

StingSport

PILOT COCKPIT CHECKLIST



**TLUSA 159
N4004**

NORMAL PROCEDURES

PREFLIGHT INSPECTION

COCKPIT

1. All Switches — OFF
2. Fuel Valve — OFF
3. Main Switch — ON
4. Fuel Gauge — CHECK QUANTITY
5. Main Switch — OFF
6. ELT Panel Indicator — CHECK STATUS
7. Flight Controls — PROPER OPERATION
8. Flaps — OPERATION, SET FULL
9. Trim — CENTERED
10. Required Documentation — ON BOARD
11. Baggage — SECURED
12. Seats — SECURE
13. Proceed to Exterior Checklist

EXTERIOR CHECKLIST

NOSE AREA

1. Windshield — CLEAN
2. Cowling — SECURE, screws tight

StingSport Abbreviated Operational Checklist

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3. **Prop/Spinner — CHECK**
4. **Air Inlets — CLEAR**
5. **Oil — CHECK QUANTITY**
6. **Coolant — CHECK QUANTITY**
7. **Nose Strut Assembly — CHECK**
8. **Nose Tire — CHECK INFLATION and WEAR**
9. **Chock — REMOVE**
10. **Firewall Fuel Gascolator — CHECK for debris**
11. **Fuel and Oil Tank Vents — CLEAR**
12. **Traffic Alert Antennae — Secure**
13. **Transponder Antennae — Secure**
14. **Fuselage Fuel Sump — DRAIN, Check for water and contaminates.**

RIGHT WING

1. **Main Fuel Tank — CHECK QUANTITY / CORRECT FUEL TYPE**
2. **Main Fuel Cap — SECURE**
3. **ELT — Check armed and secure**
4. **Gear Leg and Brake Line — CHECK**
5. **Wheel Pant and Bracket — SECURE**
6. **Brake Pads and Disk — CHECK FOR WEAR**
7. **Tire — CHECK INFLATION and WEAR**
8. **Chock — REMOVE**
9. **Wing Leading Edge — CHECK**
10. **Wing Aux Tank (if installed) — CHECK QUANTITY / FUEL TYPE**
11. **Wing Aux Tank Cap — SECURE**
12. **Under wing Inspection Ports — SECURE / CHECK CONTINUITY**
13. **Pitot Tube — SECURE - CHECK PITOT / STATIC OPENINGS**
14. **Tie Down Strap — REMOVE**
15. **Wing Tip and Enclosed Lights — CHECK**

EMERGENCY PROCEDURES

PARACHUTE RECOVERY SYSTEM

Slow the Aircraft, If Possible

1. Ignition — OFF
2. Harnesses — TIGHTEN
3. GRS Activation Handle — PULL FIRMLY (25 POUNDS)
4. Radio — SET TO 121.5. TRANSMIT "MAYDAY, MAYDAY, MAYDAY!" with AIRCRAFT ID and CURRENT POSITION
5. Transponder — SET TO 7700
6. Glidepath — CONTROL IF POSSIBLE
7. Impact Position — PULL LIMBS CLOSE TO BODY and COVER FACE

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL (ABORT)

1. Throttle — IDLE
2. Brakes — APPLY
3. Wing Flaps — RETRACT

ENGINE FAILURE (LANDING) IMMEDIATELY AFTER TAKEOFF

1. Airspeed — 70 KIAS
2. Wing Flaps — HALF
3. Fuel Valve — OFF
4. Main Switch — OFF

16. Aileron, Tab, and Hinges — CHECK
17. Flap and Hinges — CHECK

AFT FUSELAGE

1. Right Entry Step — SECURE
2. Chute Window and Shroud Lines — FREE FROM INTERFERENCE
3. VHF Antenna — SECURE
4. Aft Tie Down — REMOVE (if installed)
5. Right Horizontal Stabilizer — CHECK
6. Rudder and Tab — CHECK
7. Elevator, Trim Tab, and Hinges — CHECK
8. Tail Cone Control Bolts and Hinges — SECURE / FREE TO MOVE
9. Tail Cone — FREE OF DEBRIS
10. Left Horizontal Stabilizer — CHECK
11. Aft Inspection Cover — SECURE
12. Aft Strobe and Position Light — CHECK
13. Left Entry Step — SECURE

LEFT WING

1. Flap and Hinges — CHECK
2. Aileron and Hinges — CHECK
3. Wing Tip Cover and Enclosed Lights — CHECK
4. Tie Down Strap — REMOVE
5. Wing Leading Edge — CHECK
6. Under Wing Inspection Ports — SECURE / CHECK CONTINUITY
7. Wing Aux Tank (if installed) — CHECK QUANTITY / FUEL TYPE
8. Wing Aux Tank Cap — SECURE
9. Gear Leg and Brake Line — CHECK
10. Wheel Pant and Bracket — SECURE
11. Brake Pads and Disk — CHECK FOR WEAR

ENGINE FAILURE DURING FLIGHT

1. Airspeed — 70 KIAS
2. Fuel Valve — ON
3. Aux. Fuel Pump — ON
4. Ignition Switches — ON
5. Starter — ENGAGE

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed — 70 KIAS
2. Landing Zone — DETERMINE and FLY TOWARDS

ENGINE SHUTDOWN:

3. Aux. Fuel Pump — OFF
4. Fuel Valve — OFF
5. Radio — SET TO 121.5; TRANSMIT “MAYDAY, MAYDAY, MAYDAY!” and AIRCRAFT ID with CURRENT POSITION
6. Transponder — SET TO 7700
7. Landing Zone — CIRCLE OVER (if necessary)

BEFORE LANDING

8. All Switches — OFF
9. Harnesses — TIGHTEN
10. Flaps — FULL (on final)
11. Touchdown — PREFERABLY INTO WIND, NOSE HIGH
12. Brakes — APPLY AS REQUIRED

12. Tire — CHECK INFLATION and WEAR
13. Chock — REMOVE

OPERATING CHECKLIST

Board the aircraft

ENGINE START

1. Canopy — CLOSED and LOCKED
2. Harnesses — ADJUST and FASTEN
3. Headsets — ON and ADJUST
4. All Switches — OFF
5. Fuel Valve — ON
6. Throttle — IDLE
7. Main Switch — ON
8. Aux Fuel Pump — MOMENTARILY ON
9. Aux Fuel Pump — OFF
10. Ignition Switches — ON
11. Check Area Visually / Call Out — “CLEAR PROP!”
12. Brakes — HOLD
13. Choke — AS REQUIRED
14. Starter — ENGAGE
15. Throttle — 2000 RPM
16. Oil Pressure — CHECK
17. Choke — CLOSED as engine warms
18. Instrument Switch — ON
19. Strobe Lights — ON
20. Intercom — ON

PRE-TAXI

1. Oil Pressure — CHECK

StingSport Abbreviated Operational Checklist

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed — 70 KIAS
2. Flaps — HALF
3. Harnesses — TIGHTEN
4. Selected Field — EXECUTE LOW PASS (only if practical)
5. Electrical Equipment — OFF (EXCEPT IGNITION!)
6. Flaps — FULL (on final)
7. Airspeed — 60 KIAS
8. Touchdown — PREFERRABLY INTO WIND, NOSE HIGH
9. Canopy — UNLATCH
10. Brakes — APPLY AS REQUIRED

DITCHING – WATER FORCED LANDING

1. Airspeed — 60 KIAS
2. Flaps — FULL
3. Radio — SET TO 121.5; TRANSMIT “MAYDAY, MAYDAY, MAYDAY!” and AIRCRAFT ID with CURRENT POSITION
4. Transponder — SET TO 7700
5. Baggage — SECURE
6. Harnesses — TIGHTEN
7. Power — ESTABLISH MIN DESCENT RATE AT MIN SPEED
8. Approach — INTO WIND with high winds PARALLEL TO SWELLS with light winds
9. Canopy — UNLATCH
10. Touchdown — NOSE HIGH WITH MINIMUM DESCENT RATE, AVOID STALLING THE AIRCRAFT ON WATER!
11. Airplane — EVACUATE

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2. Transponder — STANDBY
3. VHF — ON
4. GPS — ON
5. Other Avionics — ON
6. Turn Coordinator — LEVEL
7. Altimeter — SET (note any field elevation variance)
8. GRS Safety Pin — REMOVED and STOWED
9. Warm-up — AS REQUIRED

TAXI

1. Area — CLEAR
2. Brakes — CHECK and APPLY AS NEEDED
3. Steering — CHECK
4. Compass — CHECK
5. ADI Track Display — CHECK
6. Turn Coordinator — CHECK (in turns)

ENGINE RUN-UP

1. Brakes — HOLD
2. Oil Temperature — 110°F min.
3. Oil Pressure — 29 – 73 PSI
4. Cylinder Head Temperature — 110° F min.
5. Throttle — 4000 RPM
6. Ignition switches — 300 RPM DROP (max), 120 RPM DIFF (max)
7. Throttle — 2000 RPM
8. Fuel Pressure — CHECK

BEFORE TAKEOFF

1. Harnesses — SECURE

FIRES

ENGINE FIRE DURING START

1. Starter — CONTINUE CRANKING

If engine starts:

2. Power — 2000 RPM for a few seconds
3. Fuel Valve — OFF
4. Engine — SHUTDOWN and INSPECT FOR DAMAGE

If engine fails to start:

5. Throttle — FULL OPEN
6. Starter — CONTINUE CRANKING
7. Ignition Switches — OFF
8. Fuel Valve — OFF
9. Main Switch — OFF
10. Fire Extinguisher — OBTAIN
11. Airplane — EVACUATE
12. Fire Extinguisher — USE AS REQUIRED
13. Airplane — INSPECT FOR DAMAGE

ENGINE FIRE IN FLIGHT

1. Fuel Valve — OFF
2. Throttle — FULL OPEN
3. Aux. Fuel Pump — OFF
4. Ignition Switches — OFF
5. Cabin Heat — OFF
6. Air Vents — AS REQUIRED
7. Radio — SET TO 121.5. TRANSMIT
"MAYDAY, MAYDAY, MAYDAY!" AIRCRAFT ID
and CURRENT POSITION
8. All Non-Essential Switches — OFF
9. Airspeed — 60 KIAS

2. Loose Items — SECURE
3. Instruments — CHECK and SET
4. EIS Data — CHECK
5. VHF Radio — SET
6. Transponder — ON/ALT
7. Trim — AFT
8. Flaps — HALF
9. Controls — FREE and CORRECT MOVEMENT
10. Canopy — LOCKED (x3)
11. GRS Safety Pin — CHECK REMOVED
12. Aux Fuel Pump — AS REQUIRED

TAKEOFF

1. Flaps — CHECK (HALF)
2. Throttle — FULL
3. Rotate — 45 KIAS
4. Throttle — MONITOR (5800 RPM maximum)
5. Climb — 75 KIAS
6. Flaps — RETRACT SMOOTHLY AT 500 AGL

CLIMB

1. Throttle — SET TO 5500 RPM (or as required)
2. Climb — 75 KIAS
3. Trim — ADJUST AS NEEDED
4. EIS Data - CHECK
5. Aux Fuel Pump — OFF (if used)

CRUISE

1. Throttle — 5000 TO 5200 RPM
2. Trim — LEVEL FLIGHT
3. Fuel Status — MONITOR

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10. **FLAPS - FULL**
11. **Execute a Forced Landing**

ELECTRICAL FIRE IN FLIGHT

1. **Main Switch — OFF**
2. **All Switches Except Ignition Switches — OFF**
3. **Cabin Heat — OFF**
4. **Air Vents — AS REQUIRED**
5. **Fire Extinguisher — USE (if practical)**
6. **Execute an immediate forced landing if fire continues**
7. **Land ASAP**

If fire appears out and electrical power is necessary for extended flight:

8. **Main Switch — OFF**
9. **All Switches Except Ignition Switches — OFF**
10. **Circuit Breakers — CHECK for faulty circuit (do not reset)**
11. **Main Switch — ON**
12. **Instrument Switch — ON**
13. **Avionic/Electrical Switches — ON, ONE AT A TIME to locate fault**
14. **Land ASAP**

CABIN FIRE

1. **Main Switch — OFF**
2. **Cabin Heat — OFF**
3. **Air Vents — AS REQUIRED**
4. **Fire Extinguisher — USE AS REQUIRED**
5. **Execute a forced landing if fire continues**
6. **Land ASAP**

StingSport Abbreviated Operational Checklist

4. EIS Data — CHECK

Sea Level Power and Fuel Consumption for Rotax 912 UL Engine

Power Setting %	65	75	100
R.P.M.	4800	5000	5800
Horsepower	50.6	58.4	81.0
Torque (Ft * lbs)	55.3	61.2	72.3
Fuel Consumption (Gph)	4.2	5.1	6.3

Fig. 4.1

BEFORE LANDING

1. **Harnesses — SECURE**
2. **Airspeed — 75 KIAS**
3. **Fuel — CHECK QUANTITY**
4. **Secure Loose Items**
5. **Aux Fuel Pump — AS REQUIRED**

LANDING

On downwind leg:

1. **Throttle — SMOOTHLY TO IDLE**
2. **Airspeed — 75 KIAS**
3. **Flaps — HALF**

On base leg:

4. **Airspeed — 60 KIAS**
5. **Trim — ADJUST TO AFT**

On final approach:

6. **Airspeed — 60 KIAS**
7. **Flaps — FULL**
8. **Trim — AFT AS REQUIRED**
9. **Throttle — IDLE (or as required)**
10. **Airspeed — 55 KIAS (on short final)**
11. **Touchdown — MAIN WHEELS FIRST, NOSE HIGH**
12. **Braking — MINIMUM**

SPIN RECOVERY

1. **Throttle — IDLE**
2. **Ailerons — NEUTRALIZE**
3. **Rudder — APPLY FULL (in opposite direction of rotation)**
4. **Elevator — FORWARD (to break stall)**

When rotation stops:

5. **Rudder — NEUTRALIZE**
6. **Elevator — RECOVER SMOOTHLY FROM NOSE-LOW ATTITUDE**

BALKED (GO-AROUND) LANDING

1. **Throttle — FULL**
2. **Flaps — SET TO HALF**
3. **Airspeed — 50 KTS, V_x**
4. **Flaps — RETRACT WHEN CLEAR OF OBSTACLES**
5. **Airspeed — 60 KTS, V_y**

AFTER LANDING

1. **Flaps — UP**
2. **Aux Fuel Pump — OFF (if used)**
3. **Transponder — STANDBY**

SHUTDOWN

1. **Throttle — IDLE**
2. **GPS — OFF**
3. **Transponder — OFF**
4. **Other Avionics — OFF**
5. **Strobes — OFF**
6. **Instrument Switch — OFF**
7. **Main Switch — OFF**
8. **Ignition Switches — OFF (one at a time)**
9. **Fuel Valve — CLOSED (horizontal)**
10. **GRS Safety Pin — INSERT**
11. **Canopy — OPEN**