

PREFLIGHT

A/C documents	aboard+checked
Magnetos	check off
Avionic master	check off
Foreign object	check
Flight controls	check free
Electric master switch	on
Fuel indication	check quantity
Fuel pump	check on / off
Fuel selector	fuller tank
Pitot heat	on - check outside
External lights	on - check outside
Stall warning	check outside
All Electric	off
Electric master switch	off

Chocks, tow bar, tie down	check removed
Canopy and rear door	check
Nose gear	check
Cowling+propeller+spinner	check
Engine oil	check quantity (min 5 qts)
Air intakes (3x)	check unobstructed
Fuel sump	drain
Left fuel quantity	check visual
Left fuel drain	drain
Left main gear	check
Left wing+aileron+flap	check
Tail section	check
Elevator+rudder	check

PREFLIGHT cont.

Right wing+aileron+flap	check
Right main gear	check
Right fuel drain	drain
Right fuel quantity	check visual
Antennas	check undamaged

BEFORE STARTING ENGINE

Pedals	adjust
Alternate engine air	check closed
Alternate static source	check closed
All electric	check off
Avionic master	check off
Pitot heat	check off
Circuit breakers	check in
Passenger briefing	completed
Rear door	closed+latched
Seat belts	fasten

STARTING ENGINE

Propeller control	high RPM
Mixture control	cut off
Electric master switch	on
Strobe lights ACL	on
Magnetos	on

COLD ENGINE

Throttle control	open half way
Fuel pump	on
Mixture	open (5-10sec) then cut off
Fuel pump	off
Throttle	½ inch open
Propeller area	check clear
Starter	engage
Mixture	full rich (when engine fires)

HOT ENGINE

Fuel pump	check off
Throttle	½ inch open (full open when flooded)
Propeller area	check clear
Starter	engage
Mixture	full rich (when engine fires)

STARTING ENGINE**continued**

Throttle	1000 RPM
Oil pressure	check green arc
Electric fuel pump	check off

BEFORE TAXI

Annunciator panel	check
Ammeter – pitot heat on/off	check reading
Electric / lights	on as required
Circuit breakers	check in
Wing flaps	full travel to check then T/O
Electric trim	test+both switches
Elevator trim	set for departure
Gyro instruments	set
Heading bug	set RWY heading
Altimeters 2x	set+compare
Avionics	set for departure

TAXI

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

BEFORE TAKE OFF

Taxi light	off
Fuel selector	check fuller tank
Mixture control	full rich
Propeller control	high RPM
Throttle control	2000 RPM
Propeller control	3x exercise
Magnetos	check 175/50 then both
Alternate engine air	check as required
Engine instruments	check green range
Throttle control	1000 RPM
Wing flaps	check T/O
Elevator trim	set for T/O
Flight controls	check free
Canopy front+rear door	check latched+warning
Seat belts	tighten
Fuel pump	on
Departure briefing	completed
T/O briefing	completed

LINE UP / TAKE OFF

Pitot heat	on / as required
Landing light	on
Transponder	set ALT
Runway	identify
Time	check

Throttle full	check RPM / MP / fuel flow
Rotate	59 KIAS
Initial climb (flaps T/O)	54/60/66 KIAS Vy (A/C mass)

CLIMB

Climb power	Throttle full / 2400 RPM
Wing flaps	check up
Mixture control	check full rich (<5000 ft)
Fuel pump	off
Landing light	off
Best ROC Vy (flaps UP)	60/68/73 KIAS

CRUISE

Altimeters	set+compared
Power	65% (see power table)
Mixture control	fuel flow / EGT
Fuel selector	change tanks for balance

APPROACH

Altimeters 2x	set QNH+compare
Fuel selector	fuller tank
Fuel pump	on
Landing light	on
Mixture control	full rich
Parking brake	check released
Seat belts	tighten
Approach briefing	completed

FINAL APPROACH

Wing flaps APP<108 KIAS	APP
Wing flaps LDG<91 KIAS	LDG / as required
Brakes	press check
Propeller control	high RPM
Mixture	check full rich
Speed AT with flaps LDG - min.	58/63/71 KIAS (A/C mass)

AFTER LANDING

Alternate air	off
Time	check
Transponder	as required
Wing flaps	retract
Fuel pump	off
Pitot heat	off
Landing light / taxi light	off / on

PARKING

Taxi light	off
All electric except ACL	off
Avionic master	off
Throttle	close
Mixture control	idle cut off
Magnetos	off
Strobe lights ACL	off
Electric master switch	off
Interior light	check off

CIAS / GROSSWEIGHT	850 kg	1000 kg	1150 kg
Rotate Vr	59	59	59
Best rate Vy (flaps T/O)	54	60	66
Best rate Vy (flaps UP)	60	68	73
Cruise climb			
Flaps T/O max.	108	108	108
Flaps LDG Vfe max.	91	91	91
Final Vat min.	58	63	71
Maneuvering speed	94	←980 kg →	108

DA40 STAR

POWER SETTING

	55%			65%			75%	
RPM	2000	2200	2400	2000	2200	2400	2200	2400
FUEL ECO	7,0	7,2	7,5	7,9	8,2	8,5	9,2	9,5
FUEL PWR	-	8,5	8,7	-	9,5	9,8	10,7	11

MANIFOLDPRESSURE

MSL	23,9	22,4	21,2	26,8	24,9	23,4	27,3	25,8
1000	23,6	22,2	21,0	26,4	24,5	23,2	26,8	25,5
2000	23,3	21,9	20,7	26,0	24,2	22,9	26,5	25,2
3000	23,0	21,6	20,4	25,7	23,8	22,6	26,1	24,8
4000	22,7	21,2	20,1	25,4	23,5	22,3	-	24,5
5000	22,3	20,9	19,8	-	23,1	22,0		24,1
6000	22,0	20,6	19,5		22,8	21,7		-
7000	21,7	20,3	19,3		22,4	21,4		
8000	21,3	20,0	19,0		-	21,0		
9000	21,1	19,7	18,7			20,7		
10000	-	19,4	18,4			-		
11000		19,1	18,1					
12000		-	17,8					
13000			17,6					
14000			-					
15000								

Empfohlene Bereiche grau unterlegt