# EC130 B4

### START UP 43



#### **ENGINE PRESTART CHECK**

Seats and control pedalsSeat beltsADJUSTEDFASTENED

1 Rotor brake RELEASED (fully fwd)

2 Fuel shut-off lever FORWARD (plastic guard)

3 Twist grip IDLE detent

4 EMER SW ON, LOCK-WIRED

5 Starting selector OFF

6 SCU TEST COMPLETE

7 BAT / EPU ON ON ON GEN ON

8 AVIONIC ON

9 Lighting circuits 1 and 2 test COMPLETE (night flight)

10 Electrical mirror SET (to avoid dazzling

during night flight)

11 W/LT TEST COMPLETE
12 FIRE TEST COMPLETE

13 SERVO TEST SERVO when depressed

14 CWP lights CHECK:

\* With BATT power ...... GENE

SENE PITO UELP HO ERVO HYI

\* With EPU power .....same as above +

ENG P MGB P TWT GRP BATT

15 VEMD 3-data page DISPLAYED

Vehicle page DISPLAYED

Battery voltage > 22 V

Bleed valve open DISPLAYED

16 Control pedals Freedom travel, then NEUTRAL

for informational use anly! AFM is always mandatory!

CENTER, friction = AP! 17 Cyclic pitch 18 Collective pitch LOCKED 19 Heating, demisting, A/C OFF Set crew/all/ISO **20 ICS** ON, check ATIS & TWR 21 NAV/COM 1 ANR ON, volume CK 22 Headphones

#### **ENGINE STARTING**

after 30sec...

ON (should remain ON) 1 A/COL LT

CHECK GOV 2 CWP

ON 3 FUEL P

ON 4 Starting selector

CHECK 5 Engine parameters

- NG increases

- T4 below limits

- Rotor turning Ng 25 %

- Enq oil pressure increases

- FLI activates

When Ng 60 % When Ng 67 %

6 CWP

CHECK:







7 PITOT 8 FUELP

9 SERVO TEST

10 Starting selector guard

ON OFF



when depressed SERVO

SET

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# 11 All necessary systems

### ON - TESTED

- SFD
- TAS
- AUTO TRIM
- MT
- MIRROR

12 EPU if connected

DISCONNECT, check door

closed and locked

13CWP





### **RUN-UP CHECK**

1 Twist grip when NR > 340 rpm **FLIGHT** detent

2 HORN

3 NR

4 CHECK

5 AP

6 AUTO-TRIM 6 Sand Filter

7 G500

ON

Lower green range

All lights green, no warning

Voltage and current Engine oil pressure

PITCH ON

**ROLL ON** 

ON

ON / OFF test functionality

Synthetic vision ON

Altitude warning inhibit

# **CRANKING**

See end of CHECK LIST

for informational use anly! AFM is always mandatory!

#### **TAKEOFF**

Doors

1

#### BEFORE TAKEOFF CHECK

2 Cyclic and collective frictions

3 Landing light

4 Temperatures and pressures

5 Warning panel

6 Fuel quantity

6 Collective pitch

CLOSED or OPEN LOCKED AS REQUIRED AS REQUIRED NORMAL RANGE All lights OFF CHECK UNLOCKED

# BEFORE TAKEOFF BRIEFING

1 Available power

2 In case of engine failure

3 Taxi procedure to

IGE / OGE (W&B)
Procedure / Heading
FATO or Rwy

# **HOVER CHECK**

1 All green, No warning

2 Check needed power IGE

### **CLIMB CHECK**

1 Max Continuous Power

2 Vy above 100ft/gnd

3 Engine parameters

Max green (MCP)
70 kt (-1 kt per 1000ft)
CHECK
Noise sensitive areas
Anti-noise procedure

for informational use anly! AFM is always mandatory!

### **CRUISE CHECK**

Fast cruise 95 % / reaching limit green-yellow

Beware of LIMIT if alone!

Eco cruise 80 % best or 10 % below MCP

10'000ft/ASL for best fuel consum...

Turbulences Reduce IAS

FUEL CHECK Consumption

FUEL quantity

Engine parameters CHECK

#### APPROACH BRIEFING

1 Destination Airfield or In the field (FATO?)

2 Power request IGE or OGE

3 DZ Details Airport VAC chart

Details for field landing, reco

4 Approach Choose and recap Procedure

5 Who does what PIC / SPIC or additional CM

6 Passenger Briefing

# **APPROACH CHECK**

1 Fuel Quantity

2 Engine parameters3 Warning lightsCHECKAll green, no warning

4 Landing light ON

5 Sand filter ON <u>request</u> (Airco OFF)

for informational use anly! AFM is always mandatory!

#### **DECISION**

According weather situation / available power

According a **GA** possibility ...or not

Land or Go Around

#### FINAL CHECK

1 Speed Vy reducing

2 100ft/gnd Reduce speed to IGE 3 Power CHECK IGE value

**LANDING** gentle touch-down

(beware winter ops!)

1 AP Pitch OFF

Roll OFF

### **ENGINE AND ROTOR SHUTDOWN**

1 Cyclic stick NEUTRAL (slightly fwd

against strong wind)

2 Collective pitch LOCKED

3 Twist grip GND Idle / HW Flight Idle

4 Engine oil cooling 30sec 5 Pitot, Horn, Landing light OFF

6 Non required systems OFF

7 Starting selector OFF position

8 GEN OFF

9 Rotor brake APPLY

- NR <140 normal

- NR 170max (strong wind)

10 Anti-collision light Should remain ON

for informational use anly! AFM is always mandatory!

# BEFORE LEAVING THE HELICOPTER

11 VEMD send TECH LOG to info@ben-air.ch Flight number

Ng >60 % till Ng <50 % Advisory messages...

12 DCT BAT/BAT EPU

**OFF** 

13 Pitot, Air-Intake and Exhaust covers, blade socks as required. See Extreme Weather Conditions here after...

### **CRANKING**

After an aborted start or for check or maintenance purposes only.

1 Start selector OFF

2 Emergency fuel shut-off lever FORWARD

3 Ng check < 10 %

4 FUELP ON

5 CRANK PRESSED 20sec max

6 CRANK OFF 7 FUEL P OFF

### **AP CHECK**

Remember...

AUTO TRIM ON (always) = coupled TRIM REL depressed

for informational use anly! AFM is always mandatory!

# TRIM FAIL TEST

GYRO Light OUT

CYCLIC Friction Fully released

TRIM REL OFF (out)

AUTO TRIM ON ON (depressed)

PITCH axis ON

ROLL axis OFF

TRIM TEST Press and hold.

TRIM illuminates after 7sec Cyclic moves slowly fwd

PITCH axis OFF

ROLL axis ON

TRIM TEST Press and hold.

TRIM illuminates after 7sec Cyclic moves slowly left

PITCH axis ON

for informational use anly! AFM is always mandatory!