

# CHECKLIST (EV-97 Eurostar)

## PRE START CHECKS

- S** Security; Harnesses, Hatches, Control & Trim Check
- T** Throttle set idle - Choke OFF - Fuel ON
- A** All clear around, Facing safe direction – **BRAKE ON**
- M** Master & charging on
- P** Propeller – “CLEAR PROP” – Lookout & start 5 secs mags off
- I** Ignition (MAGS) ON – choke as reqd - start
- T** Temps & Pressures
- M** Mags “Dead Cut” Check
- R** RADIO – ON – ATIS – CALL FOR TAXI

## AT THE HOLD - PRE TAKE OFF CHECKS

### **Brakes ON**

- C** Controls – Full & free movement, correct sense
- H** Harnesses & hatches secure
- I** Instruments – set & serviceable
- E** Engine -T’s & P’s ok, choke off, set RPM 3500  
**Mags – Max drop 200 rpm (max diff 120)**  
**Check Idle, reset to 2000 rpm – recheck Ts & Ps**  
**OIL Temp AT LEAST 50° C**
- F** Fuel – on & sufficient for planned flight
- T** Trim & flap - set for take off
- A** All clear – all around & final approach clear
- T** Transponder ON set to ALT
- P** Power – check full RPM achieved on take off run

## ENROUTE CHECK (Every 10 minutes)

- L** Location – Where are you where is the airfield
- I** Instruments – T’s & P’s
- F** Fuel – Check quantity/Estimate endurance
- E** Time elapsed / Estimate time to Land

## CIRCUIT JOINING CHECK - FREDA

- F** Fuel check state - sufficient for go around?
- R** Radio – Circuit (re)joining call
- E** Engine Ts & Ps OK
- D** Direction of landing runway, circuit & join
- A** Altimeter –set QFE
- A** Airfield – Check signal square, wind & traffic

## DOWNWIND CHECK -

- B** Brakes OFF
- M** Check Mags ON Both
- F** Fuel ON & Sufficient
- I** Instruments – Ts & Ps “Green”
- H** Harnesses & Hatches secure

## AFTER LANDING CHECK

- F** Flaps retracted – when clear of active runway
- T** Transponder OFF (or standby)

## SHUTDOWN

- E** Engine Ts & Ps Green – Mags check “dead cut”
- R** Radio, Transponder OFF
- I** Ignition OFF
- M** Master OFF, Charging OFF

## PRE -STALLING

### /MANOEUVRE CHECK HASELL

- H** Height – Min 2000 feet AGL
- A** Airframe – Configuration, integrity
- S** Security – harnesses & hatches, no loose objects
- E** Engine – T’s & P’s, fuel level ok
- L** Location – clear area / airspace, allow for drift
- L** Lookout – Clear all around

## MAYDAY x 3 G-SHMI (nature of emergency, location, intentions)

## EMERGENCY SHUT DOWN - TIFS

- T** Throttle – Closed
- I** Ignition (Magnetos) & master OFF
- F** Fuel - OFF
- S** Security – Harnesses & hatches

## **ALL THE TIME** LOOKOUT

## EV-97 USEFUL INFORMATION

### Speeds

VNE (Never Exceed)	146 mph
VA (Turbulent Air Limit)	100 mph
VFE (max Flaps extended)	77 mph
Vs (Stall no flaps power off)	44 mph
(Stall no flaps power on)	37 mph
(Stall flaps fully extend)	36 mph

Best glide speed 68 mph

Climbout speed	70 – 80 mph
Approach speed (flapless)	70 mph
Approach speed (with flaps)	60 mph

Typical (4000 rpm) cruise 85-90 mph  
Fast (4800 rpm) cruise 110-115 mph

### Engine / Power

Full power max rpm	5 mins only
Continuous high rpm limit	4800 rpm
Economic cruise	4000 rpm
Do not let engine idle below 1400 rpm.	

*(Always Check Pilots Operating Handbook for confirmation of operating information)*

**Weight & Balance – See Overleaf**

## PILOT'S PROCEDURES – Pre-Flight

TASK	Tools & Forms	Notes
Your currency?	Licence, medical, currency valid? Are You Fit to Fly?	
Weather	Met office website – TAFs & METARs – synoptic - rainfall radar - Local observation	<a href="http://www.metoffice.gov.uk">www.metoffice.gov.uk</a>  Airfield ATIS – inflight viz 3000 m + ?
NOTAMs	AIS (NATS) website – obtain narrow route briefing	<a href="http://www.ais.org.uk">www.ais.org.uk</a>
Navigation Planning	Current Map Airfields information Nav tools Plot flight route	
Exercise Planning	Pre flight familiarisation with subject matter	
Tech Log Entry & Flight Authorisation	Enter new line for planned flight(s) – get authorisation – check aircraft state (hrs flown) & defects	
Booking Out	Telephone Airport 01452 <b>857700</b>  Ext 223	Callsign, Type (HMNY) departing direction, PoB, Fuel state, flight time
Fuelling & Oil	Ensure fuelled up (correctly!) & oil topped up if required	Weight & Balance (under 450kg)?
Preflight Check	Use checklist from PoH	See main checklist

### Weight & Balance

Aircraft empty weight = 266 kg  
 Max allowable AUW = 450 kg  
 Therefore useful load = 184 kg

Fuel weight = 0.72 kg per litre Mogas Unld

Fuel Load	Max remaining load
20 litres = 14.4 kg	169.6 kg 26.6 stones
30 litres = 21.6 kg	162.4 kg 25.5 stones
40 litres = 28.8 kg	155.2 kg 24.4 stones
50 litres = 36.0 kg	148.0 kg 23.3 stones
60 litres = 43.2 kg	140.8 kg 22.2 stones

Baggage Shelf Max. Load 15 kgs

AIRCRAFT ICAO Code = **HMNY**