

AIRSPEED/FLIGHT LOAD SHEET

Aircraft registration.: LN-LCU/SE-LCU			
AIRSPEED LIMITATIONS		AIRSPEEDS FOR NORMAL OPERATIONS	
Vne :200 MPH	Vno :160 MPH	Va :107 MPH at 1950lbs Normal	Va :132 MPH at 1800lbs Aerobat
Vs1 : 54 MPH	Vs30: 61 MPH*	Vs40: 75 MPH*	Vs60: 78 MPH*
Vso : 54 MPH	Vxw : 17 Kts		
		Vr-----: 55-60 MPH	Vx(flaps)----: N/A
		(no flaps): 58 MPH	Vy(no flaps): 80 MPH
		(flaps)-----:	Venroute climb-:
		Vmax endurance:	Vmax range-----:
		Vbest glide-----: 80 MPH	Vapproach-----: 80 MPH
		Vfinal approach----: 70-75 MPH	V Short field-----: 60 MPH
FLIGHT LOADS	POSITIVE	NEGATIVE	
NORMAL	3,8 G	1,52 G	(At max 1950 lbs)
AEROBATIC	6,0 G	5,0 G.	(At max 1800 lbs)
Remarks:			
Vx increases with altitude and GW.			
Vy decreases with altitude increases with GW.			
Vmax range increases with altitude and GW.			
For moderate wind:Headwind add 10%.Tailwind reduce 5%.			
Vbest glide varies as Vmax range. Vturbulence as Va.			
T/O-Landing:Add 1/2 of wind gust factor to speed.			
* Calculated value or approximate value.			

C. Left and right FUEL TANKS

Fuel Caps.....Open
 Fuel Quantity and Color.....Check
 Fuel Caps.....Close and Secure
 Fuel Vent.....Check Open

D. LEFT WING

Surface Condition.....Check
 Aileron and Hinges.....Check
 Wing Tip.....Check
 Lights.....Check
 Pitot Tube.....Unobstructed
 Landing Gear and Tire.....Check
 Brake Block and Disc.....Check
 Chocks and Tie Down.....Removed

E. NOSE SECTION

General Condition.....Check
 Propeller and Spinner.....Check
 Air Inlets.....Clear
 Alternator Belt.....Check Tension
 Engine Compartment.....Check
 *Brake Fluid.....Check 1/3 Full
 Oil.....Check quantity:: 5-6 quarts
 Dipstick.....Properly Seated
 Cowling.....Close and Secure
 Windshield.....Clean

F. RIGHT WING

Check as left wing.

G. FUSELAGE RIGHT SIDE

General Condition.....Check
 Antennas.....Check
 Static Vent.....Unobstructed

H. EMPENNAGE

General Condition.....Check
 Hinges and Attachments.....Check
 Tail Wheel.....Check
 Tie Down.....Removed

I. FUSELAGE LEFT SIDE

Check as right side.

J. COCKPIT

Aircraft Documents.....On Board and Signed
 Baggage.....Stowed Properly and Secured
 Passengers.....Brief Emergencies

1. PREFLIGHT/DI

DI Specific checks marked with *

A. GENERAL

Aircraft Documents.....Check
 Aircraft.....General Overview
 Fuel Drain.....According to Note

NOTE:

It is important to perform fuel drain before any movement of the aircraft.
 Fuel drain after refueling has less effect unless aircraft has been parked
 for a while.

Fuel Selector.....ON
 Fuel Drains (4 places).....Drain

B. COCKPIT

Cockpit.....General Overview, Clean and No Loose Items
 Door.....Check Clean/Fastening and Jettison Mechanism Flight
 Controls.....Release Restraints
 Magnetos.....OFF
 Elec. Equipment.....OFF
 Master Switch..... ON
 Fuel Level.....Check Enough
 Warning Lights.....Check
 *Navigation Lights..... ON-Check-OFF
 *Strobe lights..... ON-Check-OFF
 *Landing lights.....Check-OFF
 *Stall Warning.....Check
 Master Switch.....OFF
 Flight Controls and Trim.....Check Full Movement
 Engine Controls.....Check Full Movement
 Seats and Harness.....Check Condition
 Parking Brake.....set ON

1. BEFORE STARTING

Preflight/D.I.....Completed/Signed
 Seats.....Adjust/Lock
 Harness.....Fasten
 Doors/Window.....Latch
 Brakes.....Set
 Instruments.....Check
 Elec.Equip.....OFF
 Circuit Breakers.....Check
 Fire Extinguisher.....Present
Engine Fire During Start.....Rehearse

2. STARTING

Master Switch.....ON
 Fuel Level.....Gal.....Hours__min
 Fuel Selector.....ON
 Alternate Air.....Cold/Full FWD

If engine cold

Mixture.....FULL RICH
 Throttle.....FULL OPEN
 Elec.Fuel Pump.....ON... 3 -5 seconds...OFF
 Throttle.....1 cm OPEN

If engine warm

Throttle.....as required max 3-4 cm OPEN

If engine warm or cold

Mixture.....IDLE CUT-OFF
 Magnetos.....BOTH
 Propeller Area.....Check Clear
 Nav lights.....ON
 Starter.....ENGAGE
 Mixture.....when engine starts FULL RICH
Oil Press.(30 sec).....Check min 25 psi

No start/engine flooded see note next page

Do not overprime due to the resulting fire hazard.

To clear engine that has been flooded due to excessive overpriming proceed as follows:

Electrical fuel pumpOFF
 Mixture..... IDLE CUT OFF
 Throttle.....FULL OPEN
 Magnetoos.....OFF
 Starter.....Engage for several revolutions
 Repeat normal starting procedure

3. WARM-UP

Throttle.....1000 RPM
 Engine Instruments.....Check
 Fuel press.....Check
 Altimeter.....Set
 Directional Gyro.....Set
 Radio Equip.....ON
 Warning Lights.....Check
 Flight Controls.....Check
 Elevator Trim.....Check Travel-T/O Pos.
 External Lights.....As Required
 Transponder.....STANDBY Position
 Nav.Equip.....Set

4. TAXIING

Taxi Area.....Clear
 Brakes.....Check
 T.W.Steering.....Check
 T.& B.Indicator.....Check
 Directional Gyro.....Check

5. GROUND CHECK/ RUN UP

Brakes.....Set
 Area.....Check Clear
 Fuel Selector.....ON
 Mixture.....FULL RICH
 Throttle.....1800 RPM

- Engine..Instruments.....Check
- Magnetos.....Max.Drop/Diff.175/50 RPM
- Propeller.....Cycle 3 times/ drop ca 300 RPM
- Alternate Air.....Check operation/drop RPM
- Mixture.....Check Operation by RPM Increase and Drop

Throttle.....Retard Slowly to IDLE
 Throttle.....1000 RPM

6. BEFORE TAKEOFF

Harness.....Fastened
 Elevator Trim.....Check T/O Position
 Mixture.....Below 5000ft:FULL RICH
 Propeller.....Full fwd
 Magnetos.....Check BOTH
Takeoff Emergency.....Brief/Prepare
 Time.....Note
 Transponder.....ALTITUDE

7. TAKEOFF (on gravel runway rolling Takeoff)

Power.....Apply FULL...Max 2700 RPM
 If Pwr.Output Is too low.....Abort
 Rotate.....55-60 MPH
 Best rate climb.....73-80 MPH
 Best Angle (short field/obstacle).....58-61 MPH

8. CLIMB

At 500 ft
 Pwr Output......25"HG/2500 RPM
 Normal climb speed......85 MPH

9. INFLIGHT OPERATIONS

A. CRUISE

Power Settings at Std.Temp.:

SL Max Cruise Power (75%).....24”HG 2400 RPM

SL Normal Power (65%).....22”HG2400 RPM

Mixture.....Lean According to Note

NOTE:

75 % power and less: Lean regardless of altitude to obtain best economy or best power mixture according to specified fuel flow.

More than 75 % power: Lean above 5000 ft to obtain maximum RPM.

B. BEFORE AEROBATICS

Loose Items.....Stow
 Mixture.....FULL RICH
 Engine Instr.....Check
 Magnetos.....Check BOTH
 Fuel Selector.....ON
 Door/Window.....Check Locked
 Harness.....Check Fastened
 Terrain.....Check Obst./Emerg.Field
 Emergency Bail-out Procedure.....Prepare
 Populated Area.....Avoid
 Minimum Altitude.....Determine
 Clearance.....Requested
 Clearance Turn.....Performed

10. DESCENT**A. POWER-OFF DESCENT**

Mixture.....As Required
 Airspeed.....85 MPH
 Open Throttle Every 500 ft

CAUTION

Avoid high airspeed at low power setting since this will cause too rapid cooling of the engine.

B. POWERED DESCENT

Mixture.....FULL RICH
 Typical Pwr. Setting.....15"-20" HG 2400 RPM
 Typical Airspeed.....120-140 MPH

11. BEFORE LANDING**DOWNWIND:**

Wind.....Check Direction/X-Wind Limits
 Mixture.....FULL RICH
 Magnetos.....Check BOTH
 Fuel Selector.....Check ON
 Loose Items.....Check Stowed
 Harness.....Check Fastened

KEYPOINT:

Approach Speed..... 85 MPH
 Propeller...(After power reduction).....Full FWD
 Final Approach Speed60-75 MPH

12. ABORTED LANDING

Power.....Apply FULL
 Alternate Air.....Check OFF/ Full FWD

Proceed as Normal T/O Procedure

13. TOUCH AND GO

Elevator Trim.....T/O Position
 Power.....Apply FULL
 Power Output.....Check
 If Pwr Output is too low.....Abort

14. AFTER LANDING

Alternate Air.....OFF/full FWD
 Fuel pump.....OFF
 Transponder.....OFF
 Time.....Note

15. SHUTDOWN

Throttle.....1000 RPM
 Radio/Elec.Equip.....OFF
 Throttle.....800 RPM
 Magnetos.....OFF Momentarily
 Throttle.....1000 RPM
 Mixture.....IDLE CUT-OFF
 Magnetos.....OFF
 Strobe light.....OFF
 Master Switch.....OFF
 Cabin Vents.....Close
G-Values.....Record for Aircraft Logbook

1. ENGINE FIRE DURING START

- Starter..... Continue to Crank Engine
- Mixture..... IDLE CUT-OFF
- Throttle..... OPEN
- Elec.Fuel Pump..... Check OFF
- Fuel Selector..... OFF
- Magnetos..... OFF
- Master Switch..... OFF
- Take Fire Extinguisher and Exit

2. FIRE IN FLIGHT

A. ENGINE FIRE

- Fuel Selector..... OFF
- Mixture..... IDLE CUT OFF
- Elec.Fuel Pump..... Check OFF
- Cabin Heat..... OFF
- Do not Attempt Restart
- Proceed with Emergency Landing.

B. ELECTRICAL FIRE

- Master Switch..... OFF
- Cabin Heat..... OFF
- Cabin Vents..... Open to Clear Cabin
- Elec.Switches Except Magnetos..... OFF
- Fire Extinguisher..... Use if Fire Continues
- When Fire is Extinguished:
- Check Cause of Fire
- Circuit Breakers..... Check
- Elec.Equip..... Emergency Only
- Divert to Nearest Airport
- If Fire Continues:
- Descend Rapidly and Proceed with Emergency Landing

3. ENGINE POWER LOSS DURING TAKEOFF

If Sufficient Runway Remains:

Normal Landing

If Insufficient Runway Remains:

Maintain Safe Airspeed..... 80 MPH

Locate Suitable Field Straight Ahead or Land on Remaining Runway



Proceed with Emergency Landing

If Sufficient Altitude: (Min 1000 AGL or turned crosswind)

Maintain Safe Airspeed.....80 MPH

Locate Suitable Field

Perform Restart:

Mixture.....Check FULL RICH

Elec.Fuel Pump.....ON

Magnetos.....Check BOTH

Fuel Selector.....Check ON

If no Start Perform Emergency Landing

4.ENGINE POWER LOSS IN FLIGHT

| Establish Best Glide80 MPH

Mixture.....FULL RICH

Throttle.....Midrange Position

Electric Fuel Pump.....ON

Magnetos.....Check BOTH

Fuel Selector.....Check ON

Locate Suitable Field

Check Wind Direction

If no Start Continue

Fuel Level.....Check

Fuel Flow.....Check

Power Mixture.....Try Different Settings

Engine Instr.....Check

Radio Emergency Procedure/Transponder:7700/ELT ON

If Start Attempt Are Unsuccessful:

Proceed with Emergency Landing

NOTE:

To restart by windmilling propeller use 280 Km/h and expect 1000 ft altitude loss. At lower altitude or when propeller stops restart by engaging the starter.

5. POWERPLANT MALFUNCTIONS**A. OIL LEAKAGE**

Power.....Reduce

Conserve Altitude

Divert to Nearest Airport

Engine Instr.....Monitor Continuously

NOTE:

Expect rising oil and engine temp. Be Prepared for Emergency Landing

B. LOW OIL PRESSURE

Corrective Actions as A

C. HIGH OIL/ENGINE TEMPERATURE

Corrective Actions as A

D. ROUGH ENGINE/UNEXPECTED PWR. REDUCTION

Mixture.....FULL RICH

Electric Fuel Pump.....ON

Magnetos.....Check BOTH

Fuel Selector.....Check ON

Fuel Level.....Check

Fuel Flow.....Check

Power Mixture.....Try Different Settings

Engine Instr.....Check

If Problem Persist/Malfunction Exist:

Divert to Nearest Airport and Be Prepared for Emergency Landing

E. LOW FUEL PRESSURE/FLOW

Elec. Fuel Pump.....ON

Fuel Selector.....Check ON

Divert to Nearest Airport

6. ELECTRICAL SYSTEM MALFUNCTIONS**A. ALTERNATOR FAILURE**

Verify failure (Ammeter Indication:0)

Reduce electrical load.

Alternator Circuit Breaker.....Check

Master Switch.....OFF (for 1 second), then ON

If no output:

Master Switch.....OFF

Land as Soon as Practical.

7. OTHER EMERGENCIES/MALFUNCTIONS

A. SPIN RECOVERY (UNINTENTIONAL POS/NEG SPIN)

Throttle.....CLOSE
 Ailerons.....Neutral
 Rudder.....Full Opposite to Direction of Rotation
 Elevator.....Aft/Nose Up Sector
 Rudder.....Neutral (when Rotation Stops)
 Elevator.....Smoothly Regain Level Flight Attitude

B. BAIL OUT

Door.....Operate Emergency Release Handle and Jettison
 Helmet/Headset.....Disconnect
 Harness.....Release
 Evacuate Aircraft Aiming at Aileron of Outside Wing if in Spin/Turn

C. LANDING WITHOUT PRIMARY PITCH CONTROL

Land using pitch trim control

8. EMERGENCY LANDING

Locate Suitable Field
 Check Wind Direction
 Radio Emerg.Procedure/Transponder 7700/ ELT on
 Loose Items.....Stow
 Emerg.Equip.....Available
 Harness.....Tight
 Fuel Selector.....OFF
 Magnetos.....OFF
 Master Switch.....OFF
 Throttle.....CLOSE
 Mixture.....IDLE CUT-OFF
 Canopy.....UNLOCK

NOTE:

Perform emergency landing with and 70 MPH final speed.

Ditching: Land with tail touching first into wind or parallel to heavy swells.

9. PRECAUTIONARY LANDING

Locate/Inspect Suitable Field at 85MPH

Perform Before Landing Check

Final Speed.....70 MPH

After Touchdown:

Mixture.....IDLE CUT-OFF

Fuel Selector.....OFF

Magnetos.....OFF

Master Switch.....OFF

