

PREFLIGHT

A/C documents	aboard+checked
Landing gear control	check down position
Cowl flaps	check open
Master switch	check off
Magnetos	check off
All Avionics	check off
All Electric	check off
Mixture control	check idle cut off
Flight controls	check free
Master switch	on
Landing gear lights	check 3 green
Fuel indication	check quantity
Fuel selector	fuller tank
Pitot tube	cover removed
Pitot heat	on - check (outside)
External lights	on - check (outside)
Stall warning	check (outside)
All electric	off
Master switch	off

PREFLIGHT cont.

Chocks	check removed
Tow bar	check removed
Nose gear	check
Engine oil	check quantity (9-11 qts)
Air intakes	check unobstructed
Propeller+spinner	check
Fuel sump	drain
LH fuel quantity	check visual
LH fuel drain	drain
LH main gear	check
LH wing+aileron+flap	check
Tail section	check
Static vents	check unobstructed
RH wing+aileron+flap	check
RH main gear	check
RH fuel drain	drain
RH fuel quantity	check visual
Antennas	check undamaged
baggage door	latch securely

BEFORE STARTING ENGINE

Seats	adjust
Seat belts and shoulder harness	fasten
Circuit breakers	check in

STARTING ENGINE

Master switch	on
Alternator	on
Rotating beacon	on
Mixture	full rich
Propeller control	full forward
Throttle control	full open
Electric fuel pump	on (fuel flow peak)
Throttle	¼ inch open
Magnetos	on
Propeller area	check clear
Starter	engage
Throttle	1000 RPM
Oil pressure	check green arc
Warning lights	check off

BEFORE TAXI

Avionic master	on
Warning lights	press test
Autopilot	press test
Electric	on as required
Wing flaps	full travel then up
Altimeters	2x set+compare
HSI+RMI	check heading
Heading bug	set RWY heading
Avionics	set for departure

TAXI

Taxi light	on
Brakes	check
Flight instruments	check
Fuel selector	switch tanks

BEFORE TAKE OFF

Taxi light	off
Mixture control	check full rich
Propeller control	check full RPM
Cowl flaps	check open
Fuel selector	check fuller tank
Engine instruments	check green arc
Throttle control	1700 RPM
Propeller control	3x exercise
Magnetos	check 150/50 then both
Alternate air	check
Ammeter	check – pitot heat on/off
Gyro pressure	check
Engine instruments	check green arc
Throttle control	1000 RPM
Wing flaps	check up position
Flight controls	check free
Elevator trim	set
Doors and windows (front+aft)	check latched
Seat belts	tighten
Departure briefing	completed
T/O briefing	completed

LINE UP / TAKE OFF

Transponder	set ALT
Runway	identify
Pitot heat	on
Landing light	on
Strobe lights	on
Time	check

Throttle full open	check RPM/MP/fuel flow
71 / 77 / 96 KIAS	rotate / Vx / Vy
Positive ROC	brakes+gear up

CLIMB

Climb power	25"MP/2500 RPM
Gear	check up position
Wing flaps	check up position
Cowl flaps	check open
Mixture	rich / set fuel flow
Landing light	off

CRUISE

Altimeters	standard+compared
Power	65% (23"MP/2300RPM)
Mixture	fuel flow / EGT
Cowl flaps	close

DESCENT

Seat belts	tighten
Cowl flaps	check closed
Fuel quantity	check balance L/R
Power	adjust
Mixture	as required

APPROACH

Fuel selector	fuller tank
Landing light	on
Mixture control	full forward
Altimeters	2x set QNH+compared
Approach briefing	completed

FINAL APPROACH

Gear	below 154 KIAS	down / 3 green
Brakes		checked
Wing flaps	below 154 KIAS	intermediate position

Gear	check 3 green
Mixture control	check full forward
Propeller control	full forward

AFTER LANDING

Time	check
Transponder	standby
Wing flaps	retract
Cowl flaps	open
Pitot heat	off
Strobe lights	off
Landing light / Taxi light	off / on

PARKING

Avionics master	off
All electric (except beacon)	off
Throttle	close
Mixture control	idle cut off
Magnetos	off
Alternator	off
Rotating beacon	off
Master switch	off

KIAS

Rotation	71
Best Angle	77
Best Rate	96
Cruise climb	107
Gear down	154
Flaps intermediate	154
Manoeuvring	134

BE33 BONANZA POWER SETTING

P Alt	55%				65%				75%			
	ISA	RPM	MP	Gal/h	Liter/h	RPM	MP	Gal/h	Liter/h	RPM	MP	Gal/h
0	2100	23,6	11,5	43,5	2300	23,9	13,3	50,3	2500	24,6	15,2	57,5
1000	2100	23,3	11,5	43,5	2300	23,6	13,3	50,3	2500	24,3	15,2	57,5
2000	2100	23,1	11,5	43,5	2300	23,4	13,3	50,3	2500	24,1	15,2	57,5
3000	2100	22,9	11,5	43,5	2300	23,1	13,3	50,3	2500	23,8	15,2	57,5
4000	2100	22,6	11,5	43,5	2300	22,9	13,3	50,3	2500	23,5	15,2	57,5
5000	2100	22,4	11,5	43,5	2300	22,6	13,3	50,3	2500	23,2	15,2	57,5
6000	2100	22,1	11,5	43,5	2300	22,4	13,3	50,3	2500	23,0	15,2	57,5
7000	2100	21,9	11,5	43,5	2300	22,1	13,3	50,3	2500	22,6	15,0	56,8
8000	2100	21,6	11,5	43,5	2300	21,7	13,3	50,3	2500	21,7	14,4	54,5
9000	2100	21,0	11,2	42,5	2300	20,9	12,7	48,0	2500	20,8	14,0	53,0
10000	2100	20,2	11,0	41,6	2300	20,0	12,3	46,6	2500	20,0	13,5	51,1
11000	2100	19,3	10,7	40,5	2300	19,2	11,9	45,0	2500	19,2	13,1	49,6
12000	2100	18,5	10,2	38,5	2300	18,4	11,5	43,5	2500	18,3	12,6	47,7
13000	2100	17,7	10,0	37,8	2300	17,6	11,1	42,0	2500	17,6	12,2	46,2
14000	2100	16,8	9,7	36,7	2300	16,9	10,7	40,5	2500	16,8	11,8	44,6
15000					2300	16,1	10,4	39,4	2500	16,1	11,4	43,1
16000					2300	15,5	10,0	37,8	2500	15,4	11,0	41,6