

Part1 – SIM CHECKLIST BE58

SIM PREPARATION

1	Parking Brake	SET / CHECK SET
2	Engine Starter Switches (Both)	OFF
3	Master Switches (Bat, L&R Alt)	OFF
4	Avionic Master Switch	OFF
5	Prop Sync	OFF
6	Pitot Heat & Prop De-Ice	OFF
7	All Light Switches	OFF
8	Fuel Boost Pumps (Both)	OFF
9	Landing Gear Handle	DOWN
10	Emergency Gear Extension	CHECK IN
11	Cowl Flaps (Both)	OPEN
12	Circuit Breakers	CHECK ALL IN
13	Fuel Selectors (Both)	ON
14	Seats	ADJUSTED/SECURED

SIM PREPARATION COMPLETED

BEFORE ENGINE START

1	Battery	ON
2	Fuel Quantity	CHECKED
3	Landing Gear Lights (3 greens)	CHECKED
4	Interior Lights	SET
5	BCN Light	ON

READY FOR ENGINE START

ENGINE START

Start left engine first, then repeat steps for ENGINE START to start right engine!

1	Mixture	FULL RICH
2	Propeller	HIGH RPM
3	Throttle	OPEN 1,0 cm
4	Fuel Boost Pump	HI (until stabilized) / OFF
5	Propeller Area	CLEAR
6	ENG Start Switch	START/BOTH
7	Throttle	1000 RPM SET
8	Oil Pressure	CHECKED
9	Alternator Switch	ON
10	Loadmeters & Voltmeter	CHECKED
11	Red Start Annunciator Light	CHECKED OFF

ENGINE START COMPLETED

AFTER ENGINE START

1	Avionics Master Switch	ON
2	Navigation Lights	ON
3	COM & NAV Panel	SET
4	ADF & DME Panel	SET
5	Transponder	STBY
6	AP (Autopilot) Test Switch	TEST/CHECK ANNUNC. OFF
7	FD	ON / AS REQU.
8	GPS	ON / AS REQU.
9	All Flight Instruments & NAV	SET/CHECKED
	READY FOR TAXI	

TAXI CHECK

1	Brakes	CHECKED
2	Nosewheel Steering	CHECKED
	TAXI CHECK COMPLETED	

BEFORE DEPARTURE CHECK

1	Parking Brake	SET
2	Flight Controls	CHECKED
3	Trim Tabs	SET FOR TKOF
4	Fuel Selectors (Both)	RECHECKED/ON
5	Flaps	CHECKED/SET (acc POH)
6	Engine Run Up [see page x]	COMPLETED
7	TKOF / Departure Briefing (IFR only:)	COMPLETED
	READY FOR DEPARTURE	

When entering Runway:

1	Landing Light	ON
2	Taxi Light	OFF
3	Transponder	ALT (MODE C)
4	Pilot Heat	AS REQUIRED
5	Prop De-Ice	AS REQUIRED
	READY FOR TAKE OFF	

CLIMB CHECK

to be done when Flaps & Gear up!

- | | | |
|---|--------------------------------------|-------------------|
| 1 | Climb Power (Full Throttle, 2500RPM) | SET |
| 2 | Landing Gear | UP |
| 3 | Flaps | UP |
| 4 | Cowl Flaps | HALF OPEN/AS REQ. |
| 5 | Prop Sync | ON |

CLIMB CHECK COMPLETED

CRUISE CHECK

To be performed periodically:

- | | | |
|---|--|----------------------------|
| 1 | Cruise Power (Throttle, Prop, Mixture) | SET ACCORDING POH |
| 2 | Cowl Flaps | CLOSED |
| 3 | Engine Instruments | CHECKED |
| 4 | Fuel Quantity | CHECKED |
| 5 | DG (if not slaved) | CHECK/(RESET every 15-20') |

CRUISE CHECK COMPLETED

DESCENT CHECK

(to be done when leaving cruising Altitude)

- | | | |
|---|---|-------------------|
| 1 | Landing Data / ATIS | RECEIVED |
| 2 | Descent Power (Mixture, Prop, Throttle) | SET ACCORDING POH |
| 3 | Cowl Flaps | CLOSED |
| 4 | Fuel Selectors (Both/SE: L OR R) | ON |
| 5 | IFR only: Approach-Briefing | COMPLETED |
| 6 | Seat Belts, Shoulder Harness | FASTENED |

DESCENT CHECK COMPLETED

APPROACH CHECK

(for IFR-flights to be done when Clearance below TL received !)

- | | | |
|---|---------------|----------------------------|
| 1 | Altimeters | SET / CROSSCHECKED |
| 2 | Mixture | FULL RICH/AS REQ. |
| 3 | Propeller | 2500 RPM/AS REQ. |
| 4 | Throttle | AS REQ. |
| 5 | Flaps | 10° (0° for low drag Apch) |
| 6 | Prop Sync | OFF |
| 7 | Landing Light | ON |

APPROACH CHECK COMPLETED

FINAL CHECK

1	Mixture	FULL RICH CHECKED
2	Propeller	HIGH RPM
3	Landing Gear	DOWN (3 Greens)
4	Flaps	(FINAL LDG CONFIG) SET
5	AP (if engaged)	DISENGAGE
	FINAL CHECK COMPLETED	

AFTER LANDING CHECK

1	Pitot Heat	OFF
2	Prop De-Ice	OFF
3	Flaps	UP
3	Transponder	STBY
4	Taxi Light	ON
5	Landing Light	OFF
6	Cowl Flaps	OPEN
	AFTER LANDING CHECK COMPLETED	

PARKING CHECK

1	Parking Brake	SET
2	Avionics Master Switch	OFF
3	LDG, Taxi, NAV Light	OFF
4	Mixture (Both)	ICO (Idle Cut Off)
5	Propeller (Both)	HIGH RPM
6	Throttle (Both)	CLOSED
7	Eng Start Switches (Both)	OFF
8	BCN Light & all Lights	OFF
9	Alternator Switches (L & R)	OFF
10	Battery	OFF
11	H. Meter	READ & WRITE DOWN
12	SIM Log	COMPLETED
13	SIM	SECURED
	PARKING CHECK COMPLETED	

ENGINE RUN UP

to be done at the Before Departure Check

1	Mixture	FULL RICH
2	Propeller	HIGH RPM
3	Throttle	2200 RPM SET
4	Propeller (3-5 times)	EXERCISE
5	Throttle	1700 RPM SET
6	Engine Instruments	CHECKED
7	Magnetos (max drop 200 RPM/50RPM)	CHECKED
8	Bus Voltage & Alt Load (28V)	CHECKED
9	Instrument Air (in limit, no Flag)	CHECKED
10	Throttle	1500 RPM SET
11	Propeller	FEATHER CHECK
12	Throttle (check normal engine operation)	IDLE
13	Throttle	1000 RPM SET

Part2 – SPEEDS/WEIGHT/FUEL & Informations – BE58-SIM

Sim A/C is a BE58 Beechcraft Baron Type 58

A/C:

Service Ceiling –	Both	Engines: 20700 ft	Single Engines: ~ 7000 ft
Empty Weight:	1740 kg		
Max Weight for T/O:	2490 kg		
Fuel (max usable 194 USG):	528 kg		

ENGINES:

2 engines – 300HP per engine	
Max Power:	Limited to 5' (29,5 inHg)
Max Continues Power:	29 inHg / 2600 RPM
Climp Power:	25 inHg / 2500 RPM
Cruise Power:	see charts page 10-12

SPEEDS:

Vstall flaps extended:	61 kt	
Retracted:	68 kt	
Vapp flaps APH:	110 kt	[Vapp with Flaps up – low drag Approach: 120-150kt]
DN:	90-100 kt	
Vx:	90 kt	VxSE: 90 kt
Vy:	105 kt	VySE: 100kt (blue Radial)
VFE:	122 kt	
VLE/VLO	152 kt	
VA:	156 kt	
VNE:	223 kt	
VNO:	195 kt	
VMCA:	84 kt	(red Radial)
Vrotate:	85 kt	VBest Glide: 100 kt
Vinitial climb (Flaps Aph)	90 kt	[until 400ft AAE or as required by SID]
Vclimb (after Flaps retraction)	120 kt	[accelerate to 120 kt, Flaps up, set Climp Power]

OTHER LIMITS:

Takeoff & Landing Crosswind Limit:	20 kt (dry Runway)
Load Factor Limits:	4,2 / 2,0 g (Flaps up/down)
Landing Gear Horn sounds at and below	11 inHg

SYSTEM INFORMATION:

Pitot	Static	Electric Instrument Air
ASI	ALT	Turn Coord Artificial Horizon
V/S	NAV	(HSI, RMI, DG, VOR)