lights for damage, cleanliness and security.

c. Fuselage lights for damage, cleanliness and security.

C. **INTERIOR OF THE AIRCRAFT**

1. Accessible wiring, cleating, components for sign of burning, damage, deterioration, chaffing and security.

2. Electrical panel for looseness and security.

D. **POWER ON CHECK (Both the Cockpit).**

1. All switches checked for correct operation.

2. Navigation lights for illumination.

3. Landing gear signal lights for operation.

4. Trim tab signal light for operation (if should be in neutral position).

5. Inquire from all other tradesmen whether associated electrical system operating properly.

6. Check all electric/radio cables are properly cleated and AC/ engine controls are free from obstruction.

FINAL OPERATION

1. All switches are set to 'OFF'

2. Power disconnected.

3. Electrical power socket closed and secured.

4. All previously removed panel, doors, hatches are reinstalled, locked and secured.

SECTION–IV

WEEKLY MAINTENANCE INSPECTION

WORK CARD

WEEKLY MAINTENANCE INSPECTION

1. **Battery compartment**

a. Check battery panel for damage, crack and security.

b. Check battery surrounding area for any sign of spillage of electrolyte.

c. Check battery mounting for play and cleanliness.

d. Check battery connections for looseness and security.

e. Check battery outlets for blockage.

f. Check battery security lock pins for its security.

g. Check battery for voltage (24 volts on load).

2. **Battery**

Check electrolyte level (4.5mm or $^{1}/_{8}$") above the separator (if low, top–up with distilled water).

3. **Exterior of the Aircraft**

a. Check navigation lights and bug lights for damage, crack, cleanliness and security.

b. Check the landing light and cover for damage, cleanliness and security.

MISC INFORMATION

MISC INFORMATION

1. **Generator**

   a. Type ZF - 1.5 DC Generator.

   b. Rated voltage : 27.5 V DC

   c. Rated power : 1500 watt

   d. Rated current : 54 Amps

   e. Rated rotating speed : 3800–5400 rpm

2. **Battery**

   a. Type : 12 HK–30 lead acid battery.

   b. Rated voltage : 24 V DC

   c. Rated capacity : 26 Amps/hrs.

   d. Capacity Test : Every after 03 months.

3. **Inverter**

   a. **GBL – 250**

      i. Input : 27 $\pm$ 10% V DC

      ii. Output : 115 $\pm$ 3.5 V AC

b. **SBL–53**

i. Input : 27 ± 10% C DC

ii. Output : P 36 ± 10% V AC

c. **SBL–40**

i. Input : 27 ± 10% V DC

ii. Output : 36 ± 4 V AC