



# **FIRSTLANDINGS**

## **TECNAM P92 EAGLET**

**GENERAL INFORMATION**

**PRE-FLIGHT**

**TIME SENSITIVE**

**EMERGENCY**

**TECNAM P92 EAGLET**  
**CHECKLIST**

*[FLIGHT PLAN DESIGNATION IS "ECHO"]*

**EMERGENCY CONTACT**

The following are First Landings' emergency contact telephone numbers. We ask that you call the numbers in the order listed. In addition, please continue down the phone list until you reach someone. Please do not assume a voice message left on one of the numbers will be immediately received.

<b>Office</b>	<b>(407) 886-7612</b>
<b>Jim Williams</b>	<b>(239) 938-5796</b>
<b>Peter Lankester</b>	<b>(352) 362-6676</b>
<b>Adam Valencic</b>	<b>(407) 557-7909</b>

**AIRCRAFT INFO:**

Engine.....Bombardier-Rotax 912

....4 cylinder horizontally opposed-twins with overall displacement of 1352cc, mixed cooling (water-cooled heads and air-cooled cylinders), twin carburetors, integrated reduction gear with torque damper

Rated HP .....98.5hp BHP @ 5800 RPM (5min max) / 92.5hp @ 5500 Cont.

Oil Type.....Synthetic 10W-40 or 20W-50 (Aeroshell SportPlus4)

Oil Capacity.....2.1qts—3.2 qts.

Propeller.....Fixed Pitch, Wood with Composite Laminar

Fuel.....100LL or Auto Fuel 91 Octane or greater

....Dual Tanks, 11.9 Gal Capacity Per Side

....22.9 Gal total usable, 0.9 Gal unusable

Ignition .....Dual Ignition

....solid state, breaker less, capacitive discharge, interference suppression system

Electrical .....12 Volt DC

## AIRCRAFT V SPEEDS & LIMITATIONS

### KIAS

$V_R$ ..... 38-43

$V_X$ ..... 60

$V_Y$ ..... 68

$V_{NE}$  ..... 134

$V_{NO}$  ..... 106

$V_A$ ..... 93

$V_{FE}$ ..... 68

$V_{S1}$ ..... 48

$V_{S0}$ ..... 43

$V_G$ ..... 68

Max demonstrated cross wind ..... 15 Kts

Gross Weight ..... 1320 lbs

Max ceiling (gross) ..... 13,110'

Take-off run (@SL gross) ..... 560'

Landing run (@SL gross) ..... 377'

Take-off run 50ft (@SL gross) ..... 1015'

Landing run 50ft (@SL gross) ..... 915'

**WARNING**

Spins Prohibited

## PREFLIGHT INSPECTION

Preparation: Remove gust locks, Tie Down Ropes, Pitot Tube Cover, Other Plane Protection Items/Covers.

### CABIN

- ⊗ Documents - AROW
- ⊗ Ignition Switches - Off
- ⊗ Master - On
- ⊗ Hobbs - Check and Record
- ⊗ Fuel Quantity - Verify
- ⊗ Flaps - Full Down
- ⊗ Trim - Check
- ⊗ Lights - On, Visually Check, Off
- ⊗ Strobe - On
- ⊗ Stall Horn - Check
- ⊗ Master - Off
- ⊗ Flight Controls - Free and Correct

### WARNING

For Flight Safety, Pilot Should Verify Actual Fuel Quantity Visually in Tanks Before Takeoff.

## EXTERIOR CHECK

- ⊗ Right Cowling - Open
- ⊗ Oil Level - Burp Check
- ⊗ Coolant Level - Check
- ⊗ Engine Mounts - Check
- ⊗ Hoses/Connections - Check
- ⊗ Right Cowling - Bracket Secured
- ⊗ Prop/Spinner - Check
- ⊗ Air Intakes/Radiators - Check
- ⊗ Nose Gear/Tire - Inflation, Wear
- ⊗ Left Cowling - Open
- ⊗ Hoses/Connections - Check
- ⊗ Engine Mounts - Check
- ⊗ Left Cowling - Bracket Secured
- ⊗ Fuel Quality - Sump
- ⊗ Left Static Port - Check Clear
- ⊗ Left Gear/Tire - Inflation, Wear
- ⊗ Brakes - Check, Verify No Leaks
- ⊗ Fuel Quantity - Verify
- ⊗ Fuel Cap - Secure
- ⊗ Left Leading Edge - Check
- ⊗ Pitot Tube - Check
- ⊗ Stall Warning Tab - Check
- ⊗ Nav/Strobe - Check
- ⊗ Ailerons/Flap - Check
- ⊗ Antennas - Check
- ⊗ Stabilator/Trim Tab - Check
- ⊗ Rudder - Check
- ⊗ Flap/Aileron - Check
- ⊗ Right Strobe/Nav - Check
- ⊗ Right Leading Edge - Check
- ⊗ Fuel Quantity - Verify
- ⊗ Fuel Cap - Secure
- ⊗ Right Gear/Tire - Inflation, Wear
- ⊗ Brakes - Check, Verify No Leaks
- ⊗ Right Static Port - Check

### ENGINE START

- ⊗ Passenger Briefing
  - ⊗ Seat Belt use
  - ⊗ Door Operation
  - ⊗ Emergency Equipment
  - ⊗ PIC for Flight
  - ⊗ 3 Step Control Process
  - ⊗ Purpose of Flight
  - ⊗ Taxi Brief
- ⊗ Tow-Bar - Removed/VERIFY
- ⊗ All Seats, Belts, Door - Secure
- ⊗ Parking Brake - Set
- ⊗ Fuel Selectors - Verify Both On
- ⊗ Throttle - Full Idle
- ⊗ Cold Engine - "Feed" Choke On During Cranking
- ⊗ Warm Engine - Choke Off
- ⊗ Strobes - On
- ⊗ Master - On
- ⊗ Ignition Switches - On
- ⊗ Prop Area - CLEAR!
- ⊗ Starter - Engage
- ⊗ Oil Pressure - Green
- ⊗ Engine Instruments - Check
- ⊗ Choke - Verify Off
- ⊗ RPM - 2000-2500rpm

#### WARNING

If Oil Pressure Doesn't Rise Within 10 Seconds, Shut Down Engine.

#### CAUTION

If Engine Kicks Back During Starting, Please Advise First Landings.

### TAXI

- ⊗ Radio and Avionics - ON
- ⊗ Altimeter - Set
- ⊗ GPS - Set
- ⊗ Transponder - STBY
- ⊗ Flaps - Up
- ⊗ Flight instruments - Check
- ⊗ Lights - Landing/Nav (Night)
- ⊗ Brakes - Test
- ⊗ Radio - Call
- ⊗ Control Stick - Wind Correction

### ENGINE RUN-UP

- ⊗ Parking Brake - Set
- ⊗ Oil Temp - 122F/50C Minimum
- ⊗ Oil Pressure - 2-5 bar
- ⊗ Throttle - 4000 RPM
- ⊗ Ignition Left-Right
  - ⊗ 300RPM Max Drop Each
  - ⊗ 120RPM Max Differential
- ⊗ Throttle - Idle
- ⊗ Engine Gauges - Check
- ⊗ Fuel Gauges - Check
- ⊗ Flight Controls - Free and Correct

#### CAUTION

It's Critical There Is a Firm Understanding Of Who Will Be PIC During An Engine Failure Situation

## ENGINE FAILURE BREIF

### Engine Failure During Takeoff Roll

- ⊗ Throttle - Idle
- ⊗ Brakes - Full Stop

### Engine Failure After Rotation With Available Runway

- ⊗ Throttle - Idle
- ⊗ Land On Remaining Runway
- ⊗ Brakes - Full Stop

### Engine Failure After Rotation with No Remaining Runway

- ⊗ Throttle - Idle
- ⊗ Pitch for Best Glide  
Flaps 0—68kts  
Flaps T/O—60kts
- ⊗ Landing Site Select, no more than 30 Degrees either way
- ⊗ Prepare for Forced Landing

## BEFORE TAKEOFF

- ⊗ Seat Belts - Secure
- ⊗ Transponder - ALT
- ⊗ Lights - As Needed
- ⊗ Trim - Set for Takeoff
- ⊗ Flaps - Takeoff
- ⊗ Doors - Latched
- ⊗ Engine Gauges - Check
- ⊗ Departure Brief
- ⊗ Radio - Call

## TAKEOFF

- ⊗ Parking Brake - OFF
- ⊗ Full Power
- ⊗ RPM - 4850 Minimum
- ⊗ Rotate Vr - 48Kts
- ⊗ Climb Vx - 60Kts
- ⊗ Above Obstacles Vy - 68Kts
- ⊗ Flaps - Up

## CRUISE

- ⊗ Throttle - 4800-5300 RPM
- ⊗ Engine Gauges - Check
- ⊗ Avoid RPM below 4600 Cruise
- ⊗ Lights - As Needed

## CAUTION

Check Fuel Gauges Frequently  
With One Tank Shut Off To  
Prevent Fuel Starvation.

## DESCENT AND LANDINGS

- ⊗ ATIS / GPS
- ⊗ Brief Approach
- ⊗ Seat Belts - Secure
- ⊗ Landing Light - On
- ⊗ Fuel Selectors - Verify Both On
- ⊗ Flaps - As Req.

## GO AROUND

- ⊗ Throttle - FULL
- ⊗ Climb - 60Kts
- ⊗ Positive Rate of Climb
- ⊗ Climb - 68Kts
- ⊗ Flaps - Up

## POST LANDING CHECK

- ⊗ Runway - Clear
- ⊗ Radio Call - Clear
- ⊗ Flaps - Up
- ⊗ Trim - Set to T/O
- ⊗ Lights - Landing/Nav (As needed)

## SECURING AIRCRAFT

- ⊗ Parking Brake - Set
- ⊗ Throttle - Idle
- ⊗ Lights - Off (Strobe ON)
- ⊗ Avionics - Off
- ⊗ Ignition - Left/Right Off
- ⊗ Hobbs - Record
- ⊗ Master - Off

### **LANDING WITH A FLAT NOSE TIRE**

- ⊗ Pre-landing checklist..... COMPLETE
- ⊗ Approach ..... NORMAL
- ⊗ Flaps ..... FULL
- ⊗ Land and maintain aircraft NOSE HIGH attitude as long as possible

### **LANDING WITH A FLAT MAIN TIRE**

- ⊗ Pre-landing checklist..... COMPLETE
- ⊗ Approach ..... NORMAL
- ⊗ Flaps ..... FULL
- ⊗ Directional Control..... MAINTAIN
- ⊗ Land the airplane on the opposite side of runway to the side with the defective tire to compensate for change in direction, which is to be expected during final rolling.
- ⊗ Touchdown with the GOOD TIRE FIRST and hold flat tire off the ground as long as possible.

### **TRIM FAILURE**

- ⊗ Fuses/Breakers ..... CHECK
- ⊗ LH/RH Switch..... CHECK
- ⊗ Airspeed ..... Adjust to control without
  - ⊗ excessive force
- ⊗ Seat Belts..... CHECK
- ⊗ LAND ..... AS SOON AS PRACTICAL

## EMERGENCY PROCEDURES

Emergency procedures shown in bold faced type are immediate action items which should be committed to memory.

### ENGINE FAILURE DURING TAKEOFF ROLL

- ⊗ Throttle - IDLE
- ⊗ Brakes - **APPLY AS NEEDED**
- ⊗ Ignition Switches - OFF
- ⊗ Master Switch - OFF
- ⊗ Fuel Selector Valves - OFF

### ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

**NOSE DOWN!**

- ⊗ **Airspeed - 60 KIAS**
- Find Suitable Landing Site off Nose, No more than 30\* either way**
- ⊗ **Flaps - AS REQUIRED**
- ⊗ AT TOUCHDOWN
- ⊗ Throttle - IDLE
- ⊗ Ignition Switches - OFF
- ⊗ Master - OFF
- ⊗ Fuel Selector Valves - OFF

### ENGINE ROUGHNESS OR RPM LOSS

- ⊗ Throttle - CHECK
- ⊗ Engine Gauges - CHECK
- ⊗ Fuel Quantities - CHECK
- ⊗ Fuel Valves BOTH - ON
- If Roughness Continues Land As Soon As Possible**

## ENGINE FAILURE DURING FLIGHT

- ⊗ Establish Glide - 68 KIAS
- ⊗ Select Emergency Landing Site
- ⊗ Fuel Valves - **BOTH ON**
- ⊗ Throttle - MIDDLE POSITION
- ⊗ Ignition Switches - ON
- ⊗ Master Switch - START
- ⊗ If Restart Fails, Procedure for Forced Landing

**IF ALTITUDE PERMITS, TRY RESTART CONTINUOUSLY**

### FORCED LANDING WITHOUT ENGINE POWER

- ⊗ **Declare Emergency, 121.5, Squawk 7700**
- ⊗ Fuel Selector Valves - OFF
- ⊗ Ignition Switches - OFF
- ⊗ Safety Belts - Tighten
- ⊗ **Doors - Unlatched**
- ONCE LANDING ASSURED**
- ⊗ Flaps - As Necessary
- ⊗ Master Switch - OFF
- ⊗ Touchdown - 42Kts (Full Flaps)

### LOW OIL PRESSURE

- ⊗ **Oil Temp - CHECK**
- Above Green or Rising; LAND as soon as possible and be alert for impending engine failure**
- ⊗ **Throttle - REDUCE IMMEDIATELY**
- If stable within the green arc; LAND as soon as practical**
- ⊗ **Oil Temp/PSI Monitor**



### ENGINE FIRE WHILE PARKED

- ⊗ Fuel Selector Valves - OFF
- ⊗ Ignition Switches - OFF
- ⊗ Master Switch - OFF
- ⊗ Parking Brake - SET
- ⊗ EVACUATE AIRCRAFT

### ENGINE FIRE DURING TAKEOFF

- ⊗ Throttle - IDLE
- ⊗ Brakes - AS NEEDED
- ⊗ Fuel Selector Valves - OFF
- ⊗ Cabin Heating - OFF
- ⊗ Ignition Switches - OFF
- ⊗ Master Switch - OFF
- ⊗ Parking Brake - SET
- ⊗ EVACUATE AIRCRAFT

### ENGINE FIRE IN-FLIGHT

- ⊗ Cabin Heat - OFF
- ⊗ Fuel Selector Valves - OFF
- ⊗ Throttle - FULL IN, Until Engine Stops
- ⊗ Cabin Vents - OPEN
- ⊗ Ignition Switches - OFF
- ⊗ Air Speed INCREASE, DO NOT EXCEED  $V_{NE}$  148KTS

### DO NOT Attempt An In-Flight Restart

- ⊗ Procedure For a Forced Landing

### ELECTRIC FIRE IN CABIN IN FLIGHT

- ⊗ Cabin Heat - OFF
- ⊗ Cabin Vents - OPEN
- ⊗ Doors - Open If Necessary
- ⊗ Master Switch - OFF
- ⊗ Try to Choke Fire, Direct Extinguisher at base of flames
- ⊗ Procedure for forced Landing

### WING FIRE

- ⊗ LDG Light - OFF
- ⊗ NAV Light - OFF
- ⊗ STROBE Light - OFF
- ⊗ Sideslip to Keep Flames Away from the Fuel Tank and Cabin
- ⊗ Land as Soon as Possible

### PRECAUTIONARY LANDING WITH ENGINE POWER

- ⊗ Descent - Establish
- ⊗ Best Glide - 68KTS
- ⊗ Flaps - As Necessary
- ⊗ Selected Field - FLY OVER
  - ⊗ Noting Terrain & Obstacles)
- ⊗ Safety Belts - Tighten
- ⊗ Doors - Unlock

### ONCE LANDING ASSURED

- ⊗ Flaps - As Necessary
- ⊗ Fuel Selector Valves - OFF
- ⊗ Ignition Switches - OFF
- ⊗ Master Switch - OFF

### LOW FUEL PRESSURE

If Fuel Pressure Indicator Falls Below the 0.15 Bar Limit

- ⊗ Fuel Quantity - CHECK
- ⊗ Fuel Valves - BOTH ON
- ⊗ Fuel pump - ON
  - If Low Fuel Pressure Condition Continues, Land As Soon As Possible

