

**PRE START**

OIL / COOLANT CHECK	COMPLETE
SUN LOCATION	IN FRONT OF EZT
REFUEL DECALIN	ADDED AS REQUIRED
PRE FLIGHT INSPECTION	COMPLETE
PAX BRIEF	COMPLETE
RUDDER PEDALS	ADJUST + CHECK LOCKED
SAFETY HARNESS	SECURE
FUEL TANK SELECTOR	ON <b>TAXI</b> TANK (left tank if both full)
MASTER SWITCH	ON
INSTRUMENT SWITCH	ON
ELECT TRIMS	SET
AVIONICS SWITCH	<b>ON</b> ATIS / QNH ACD <b>THEN OFF</b>
Altimeter QNH	SET EFIS & STDBY ALT
CARB HEAT	OFF
CABIN HEATING	OFF
FLAPS	UP

**START**

BRAKES	ON SET
IGNITION SWTICH	KEY IN / ON LEFT
THROTTLE PSN	CLOSED (IDLE)
CHOKE (COLD STARTS)	ON 1 INCH
<b>FOR HOT STARTS DO NOT USE CHOKE</b>	
FUEL PUMP (0.15-0.4 bar)	ON GREEN ARC / STABLE WITHIN 5 SEC
PROPELLER	CHECK CLEAR AND CALL "CLEAR PROP"
STARTER	ENGAGE 8 SEC MAX

**POST START**

AVIONICS SWITCH	ON – RADIO & GPS ON
CHOKE	CLOSE SLOWLY
THROTTLE INITIAL	2100 RPM 2MIN
EMS	OIL PRESSURE GREEN FUEL PRES GREEN AMPS POSITIVE +
ENGINE WARMUP	2200 – 2500 RPM (Stay in green band)
EMS	CHT ACTIVE MONITOR CHT
STROBE / NAV LIGHTS	ON AS REQ
ALL SWITCHES	ON AS REQ

**PRE TAXI**

HARNESS	SECURE
RUDDER PEDALS	ADJUSTED + TEST
CANOPY LATCH	LOCKED
ATIS / ACD / CODE	REC
TRANSPONDER	SBY / CODE / AUTO
ALTIMETER	QNH SET
RADIO	ON / SMC SET
SMC TAXI CLEARANCE	APPROVED

**HOT WEATHER HANDLING:**

CONTROL CHT WITH INCREASED RPM (2500-3500). DO NOT EXCEED MAX CHT OR ENGINE DAMAGE WILL OCCUR. IF YOU CAN'T REDUCE TEMPS SHUTDOWN THE ENGINE AND WAIT FOR IT TO COOL. CHECK COOLANT LEVEL BEFORE RESTART.

**TAXI CHECKS**

BRAKES / STEERING	CORRECT
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FUEL SELECTOR	<b>ON TAXI TANK</b>
EFIS	HDG / ALT XCHECK
CONTROL COLUMN	WIND PSN CHECK
CHT	MONITOR TEMP

**PRE TAKE OFF**

RUN UP AREA	CLEAR REAR / INTO WIND / NO LOOSE STONES OR GRAVEL
BRAKES	ON
<b>GRAVEL RUNWAY OPERATIONS:</b> STATIONARY RUN-UPS ON GRAVEL WILL CAUSE PROP DAMAGE. PERFORM RUNUPS WHILE ROLLING / BACK TRACKING. ALWAYS USE GENTLE RPM INCREASES.	

**VITAL ACTIONS BEFORE TAKEOFF (RUNUP)**

FUEL TANK SELECTOR	SWITCH TO <b>FULL</b> TANK
TRIMS	SET
MASTR/INST/AVINCS	ON
MAG IGNITION	ON BOTH
FUEL PUMP	ON, EMS LIGHT, FUEL PSI GREEN/STABLE
FLAPS	AS REQ
EFIS / EMS / INST	NORM / OIL>50C
AVIONICS	SET RADIO / GPS
THROTTLE IGNITION SWITCHES (DROP 300 / DIFF 115)	RUNUP 3800RPM L/R DIFF NORMAL, SET BOTH
EMS INST GREEN	AMPS / VOLTS FUEL PRESSURE / CHT OIL TEMP / OIL PRES
CARB HEAT	TEST
SLOW IDLE CHECK	1800 RPM
SET RPM	2500+ RPM
CARB HEAT	COLD
CIRCUIT BREAKES	ALL IN
CONTROLS	FREE / CORRECT
CANOPY	SECURE <b>LOCKED</b>
<b>PUSH UP ON CANOPY, CHECK CANOPY LOCK, VISUALLY INSPECT EACH SIDE OF CANOPY SEAL</b>	
HARNESSES	SECURE
FUEL	ON <b>FULL</b> TANK

**HOLDING POINT**

RPM	2500+ MONITOR CHT
TRANSPONDER	SET / CODE
STROBE / LAND LIGHT	ON
ABORT PLAN	PREPARED
EMS / EFIS	INST IN GREEN
FUEL PUMP	ON
<b>CANOPY</b>	<b>LOCKED PUSH CHECK</b>
ATC CALL	READY

**LINE UP / TAKE OFF**

POWER	4000 INITIAL ROLL
EMS	CHECK GREEN
THROTTLE	ADV SMOOTH FULL PWR
NOSE WHEEL	HOLD OFF AT 35KTS
LIFT OFF	45 KTS – 50 KTS <b>DO NOT OVER ROTATE</b>
CLIMBOUT	65 KTS – 70 KTS

**AFTER TAKE OFF**

FLAPS	<b>UP</b> +CLIMB and >350FT
FUEL PUMP	<b>OFF</b> ABOVE 1000FT AGL
POWER (5500RPM METO)	AS REQ
LOOKBACK	MAINTAIN C/LINE
CLIMB AIRSPEED (BRC 62KT / BAC 56KT / CC 80KT)	AS REQ
LANDING LIGHT	<b>OFF</b>
CARB HEAT	COLD
EMS/EFIS	SCAN INST
XPDR	ALT / CODE
LOOKOUT	HEADING / RADIO SET / TIME NOTED

**CRUISE CHECKS**

FUEL	<b>F</b>	CORRECT TANK UPDATE LOG PUMP OFF
RADIO	<b>R</b>	FREQ SELECTED / CORRECT
ENGINE	<b>E</b>	SCAN EMS
DIRECTION	<b>D</b>	CHECK HEADING CHECK COMPASS
ALTITUDE	<b>A</b>	AS PLANNED HEMISPHERICAL FLYING
LOOKOUT		START SCAN
FIELD		BE PREPARED

**DESCENT / PRE LANDING CHECKS**

ATIS	<b>A</b>	<b>QNH SET</b> XPDR 3000 JT
THROTTLE	<b>T</b>	3000
TRIM		SET AS REQ
EFIS/EMS	<b>E</b>	SCAN INST
BRAKES	<b>B</b>	OFF HEELS ON FLOOR
UC/MIXTURE	<b>UM</b>	DOWN / FIXED
FUEL PUMP	<b>P</b>	ON
FUEL TANKS	<b>F</b>	SET ON FULL
FLAPS		AS REQ <75KTS
SWITCHES	<b>S</b>	IGN BOTH / L LIGHT / STROBE
CARB HEAT	<b>C</b>	TEST
HATCH/HARNESS	<b>H</b>	SECURE

**FINAL**

FLAPS	<b>F</b>	SET
AIRSPEED	<b>A</b>	V REF 55KTS
CARB HEAT	<b>C</b>	COLD
TOWER CLEARANCE	<b>T</b>	APPROVED

**AFTER LANDING**

FLAPS	UP
FUEL PUMP	OFF
CARB HEAT	OFF / COLD
LANDING LIGHT	OFF
TRIM	SET T/OFF
CONTINUE AT TOP OF NEXT COLUMN →	

TRANSPONDER	ACTIVE / CODE
RPM	2500+ <b>MONITOR CHT</b>
TAXI CLEARANCE	RECIEVED

**SHUTDOWN**

SUN LOCATION CHECK	IN FRONT OF EZT (Don't leave canopy open if sun is behind aircraft as it will focus on and burn the dash)
BRAKE	ON
ELT	SILENT
RPM	3500 30sec
IGNITION	L/R CHECK
XPDR / RADIO	OFF
RPM SET	IDLE
IGNITION OFF	Left, Pause, Right, Pause, OFF
STROBE / NAV LIGHTS	OFF
INST / AVIONICS SW	OFF
MASTER SW	OFF
FUEL SELECTOR	OFF
MR / FLIGHT LOG	RECORD INFO
ALL SWITCHES	<b>OFF</b>

**STOW & SECURE AIRCRAFT**

PARK BRAKE	<b>OFF</b> at YPJT / <b>ON</b> other
ALL SWITCHES	OFF
SUN VISOR	CLOSED
AIR VENTS	CLOSED
FUEL	OFF
TIE DOWNS	SECURE WINGS + TAIL
WHEEL CHOCKS	ALL WHEELS
AIRCRAFT COVER	ON
PITOT COVER	ON
PROP COVER	ON and in Y formation

**SPEEDS**

Vx (Best Angle)	52 kts
Vy (Best Rate)	62 kts
Vz (cruise climb)	80 kts
Vr (rotate)	45-50 kts
Vfe (max flaps speed)	75 kt
Vno (normal ops)	108 kt
Vne (never exceed)	138 kts
Vs1 (stall flps up idle)	39 kts
Vso (stall flps dwn idle)	32 kts
Va (Manoeuvring Spd)	88 kts
Vbg (Best Glide)	60 kts

**ENGINE CRUISE SETTINGS (approx.)**

UFC Standard Cruise: 5200RPM

<b>65%</b>	<b>75%</b>	<b>80%</b>	<b>85%</b>
<b>4800</b>	<b>5000</b>	<b>5200</b>	<b>5500</b>
<b>95KT</b>	<b>100KT</b>	<b>110KT</b>	<b>120KT</b>
<b>18 lph</b>	<b>19.5 lph</b>	<b>~20 lph</b>	<b>23.7 lph</b>

## REFERENCE INFORMATION

### LANDING AND TAKEOFF PERFORMANCE

#### Takeoff distances

Conditions: - Altitude: 0 ft ISA  
 - Engine power: full throttle  
 - Flaps: 15°

RUNWAY SURFACE	Takeoff run distance		Takeoff distance over 50 ft (15 m) obstacle	
	ft	m	ft	m
CONCRETE	463	141	1,270	387
GRASS	702	214	1,499	457

#### Landing distances

Conditions: - Altitude: 0 ft ISA  
 - Engine power: idle  
 - Flaps: 30°  
 - Brakes fully depressed immediately after touch-down

RUNWAY SURFACE	Landing distance over 50 ft (15 m) obstacle		Landing run distance (braked)	
	ft	m	ft	m
CONCRETE	1,188	362	479	146
GRASS	1,109	338	364	111

### HOT WEATHER OPERATIONS

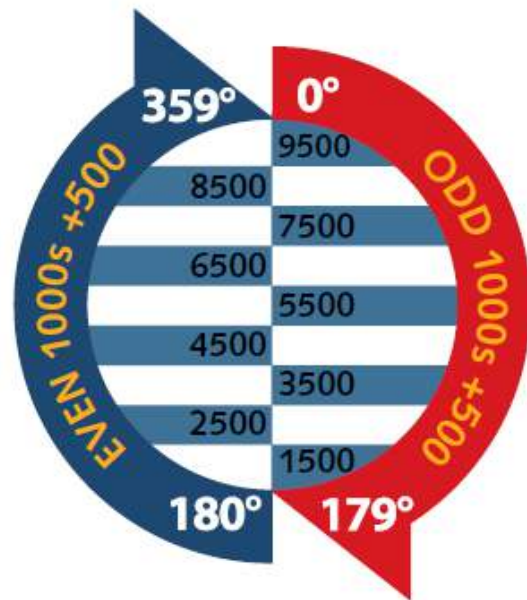


#### WHEN TAXIING / FLYING

- Monitor CHT vigilantly
- Face into wind as much as possible
- Increase IDLE RPM to control CHT
- Ask tower for priority if you are at the holding point and temps are getting high
- IF CHT exceeds 120 degC you should shut down and allow the aircraft to cool before checking coolant levels.
- If temps are high after shutdown open the oil cap on the engine cowl to assist cooling.

#### WHEN PARKED

- **Critical:** Don't leave instruments on in direct sunlight for long periods
- Leave the sun visor deployed
- Put the cover on the aircraft – this is mandatory on very hot days as you will risk cooking the Dynon instruments if the canopy is not covered
- MASTER SWITCH OFF when leaving aircraft.



## LIGHT SIGNALS

ON GROUND		IN FLIGHT
Authorised to <b>TAKE-OFF</b> if pilot is satisfied that no collision risk exists		Authorised to <b>LAND</b> if pilot is satisfied that no collision risk exists
Authorised to <b>TAXI</b> if pilot is satisfied that no collision risk exists		<b>RETURN</b> for landing
<b>STOP</b>		<b>GIVE WAY</b> to other aircraft <b>CONTINUE CIRCLING</b>
<b>TAXI CLEAR OF LANDING AREA</b> in use		<b>DO NOT LAND</b> Aerodrome unsafe
Return to starting point on aerodrome		

#### SYMBOLS NEAR WIND DIRECTION INDICATOR

AERODROME UNSERVICEABLE	GLIDING OPERATIONS IN PROGRESS	OPERATIONS ARE CONFINED TO HARD SURFACE RUNWAYS, APRONS AND TAXIWAYS ONLY

## EMERGENCY PROCEDURES

SEE POH for full list of emergency procedures.

The ones included here are the only useful for reference during flight.

Engine Failure on take-off, etc. need to be committed to memory and rehearsed before every take-off.

### RESTARTING ENGINE IN FLIGHT

SWITCHES	UNNECESSARY EQUIP OFF
MASTER	ON
FUEL	ON
THROTTLE	IDLE
FUEL PUMP	ON
IGNITION	HOLD ACTIVATED TO START
AFTER ENGINE STARTS	FUEL PUMP OFF OTHER SWITCHES ON AS REQUIRED

### EMERGENCY LANDING WITHOUT POWER

SPEED	60 KTS
TRIM	ADJUST
COMM	MAYDAY
EPIRB	ACTIVATE
XPDR	7700
FLAPS	AS REQUIRED
FUEL	OFF
IGNITION	OFF
MASTER	AFTER FLAPS SET OFF
HARNESS	TIGHT
PAX	BRIEF
<b>DO NOT MAKE STEEP TURNS</b>	

### ENGINE FIRE IN FLIGHT

HEATING	CLOSE
FUEL	OFF
THROTTLE	FULL POWER
IGNITION	OFF AFTER FUEL IN CARB CONSUMED AND ENGINE SHUT DOWN (est 30sec)
MASTER	OFF
EMERGENCY LANDING	PERFORM STEPS ABOVE
AFTER LANDING	EXIT AIRCRAFT USE FIRE EXTINGUISHER

### ELECTRICAL FIRE IN FLIGHT

MASTER	OFF
SWITCHES	OFF
HEATING	OFF
VENTILATION	OPEN
FIRE EXTINGUISHER	USE
EMERGENCY LANDING	PERFORM AS ABOVE

### GENERATOR FAILURE

NOTE: The engine has its own independent generator. It does NOT stop after the main battery goes flat.

EMS VOLTS	CHECK (SHOULD BE ABOVE 12.5V)
EMS AMMETER	CHECK (SHOULD NOT INDICATE PERMANENT NEGATIVE CURRENT)
ENGINE RPM	INCREASE ABOVE 3000 RPM
IF PROBLEM PERSISTS	
SWITCHES	MASTER INST AVIONICS ON
UNNECESSARY EQUIPMENT (XPDR, RADIO, LIGHTS, ETC)	OFF (TURN BACK ON AS REQUIRED FOR SHORT TIME ONLY)
VOLTMETER	MONITOR VOLTAGE
BATTERY	APPROX 15MINS REMAINING
BE PREPARED	CHECK QNH ON BACKUP ALTIMETER BE READY TO USE STANDBY INST