National Defence / Défense nationale

C-12-114-000/NR-000

CT114 TUTOR

SERVICING LEVEL INSPECTION SCHEDULE

(ENGLISH)

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LIST OF EFFECTIVE PAGES

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NOTE

On a changed page, the portion of the text affected by the latest change is indicated by a vertical line in the margin of the page. Changes to illustrations are indicated by miniature pointing hands or black vertical lines.

Dates of issue for original and changed pages are:

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Contact Officer: DAEPM(FT) 2-5-2

FOREWORD

1. This servicing inspection schedule defines maintenance tasks necessary to protect the safety and operating capability of the CT114 Tutor aircraft. These inspections are defined in C-05-005-P08/AM-001(Aircraft Weapon Systems Maintenance, Maintenance Program Implementation – Preventive Maintenance) and C-05-005-P04/AM-001(Aircraft Weapon Systems Maintenance, Aircraft Maintenance Record Set).

2. For change requests to this order, refer to C-05-005-P08/AM-001.

3. Unless specified otherwise, abbreviations used in this order are those contained in MIL-STD-12D (Abbreviations for Use on Drawings, Specifications, Standards and in Technical Documents).

4. For authorization of any deviation, postponement or delay of inspections refer to C-05-005-P08/AM-001.

5. In order to arrange inspection instructions according to the manner in which work will be divided and assigned, the instructions in each part of the schedule are divided into sections and groups. The section title denotes the generic aircraft structure or system, e.g. SECTION 1 – AIRFRAME, SECTION 2 – ENGINE, etc. A group title indicates either a functional system, a group of related components, or a work area, e.g. cockpit (Ckpt), fuselage (Fus) etc.

NOTE

The following Parts and Sections are not applicable to the CT114 Tutor aircraft, therefore they will only appear as introduction pages with the mention INTENTIONALLY OMITTED:

– Part 1, Sections 3 and 5.
– Part 2, Sections 3 and 5.
– Part 3, Sections 3 and 5.
– Part 4.
– Part 5, Sections 2 and 3.
– Part 7.

APPLICABLE SERVICING INSPECTIONS

6. The inspections applicable to the CT114 Tutor aircraft are:

a. Before flight inspection (B check).

b. After flight inspection (A check).

c. Quick turn around inspection (AB check).

d. Primary Inspection – 14 days (PI).

INSPECTION VALIDITY

7. When the requirement for a quick turn around exists, an AB check may be carried out in lieu of an A check and B check. An AB check may be carried out on the CT114 Tutor if the aircraft is on the ground for 8 hours or less between landing and the next take-off.

8. B check validity for the CT114 Tutor shall be 8 hours.

9. Tire pressure inspection validity for the CT114 Tutor shall be 7 days.

CONTINUOUS OPERATIONS

10. NA.

CONTINGENCY AIRCRAFT MAINTENANCE PROGRAM (CAMP)

11. NA.

CONDITIONAL INSPECTIONS

12. Part 6, Conditional Inspections, lists additional inspections that are depending upon specific conditions or incidents, which require an inspection to ensure further safe flight. The specific inspection requirements for each condition are specified in Part 6, Figure 6-1, under Conditions. Conditional inspection completion shall be recorded on form CF349.

GENERAL INSTRUCTIONS

HAZARDS

1. In order to prevent personal injury or aircraft damage, technicians shall do the following before starting an inspection:

   a. Check the following aircraft servicing set records, as applicable, for any hazardous conditions that may exist:

      (1) CF336 Aircraft Minor Defect Record.

      (2) CF338 Aircraft Armament State Record.

      (3) CF339 Aircraft Information Record.

      (4) CF339A Operational Restriction Record.

      (5) CF349 Aircraft Unserviceability Record.

      (6) CF353 Explosive Cartridge and Cartridge Actuated Device Record.

   b. Inspect the aircraft to ensure that applicable ground safety devices are installed, and that electrical switches, circuit breakers and selector handles are correctly positioned.

   c. Rectify any hazardous condition prior to commencement of the inspection.

CAUTION

During the inspection, panels, cowlings, etc., are to be either properly installed on the aircraft with all quick release pressure fasteners in the locked position, or be completely removed from the aircraft.

2. After the inspection and prior to the installation of panels and cowlings or compartment close-out, a check shall be carried out to ensure the absence of foreign objects and/or loose articles in accordance with C-05-005-P10/AM-001, Prevention of Foreign Object Damage to Aircraft and Aero Engines.

SIGN OFF

3. Signatures for B checks, A checks, AB checks and Primary Inspections (PI) shall be made on CF335 (Daily Aircraft Maintenance Certificate), by authorized personnel in accordance with C-05-005-P04/AM-001.

METHOD AND DEGREE OF INSPECTION

4. The inspection of items for which no other specific method of inspection is detailed shall be carried out according to the terms Visual, Area, Check, Operational Check, or Functional Check. Interpretation of these terms is as per the following paragraphs:

   a. **Visual Inspection.** A visual inspection of an item shall include a detailed examination of the item for the following conditions:

      (1) Cleanliness.

      (2) Corrosion.

      (3) Cracks.

(4) Damage.

(5) Delamination.

(6) Distortion.

(7) Leakage.

(8) Chafing or wear.

(9) Loose or missing attachments.

(10) Unbonded/disbonded layers.

(11) Signs of overheating or burning.

(12) Security of the item and all connections.

(13) Drainage holes, vents and orifices, free of obstructions.

(14) Technicians shall perform an area inspection of the surrounding area for any other discrepancy not specified above which may affect the functioning of the item or the airworthiness of the aircraft.

NOTE

The visual inspection shall be accomplished without removal or disassembly of the item or removal of adjacent equipment, and shall apply to exposed items and surfaces of those items which become visible by opening/removal of readily operated/removed panels or doors. Where visual inspections deviate from the norm, requirements shall be specified for the affected item.

b. **Area Inspection.** An area inspection is a non-specific visual inspection or check of all visible structure, system installation and components in a compartment, area or zone, for obvious defects.

c. **Check.** A check is the actions taken to determine the correctness or accuracy of a specified condition.

d. **Operational Check.** An operational check is a task involving the operation of installed equipment to establish that a particular item or system is operating correctly. Operational checks are usually relatively simple procedures and are normally performed without external test equipment or other aids, or using simple test equipment.

e. **Functional Check.** A functional check is a task involving a deeper level of activity than an operational check, requiring measurement of operating parameters through the use of test equipment, to ensure that an item or system is operating at the required standard.

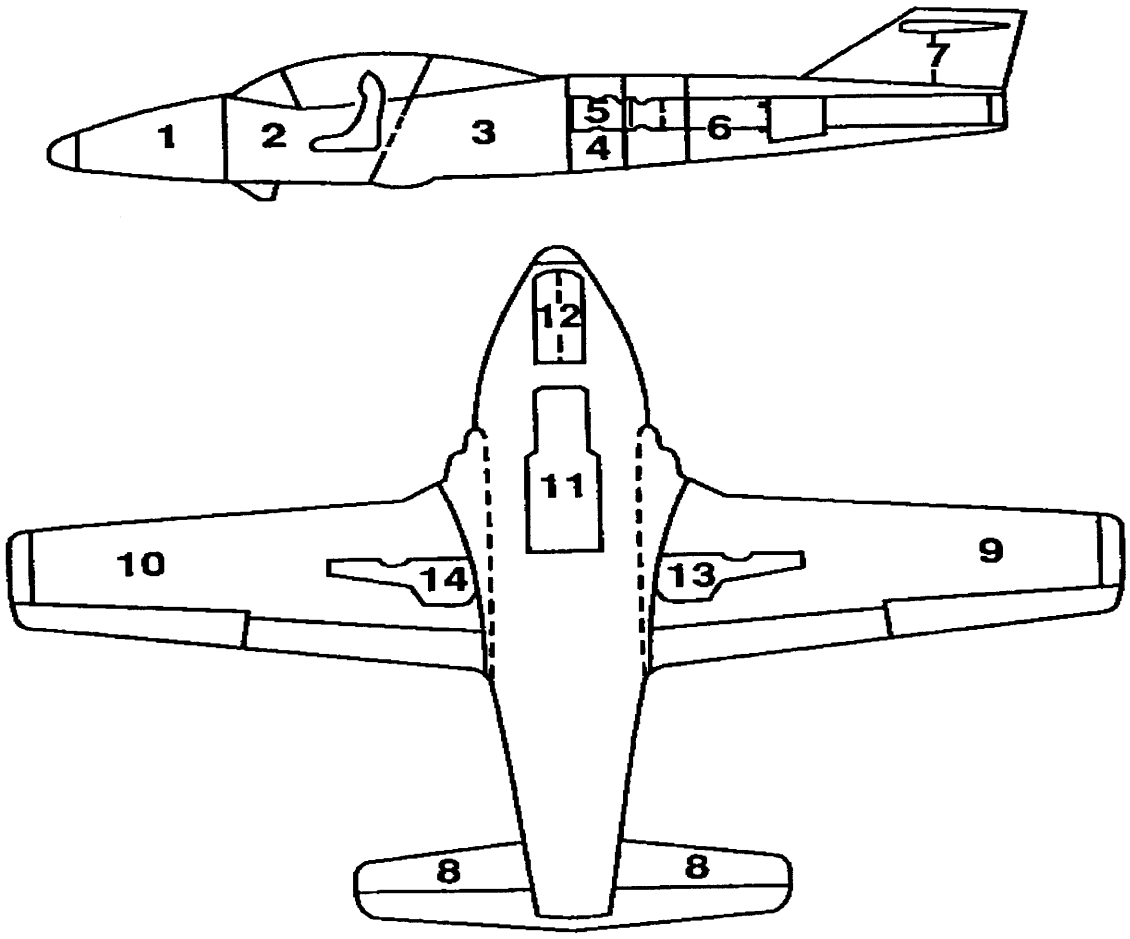
GENERAL

5. ″IAW″ (in accordance with) indicates a procedure is detailed in the listed Canadian Forces Technical Order (CFTO). The technician shall follow the procedure as written in the CFTO.

6. ″Refer to″ indicates that pertinent information is available in the listed CFTO.

7. Unless otherwise specified, any lubrication required shall be carried out IAW C-12-114-000/MF-000 (Introduction and General Information).

CT114 TUTOR
MAINTENANCE WORK CARD AREA CHART



1. FORWARD FUSELAGE
2. COCKPIT AND CANOPY
3. CENTRE FUSELAGE
4. ENGINE COMPARTMENT
5. ENGINE
6. AFT FUSELAGE AND ENG JET PIPE
7. VERTICAL STABILIZER AND RUDDER
8. HORIZONTAL STABILIZER AND ELEVATOR
9. LH WING-AILERON AND FLAP
10. RH WING-AILERON AND FLAP
11. TROUGH
12. NOSE LANDING GEAR
13. LH MAIN LANDING GEAR
14. RH MAIN LANDING GEAR

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CONTENTS (Cont'd)

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PART 1

BEFORE FLIGHT CHECK (B CHECK)

SECTION 1

AIRFRAME

INTRODUCTION

This section contains the Airframe Before Flight Check (B Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	B Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL	
GENL 1	Visually inspect exterior of aircraft, including primary and secondary flight control surfaces. Pay particular attention to panel security.
GENL 2	Check hydraulic and brake reservoirs for correct fluid level.
COCKPIT	
CKPT 1	Visually inspect windshield and canopy assys. **NOTE** Clean polycarbonate windscreens IAW C-12-114-000/MF-001.
CKPT 2	Visually inspect cockpit. Ensure article security.
CKPT 3	**WARNING** Ensure landing gear handle (2 for snowbird aircraft) is in the down position. Operate hydraulic hand pump and ensure positive pressure in both directions of hand pump movement. Ensure the emergency landing gear handle is in fully.
FUSELAGE	
FUS 1	Visually check fuel levels (including external tanks, if installed).

Figure 1-1-1 (Sheet 1 of 2) Airframe – B Check Instructions

Group & Item	B Check Instructions
LANDING GEAR LG 1	Visually inspect tires and ensure correct extension on shock struts. Ensure nose toggle link pin is secure. **NOTES** 1. MLG shock strut extension (50.8 mm ±6.4 mm) (2.0 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-4. 2. Nose gear strut extension (57.2 mm ±6.4 mm) (2.25 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-5.
LG 2	Visually inspect fibre block installed on main landing gear torque link arms.
LG 3	Remove landing gear ground safety pins.

Figure 1-1-1 (Sheet 2 of 2) Airframe – B Check Instructions

SECTION 2

AERO ENGINE

INTRODUCTION

This section contains the Aero Engine Before Flight Check (B Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	B Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
ENGINE	
ENG 1	Visually inspect jet pipe interior for Foreign Object Damage (FOD) and thermocouple probes for damage.
FUSELAGE	
FUS 1	Visually inspect intake ducts and surrounding area for FOD.

Figure 1-2-1 Aero Engine – B Check Instructions

SECTION 3

INTEGRAL SYSTEM

INTENTIONALLY OMITTED

SECTION 4

INSTRUMENT ELECTRICAL

INTRODUCTION

This section contains the Instrument Electrical Before Flight Check (B Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	B Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL	
GENL 1	Prior to night flying operations, operationally check all interior and exterior lighting.
COCKPIT	
CKPT 1	Visually inspect all instruments. Ensure range markings and creep marks are installed (refer to C-12-114-000/MB-001).
CKPT 2	Visually inspect cockpit circuit breakers, ensure they are in the set position.
CKPT 3	Visually inspect all lighting panels and consoles. Ensure all switches are in their OFF or NORMAL position.
CKPT 4	Visually inspect witness wire on external tank arm switch on aircraft with external fuel tanks installed.
WING	
WG 1	Visually inspect pitot head and boom.
WG 2	Visually inspect lift transducer.

Figure 1-4-1 Instrument Electrical – B Check Instructions

SECTION 5

COMM/RADAR SYSTEMS

INTENTIONALLY OMITTED

SECTION 6

SAFETY SYSTEMS

INTRODUCTION

This section contains the Safety Systems Before Flight Check (B Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	B Check Instructions
	WARNING When handling oxygen ensure all safety precautions are adhered to IAW C-22-040-001/TS-000. **WARNING** Prior to cockpit entry, ensure all cockpit safety pins are installed.
COCKPIT	
CKPT 1	Visually inspect shoulder and lap belt harness assemblies.
CKPT 2	Visually inspect remover canopy (M1A3).
CKPT 3	Visually inspect canopy remover release firing pin (M1A1) ballistic hose and mounting screws for condition and security.
CKPT 4	Visually inspect all accessible ballistic hoses and their fittings.
CKPT 5	Visually inspect personal lead disconnect assembly and lanyard IAW C-12-114-0A0/MF-001, Part 7.
CKPT 6	Check oxygen system quantity and replenish as required. Carry out operational check of oxygen regulator and ensure that the regulator's toggles are in the NORMAL position. Record information, as required, on CF-335.
CKPT 7	Visually inspect internal canopy jettison handle.
CKPT 8	Visually inspect ARAD system.

Figure 1-6-1 Safety Systems – B Check Instructions

PART 2

AFTER FLIGHT CHECK (A CHECK)

SECTION 1

AIRFRAME

INTRODUCTION

This section contains the Airframe After Flight Check (A Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	A Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL	
GENL 1	Visually inspect exterior of aircraft, including primary and secondary flight control surfaces. Pay particular attention to attachments, seals and linkages.
COCKPIT	
CKPT 1	Visually inspect windshield and canopy assys. **NOTE** Clean polycarbonate windscreens IAW C-12-114-000/MF-001,
CKPT 2	Visually inspect cockpit.
CKPT 3	Ensure emergency landing gear handle is in fully.
CKPT 4	Visually inspect blind flying hood (visor). Ensure correct stowage.
CKPT 5	Visually inspect rudder and brake pedal adjusting mechanism.
FUSELAGE	
FUS 1	Visually inspect external tanks (if installed). Pay particular attention for leaks at welds, screw holes at mounting points and the filler cap and fuel fittings.
FUS 2	Check fuel strainer bypass valve indicator for correct indication (flush with housing).

Figure 2-1-1 (Sheet 1 of 2) Airframe – A Check Instructions

Group & Item	A Check Instructions
	WARNING Ensure landing gear ground safety pins are installed.
LANDING GEAR LG 1	Visually inspect landing gear and gear mechanism. **NOTE** Lower portion of oleos to be cleaned using a cloth soaked in hydraulic fluid 3-GP-26, NATO H-515.
LG 2	Visually inspect landing gear doors and door mechanisms.
LG 3	Ensure correct extension on shock struts. **NOTES** 1. MLG shock strut extension (50.8 mm ±6.4 mm) (2.0 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-4. 2. Nose gear strut extension (57.2 mm ±6.4 mm) (2.25 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-5.
LG 4	Visually inspect nose gear torque links, bearing trunnion cap and lock spring.
LG 5	Visually inspect fibre block installed on main landing gear torque link arms. Pay particular attention to strut cylinders for chafing.
LG 6	Visually inspect tires, wheels, brakes and brake lines. **NOTE** If any self-adjusting pin on the brake assemblies is flush or below the threaded bushing when brake pressure is applied, brake unit is unserviceable.
LG 7	Ensure landing gear ground safety pins are installed.

Figure 2-1-1 (Sheet 2 of 2) Airframe – A Check Instructions

SECTION 2

AERO ENGINE

INTRODUCTION

This section contains the Aero Engine After Flight Check (A Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	A Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
ENGINE	
ENG 1	Visually inspect jet pipe assy and jet pipe ring.
ENG 2	Visually inspect jet pipe forward section including blanket, lockwire and bellows.Pay particular attention to the coupling assy – jet pipe for cracks and security.
ENG 3	Visually inspect static end movement of jet pipe. **NOTE** The maximum jet pipe static end movement in the vertical and lateral plane as measured between the end of the jet pipe and the airframe at Sta 461 is 0.0625 inch (1/16 inch).
ENG 4	Remove engine lower access panels. Visually inspect accessible components lines and controls.
ENG 5	**CAUTION** Prior to carrying out engine intake inspection, ensure engine MASTER switch is in the OFF position, select DC MASTER switch to BATT, push STARTER STOP button, set DC MASTER switch to OFF and then pull ENGINE START & CONTROL circuit breaker. On completion, reset circuit breaker. Remove compressor blade access door and intake duct panel. Visually inspect front frame, parabolic dome, struts, inlet guide vanes, accessible stator blades and accessible compressor rotor blades for freedom of movement and blade tip rub.

Figure 2-2-1 (Sheet 1 of 2) Aero Engine – A Check Instructions

Group & Item	A Check Instructions
FUSELAGE	
FUS 1	Visually inspect air intake ducts.
FUS 2	Visually inspect jet pipe alignment turnbuckle brackets.
FUS 3	Visually inspect oil quantity within 10 minutes after shutdown. Replenish as required. Ensure oil tank cap and access panel are serviceable and secured. **NOTE** Spectrometric Oil Analysis Program (SOAP) samples (if required) to be taken prior to replenishment (A/C in Snowbird role are exempt).
FUS 4	Through upper access doors, visually inspect main fuel line, front frame, compressor casing, engine forward mount and all accessible components and lines.

Figure 2-2-2 (Sheet 2 of 2) Aero Engine – A Check Instructions

SECTION 3

INTEGRAL SYSTEM

INTENTIONALLY OMITTED

SECTION 4

INSTRUMENT ELECTRICAL

INTRODUCTION

This section contains the Instrument Electrical After Flight Check (A Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	A Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
COCKPIT	
CKPT 1	Visually inspect all instruments.
CKPT 2	Visually inspect cockpit circuit breakers, ensure they are in the set position.
CKPT 3	Read accelerometer, if pointer is in yellow range, reset, if at or over red range, record as an overstress. Ensure locking bar is secured.
CKPT 4	Ensure aircraft compass and altimeter correction cards are fitted.
WING	
WG 1	Visually inspect pitot head and boom. Replace pitot cover.

Figure 2-4-1 Instrument Electrical – A Check Instructions

SECTION 5

COMM/RADAR SYSTEMS

INTENTIONALLY OMITTED

SECTION 6

SAFETY SYSTEMS

INTRODUCTION

This section contains the Safety Systems After Flight Check (A Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	A Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed. **WARNING** When handling oxygen ensure all safety precautions are adhered to IAW C-22-040-001/TS-000.
COCKPIT CKPT 1	Check oxygen system quantity and replenish as required. Ensure that the regulator's toggles are in the NORMAL position. Record information, as required, on form CF-335.
CKPT 2	Test shoulder harness for proper functioning.
CKPT 3	Visually inspect ARAD system.

Figure 2-6-1 Safety Systems – A Check Instructions

PART 3

QUICK TURN AROUND CHECK (AB CHECK)

SECTION 1

AIRFRAME

INTRODUCTION

This section contains the Airframe Quick Turn Around Check (AB Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	AB Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL GENL 1	Visually inspect exterior of aircraft, including primary and secondary flight control surfaces.
GENL 2	Check hydraulic and brake reservoirs for correct fluid level.
COCKPIT CKPT 1	Visually inspect windshield and canopy assys.
	NOTE Clean polycarbonate windscreens IAW C-12-114-000/MF-001.
CKPT 2	Visually inspect cockpit.
CKPT 3	Ensure emergency landing gear handle is in fully.
CKPT 4	Visually inspect blind flying hood (visor). Ensure correct stowage.
FUSELAGE FUS 1	Visually check fuel levels (including external tanks, if installed).
FUS 2	Visually inspect external tanks (if installed). Pay particular attention for leaks at welds, screw holes at mounting points and the filler cap and fuel fittings.
LANDING GEAR LG 1	Visually inspect landing gear and gear mechanism. Pay particular attention to fibre block on main landing gear torque link arms and for evidence of chafing on strut cylinders. Ensure nose toggle link pin is secure.

Figure 3-1-1 (Sheet 1 of 2) Airframe – AB Check Instructions

Group & Item	AB Check Instructions
LG 2	Visually inspect landing gear doors and door mechanisms.
LG 3	Visually inspect tires, wheels, brakes and brake lines. **NOTE** If any self-adjusting pin on the brake assemblies is flush or below the threaded bushing when brake pressure is applied, brake unit is unserviceable.
LG 4	Ensure correct extension of shock struts. **NOTES** 1. MLG shock strut extension (50.8 mm ±6.4 mm) (2.0 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-4. 2. Nose gear strut extension (57.2 mm ±6.4 mm) (2.25 in. ±0.25 in.) IAW C-12-114-000/MF-001, Figure 3-5.

Figure 3-1-1 (Sheet 2 of 2) Airframe – AB Check Instructions

SECTION 2

AERO ENGINE

INTRODUCTION

This section contains the Aero Engine Quick Turn Around Check (AB Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	AB Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
ENGINE	
ENG 1	Visually inspect jet pipe assy and jet pipe ring.
ENG 2	Visually inspect jet pipe forward section including blanket, lockwire and bellows. Pay particular attention to the coupling assy – jet pipe for cracks and security.
FUSELAGE	
FUS 1	Visually inspect air intake ducts.
FUS 2	Visually inspect jet pipe alignment turnbuckle brackets.
FUS 3	Visually inspect oil quantity within 10 minutes after shutdown. Replenish as required. Ensure oil tank cap and access panel are serviceable and secured. **NOTE** Spectrometrico Oil Analysis Program (SOAP) samples (if required) to be taken prior to replanishment (A/C in Snowbird role are exempt).

Figure 3-2-1 Aero Engine – AB Check Instructions

SECTION 3

INTEGRAL SYSTEM

INTENTIONALLY OMITTED

SECTION 4

INSTRUMENT ELECTRICAL

INTRODUCTION

This section contains the Instrument Electrical Quick Turn Around Check (AB Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	AB Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL GENL 1	Carry out AB check immediately preceding night flying operations, operationally check all internal and external lighting.
COCKPIT CKPT 1	Visually inspect all instruments. Ensure range markings and creep marks are installed (refer to C-12-114-000/MB-001).
CKPT 2	Visually inspect cockpit circuit breakers, ensure they are in the set position.
CKPT 3	Read accelerometer, if pointer is in yellow range, reset, if at or over red range, record as an overstress. Ensure locking bar is secured.
WING WG 1	Visually inspect pitot head and boom.
WG 2	Visually inspect lift transducer.

Figure 3-4-1 Instrument Electrical – AB Check Instructions

SECTION 5

COMM/RADAR SYSTEMS

INTENTIONALLY OMITTED

SECTION 6

SAFETY SYSTEMS

INTRODUCTION

This section contains the Safety Systems Quick Turn Around Check (AB Check) instructions.

NOTE

Read and adhere to the Foreword and General Instructions.

Group & Item	AB Check Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed. **WARNING** When handling oxygen ensure all safety precautions are adhered to IAW C-22-040-001/TS-000.
COCKPIT CKPT 1	Check oxygen system quantity and replenish as required. Ensure that the regulator's toggles are in the NORMAL position. Record information, as required, on form CF-335.
CKPT 2	Test shoulder harness for proper functioning.
CKPT 3	Visually inspect ARAD system.

Figure 3-6-1 Safety Systems – AB Check Instructions

PART 4

DAILY INSPECTION (DI)

INTENTIONALLY OMITTED

PART 5

PRIMARY INSPECTION (PI)

SECTION 1

AIRFRAME

INTRODUCTION

This section contains the Airframe Primay Inspection (PI) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	PI Instructions
COCKPIT CKPT 1	**WARNING** Prior to cockpit entry, ensure all cockpit safety pins are installed. Drain accumulated water from cockpit drains.

Figure 5-1-1 Airframe – PI Instructions

SECTION 2

AERO ENGINE

INTENTIONALLY OMITTED

SECTION 3

INTEGRAL SYSTEM

INTENTIONALLY OMITTED

SECTION 4

INSTRUMENT ELECTRICAL

INTRODUCTION

This section contains the Instrument Electrical Primary Inspection (PI) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	PI Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
GENERAL GENL 1	Functionally check all interior and exterior lights for serviceability.
FUSELAGE FUS 1	Visually inspect the batteries, battery cables, and battery vent system.
FUS 2	Visually inspect the Operating Load Monitoring (OLM) Data Acquisition Unit (DAU). If the 80% or 100% memory status indicators on the face plate of the DAU are lit, notify the CT114 OLM manager.
FUS 3	Visually inspect the OLM DAU. If the DAU fail Built-In-Test (BIT) indicator is lit, notify the CT114 OLM manager.
LANDING GEAR LG 1	Visually inspect all landing gear weight, uplock, and downlock switches. Visually inspect landing gear wiring.

Figure 5-4-1 Instrument Electrical – PI Instructions

SECTION 5

COMM/RADAR SYSTEMS

INTRODUCTION

This section contains the Comm/Radar Systems Primary Inspection (PI) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	PI Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
COCKPIT CKPT 1	Visually inspect all Comm/Radar Systems (CRS) equipment in cockpit. Ensure all switches are in proper position.
FUSELAGE FUS 1	Visually inspect equipment in nose compartment. Pay particular attention to all wiring, relays and associated hardware.

Figure 5-5-1 Comm/Radar Systems – PI Instructions

SECTION 6

SAFETY SYSTEMS

INTRODUCTION

This section contains the Safety Systems Primary Inspection (PI) instructions.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Group & Item	PI Instructions
	WARNING Prior to cockpit entry, ensure all cockpit safety pins are installed.
COCKPIT	
CKPT 1	Visually inspect lever assembly. Ensure striker is aligned with M32A1 trip lever.
CKPT 2	Visually inspect tool and breakout assy – canopy breaker.
CKPT 3	Visually inspect emergency maps and forced landing instructions.
CKPT 4	Visually inspect survival kit(s) (seat pack). Ensure pin is secure, the witness wire is intact and that the due date is valid. Stow lanyard(s) as required.
CKPT 5	Visually inspect canopy remover release firing pin (M1A1) ballistic hose and mounting screws for condition and security.
CKPT 6	Visually inspect personal lead disconnect assy and lanyard IAW C-12-114-0A0/MF-001, Part 7.
FUSELAGE	
FUS 1	Visually inspect external canopy jettison handle and cable assembly.

Figure 5-6-1 Safety Systems – PI Instructions

PART 6

CONDITIONAL INSPECTIONS

INTRODUCTION

This part contains additional inspections that are depending upon specific conditions or incidents, which require an inspection to ensure further safe flight. The specific inspection requirements for each condition are specified in Figure 6-1, under Conditions. Conditional Inspection completion shall be recorded on form CF349.

NOTE

Read and adhere to the Foreword and General Instructions of this schedule.

Item and Trade Code	Conditions
1 514	ENGINE OVERTEMPERATURE Carry out inspection IAW C-14-165-000/MF-000
2 514	ENGINE TURBINE BLADE FAILURE Carry out inspection IAW C-14-165-000/MF-000
3 514	ENGINE SUBJECTED TO SHOCK LOADING Carry out inspection IAW C-14-165-000/MF-000
4 514	ENGINE COMPRESSOR STALL Carry out inspection IAW C-14-165-000/MF-000
5 514	ENGINE UNRESTRAINED INLET GUIDE VANE Carry out inspection IAW C-14-165-000/MF-000
6 514	ENGINE NON-METALLIC FOREIGN OBJECT DAMAGE Carry out inspection IAW C-14-165-000/MF-000
7 514	ENGINE OVERSPEED Carry out inspection IAW C-14-165-000/MF-000
8 514	ENGINE OIL FILTER CONTAMINATION Send filter for FDA IAW C-14-165-000/MF-000
9 514	INSPECTION OF LANDING GEAR AFTER LOWERING AT EXCESSIVE SPEED IAW C-12-114-000/MN-000
10 514	INSPECTION OF WING FLAPS AFTER LOWERING AT EXCESSIVE SPEED IAW C-12-114-000/MN-000
11 514	INSPECTION OF AIRCRAFT AFTER HARD LANDING IAW C-12-114-000/MN-000
12 514	INSPECTION OF AIRCRAFT WHEELS AND BRAKES FOLLOWING SEVERE BRAKING IAW C-12-114-000/MN-000
13 514	INSPECTION OF CANOPY FOLLOWING USE OF CANOPY FOR EMERGENCY BRAKING IAW C-12-114-000/MN-000
14 514	INSPECTION AFTER OVER ″G″ CONDITION AND AFTER FLIGHT THROUGH SEVERE TURBULENCE IAW C-12-114-000/MN-000

Figure 6-1 (Sheet 1 of 2) Conditional Inspections

Item and Trade Code	Conditions
15 514	INSPECTION OF EXTERNAL FUEL TANK INSTALLATION AFTER OVERSTRESS OR HARD LANDING IAW C-12-114-000/MN-000
16 514	HYDRAULIC SYSTEM CONTAMINATION CHECK IAW C-12-114-0B0/MF-001
17 ALL	INSPECTION FOLLOWING LIGHTNING STRIKE IAW C-12-114-000/MN-000
18 ALL	INSPECTION OF AIRCRAFT SUSPECTED OF HAIL DAMAGE IAW C-12-114-000/MN-000

Figure 6-1 (Sheet 2 of 2) Conditional Inspections

PART 7

AIRCRAFT LAUNCH AND RECOVERY PROCEDURES

INTENTIONALLY OMITTED

LIST OF ABBREVIATIONS

Ckpt	Cockpit
Eng	Engine
Fwd Fus	Forward Fuselage
Fus	Fuselage
Genl	General
LG	Landing Gear
NLG	Nose Landing Gear
MLG	Main Landing Gear
Wg	Wing

NOTE

These abbreviations may not be standard for other aircraft. They are applicable only to this CFTO.