

CHECKLIST

HB-ZAL

BELL 206B

S/N 134

From AFM/RFM revision N°B-50 (08-DEC-08)



ENGINE PRESTART CHECK

EXTERIOR CHECK.....	COMPLETED
REQUIRED DOCUMENTS	ALL ON BOARD
COPILOT SEAT BELT	SECURED (if solo)
DOORS	SECURED
PEDALS	ADJUSTED
FLIGHT CONTROLS.....	FREEDOM OF MOVEMENT
THROTTLE	OPEN, IDLE, CLOSED
EXTINGUISHER	ON BOARD
HEATER.....	OFF
MAP LIGHT	OFF
CIRCUIT BREAKERS	ALL IN
BOOST PUMPS AFT & FWD	OUT
OVERHEAD CONSOLE	
ANTI COLL LIGHT	ON
INSTRUMENT LIGHT	OFF
POS LIGHT	OFF
PITOT HEAT	OFF
GENERATOR.....	OFF
BATTERY.....	OFF
ALTIMETER	AIRFIELD ELEVATION / QNE
FUEL VALVE.....	ON
ELT	ARMED
ENGINE ANTI-ICE	OFF
HYD SYSTEM	ON
LANDING LIGHT	OFF
DEFROST	OFF
BATTERY	ON (OFF for GPU)
CAUTION ALARM.....	AUDIO CHECK
TRANSMISSION OIL PRESSURE,	
ENGINE OUT, FUEL PUMP lights	ON
CAUTION and WARNING LIGHTS	TEST
TOT WARNING LIGHT	TEST

**USE FOR REFERENCE ONLY
THIS DOCUMENT DOES NOT REPLACE THE AFM/RFM**

CAUTION LIGHT BREAKER.....OUT
 FUEL QUANTITYCHECK ENDURANCE
 RADIOS.....ON
 TRANSPONDER.....SBY
 ATISRECEIVED
 START-UP CLEARANCE.....RECEIVED (if necessary)
 ALTIMETERSET
 BOOST PUMPS AFT & FWD.....IN
 FUEL PRESSURE.....CHECK

ENGINE START

COLLECTIVE PITCH.....FULL DOWN
 THROTTLEFULL CLOSED
 ROTORCLEAR; ROTOR
 MAIN BLADES IN
 SIGHT
 CAUTION LIGHT BREAKER.....IN
 STARTERENGAGED
 Wait until:
 TOTBELOW 150 °C
 OAT above 7 °C.....N1 15%
 OAT from 7 °C to -18 °C.....N1 13%
 OAT below -18 °C.....N1 12%
 THROTTLEOPEN TO IDLE
 Monitor:
 TOT793 °C TO 927 °C
 MAX 10 sec
 25% N1MAIN ROTOR MUST BE
 TURNING
 58% N1RELEASE START
 BUTTON
 ENGINE AND TRANSMISSION OIL.....CHECK
 ENGINE IDLECHECK 60-62% N1

ENGINE RUN-UP

ENGINE OIL TEMPERATURE.....CHECK ABOVE 0 °C
 If started with GPU:
 BATTERY.....CHECK ON
 GPUDISCONNECTED
 THROTTLEOPEN TO 70% N1
 GENERATOR.....ON, CHECK
 LOADMETER (below 70%)
 POSITION LIGHT.....ON
 PITOT HEATAS REQUIRED (visible
 moisture, OAT below 4,4 °C)
 THROTTLEFULL OPEN
 MAX 40% TRQ
 N2SET 100%

CHECKS

BOOST PUMPS AFT & FWD
 (below 6000 ft).....OFF, CHECK
 PRESSURE, ON (BOTH)
 PITOT HEATON, CHECK
 LOADMETER, OFF
leave ON if visible moisture with OAT below 4,4 °C
 ENGINE ANTI-ICINGON
 TOTCHECK RISE
 ENGINE ANTI-ICEOFF
 TOTCHECK DECREASE
leave ON if visible moisture with OAT below 4,4 °C

If the engine has been shut down for more then 15 minutes,
 stabilize at idle for one minute

FLIGHT CONTROLS	CHECK
HYD SYSTEM	OFF
FLIGHT CONTROLS	CHECK MOVING PEDALS; COLLECTIVE & CYCLIC IN AN "X" PATTERN.
HYD SYSTEM	ON
FLIGHT CONTROLS	CHECK
THROTTLE	DECREASE TO IDLE
N1	60-62% IN 3-5 SEC
ENGINE	CONTINUE TO RUN
THROTTLE	FULL OPEN
	MAX 40% TRQ
N2 GOVERNOR TRIM	CHECK RANGE
	97% - 102%
	SET TO 100%
ATTITUDE INDICATOR	PULL TO ERECT
VOR (if needed)	SELECTED DESIRED RADIAL
GYRO COMPASS	ALIGNED WITH MAGNETIC
CAUTION and WARNING LIGHTS	TEST AGAIN

BEFORE TAKEOFF CHECK

CAUTION & WARNING PANEL	NO LIGHTS
INSTRUMENTS	NORMAL RANGE
GENERATOR LOAD	< 70% - NORMAL
	LOAD IS 10-20%
ROTOR RPM	CHECK 100%
FUEL QUANTITY	CHECK ENDURANCE
LDG & TAXI LIGHTS	AS REQUIRED
THROTTLE	CHECK FULL OPEN
TAKEOFF BRIEFING	DONE
DEPARTURE CLEARANCE	RECEIVED

HOVER CHECK

TRQ, TOT, N1	WITHIN LIMITS
WARNING & CAUTION PANEL	NO LIGHTS
ROTOR RPM	CHECK 100%
TAKEOFF SECTOR	CLEAR

IN-FLIGHT OPERATION

CAUTION & WARNING PANEL	NO LIGHTS
INSTRUMENTS	NORMAL RANGE
ROTOR RPM	CHECK 100%
FUEL QUANTITY	CHECK ENDURANCE
TRANSPONDER	CHECK ALT
	in visible moisture with OAT below 4,4°C
PITOT HEAT	ON
ENGINE ANTI-ICE	ON
	TOT
	CHECK RISE
	GREEN SECTOR

DESCENT AND LANDING

BREAKERS	ALL IN
PITOT HEAT	AS REQUIRED
	ON if visible moisture with OAT below 4,4°C
CAUTION & WARNING PANEL	NO LIGHTS
INSTRUMENTS	NORMAL RANGE
ROTOR RPM	CHECK 100%
ENGINE ANTI-ICE	OFF
	ON if visible moisture with OAT below 4,4°C
LANDING LIGHT	AS REQUIRED
LANDING BRIEFING	DONE

A/F FUEL FILTER

AIRFRAME FUEL FILTER CLOGGED

LAND AS SOON AS PRACTICAL

CLEAN BEFORE NEXT FLIGHT

FUEL PUMP

ONE (OR BOTH) FUEL BOOST PUMP IS
INOPERATIVE

DESCENT BELOW 6000 FT

UNUSABLE FUEL.... 10 GAL

ENGINE FIRE DURING STARTING OR SHUTDOWN

STARTER	CONTINUE TO MOTOR THE ENGINE
THROTTLE	FULL CLOSED
FUEL VALVE.....	OFF
IGNITION CIRCUIT BREAKER.....	OUT

ENGINE FIRE DURING FLIGHT

IMMEDIATELY ENTER AUTOROTATION

THROTTLE	CLOSED
FUEL VALVE.....	OFF
BATTERY	OFF

ENGINE AIR START

When cause of the engine failure is believed to be mechanical, do not attempt a restart

ROTOR RPM	MAINTAIN BETWEEN 90-107%
IAS	REDUCE TO 52-69 KTS
GENERATOR.....	OFF
ALTITUDE	CHECK BELOW 12000 FT

PERFORM NORMAL ENGINE START PROCEDURE

FUEL CONTROL AND/OR GOVERNOR FAILURE

MAINTAIN RPM WITH COLLECTIVE PITCH DOWN IF ENGINE
UNDERSPEEDS
ESTABLISH AUTOROTATIVE GLIDE IF POWER IS VERY LOW
OR IF ENGINE MUST BE SHUT DOWN

DRIVESHAFT FAILURE

If you can observe:

LEFT YAW
RAPID DECREASE OF ROTOR RPM
INCREASE OF POWER TURBINE (N2) RPM
(overspeed)

ROTOR RPM..... MAINTAIN BETWEEN
90-107%
IAS MAINTAIN BETWEEN
52-69 KTS
THROTTLE OPEN (to provide
power to T/R)
COMPLETE AUTOROTATIVE LANDING AND HELICOPTER
SHUTDOWN

TAIL ROTOR CONTROL FAILURE

COMPLETE LOSS OF THRUST

THROTTLE REDUCE TO IDLE
IAS 50 KTS DURING THE
DESCENT

FIXED PITCH FAILURE

POWER ADJUST TO MINIMIZE
EXCESSIVE YAWING
IAS ADJUST TO MINIMIZE
EXCESSIVE YAWING

HIGH OIL ENGINE TEMPERATURE

LAND AS SOON AS PRACTICAL

HYDRAULIC SYSTEM FAILURE

IAS REDUCE 61-69 KTS
HYDRAULIC BOOST CIRCUIT BREAKER OUT
If power is not restored
HYDRAULIC BOOST CIRCUIT BREAKER IN
HYDRAULIC SYSTEM OFF

LAND AS SOON AS PRACTICAL

ELECTRICAL POWER FAILURE

GEN FAIL

GENERATOR..... RESET THAN ON
If power is not restored
GENERATOR..... OFF
ALL ELECTRICAL EQUIPMENT OFF
REQUIRED ELECTRICAL EQUIPMENT .. ON
ALTITUDE DESCENT BELOW
6000 FT

ENGINE ICING

ENGINE DE-ICING..... ON
TOT MAINTAIN WITHIN
LIMITS

ENGINE OIL PRESSURE LOW, HIGH, OR FLUCTUATING

If engine oil pressure is below minimum or above maximum
LAND AS SOON AS POSSIBLE / LAND AS SOON AS PRACTICAL