

# L-29

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**AERO VODOCHODY L-29 DELFIN**

**APPROVED AIRCRAFT INSPECTION PROGRAM**

**For: 591378**

**Dated: March 01, 2020**

**AERO VODOCHODY L-29 DELFIN**

**APPROVED AIRCRAFT INSPECTION PROGRAM**

**For:**

**SERIAL NUMBER: 591378**

**REGISTRATION NUMBER: N21KE**

**OWNED AND OPERATED BY:**

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## SECTION 1

### INTRODUCTION

The L-29 Delfin is a military jet trainer aircraft that became the standard jet trainer for the air forces of Warsaw Pact nations in the 1960s. It was manufactured by Aero of Vodochody Czechoslovakia. The prototype XL-29 first flew on 5 April 1959, powered by a Rolls Royce Viper engine. The second prototype was powered by the Czech-designed M701 engine, which was used in all subsequent aircraft. Some 3600 aircraft were produced between 1963-1974.

This specific aircraft was imported to the US and certified in the Experimental Exhibition category October 21, 1999. It is powered with a M701 engine and has safely operated in the US since being certified.

The development of this program is an ongoing cooperative effort between owners, mechanics and operators experienced in the operation and maintenance of this aircraft along with guidance from the FAA. This particular program is tailored specifically for L29, 591378 utilizing the knowledge and experience obtained from over two decades of this cooperative effort and the owner's input.

The following documents were used to develop this inspection program:

- A. AC43-209A
- B. AC43-4B
- C. CFR 49 part 43 appendix D
- D. GENERAL DATA OF THE L-29 AIRCRAFT.
- E. INSTRUCTIONS FOR OPERATION AND ATTENDANCE OF THE L-29 AIRCRAFT.
- F. INSTRUCTION FOR AIRCRAFT OPERATIONS AND MAINTENANCE (L-29).
- G. TECHNICAL DESCRIPTION OF M701c-500 AIRCRAFT ENGINE.
- H. SERVICE INSTRUCTIONS OF M701c-500 AIRCRAFT ENGINE.

### PAGE NUMBERS

Pages in this Inspection Program are assigned a two or three part page number. The first number always specifies the chapter number. The last number always indicates the page number. If a chapter is broken down into sections, the middle number will be a section number. The following are examples:

- 1.0.1 = Chapter 1, Contents, Page 1
- 1.1.1 = Chapter 1, Section 1, Page 1
- 4.2.3 = Chapter 4, Section 2, Page 3

### METHOD OF REVISION

Submit revisions of this program to the Minneapolis FSDO office for approval. Once approved by the FSDO, insert the revision into the approved aircraft inspection program. Record revisions on the: Record of Revisions page, which lists the revision number, date and initials of the person making the insertion.



## SECTION 2

### AIRCRAFT RECORDS

CFR 49 part 91.417 provides recordkeeping requirements for civil aircraft operators. It is imperative that clear and concise aircraft maintenance records kept and maintained. Aircraft records provide continuity of maintenance and inspections and are useful for planning the future (as well as show completion of past) maintenance, and inspections.

Use the following methods for determining:

#### AIRCRAFT & ENGINE TOTAL TIME IN SERVICE:

Aircraft and engine total time in service is the accumulation of time from when the aircraft becomes airborne to touch down. Any of the following methods are acceptable for determining time in service:

- By recoding of flight information electronically, using a device such as TimeTrac.
- By an hour meter wired to record time in service.
- By an hour meter that is installed and wired to start recording at electrical power up; reduce the recorded time by 20% to equal time in service.
- By manually recording takeoff and landing times to determine time in service.

#### LANDINGS:

Any of the following methods are acceptable for determining the number of landings:

- By recoding of flight information electronically, using a device such as TimeTrac.
- By manually recording each landing.

#### ENGINE FLIGHT CYCLES:

An engine flight cycle is equal to one takeoff and one landing.

Any of the following methods are acceptable for determining the number of flight cycles:

- By recoding of flight information electronically, using a device such as TimeTrac.
- By multiplying time in service hours by 1.4 to determine engine flight cycles.
- By manually recording each flight cycle.

### LOGBOOK ENTRIES

Logbook entries are required upon completion of the Condition or Detailed Engine inspections outlined in this program. The actual logbook entry format is located in the FAA issued aircraft operating limitations.

**A.** Completed inspection and the aircraft is determined to be in a condition for safe operation:

"I certify that this aircraft has been inspected on [insert date] in accordance with the scope and detail of the FAA-Approved Inspection Program for this aircraft dated \_\_\_\_\_ for serial number \_\_\_\_\_, and found to be in a condition for safe operation.

Aircraft Total Time: \_\_\_\_\_ Inspection Type: \_\_\_\_\_

Signature \_\_\_\_\_ A&P Certificate #: \_\_\_\_\_ Date: \_\_\_\_\_

**B.** Enter the following statement in the appropriate aircraft and/or engine logbook if the aircraft was inspected and found not safe for flight:

"I certify that this aircraft has been inspected on [insert date] in accordance with scope and detail of the FAA-Approved Inspection Program for this aircraft dated \_\_\_\_\_ for serial number \_\_\_\_\_, and found NOT TO BE IN A CONDITION FOR SAFE OPERATION.

Aircraft Total Time: \_\_\_\_\_ Inspection Type: \_\_\_\_\_

Signature \_\_\_\_\_ A&P Certificate #: \_\_\_\_\_ Date: \_\_\_\_\_

## SECTION 3

### INSPECTIONS

This program includes the following inspections to be complied with at specified intervals:

#### CONDITION INSPECTION

The condition inspection is due every 100 hours time in service or 12 calendar months, whichever occurs first. It must be performed by an appropriately rated certificated mechanic and signed off in accordance with the aircraft's operating limitation.

#### DETAILED ENGINE INSPECTION

The Detailed Engine Inspection is due every 100 hours time in service or as directed in this program when discrepancies are found. The inspection is a comprehensive inspection that includes the compressor and hot section. It must be performed by an appropriately rated certificated mechanic and signed off in accordance with the aircraft's operating limitation.

#### ADDITIONAL INSPECTIONS

**Altimeter System(s), Altitude Reporting & Transponder Test & Inspections.** Required tests and inspections will be accomplished in accordance with 14 CFR §§ 91.411 and 91.413 as required and shall not exceed 24 calendar months between inspections.

**Hydrostatic Test.** The high pressure bottles will be hydrostatically tested as set forth in 49 CFR §180.209 as amended, Applicable Military Specifications, Foreign Specifications or the Aircraft Manufacturer's Specifications as applicable. The results of these tests will be entered in the aircraft log. The bottles used in the fire suppression system are maintained on condition.

These additional inspections may be completed in conjunction with other inspections or performed independently.

#### INSPECTION TIME LIMITATION

Inspection intervals called out in this inspection program may be exceeded by no more than 10 hours. If an inspection interval was exceeded, the next required inspection time must be calculated from the previous due time, not the time the inspection was actually performed. There is no extension allowed for calendar items.

**INSPECTION PROGRAM RESPONSIBILITY.** The owner is responsible for having the inspection(s) performed as prescribed in the inspection program identified in the aircraft's operating limitations and for keeping the records as required under 14 CFR § 91.417.

The owner shall ensure that all inspections are performed in accordance with the applicable L-29 and other manufacturer's maintenance manuals. In addition, the owner shall ensure that all maintenance record entries are made in accordance with 14 CFR §§ 43.9 and 43.11 and retained in accordance with 14 CFR § 91.417.

## SECTION 4

## ACCEPTABLE FUELS, OIL &amp; LUBRICANTS

FUEL (Preferred).....	JET A, JET A-1, ALTERNATE FUEL JP-4, JP-5, JP-8
TURBOJET ENGINE OIL.....	SHELL 3SP ROYCO 481 MIL-PRF6081E
GREASE: WHEEL BEARINGS.....	AEROSHELL #22 AEROSHELL #5
FLAP TRACK ROLLERS.....	AEROSHELL #22 AEROSHELL #5
GENERAL APPLICATIONS.....	AEROSHELL#5 AEROSHELL#6 AEROSHELL #22 LPS-1, LPS-2, LPS-3 LUBRIPLATE 630
HYDRAULIC FLUID.....	MIL-PRF-5606H AEROSHELL 41 ROYCO 756 PHILLIPS 66 X/C 5606H

NOTE: Control hinges, control rod end bearings, and bellcranks are packed with grease (Lubriplate 630, Aeroshell #22, or similar grease) at assembly. During inspections it is generally not necessary to disassemble each control rod end to grease. Use of LPS-2 will displace moisture and maintain a film of lubrication.

## SECTION 5

## LIFE-LIMITED COMPONENTS

The following table lists the life-limited components for the L29 and shall be removed from service as indicated upon reaching the life-limit. The components removed from service may be overhauled and returned to service starting the hours or landings at zero.

	NAME OF ITEM	PART NO.	QTY	HOURS	LANDINGS
A	ENGINE (2&5)	M701C-500	1	500	
B	FUEL PUMP(2&3)	PCR-1	1	400	
C	PRESSURE REGULATOR(2&3)	RD 21A	1	500	
D	MAIN U/C LEG – LEFT(1-2&4)	AL 229.501-XX	1		4-9 series, 2000 10-11 ser, 2400 12 series, 3000
E	MAIN U/C LEG – RIGHT(1-2&4)	AL 229.502-XX	1		
F	NOSE U/C LEG(1-2&4)	AL229.503-XX	1		3000 on cond.
G	UNDERCARRIAGE STRUT LEFT(1-2&4)	L 229.501-XX	1	800 on cond.	
H	UNDERCARRIAGE STRUT RIGHT(1-2&4)	L 229.502-XX	1	800 on cond.	
I	MAIN U/C WHEEL(2&4)	600 X 150	2		1000 on cond.
J	NOSE WHEEL(2&4)	400 X 150	1		1000 on cond.

Notes:

- 1) The (-XX) behind a part number indicates the series of the part and is only significant regarding the number of landings for the main undercarriage leg.
- 2) Derived from a document received from the aircraft manufacturer, Aero Vodochody LTD. to the FAA, dated April 29, 1996.
- 3) IAW AC43.209A item 4e(2) the yearly (no change to hourly) requirement was replaced with inspections, detailed in this program. This will provide an equivalent level of safety for these items.
- 4) IAW AC43.209A item 4e(2) Since the aircraft is not flown in the original use as a military aircraft it is recognized that certain components may have extended life-limits beyond the times listed above. The undercarriage life-limits may be extended in the following manner:  
Undercarriage attach points and mounting holes will be dye penetrate checked for cracks and corrosion, upon reaching their life-limits, and if found to be in good condition will be extended until the next Condition Inspection. These components may remain in service as long as they are inspected at each subsequent Condition Inspection, as described above, and found to be in good condition. This will provide an equivalent level of safety for these items.
- 5) Reference: Technical Description Aircraft Engine M701c-500 page 8.

## SECTION 6

### AGING, CORROSION CONTROL & PRESERVATION

**STORAGE:** Aircraft is stored indoors and is not subject to extended periods in the elements.

**CORROSION CONTROL:** The current edition of AC 43-4B, Corrosion Control for Aircraft, may be used for additional guidance pertaining to corrosion control in aircraft.

**GENERAL:** This guide provides a general inspection for those parts or surfaces that can be visually inspected without disassembly of the aircraft. It is intended for use in establishing corrosion inspection areas for which the manufacturer has not provided a recommended corrosion inspection program. These inspections should be accomplished in conjunction with other preventive maintenance. Any defects found will be treated, repaired, or replaced and documented in the aircraft logbook.

**EXHAUST TRAIL AREAS:** Visually inspect paint in areas of the exhaust trails for damage. Visually inspect under fairings, around rivet heads, and in skin crevices, for corrosion in areas of engine exhaust trail.

**BATTERY COMPARTMENTS AND BATTERY VENT OPENINGS:** Inspect battery compartment for electrolyte spillage, corrosion, and condition of protective paint. Inspect the area around battery vents for corrosion.

**WHEEL WELLS AND LANDING GEAR:** Inspect wheel well area and landing gear components for damage to exterior finish coating and corrosion. Particular attention should be given to exposed surfaces of struts, oleos, arms, links, and attaching hardware; axle interiors, exposed position indicator switches and other electrical equipment; crevices between stiffeners, ribs, and lower skin surfaces; magnesium wheels, particularly around bolt heads, lugs, and wheel web areas; and exposed rigid tubing at "B" nuts and ferrules under clamps, and tubing identification tapes.

**EXTERNAL SKIN AREAS:**

a. Inspect external skin surfaces for damage to protective finishes and corrosion.

b. Inspect around fastener for damage to protective finishes and corrosion.

c. Inspect lap joints for bulging of skin surface, which may indicate the presence of corrosion between the faying surfaces. Skin cracks and/or dished or missing fasteners.

d. Inspect area around spot welds for bulges, cracks, or corrosion.

e. Inspect piano type hinges for corrosion.

f. Inspect thick alloy skin surfaces for pitting, intergranular corrosion, and exfoliation of the metal. Look for white or gray deposits around countersunk fastener heads and raised areas or bumps under the paint film. g. Inspect composite skins for corrosion of attachment fasteners.

**WATER ENTRAPMENT AREAS:** Inspect area around edge of drain holes for corrosion and ensure that drain holes are not blocked by debris.

**FLEXIBLE HOSE ASSEMBLIES:** Inspect hose assemblies for chafing, weather checking, hardening, discoloration, evidence of fungus, torn weather protective coatings or sleeves, and corrosion of fittings. Replace any defective, damaged, twisted, or bulging hoses.

**ELECTRONIC PACKAGE COMPARTMENTS:** Inspect circuit breakers, contact points, and switches for evidence of moisture and corrosive attack.

**ELECTRICAL CONNECTORS:** Inspect electrical connectors for breaks in potting compound and corrosion of pins and wires. If the electrical connector is suspected of having moisture intrusion, disassemble the connector, clean the connector, and inspect it for corrosion.

## SECTION 7

### SECURITY

The owner or operator will provide that the aircraft is secured from theft by storing the aircraft in a hanger environment.

When the aircraft can not be stored in a hangar or is being exhibited the aircraft will be disabled by disconnecting the battery or other similar measure.



## SECTION 8

## DEFINITIONS &amp; ABBREVIATIONS

## General

The following abbreviations may be found throughout the manual. Some abbreviations may also appear in lowercase letters.

ADJ	adjust/adjustment
AFT	rear
ATC	air traffic control
ATM	atmosphere, standard, 1 ATM = 14.696psi
C	temperature in centigrade
CAB	cabin
CG	center of gravity
CCW	counter clockwise
CW	clockwise
D.A.	density altitude
D.G.	directional gyro
EGT	exhaust gas temperature
EXT	extinguisher
F/C	front cockpit
FOD	foreign object damage
FWD	forward
INST	instrument
G	g-force acceleration
GEN	generator
kg/cm <sup>2</sup>	kilogram-force per square centimeter 1 kg/cm <sup>2</sup> = 14.22psi
kts	knots
L	liter, 1L = .264 gallons
Lbs	pounds
MAC	mean aerodynamic cord
MAX	maximum
MIN	minimum
MMM	Manufacturers Maintenance Manual
NAV	navigation
N <sub>1</sub>	engine rpm expressed in percent
Pos. L.	position light
psi	pounds per square inch
R/C	rear cockpit
RPM	revolutions per minute
STBY	standby
sec	seconds
SEL	selector
SID	Summary of Items Deferred
S.L.	sea level
TEMP	temperature
U/C	under carriage
UV	ultra violet
VDC	volts direct current
XFR	transfer

## SECTION 9

### DISCREPANCIES AND INOPERATIVE EQUIPMENT

The pilot in command shall ensure that all mechanical irregularities occurring during flight are entered on a maintenance discrepancy form at the end of that flight. Before each flight the pilot in command shall ascertain the status of each discrepancy entered on a maintenance discrepancy form for the previous flight.

All mechanical irregularities documented on maintenance discrepancy forms must be addressed (corrected or deferred) prior to the next flight.

It is preferred to have all mechanical irregularities cleared and the corrective action documented on the maintenance discrepancy form prior to flight. However this is not always possible and some maintenance irregularities may be repaired at a latter date (deferred) provided:

- 1.) The inoperative instruments and equipment are not-
  - a.) Part of the instruments and equipment required for VFR flight during the day under 14 CFR § 91.205(a);
  - b.) Required by 14 CFR § 91.205 or any other rule of 14 CFR § 91 for the specific kind of flight operation being conducted **and**
- 2.) The inoperative instruments and equipment are-
  - a.) Removed from the aircraft, the cockpit control is placarded and the maintenance is recorded in accordance with 14 CFR § 43.9 **or**
  - b.) Deactivated and placarded as "Inoperative". If deactivation of the inoperative instrument or equipment involves maintenance, it must be accomplished and recorded in accordance with 14 CFR § § 43.3, 43.7 and 43.9 **and**
- 3.) A determination is made by a certificated pilot who is rated to act as pilot in command of an L-29, or by a person who is certificated and appropriately rated to perform maintenance on the aircraft, that the inoperative instrument or equipment does not constitute a hazard to the aircraft.

This aircraft with inoperative instruments or equipment as provided for above is considered to be in a properly altered condition acceptable to the FAA Administrator.

The Maintenance Discrepancy form and the Summary of Items Deferred form (SID) shall be kept with the aircraft until the maintenance discrepancy is corrected and cleared. These forms are considered part of the aircraft maintenance records and shall be kept in accordance with 14 CFR § 91.417.

Items that are permanently deactivated and remain installed on the aircraft (Jettison systems etc.) shall be documented in the aircraft logbook and are also required to be entered in SID.

A copy of Chapter 1 Item 8 shall be kept in the aircraft for reference.

EXAMPLE OF A CLEARED DEFERRED ITEM.

**MAINTENANCE DISCREPANCY FORM No. 1002 AIRCRAFT:765432 L-29**

DATE	AIRCRAFT TOTAL TIME:
DISCREPANCY	
<i>INSTALLED A NEW BULB IN THE LEFT NAV LIGHT.</i> <i>CLOSED THE NAV LIGHT CIRCUIT BREAKER.</i> <i>NAV LIGHTS OPERATE NORMALLY</i> <i>REMOVED PLACARD AND CLEARED SID ITEM #3.</i>	
SIGNATURE	CERTIFICATE #
DATE 28AUG06	AIRCRAFT TOTAL TIME: 2357.2
CORRECTIVE ACTION:	
SIGNATURE MARK R. JETPILOT	
CERTIFICATE # 123456789	

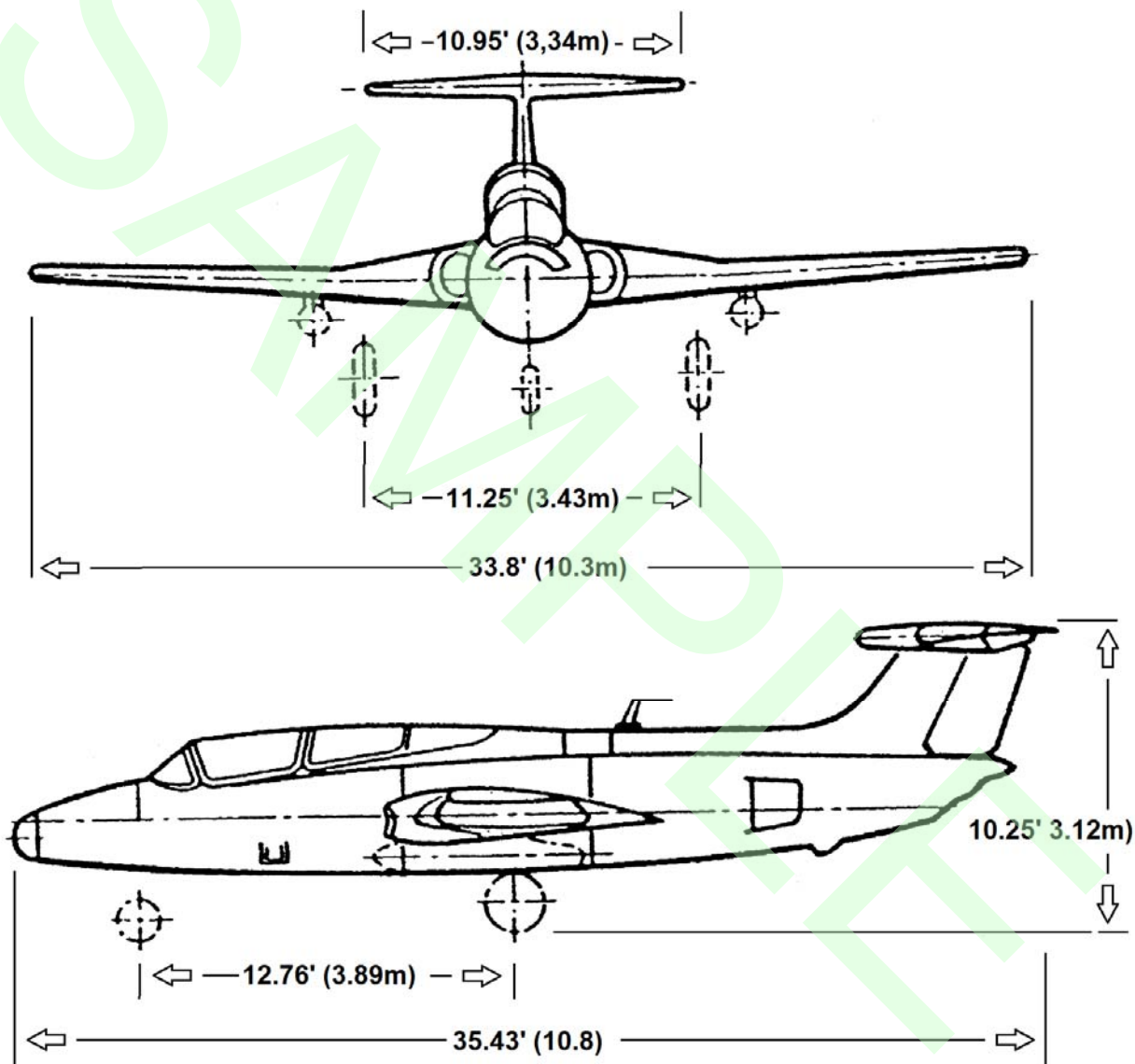
**SUMMARY of ITEMS DEFERRED AIRCRAFT:765432 L-29**

DESCRIPTION OF ITEM DEFERRED	ENTERED DATE/A/C T.T.	CORRECTED DATE/A/C T.T.
1. EXTERNAL STORES JETTISON SYSTEM DEACTIVATED	PERMANENT	
2. BOTH EJECTION SEAT SYSTEMS DEACTIVATED	PERMANENT	
3. NAV LIGHTS DEACTIVATED AND ARE INOP. (1001)	28AUG06/2356.2	28AUG06/2357.2
4.		
5.		
6.		
7.		
9.		
10.		

## AIRCRAFT SPECIFICATIONS

*This section lists the basic flight information as required in AC43-209A and is not intended as acceptable data for flight. If a discrepancy is found between this program and the manufactures data use the manufacturer's data.*

### BASIC DIMENSIONS:



### WEIGHTS & CENTER OF GRAVITY:

- Max Takeoff Weight: 7828lbs.
- Max Landing Weight: 7243lbs.
- Center of gravity range: 20.5% - 25.5% MAC.
- Basic Empty Weight: Approximately 5100lbs. (depending on equipment installed).
- Typical takeoff weight & CG: 7200lbs. 23.5% MAC (two pilots & full internal fuel).

**SPEED LIMITATIONS:**

- Maximum Allowable Airspeed: **443kts.** ( $V_{NE}$ )
- Maximum Allowable Mach, Clean: **.75** ( $M_{MO}$ )
- Maximum Allowable Mach, with Stores: **.70** ( $M_{MO}$ )
- Maximum allowable airspeed for landing gear:
  - Extension: **157kts** ( $V_{LO}$ ).
  - Retraction: **157kts** ( $V_{LO}$ ).
  - Extended: **157kts.** ( $V_{LE}$ ).

**LOAD FACTOR**

- **+8g to -4g** with no external stores and
- **+7.5g to -3.5g** with external stores.

**TAKEOFF PERFORMANCE:**

- **1318'** @ S.L. to **4620'** @ 8,000' depending on weight and D.A.

Assumptions; Flaps 15°,  $N_1$  100% at brakes release, paved level dry surface runway.

**LANDING PERFORMANCE:**

- **1731'** @ S.L. to **2743'** @ 8,000' depending on weight and D.A.

Assumptions; Flaps 30°, speed brakes extended, idle thrust, maximum braking, paved level dry surface runway.

**MAXIMUM RANGE:**

- **350nm** depending on factors such as weight, altitude, ATC and weather.

**ENGINE:**

- Motorlet M701C-500

## SAFETY & HAZARDOUS MATERIALS

Listed below are safety practices that must be adhered to. Understand that not all situations can be anticipated, however, most accidents can be prevented with planning and situational awareness. Before performing any work or tasks on the aircraft, please follow these simple steps:

- A.) Brief co-workers of your intentions.
- B.) Ensure the area is clear.
- C.) Ensure it is safe for what is planned.
- D.) Know where your co-workers are.

**ELECTRICAL POWER:** Disconnect the aircraft battery before performing any inspections. If electrical power is required to perform certain tasks or checks ensure it is safe to apply electrical power to the aircraft before doing so. The use of an external power source is preferred over the aircraft battery.

**EJECTION SEATS:** Both ejection seats on this aircraft have been disabled by removing the pyrotechnic charges. In addition the seats shall be placarded showing that the ejection portion of the ejection seats are inoperative.

**CANOPY JETTISON:** The canopy jettison system was part of the ejection seat system and was retained as a safety measure. Rotating the handle, on the right side of the seat, forward, with electrical power applied to the aircraft, will energized the canopy rams.

**Caution should be exercised to:**

- to remain clear of the canopy ram cylinders and
- pin the handles on the ejection seats when the aircraft is not flying or
- remove the connectors on the two canopy ram valves, located behind the front seat, when the front seat is removed.

**GEAR COLLAPSE:** While inspecting or performing maintenance on the landing gear or in a gear well area, it is strongly recommended that the aircraft be placed on jacks prior to starting work.

**RADIOACTIVE COMPONENTS:** The transmitter of the ice accretions system on the right side of the nose has been removed. The high energy ignition box may contain low-level radioisotopes and shall not be handled without protective clothing.

**HYDRAULIC PRESSURE:** Prior to starting any work or inspections, ensure that the hydraulic pressure is at zero and all emergency extension valves are closed (clockwise). Before applying hydraulic pressure to any system, ensure the area around the landing gear, flaps and speed brakes are clear.

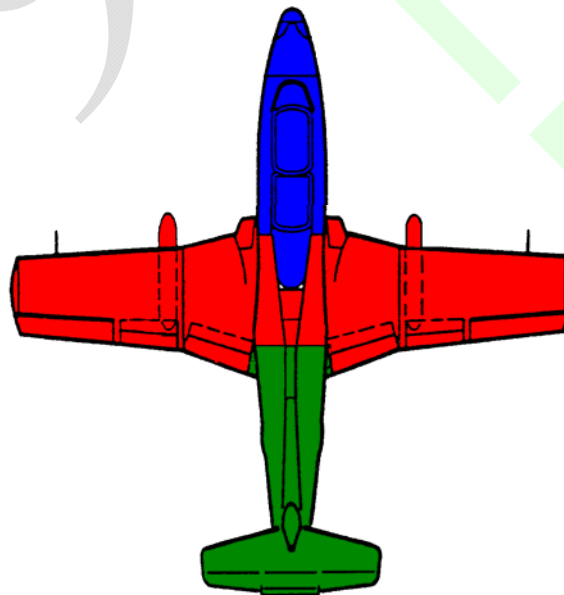
**DEFLATE TIRES:** An explosion hazard exists if the wheel or wheel bolts are damaged and the axel nut is loosened. Before loosing any axel nut, ensure the tire is deflated.

## CONDITION INSTECTION

The Condition Inspection shall be completed every 100 hours time in service or every 12 calendar months, whichever occurs first. This inspection must be performed by an appropriately rated certificated mechanic and signed off in accordance with the aircraft's operating limitation. The mechanic performing this inspection shall thoroughly clean the aircraft and engine.

Dimensions and tolerances required for this inspection may be found in the *L-29 Aircraft Book, Instruction for Aircraft Operations and Maintenance* pages 52 thru 56 and component manufactures' maintenance manuals or instructions.

- Section 1 (blue)**      **Forward Fuselage:** Everything forward of the aft pressure bulkhead excluding the nose gear and gear doors.
- Section 2 (red)**      **Center Section & Both Wings:** From the aft pressure bulkhead to the engine firewall, excluding the landing gear & gear doors.
- Section 3 (green)**      **Aft Fuselage & Empennage:** The point at which the aft fuselage mates to the center section aft to include the entire empennage.
- Section 4**              **Landing Gear, Gear Doors, Wheels & Brakes.**
- Section 5**              **Engine:** Everything aft of the engine firewall that is not attached to the aft fuselage when it is de-mated.
- Section 6**              **Operational Checks.**
- Section 7**              **Initial Engine Run.**
- Section 8**              **Final Items.**
- Section 9**              **Final Engine Run.**



---

**SECTION 1: FORWARD FUSELAGE**


---

**1. REMOVE BATTERY**

a. Remove Battery. \_\_\_\_\_

**ACCESS PANEL**

b. Service Electrolyte Level, if applicable. \_\_\_\_\_

**AND:**

c. Charge Battery. \_\_\_\_\_

d. Test Battery. \_\_\_\_\_

e. Recharge Battery or Replace. \_\_\_\_\_

**2. INSPECT (4) COCKPIT**

a. General Condition. \_\_\_\_\_

**ENTRY STEPS FOR:**

b. Mounting and Security. \_\_\_\_\_

**3. REMOVE FRONT CANOPY**

a. General Condition. \_\_\_\_\_

**AND INSPECT:**

b. Condition of Canopy Seal. \_\_\_\_\_

c. Condition of Canopy Plastic. \_\_\_\_\_

d. Condition of Hinges. \_\_\_\_\_

**4. INSPECT WINDSHIELD**

a. General Condition. \_\_\_\_\_

**FOR:**

b. Mounting and Security. \_\_\_\_\_

c. Condition of Windshield Plastic. \_\_\_\_\_

**5. REMOVE FRONT PILOT**

a. General Condition. \_\_\_\_\_

**SEAT AND INSPECT:**

b. Pilot Restraint System for Condition and obvious defects. \_\_\_\_\_

**NOTE: DISCONNECT CANOPY JETTISON CONNECTORS AT THEIR SOLENOID VALVES.**

**\*\*\* IN THE FRONT COCKPIT REMOVE THE GLARESHIELD, SIDE PANELS AND FLOOR PANELS THEN PERFORM THE FOLLOWING STEPS. \*\*\***

**6. MOVE FLIGHT**

a. Freedom of Movement. \_\_\_\_\_

**CONTROLS FULL**

b. Interference or Chafing. \_\_\_\_\_

**TRAVEL AND INSPECT****FOR:**



**45. INSPECT ELECTRIC**

a. General Condition. \_\_\_\_\_

**WIRE BUNDLES AND**

b. Routing and Security. \_\_\_\_\_

**CONNECTORS (NOSE)**

c. Obvious Defects. \_\_\_\_\_

FOR:

**46. INSPECT FORWARD SIDE**

a. General Condition. \_\_\_\_\_

**OF FORWARD PRESSURE**

b. Defects or Distortion. \_\_\_\_\_

**BULKHEAD FOR:**

c. Condition and Security of Bulkhead Fittings. \_\_\_\_\_

**47. REINSTALL BATTERY**

a. Mounting and Security. \_\_\_\_\_

**AND INSPECT FOR:**

b. Vent System (If Installed). \_\_\_\_\_

**NOTE: DO NOT CONNECT THE BATTERY AT THIS TIME.**

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 2.**

---

**SECTION 2: CENTER SECTION & BOTH WINGS**


---

**1. INSPECT BOTH WINGS**

a. General Condition. \_\_\_\_\_

**AND CENTER SECTION**

b. Loose Rivets/Fasteners. \_\_\_\_\_

**SKIN FOR:**

c. Corrosion. \_\_\_\_\_

d. Distortion. \_\_\_\_\_

---

**\*\*\* REMOVE WING STRAPS, TURTLE BACK, OPEN ALL ACCESS PANELS AND DOORS. THEN PERFORM THE FOLLOWING STEPS. \*\*\***

---

**2. INSPECT LEFT WING TIP**

a. General Condition. \_\_\_\_\_

**AND LIGHT ASSEMBLY FOR:**

b. Mounting and Security. \_\_\_\_\_

c. Presence and Condition of Static Wicks. \_\_\_\_\_

**3. INSPECT LEFT AILERON**

a. General Condition. \_\_\_\_\_

**AND TRIM TAB FOR:**

b. Loose Rivets/Fasteners. \_\_\_\_\_

c. Counter Weight Security. \_\_\_\_\_

d. Corrosion. \_\_\_\_\_

e. Distortion. \_\_\_\_\_

f. Aileron Hinges. \_\_\_\_\_

g. Proper Deflection/Rigging. \_\_\_\_\_

**4. INSPECT LEFT AILERON**

a. General Condition. \_\_\_\_\_

**PUSH PULL TUBES, ROD ENDS**

b. Corrosion. \_\_\_\_\_

**BELL CRANKS FOR:**

c. Security. \_\_\_\_\_

**5. INSPECT CONNECTING**

a. General Condition. \_\_\_\_\_

**POINTS (3) OF THE LEFT OUTER**

b. Cracks. \_\_\_\_\_

**WING AND CENTER PLANE**

c. Corrosion. \_\_\_\_\_

**FOR:**

d. Lubricate and Re-torque. \_\_\_\_\_

**36. INSPECT HYDRAULIC  
LINES AND COMPONENTS  
IN THE CENTER  
SECTION FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_
- c. Leaks. \_\_\_\_\_
- d. Routing and Security  
of Hydraulic Lines. \_\_\_\_\_
- e. Obvious Defects. \_\_\_\_\_

**37. INSPECT ANTENNAS FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_

**38. INSPECT PNEUMATIC LINES  
FOR BRAKES AND EXT. FUEL  
TANKS FOR:**

- a. General Condition. \_\_\_\_\_
- b. Routing and Security. \_\_\_\_\_

**39. INSPECT BLEED  
AIR LINES AND  
COMPONENTS FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN  
SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 3.**

---

**SECTION 3: AFT FUSELAGE & EMPENNAGE**


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**\*\*\* REMOVE ALL FAIRINGS AND ACCESS PANELS ON THE VERTICAL AND HORIZONTAL STABILIZER. THEN PERFORM THE FOLLOWING STEPS. \*\*\***

---

**1. INSPECT AFT FUSELAGE**
**SKIN FOR:**

- a. General Condition. \_\_\_\_\_
- b. Loose Rivets/Fasteners. \_\_\_\_\_
- c. Corrosion. \_\_\_\_\_
- d. Distortion. \_\_\_\_\_

---

**2. INSPECT SPEED**
**BRAKE SKIN FOR:**

- a. General Condition. \_\_\_\_\_
- b. Loose Rivets/Fasteners. \_\_\_\_\_
- c. Corrosion. \_\_\_\_\_
- d. Distortion. \_\_\_\_\_

---

**3. INSPECT ANTENNAS FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_

---

**\*\*\* DEMATE AFT FUSELAGE FROM CENTER SECTION AND THEN PERFORM THE FOLLOWING STEPS. \*\*\***

---

**4. INSPECT CONNECTING  
BOLTS, NUT PLATES AND  
GUIDE PINS:**

- a. General Condition. \_\_\_\_\_
- b. Corrosion. \_\_\_\_\_
- c. Lubricate, as Required. \_\_\_\_\_

---

**5. INSPECT INTERIOR  
STRUCTURE FOR:**

- a. General Condition. \_\_\_\_\_
  - b. Loose Rivets/Fasteners. \_\_\_\_\_
  - c. Corrosion. \_\_\_\_\_
  - d. Distortion. \_\_\_\_\_
-

**18. INSPECT ELEVATOR FOR:**

- a. General Condition. \_\_\_\_\_
- b. Loose Rivets. \_\_\_\_\_
- c. Counter Weight Security. \_\_\_\_\_
- d. Corrosion. \_\_\_\_\_
- e. Distortion. \_\_\_\_\_
- f. Hinges and Lubricate, as Required. \_\_\_\_\_

**19. INSPECT ELEVATOR TRIM  
TAB FOR:**

- a. General Condition. \_\_\_\_\_
- b. Loose Rivets. \_\_\_\_\_
- c. Counter Weight Security. \_\_\_\_\_
- d. Corrosion. \_\_\_\_\_
- e. Distortion. \_\_\_\_\_
- f. Hinges and Lubricate, as Required. \_\_\_\_\_

**20. INSPECT TAIL PIPE  
EXIT SHROUD FOR:**

- a. General Condition. \_\_\_\_\_
- b. Corrosion. \_\_\_\_\_
- c. Mounting and Security. \_\_\_\_\_

**21. INSPECT TAIL SKID FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_
- c. Corrosion. \_\_\_\_\_
- d. Proper Charge. \_\_\_\_\_

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 4.**

**SECTION 4: LANDING GEAR, GEAR DOORS, WHEELS & BRAKES****\*\*\* WASH LANDING GEAR AND GEAR WELLS DOWN BEFORE INSPECTION \*\*\***

<b>1. INSPECT NOSE TIRE FOR:</b>	<ul style="list-style-type: none"> <li>a. General Condition. _____</li> <li>b. Abnormal Wear. _____</li> <li>c. Deflate Tire. _____</li> </ul>
<b>2. REMOVE NOSE WHEEL AND INSPECT WHEEL, WHEEL BEARINGS, AXLE AND AXEL NUT FOR:</b>	<ul style="list-style-type: none"> <li>a. General Condition. _____</li> <li>b. Obvious Defects. _____</li> <li>c. Corrosion. _____</li> <li>d. Clean and Repack Bearings. _____</li> </ul>
<b>3. INSPECT NOSE GEAR FOR:</b>	<ul style="list-style-type: none"> <li>a. General Condition. _____</li> <li>b. Leaks. _____</li> <li>c. Free Play. _____</li> <li>d. Corrosion. _____</li> <li>e. Mounting and Security. _____</li> <li>f. Proper Strut Inflation. _____</li> <li>g. Lubricate. _____</li> </ul>
<b>4. INSPECT SHIMMY DAMPENER FOR:</b>	<ul style="list-style-type: none"> <li>a. General Condition. _____</li> <li>b. Leaks. _____</li> <li>c. Corrosion. _____</li> <li>d. Mounting and Security. _____</li> </ul>
<b>5. INSPECT NOSE GEAR ACUATOR AND HYDRAULIC LINES FOR:</b>	<ul style="list-style-type: none"> <li>a. General Condition. _____</li> <li>b. Leaks. _____</li> <li>c. Corrosion. _____</li> <li>d. Mounting and Security. _____</li> <li>e. Lubricate. _____</li> </ul>

**34. INSPECT RIGHT INBOARD  
GEAR DOOR AND  
ACTUATOR FOR:**

- a. General Condition. \_\_\_\_\_
- b. Corrosion. \_\_\_\_\_
- c. Leaks. \_\_\_\_\_
- d. Mounting and Security. \_\_\_\_\_
- d. Lubricate. \_\_\_\_\_

**35. REINSTALL RIGHT MAIN  
WHEEL, INFLATE TIRE AND  
INSPECT FOR:**

- a. Brake Adjustment. \_\_\_\_\_
- b. Proper Tire Inflation. \_\_\_\_\_
- c. Mounting and Security. \_\_\_\_\_

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN  
SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 5.**

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**SECTION 5: ENGINE**


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**1. INSPECT INLETS, Y DUCT,  
STARTER DOME AND INLET  
GUIDE VAINS FOR:**

- a. General Condition. \_\_\_\_\_  
 b. Corrosion. \_\_\_\_\_  
 c. Mounting and Security. \_\_\_\_\_

**2. INSPECT COMPRESSOR  
BLADES THROUGH AIR  
INTAKE FOR:**

- a. General Condition. \_\_\_\_\_  
 b. Corrosion. \_\_\_\_\_

**NOTE: IF UNDOCUMENTED FOD IS DETECTED PERFORM A "DETAILED ENGINE INSPECTION".**

**3. INSPECT FIREWALL AND  
ENGINE MOUNTS FOR:**

- a. General Condition. \_\_\_\_\_  
 b. Corrosion. \_\_\_\_\_  
 c. Mounting and Security. \_\_\_\_\_

**4. CHECK COMPRESSOR  
HOUSING BOLTS FOR:**

- a. General Condition. \_\_\_\_\_

**5. EXTERNALLY INSPECT  
IGNITION BOX, LEADS AND  
IGNITERS FOR:**

- a. General Condition. \_\_\_\_\_  
 b. Mounting and Security. \_\_\_\_\_  
 c. Wiring Condition, Routing and  
 Security. \_\_\_\_\_

**6. EXTERNALLY INSPECT  
BURNER CANS, FLAME  
PROPAGATION TUBES,  
AND TURBINE HOUSING  
FOR:**

- a. General Condition. \_\_\_\_\_  
 b. Spot Over Heating. \_\_\_\_\_  
 c. Distortion or Cracks. \_\_\_\_\_  
 d. Corrosion. \_\_\_\_\_  
 e. Mounting and Security. \_\_\_\_\_

**NOTE: IF UNDOCUMENTED DEFECTS ARE FOUND PERFORM A "DETAILED ENGINE INSPECTION".**

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**32. INSPECT OIL LINES  
AND PRESSURE  
TRANSMITTERS FOR:**

- a. General Condition. \_\_\_\_\_  
b. Leaks. \_\_\_\_\_  
c. Mounting and Security. \_\_\_\_\_

---

**33. INSPECT TACH  
GENERATOR FOR:**

- a. General Condition. \_\_\_\_\_  
b. Mounting and Security. \_\_\_\_\_  
c. Wiring, Connectors,  
Routing and Security. \_\_\_\_\_

---

**34. INSPECT THE FIRE  
BOTTLE, LINES AND  
FITTINGS FOR:**

- a. General Condition. \_\_\_\_\_  
b. Mounting and Security. \_\_\_\_\_  
c. Proper Pressure. \_\_\_\_\_

---

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN  
SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 6.**

**SECTION 6: OPERATIONAL CHECKS**

The Operational Checks may be accomplished when working on a particular system individually or as they are outlined in this section sequentially. For example it may be advantageous to perform the Landing Gear Check when working with the landing gear in section 4 and not wait until you complete all five sections before doing any operational checks. To accommodate this method a checklist has been provided to ensure all checks in this section are completed.

The Operational Checks are broken down into three categories. Checks that require no external power (Green), checks that require only external electrical power (Yellow) and checks that require both external electrical and hydraulic power (Gold). When possible items are listed, starting in the front cockpit, aft left then proceeding clockwise to conclude at aft right. Only the items not checked in previous sections or engine runs will be listed in this section.

<b>GREEN</b>		<b>YELLOW</b>	
<b>OXYGEN SYSTEM</b>	_____	<b>AIR START</b>	_____
<b>CABIN DUMP VALVE</b>	_____	<b>FIRE EXT.</b>	_____
<b>PITOT STATIC SEL.</b>	_____	<b>PITOT HEAT</b>	_____
<b>BRAKES &amp; RUDDER ADJ.</b>	_____	<b>LIGHTS</b>	_____
<b>RAM AIR VENT</b>	_____	<b>GYRO INST.</b>	_____
		<b>TEMP. CONTROL</b>	_____
		<b>CANOPY JETTISON</b>	_____
		<b>GOLD</b>	
		<b>FLAPS</b>	_____
		<b>LANDING GEAR</b>	_____

**THIS SECTION IS CONSIDERED COMPLETE WHEN ALL OPERATIONAL CHECKS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 7.**

**TO ESTABLISH ELECTRICAL POWER FOLLOW THIS PROCEDURE:**

**NOSE COMPARTMENT**

Fire Extinguishing Switch..... Off

**REAR COCKPIT**

Fire Extinguishing Switch Cover ..... Closed

Master Switch..... On

Secondary Bus Switch..... On

**FRONT COCKPIT**

Fire Extinguishing Switch Cover ..... Closed

All Electrical Switches..... Off

Gyro Inverter Circuit Breakers..... Off (2)

External Power (Preferred Method) ..... Connect

If external power is available skip connecting the battery.

Battery (Alternate Method) ..... Connect

Battery Switch..... On

External Power Light (If Connected) ..... On

Check Voltage..... 26 VDC Min.

---

**TO ESTABLISH HYDRAULIC POWER FOLLOW THIS PROCEDURE:**

**REAR COCKPIT**

- Flap Selector Buttons..... Out
- Gear Selector Buttons..... Out
- Flap and Gear Emergency Extension Valves ..... Closed (CW)
- F/C Landing Gear Lockout Switch..... Off

**FRONT COCKPIT**

- Flap Selector Buttons..... Out
- Gear Selector Buttons..... Out
- Flap and Gear Emergency Extension Valves..... Closed (CW)
- Hydraulic Mule..... Connect

After turning on the hydraulic mule the pressure should read zero, if not, shut the mule off and determine the cause and correct.

---

**OXYGEN SYSTEM**

**Oxygen Regulator**..... 100%

Lever should be 90° to the direction of flight.

**Oxygen Valve**..... Closed (CW)

**Oxygen Gauge**..... Zero

If gauge reads any pressure open emergency valve until the pressure is depleted then close.

**Oxygen Mask**..... Inhale

There should be no flow from the regulator.

**Oxygen Regulator**..... Dilute

**Oxygen Mask**..... Inhale

There should be flow of cabin air from the regulator.

**Oxygen Valve**..... On (CCW)

The oxygen gauge should read the pressure of the bottle dedicated for the front pilot and the white lung symbols should be in view.

**Oxygen Mask**..... Inhale

The white lung symbols should move out of view when inhaling and return when not.

**Oxygen Regulator**.....100%

**Oxygen Mask**..... Inhale

The white lung symbols should move out of view when inhaling and return when not.

**Emergency Oxygen Valve**..... On (CCW)

There should be a constant flow to the mask and the white lung symbols should be out of view.

**Emergency Oxygen Valve**..... Closed (CW)

Flow should stop and the white lungs should be in view.

**Oxygen Valve**..... Closed (CW)

Relieve any residual pressure by opening the emergency valve until the pressure reads zero, then re-close the emergency valve.

**REAR COCKPIT**

**Oxygen Regulator**..... 100%

Lever should be 90° to the direction of flight.

**Oxygen Valve**..... Closed (CW)

**Front Cockpit Normal Brakes..... Apply and Hold**

Hold approximately 4 ATM. These next steps will check the front cockpit lockout device.

**Rear Cockpit Normal Brakes..... Apply and Release**

**Brake Pressure Indicator..... 0 ATM/0 ATM**

**Front Cockpit Normal Brake..... Release and Re-Apply**

**Brake Pressure Indicator..... 0 ATM/0 ATM**

**Front Cockpit Normal Brake..... Release**

This confirms that the front cockpit lockout device worked.

**Front & Rear Normal Brakes..... Apply and Hold**

Deflection should be approximately the same, about half travel.

**Front & Rear Normal Brakes Simultaneously ..... Release Slowly**

This should have reset the front cockpit lockout device.

**Front Cockpit Normal Brake..... Apply and Release**

Confirm with brake the pressure gauges that normal braking is restored in the front cockpit.

**RAM AIR VENT**

**Ram Air Vent Valve..... Open**

Verify valve position through vent opening.

**Ram Air Vent Valve..... Closed**

Verify valve position through vent opening.

**Vent Nozzle Rotate..... Left and Right**

Perform the same procedure for rear vent.

---

**ESTABLISH ELECTRICAL POWER FOR THESE PROCEDURES:**


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**AIR START (IGNITION)**
**FRONT COCKPIT**

**Engine Bus Switch**..... On

**Airstart Switch**..... Push and Release

This provides ignition for approximately 19 seconds and the **RELIGHT IN FLIGHT** annunciator light should be illuminated.

**REAR COCKPIT**

**Airstart Switch**..... Push and Release

This also provides ignition for approximately 19 seconds and the **RELIGHT IN FLIGHT** annunciator light should be illuminated.

**Engine Bus Switch**..... Off

When finished, safety both airstart switches with breakable copper wire.

---

**FIRE EXTINGUISHING**

**Fire Bottle Connectors (Two)**..... Disconnect

Connect a voltmeter between each connector and ground.

**Engine Bus Switch**..... On

**Fire Extinguisher Button**..... Push and Hold

Approximately 28 VDC should be read on one connector.

**Fire Extinguisher Button**..... Release

Voltage should drop to zero. Repeat above two steps in rear cockpit.

**Engine Bus Switch**..... Off

**Battery Switch**..... Off

**External Power** ..... Disconnect

**Battery**..... Connect

**Fire Extinguisher Switch In Nose Compartment**..... On

**Fire Extinguisher Button**..... Push and Hold

Approximately 28 VDC should be read on the other connector.

**Fire Extinguisher Button**..... Release

Voltage should drop to zero. Repeat above two steps in rear cockpit.

---

**\*\*\*CAUTION\*\*\*****REMAIN CLEAR OF THE CANOPY JETTISON RAMS AT ALL TIMES.**

**Front Canopy Jettison Lever Safety Pin ..... Remove**

Note: Some aircraft have an additional safety switch that prevents canopy jettison if the canopy is removed. If installed the switch would be adjacent to the aft left canopy rail. When testing the jettison system this switch must be held in for a valid test.

**Front Canopy Jettison Lever ..... Full Forward**

The two canopy rams should deploy with authority.

Leave the front canopy jettison lever forward and proceed to the rear cockpit.

**Rear Canopy ..... Remove**

**\*\*\*CAUTION\*\*\*****REMAIN CLEAR OF THE CANOPY JETTISON RAMS AT ALL TIMES.**

**Rear Canopy Jettison Lever Safety Pin ..... Remove**

**Rear Canopy Jettison Lever ..... Full Forward**

The two canopy rams should **NOT** deploy. The canopy jettison is blocked by the front canopy jettison lever in the full forward position.

**Rear Canopy Jettison Lever ..... Full Aft/Stowed**

Return to the front cockpit and stow the front canopy jettison lever, full aft.

**Rear Canopy Jettison Lever ..... Full Forward**

The two canopy rams should deploy with authority.

Leave the rear canopy jettison lever forward and proceed back to the front cockpit.

**Front Canopy Jettison Lever ..... Full Forward**

The two canopy rams should **NOT** re-deploy. The canopy jettison is blocked by the rear canopy jettison lever in the full forward position.

**Aircraft Electrical Power ..... Remove**

This completes the test and the system must be returned to normal.

**Front Canopy Jettison Lever ..... Full Aft/Stowed**

**Front Canopy Jettison Lever Safety Pin ..... Install**

**Front Canopy Locking Lever ..... Full Aft/Open**

**Rear Canopy Jettison Lever ..... Full Aft/Stowed**

**Rear Canopy Jettison Lever Safety Pin ..... Installed**

Lubricate the canopy jettison rams with light grease and push them back into the cylinders.



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**ESTABLISH ELECTRIC AND HYDRAULIC POWER FOR  
THE FOLLOWING PROCEDURES:**

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**FLAPS**

Extending the landing gear and or the flaps by means of the emergency extension valves will overfill the hydraulic reservoir and will cause venting of hydraulic fluid. For this reason it is recommended that the hydraulic reservoir not be refilled until tests using the emergency extension system are complete and the hydraulic accumulator is full.

<b>Flap Hydraulic Dump Valve.....</b>	<b>Drain and Close</b>
<b>Secondary Bus Switch.....</b>	<b>On</b>
<b>Flaps 0° Button.....</b>	<b>Push</b>
<b>Verify Flaps Up Electrically.....</b>	<b>Red Light On</b>
<b>Verify Flaps Up Manually.....</b>	<b>Pole Retracted</b>
<b>All Flap Buttons .....</b>	<b>Out</b>
<b>Hydraulic Pressure.....</b>	<b>Zero</b>
<b>Visually Verify Flaps.....</b>	<b>Up</b>
<b>Battery Switch.....</b>	<b>Off</b>
<b>Hydraulic Mule.....</b>	<b>Off</b>
<b>Check Flap Trailing Edges For .....</b>	<b>Alignment</b>
<b>Battery Switch.....</b>	<b>On</b>
<b>Hydraulic Mule.....</b>	<b>On</b>
<b>Flaps 15° Button.....</b>	<b>Push</b>
<b>Verify Flaps 15° (Electrically).....</b>	<b>Amber Light On</b>
<b>Verify Flaps 15° (Manually).....</b>	<b>Pole at 15° Mark</b>
<b>All Flap Buttons .....</b>	<b>Out</b>
<b>Hydraulic Pressure.....</b>	<b>Zero</b>
<b>Battery Switch.....</b>	<b>Off</b>
<b>Hydraulic Mule.....</b>	<b>Off</b>
<b>Flaps Rigging At 15°.....</b>	<b>Check</b>
<b>Hydraulic Mule.....</b>	<b>On</b>
<b>Battery Switch.....</b>	<b>On</b>
<b>Flaps 30° Button.....</b>	<b>Push</b>

**Battery Switch**..... **On**

**Hydraulic Accumulator**..... **Fill**

To fill the hydraulic accumulator (electric + hydraulic power est.) push and hold the gear down button. The hydraulic pressure will build up and fill the accumulator. On models with a manual fill valve use the same procedure, but manually open the fill valve until the accumulator is full, 100 ATM is maximum. If needed, adjust the pressure relief valve to obtain 100ATM.

**REAR COCKPIT**

**Select Gear**..... **UP**

**Verify Gear Up Electronically**..... **3 Red Lights**

**Gear Selector Button**..... **Out**

**Hydraulic Pressure**..... **Zero**

**Select Gear**..... **Down**

**Verify Gear Down Electrically**..... **3 Green Lights**

**Verify Gear Down Manually**..... **3 Poles Extended**

**Gear Selector Button**..... **Out**

**Hydraulic Pressure**..... **Zero**

**Electrical Power**..... **Off**

**Hydraulic Mule**..... **Off**

**Visually Verify Gear**..... **Down and Locked**

**Hydraulic Reservoir**..... **Fill**

**\*\*\* REMOVE THE AIRCRAFT FROM THE JACKS AFTER THE LANDING**

**GEAR CHECK IS SUCCESSFULLY COMPLETED \*\*\***

**PROCEED TO CHAPTER 4 SECTION 7.**

**SECTION 7: INITIAL ENGINE RUN**

*Please review this entire procedure prior to attempting an engine start.*

**SAFETY FIRST!**

- Ensure that the engine intake and tail pipe is clear of FOD.
- There are not any loose articles in the cockpit that could end up going down the intake.
- The ramp area is free of FOD.
- Ensure everyone on the ramp is briefed not to walk within 15' of the jet intakes or within 100' of the tail pipe while the engine is running.
- Hearing protection is required.
- It is possible to lockout normal braking from the front cockpit. Ensure normal brakes can be applied from the front cockpit before starting.
- One of the leading causes of hot starts is a low battery. Prior to starting, ensure that the battery is fully charged (26VDC MIN) or use an adequate external power source.

To properly observe the fuel transfer the fuel should be distributed as follows:

- Internal fuel, 800L or less.
- Each external fuel tank, 5 - 10 gallons.

The electrical part of the start sequence is controlled automatically by the starting control box as follows:

- 0sec. – Starter current applied half power (200A)
- 3sec. – Ignition on
- 5sec. – Starter current applied full power (400A)
- 15sec. – Ignition off
- 17sec. – Starter off

Duration of a complete start cycle is 17 ± 1.5 seconds.

**NOSE**

Battery ..... Connect

**REAR COCKPIT**

Isolation Valve Switch..... Off

Fire Extinguisher..... Safety Wired

**BEFORE ENGINE START**

Cabin Dump Valve.....	Closed
Anti-Ice.....	Off
Throttle.....	Idle
Fuel Shutoff Lever .....	Off
Isolation Valve Switch.....	Off
Fire Extinguisher.....	Safety Wired
Pitot Selector.....	Right
Pitot Heat.....	Off
Landing Light.....	Off
Emergency Brakes.....	On
Electrical Switches.....	Off
Hydraulic System Pressure.....	Zero
Hydraulic Accumulator Pressure .....	100atm.
Emergency Gear and Flap Valves.....	Safety Wired
Cabin Heat Switch.....	Automatic
Circuit Breakers.....	Normal
Cabin Pressure Lever.....	Off
Battery Switch.....	On
External Power Light .....	(If External Power is used) On
Check Voltage .....	26VDC Min.
Caution and Warning Panel.....	Three (3) Illuminated and Test
<p>The <b>FIRE</b> light will be on because the tail is off and the fire warning senses an open circuit. The engine <b>FUEL P</b> light is on because of low fuel pressure.</p> <p>The <b>GEN</b> light should be flashing, indicating the generator is not producing current.</p>	
Engine Switch.....	On
Caution and Warning Panel.....	GEN & FIRE Only
Fuel Quantity.....	Checked

**SHUTDOWN CHECK**

Electrical Equipment..... Off  
Secondary Bus Switch..... Off  
Throttle Idle..... 35 - 39% (30sec. Min.)  
Fuel Shutoff Lever..... Off  
Timer..... Start  
Rundown Time 50 Seconds Minimum.  
Engine Switch..... Off  
Battery Switch..... Off  
GEN Switch..... Off  
Emergency Brakes..... Off  
Battery..... Disconnect

---

**THIS ENGINE RUN IS CONSIDERED COMPLETE WHEN ALL ITEMS IN THIS SECTION  
HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 8.**

---

**SECTION 8: FINAL ITEMS**


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**1. BEFORE ENGINE**

a. Obtain a Soap Sample (If Due). \_\_\_\_\_

**COOLS DOWN:**

b. Drain Engine Oil. \_\_\_\_\_

c. After Engine Cools, Clean Oil Screens. \_\_\_\_\_

d. Refill Oil. \_\_\_\_\_

**2. INSPECT ENGINE FOR ANY FLUID LEAKS:**

a. Fuel System. \_\_\_\_\_

b. Oil System. \_\_\_\_\_

c. Hydraulic System. \_\_\_\_\_

**3. EXTERNALLY INSPECT COMBUSTION CHAMBERS, FLAME PROPAGATION TUBES, AND TURBINE HOUSING FOR:**

a. General Condition. \_\_\_\_\_

b. Spot Over Heating. \_\_\_\_\_

c. Distortion or Cracks. \_\_\_\_\_

e. Mounting and Security. \_\_\_\_\_

**\*\*\* PLACE AIRCRAFT ON JACKS \*\*\*****4. RE-INSTALL AFT FUSELAGE TO CENTER SECTION AND INSPECT:**

a. Torque on Eight (8) Mounting Bolts. \_\_\_\_\_

b. Hydraulic Connections. \_\_\_\_\_

c. Electrical Connections. \_\_\_\_\_

d. Push Pull Tubes Connections. \_\_\_\_\_

e. Tail Pipe Hangar. \_\_\_\_\_

**\*\*\* REMOVE AIRCRAFT FROM JACKS \*\*\*****5. INSPECT FRONT COCKPIT FOR:**

a. Cleanliness. \_\_\_\_\_

b. Loose Items. \_\_\_\_\_

c. Anything Out of Place. \_\_\_\_\_

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<b>29. CHECK HYDRAULIC RESERVOIR FOR:</b>	a. Quantity.	_____
	b. Cover Secured.	_____
<hr/>		
<b>30. INSPECT ELEVATOR FOR:</b>	a. Proper Rigging.	_____
	b. Freedom of Movement.	_____
<hr/>		
<b>31. INSPECT ELEVATOR TRIM TAB FOR:</b>	a. Proper Rigging.	_____
	b. Freedom of Movement.	_____
<hr/>		
<b>32. INSPECT RUDDER FOR:</b>	a. Proper Rigging.	_____
	b. Freedom of Movement.	_____
<hr/>		
<b>33. REINSPECT THE FOLLOWING AREAS FOR CLEANLINESS AND LOOSE ITEMS:</b>	a. Top of Vertical Stab.	_____
	b. Stab Actuator.	_____
	c. Elevator Trim Tab.	_____
	d. Access Panel on Left Side of Vertical Stab.	_____
	e. Top of Aft Fuselage.	_____
<hr/>		
<b>34. REINSTALL FAIRINGS AND ACCESS PANELS ON THE VERTICAL AND HORIZONTAL STABILIZER AND THEN INSPECT FOR:</b>	a. General Condition.	_____
	b. Fit.	_____
	c. Mounting and Security.	_____
<hr/>		
<b>35. REINSTALL TURTLE BACK FAIRINGS THEN INSPECT FOR:</b>	a. General Condition.	_____
	b. Fit.	_____
	c. Mounting and Security.	_____
<hr/>		
<b>36. CONNECT BATTERY, INSTALL BATTERY ACCESS COVER AND INSPECT FOR:</b>	a. Mounting and Security.	_____

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**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 4 SECTION 9.**

SAMPLES



**SECTION 9: FINAL ENGINE RUN**

*Please review this entire procedure prior to attempting an engine start.*

**SAFETY FIRST!**

- Ensure that the engine intake and tail pipe is clear of FOD.
- There are not any loose articles in the cockpit that could end up going down the intake.
- The ramp area is free of FOD.
- Ensure everyone on the ramp is briefed not to walk within 15' of the jet intakes or within 100' of the tail pipe while the engine is running.
- Hearing protection is required.
- It is possible to lockout normal braking from the front cockpit. Ensure normal brakes can be applied from the front cockpit before starting.
- One of the leading causes of hot starts is a low battery. Prior to starting, ensure that the battery is fully charged (26VDC MIN) or use an adequate external power source.

The electrical part of the start sequence is controlled automatically by the starting control box as follows:

- 0sec. – Starter current applied half power (200A)
- 3sec. – Ignition on
- 5sec. – Starter current applied full power (400A)
- 15sec. – Ignition off
- 17sec. – Starter off

Duration of a complete start cycle is 17 ± 1.5 seconds.

**NOSE COMPARTMENT**

Fire Extinguishing Switch..... On

**REAR COCKPIT**

Isolation Valve Switch..... Off

Fire Extinguisher..... Safety Wired

**FRONT COCKPIT**

Cabin Dump Valve..... Closed

Anti-Ice..... Off

Throttle.....	Idle
Fuel Shutoff Lever .....	Off
Isolation Valve Switch.....	Off
Fire Extinguisher.....	Safety Wired
Pitot Selector.....	Right
Pitot Heat.....	Off
Landing Light.....	Off
Emergency Brakes.....	SET
Electrical Switches.....	Off
Hydraulic System Pressure.....	Zero
Hydraulic Accumulator Pressure.....	100atm.
Emergency Gear and Flap Valves.....	Safety Wired
Cabin Heat Switch.....	Automatic
Circuit Breakers.....	Normal
Cabin Pressure Lever.....	Off
Battery Switch.....	On
External Power Light .....	(If External Power is used)..... On
Check Voltage .....	26VDC Min.
Caution and Warning Panel.....	Two (2) Illuminated and Test
The engine <b>FUEL P</b> light is on because of low fuel pressure.	
The <b>GEN</b> light should be flashing, indicating the generator is not producing current.	
Engine Switch.....	On
Caution and Warning Panel.....	GEN Only
Fuel Quantity.....	Checked

**EGT..... 550 Max.**  
**Fuel Pressure..... 12kg Min.**  
**Oil Pressure..... .5kg Min.**  
**Oil Temperature..... 110°C Max.**

**SHUTDOWN CHECK**

**Electrical Equipment..... Off**  
**Secondary Bus Switch..... Off**  
**Throttle..... Idle, 30sec. Min.**  
**Fuel Shutoff Lever..... Off**  
**Timer..... Start**  
**Rundown Time 50 Seconds Minimum.**  
**Engine Switch..... Off**  
**Battery Switch..... Off**  
**GEN Switch..... Off**  
**Emergency Brakes..... Off**

**CHECK ENGINE COMPARTMENT FOR ANOMALIES THEN INSTALL AFT BELLY PAN.**

**THIS ENGINE RUN IS CONSIDERED COMPLETE WHEN ALL ITEMS IN THIS SECTION  
HAVE BEEN SUCCESSFULLY COMPLETED.**

**MAKE LOGBOOK ENTRIES IN ACCORDANCE WITH THE OPERATING LIMITATIONS  
ISSUED BY THE FAA INDICATING THAT A “CONDITION INSPECTION” HAS BEEN  
COMPELTED.**

The Detailed Engine Inspection is due every 100 hours time in service or as directed in this program when discrepancies are found. The inspection is a comprehensive inspection that includes the compressor and hot section. It must be performed by an appropriately rated certificated mechanic and signed off in accordance with the aircraft's operating limitation.

Dimensions and tolerances required for this inspection may be found in **L-29 Aircraft Book V Instruction for Aircraft Operations and Maintenance** pages 52 and 53.

If the Detailed Inspection is performed in conjunction with a Condition Inspection then:

- 1.) Perform the Detailed Engine Inspection as specified in Chapter 5 Section 1 at the same time as the Engine Inspection found in Chapter 4 Section 5.
- 2.) Do not perform the steps and procedures found in Chapter 5 Sections 2 – 4, as these are covered in Chapter 4 Sections 7 – 9.
- 3.) At the completion of the Detailed Inspection include in the logbook entry that a Detailed Engine Inspection has also been completed.

**Section 1**                      **Detailed Engine Inspection.**

**Section 2**                      **Initial Engine Run.**

**Section 3**                      **Final Items.**

**Section 4**                      **Final Engine Run.**



**SECTION 1: DETAILED ENGINE INSPECTION****DISCONNECT THE BATTERY.****PLACE THE AIRCRAFT ON JACKS.****DEMATE THE AFT FUSELAGE FROM THE CENTER SECTION.****REMOVE THE AIRCRAFT FROM THE JACKS.****PERFORM THE FOLLOWING STEPS.**


---

<b>1. INSPECT COMPRESSOR BLADES THROUGH AIR INTAKE FOR:</b>	a. General Condition.	_____
	b. Corrosion.	_____
	c. FOD.	_____

---

<b>2. CHECK COMPRESSOR HOUSING FOR:</b>	a. General Condition.	_____
	b. Distortion or Cracks.	_____

---

<b>3. EXTERNALLY INSPECT COMBUSTION CHAMBERS OUTER CASING FOR:</b>	a. General Condition.	_____
	b. Spot Over Heating.	_____
	c. Distortion or Cracks.	_____
	e. Mounting and Security.	_____

**IF DEFECTS ARE FOUND REMOVE ALL COMBUSTION CHAMBERS AND INSPECT.**


---

<b>4. EXTERNALLY INSPECT TURBINE HOUSING FOR:</b>	a. General Condition.	_____
	b. Spot Over Heating.	_____
	c. Distortion or Cracks.	_____
	e. Mounting and Security.	_____

---

<b>5. REMOVE AND INSPECT THERMOCOUPLES AND WIRING HARNESS FOR:</b>	a. General Condition.	_____
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<b>6. REMOVE AND INSPECT THERMAL BLANKETS, EXHAUST NOZZEL, TAIL PIPE, AND DIFFUSER FOR:</b>	a. General Condition.	_____
	b. Cracks.	_____

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<b>13. INSPECT THE TURBINE BLADE GUIDE VANES AND TURBINE BLADES FOR:</b>	a. General Condition.	_____
	b. Cracks.	_____
	c. FOD damage.	_____

---

<b>14. REASSEMBLE ALL COMBUSTION CAMBERS AND INSPECT FOR:</b>	a. General Condition.	_____
	b. Mounting and Security.	_____

---

<b>15. INSPECT IGNITERS FOR:</b>	a. General Condition.	_____
	b. Proper Gap.	_____
	c. Mounting and Security.	_____

---

<b>16. REINSTALL DEFUSER, TAIL PIPE, EXHAUST NOZZLE AND THERMAL BLANKETS AND INSPECT FOR:</b>	a. Mounting and Security.	_____
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<b>17. REINSTALL THERMAL- COUPLES AND WIRING HARNESS AND INSPECT FOR:</b>	a. Mounting and Security.	_____
	b. Wiring, Connectors, Routing and Security.	_____

---

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 5 SECTION 2.**

**SECTION 2: INITIAL ENGINE RUN**

*Please review this entire procedure prior to attempting an engine start.*

**SAFETY FIRST!**

- Ensure that the engine intake and tail pipe is clear of FOD.
- There are not any loose articles in the cockpit that could end up going down the intake.
- The ramp area is free of FOD.
- Ensure everyone on the ramp is briefed not to walk within 15' of the jet intakes or within 100' of the tail pipe while the engine is running.
- Hearing protection is required.
- It is possible to lockout normal braking from the front cockpit. Ensure normal brakes can be applied from the front cockpit before starting.
- One of the leading causes of hot starts is a low battery. Prior to starting, ensure that the battery is fully charged (26VDC MIN) or use an adequate external power source.

The electrical part of the start sequence is controlled automatically by the starting control box as follows:

- 0sec. – Starter current applied half power (200A)
- 3sec. – Ignition on
- 5sec. – Starter current applied full power (400A)
- 15sec. – Ignition off
- 17sec. – Starter off

Duration of a complete start cycle is  $17 \pm 1.5$  seconds.

**NOSE**

Battery ..... Connect

**REAR COCKPIT**

Isolation Valve Switch..... Off

Fire Extinguisher..... Safety Wired

## BEFORE ENGINE START

Cabin Dump Valve.....	Closed
Anti-Ice.....	Off
Throttle.....	Idle
Fuel Shutoff Lever .....	Off
Isolation Valve Switch.....	Off
Fire Extinguisher.....	Safety Wired
Pitot Selector.....	Right
Pitot Heat.....	Off
Landing Light.....	Off
Emergency Brakes.....	On
Electrical Switches.....	Off
Hydraulic System Pressure.....	Zero
Hydraulic Accumulator Pressure .....	100atm.
Emergency Gear and Flap Valves.....	Safety Wired
Cabin Heat Switch.....	Automatic
Circuit Breakers.....	Normal
Cabin Pressure Lever.....	Off
Battery Switch.....	On
External Power Light .....	(If External Power is used) On
Check Voltage .....	26VDC Min.
Caution and Warning Panel.....	Three (3) Illuminated and Test
<p>The <b>FIRE</b> light will be on because the tail is off and the fire warning senses an open circuit. The engine <b>FUEL P</b> light is on because of low fuel pressure.</p> <p>The <b>GEN</b> light should be flashing, indicating the generator is not producing current.</p>	
Engine Switch.....	On
Caution and Warning Panel.....	GEN & FIRE Only
Fuel Quantity.....	Checked



**Throttle (Within 2 Seconds)..... Full Forward**

Acceleration time must not be more than 12 seconds at ambient temperatures of 15°C and below or 14 seconds above 15°C.

- RPM Swing .....102% Max 5 Times**
- EGT..... 730 Peak**
- RPM Stabilized ..... 100% (20 Seconds Min.)**
- RPM ..... 52% (2 1/2 Minutes for Cooling)**
- RPM ..... 35 - 39% (30 Seconds Min.)**
- EGT..... 550 Max.**
- Fuel Pressure..... 12kg Min.**
- Oil Pressure..... .5kg Min.**
- Oil Temperature..... 110°C Max.**

**SHUTDOWN CHECK**

- Electrical Equipment..... Off**
  - Secondary Bus Switch..... Off**
  - Throttle Idle..... 35 - 39% (30sec. Min.)**
  - Fuel Shutoff Lever..... Off**
  - Timer..... Start**
- Rundown Time 50 Seconds Minimum.
- Engine Switch..... Off**
  - Battery Switch..... Off**
  - GEN Switch..... Off**
  - Emergency Brake..... Off**
  - Battery..... Disconnect**

**THIS ENGINE RUN IS CONSIDERED COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 5 SECTION 3.**

**SECTION 3: FINAL ITEMS**

---

**1. INSPECT ENGINE FOR ANY FLUID LEAKS:**

- a. Fuel System. \_\_\_\_\_
- b. Oil System. \_\_\_\_\_
- c. Hydraulic System. \_\_\_\_\_

---

**2. EXTERNALLY INSPECT COMBUSTION CHAMBERS, FLAME PROPAGATION TUBES, AND TURBINE HOUSING FOR:**

- a. General Condition. \_\_\_\_\_
- b. Spot Over Heating. \_\_\_\_\_
- c. Distortion or Cracks. \_\_\_\_\_
- e. Mounting and Security. \_\_\_\_\_

---

**3. VISUALLY INSPECT DEFUSER, TAIL PIPE EXHAUST NOZZLE AND THERMAL BLANKETS FOR:**

- a. General Condition. \_\_\_\_\_
- b. Mounting and Security. \_\_\_\_\_

---

**\*\*\* PLACE AIRCRAFT ON JACKS \*\*\***

---

**4. REINSTALL AFT FUSELAGE TO CENTER SECTION AND INSPECT:**

- a. Torque on Eight (8) Mounting Bolts. \_\_\_\_\_
- b. Hydraulic Connections. \_\_\_\_\_
- c. Electrical Connections. \_\_\_\_\_
- d. Push Pull Tubes Connections. \_\_\_\_\_
- e. Tail Pipe Hangar. \_\_\_\_\_

---

**\*\*\* REMOVE AIRCRAFT FROM JACKS \*\*\***

---

**5. REINSTALL TURTLE BACK FAIRINGS THEN INSPECT FOR:**

- a. Mounting and Security. \_\_\_\_\_
-

---

**6. INSPECT ELEVATOR**

a. Proper Operation \_\_\_\_\_

**FOR:**

b. Freedom of Movement. \_\_\_\_\_

---

**7. INSPECT ELEVATOR**

a. Proper Operation \_\_\_\_\_

**TRIM TAB FOR:**

b. Freedom of Movement. \_\_\_\_\_

---

**8. INSPECT RUDDER FOR:**

a. Proper Operation \_\_\_\_\_

b. Freedom of Movement. \_\_\_\_\_

---

**9. CONNECT BATTERY**

a. Mounting and Security. \_\_\_\_\_

**AND BATTERY ACCESS****COVER AND INSPECT FOR:**

---

**THIS SECTION IS COMPLETE WHEN ALL ITEMS IN THIS SECTION HAVE BEEN SUCCESSFULLY COMPLETED. PROCEED TO CHAPTER 5 SECTION 4.**

**SECTION 4: FINAL ENGINE RUN**

*Please review this entire procedure prior to attempting an engine start.*

**SAFETY FIRST!**

- Ensure that the engine intake and tail pipe is clear of FOD.
- There are not any loose articles in the cockpit that could end up going down the intake.
- The ramp area is free of FOD.
- Ensure everyone on the ramp is briefed not to walk within 15' of the jet intakes or within 100' of the tail pipe while the engine is running.
- Hearing protection is required.
- It is possible to lockout normal braking from the front cockpit. Ensure normal brakes can be applied from the front cockpit before starting.
- One of the leading causes of hot starts is a low battery. Prior to starting, ensure that the battery is fully charged (26VDC MIN) or use an adequate external power source.

The electrical part of the start sequence is controlled automatically by the starting control box as follows:

- 0sec. – Starter current applied half power (200A)
- 3sec. – Ignition on
- 5sec. – Starter current applied full power (400A)
- 15sec. – Ignition off
- 17sec. – Starter off

Duration of a complete start cycle is 17 ± 1.5 seconds.

**NOSE COMPARTMENT**

**Fire Extinguishing Switch..... On**

**REAR COCKPIT**

**Isolation Valve Switch..... Off**

**Fire Extinguisher..... Safety Wired**

**FRONT COCKPIT**

**Cabin Dump Valve..... Closed**

**Anti-Ice..... Off**

<b>Throttle</b> .....	<b>Idle</b>
<b>Fuel Shutoff Lever</b> .....	<b>Off</b>
<b>Isolation Valve Switch</b> .....	<b>Off</b>
<b>Fire Extinguisher</b> .....	<b>Safety Wired</b>
<b>Pitot Selector</b> .....	<b>Right</b>
<b>Pitot Heat</b> .....	<b>Off</b>
<b>Landing Light</b> .....	<b>Off</b>
<b>Emergency Brakes</b> .....	<b>On</b>
<b>Electrical Switches</b> .....	<b>Off</b>
<b>Hydraulic System Pressure</b> .....	<b>Zero</b>
<b>Hydraulic Accumulator Pressure</b> .....	<b>100atm.</b>
<b>Emergency Gear and Flap Valves</b> .....	<b>Safety Wired</b>
<b>Cabin Heat Switch</b> .....	<b>Automatic</b>
<b>Circuit Breakers</b> .....	<b>Normal</b>
<b>Cabin Pressure Lever</b> .....	<b>Off</b>
<b>Battery Switch</b> .....	<b>On</b>
<b>External Power Light</b> .....	<b>(If External Power is used)..... On</b>
<b>Check Voltage</b> .....	<b>26VDC Min.</b>
<b>Caution and Warning Panel</b> .....	<b>Two (2) Illuminated and Test</b>
The engine <b>FUEL P</b> light is on because of low fuel pressure.	
The <b>GEN</b> light should be flashing, indicating the generator is not producing current.	
<b>Engine Switch</b> .....	<b>On</b>
<b>Caution and Warning Panel</b> .....	<b>GEN Only</b>
<b>Fuel Quantity</b> .....	<b>Checked</b>

- EGT..... 550 Max.
- Fuel Pressure..... 12kg Min.
- Oil Pressure..... .5kg Min.
- Oil Temperature..... 110°C Max.

**SHUTDOWN CHECK**

- Electrical Equipment..... Off
- Secondary Bus Switch..... Off
- Throttle..... Idle, 30sec. Min.
- Fuel Shutoff Lever..... Off
- Timer..... Start
- Rundown Time 50 Seconds Minimum.
- Engine Switch..... Off
- Battery Switch..... Off
- GEN Switch..... Off
- Emergency Brakes..... Off

**CHECK ENGINE COMPARTMENT FOR ANOMALIES THEN INSTALL AFT BELLY PAN.**

**THIS ENGINE RUN IS CONSIDERED COMPLETE WHEN ALL ITEMS IN THIS SECTION  
HAVE BEEN SUCCESSFULLY COMPLETED.**

**MAKE LOGBOOK ENTRIES IN ACCORDANCE WITH THE OPERATING LIMITATIONS  
ISSUED BY THE FAA INDICATING THAT A  
"DETAILED ENGINE INSPECTION"  
HAS BEEN COMPELTED.**