A BEFORE ENGINE	START-up	Е	ENGINE RUN-up	
Daily pre-flight check	completed	1.	Brakes	apply
Passenger briefing	completed	2.	Parking brake	set
3. Seats	adjusted as required	3.	Fuel pressure warn. light	off
4. Seat belts & harnesses	fastened & tightened	4.	Throttle	1700 RPM
5. Canopy	closed and locked	5.	Prop control	cycle 3 times
6. Parking brake	set	6.	Ignition magnet check R/L	drop <120 (diff. <50)
7. Control stick	free	7.	Carburetor heat	on (20-50) RPM
Carburator heat	off	8.	Carburator heat	off
9. Throttle	idle	9.	Throttle	idle
10. Propeller control lever	HIGH-RPM position		Engine instruments	_check (green arc)
11. Avionics switch	off	11.	Circuit breakers (fuses)	checked
12. Circuit breakers (fuses)	check	12.	Engine run up checklist	complete
13. Before engine start checklist	complete			
D FNOWE OTABE		F	BEFORE TAKE O	
B ENGINE START-up		1.	Controls	free & correct
1. ALT/BAT switch	on		Flaps	set for T/O
2. Generator warn. light	illuminiates		Elevator Trim	set for T/O
Fuel pressure warn. light	illuminiates		Propeller control	max. RPM
Anti-collision light Fuel collector valve	on		Canopy	closed and locked
5. Fuel selector valve	switch to fullest tank	-	T/O clearance	obtained
6. Electrical fuel pump	on	-	Electric fuel pump	OND / ALT
7. Fuel pressure warn. light	off	-	Transponder	GND / ALT
8. Throttle cold engine	idle		Landing light	on
9. hot engine	2 cm opened	11	Parking brake	released
10. Choke cold engine 11. hot engine	pull off	11.	Before take off checklist	complete
11. hot engine 12. Brakes	apply	G	LINE UP CHEC	K
13. Propeller area	check if clear		All sectors	clear
14. Ignition switch	start (RPM 820/2min)	1	Runway	clear & identified
15. Oil pressure gauge	green arc (<10 sec)		Compass (both)	check
16. Alternator warning light	off		Airborne time	note
17. NAV-Lights	as required	5.	Line up checklist	complete
18. Electrical fuel pump	Warning light off	Ů.	Ellio up direckiist	Complete
19. Avionics master switch	on	Р	Airspeeds for safe	e operations
20. Engine start checklist	complete		Start	•
	,		Lift off speed	50
C BEFORE TAXI CHECK			V _x best angle (flaps TO)	52
1. Transponder	Standby/GND		V _y best rate (flaps up)	65
2. ATIS	note		Engine failure after take off	70
3. Avionics & flight instruments	setup & QNH (2x)		Cruise	
4. Engines instruments	check		VFE full flaps	90
5. Volt- Amperemeter	V green range A+		V _A maneuvering speed	112
6. Flaps	check & T/O		V _{NO} max. structural cruise	130
7. Taxi clearance	obtain		V _{NE} never exceed	165
8. Before taxi checklist	complete		Landing	
Γ		↓	Normal landing (full flaps)	60
D TAXI CHE			Ldg. without engine power	-
Parking brake	release	<u> </u>	- flaps in TO	65
2. Taxi- Landing lights	as required	<u> </u>	- flaps up	70
Nose wheel steering	check function		Descrition lending	00
4. Brakes	check	 	Precaution landing	60
5. Flight instruments & avionics	check	 	V for best glide flaps up	78
Compass reading/gyro Fuel tank lever	check	┞	V for best glide flaps TO	73
7. Fuel tank lever	switch left/right	l		

			_		
	ENGINE FAILU	RES		ENGINE FAILU	JRES
	Engine Failures During Tak	e-off Run			
1.	Trottle	idle	D	Engine Restart Proc. with st	opped Propeller
2.	Brakes	apply as required	1.	Electrical consumers	off
			2.	BAT Switch	on
Engine Failures Immediately After Take-off		3.	Propeller control lever	HIGH-RPM position	
A.	. Engine Power Loss		4.	Fuel selector valve	switch to fullest tank
1.	Trottle	full open	5.	Electrical fuel pump	on
2.	Electrical fuel pump	on	6.	Throttle hot engine	2 cm opened
3.	Airspeed	70 kts		cold engine	idle
4.	Propeller control lever	HIGH-RPM position	7.	Choke hot engine	off
5.	Fuel selector valve	switch to fullest tank		cold engine	pull
6.	Choke	off	8.	Ignition switch	both
7.	Carburator heat	on	9.	Ignition switch	start
8.	Ignition switch	both		When power is restored:	
	if no restored => emergency	anding	10	. Oil pressure gauge	check
9.	Fuel selector valve	off	11	. Choke	off
10	. Ignition switch	off	12	. Electrical equipment	switch on as req.
11	. ALT/BAT switch	off (!No stall warn!)	13	. Oil Temperature	check

_								
	In-flight Engine Failure		Е	Restart Proc. with Propeller in Windmilling C				
Α	Engine Roughness			With engine power off and airspeeds above				
1.	Carburator heat	on		60 kts the propeller auto-rot	ates.			
2.	Electrical fuel pump	on	1.	Airspeed	76 kts			
3.	Ignition switch	switch L/both R/both	2.	BAT Switch	on			
4.	Throttle	not change pos	3.	Fuel selector valve	switch to fullest tank			
	If roughness continous		4.	Propeller control lever	HIGH-RPM position			
5.	Throttle	reduce to min requ.	5.	Electrical fuel pump	on			
6.	Precautionary landing	perform	6.	Ignition switch	both			
			7.	Throttle hot engine	2 cm opened			
В	Loss Of Oil Pressure			cold engine	idle			
1.	Oil Temperature	check	8.	Choke hot engine	off			
	If oil pressure below green ar	c and oil temp ok		cold engine	pull			
2.	Land at the nearest airfield			When power is restored:				
			9.	Oil pressure gauge	check			
	If oil pressure below green ar	c + oil temp increase	10	. Choke	off			
3.	Throttle	reduce to min requ.	11	. Electrical equipment	switch on as req.			
4.	Precautionary landing	perform	12	Oil Temperature	check			

С	Loss Of Fuel Pressure			Power-off Landing	
1.	Electrical fuel pump	on	Α	Emergency Landing Withou	t Engine Power
2.	Fuel selector valve	switch to fullest tank	1.	Airspeed	
3.	Electrical fuel pump	on		Flaps in landing position	60 kts
	After switching wait up to 8 sec restoring pressure			Flaps in take-off position	65 kts
	If the low fuel warning light remains alight			Flaps in cruise position	70 kts
4.	Land at the nearest airfield			Fuel selector valve	off
_				Ignition switch	off
				Seat belts & harnesses	tight
				COM (ATC)	rep. loc & indent
				ALT/BAT switch	off (!No stall warn!)

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Cruise Power Settings

	Engine Fire On Ground	
1.	Fuel selector valve	
2.	Throttle	full open
3.	ALT/BAT	switch off
4.	Ignition switch	off
5.	Aircraft	evacuate

	In-flight Engine Fire				
1.	Fuel selector valve	off			
2.	Airspeed	90 kts			
3.	Flaps	TAKE-OFF Position			
4.	Throttle	full open			
5.	Cabin heat	off			
6.	Canopy slide-window	full open			
7	Proceed with => power-off landing => A				

Ele	Electrical Fire and Formation of Smoke on Ground							
1.	ALT/BAT switch	off						
	If engine is running:							
2.	Throttle	idle						
3.	Fuel selector valve	off						
4.	Ignition switch	off						
5.	Canopy	open						
6.	Fire extinguisher behind seat	activate						

- II	In-flight Electrical Fire and Formation of Smoke								
1.	BAT switch	off							
2.	Cabin vents	open							
3.	Canopy slide-window	full open							
4.	Fire extinguisher behind seat	activate							

	in-flight Cabin Fire				
1.	BAT switch	off			
2.	Cabin vents	open			
3.	Cabin heat	off			
4.	Fire extinguisher behind seat activate				
5.	If necessary, prepare safety landing.				

	F/F	[//]	26	26					
MCP	MP	[jn Hg]	28	27			-1 2100 21.0 18 2200 21.5 21.5 2200 21.5		
	RPM	[1/min]	2260	2260		3 2000 22.0 17 2200 22.7 19.3 2260 23.3 22.3			
	F/F	[Nh]	24	22	22				
85%	MP	[in Hg]	27.7	26.7	25.2				
	RPM	[1/min]	2260	2260	2260				
	F/F	[l/h]	21.0	21.3	21.5	22.3	23.0		
75%	MP	[ju Hg]	27.0	25.7	24.3	23.3	21.5		
	RPM	[1/min]	2100	2200	2260	2260	2260		
	F/F	[//r]	15.6	16.0	16.8	19.3	21.5	22.0	
969	MP	[in Hg]	25.7	24.7	23.3	22.7	21.5	20.1	
	RPM	[1/min]	2000	2000	2100	2200	2200	2260	
	F/F	[//n]	14	15	16	17	18	19	19
92%	MP	[in Hg]	24.6	24.0	23.3	22.0	21.0	19.7	18.5
	RPM	[1/min]	1900	1900	1900	2000	2100	2200	2260
(ISA)	Τ	[0]	15	11	7	3	-1	-5	-6
Alt		[11]	0	2,000	4,000	0000'9	8,000	10,000	12,000
	(ISA) 55% 65% 75% 85%	(ISA) 55% 65% 75% 85% MCP T RPM MP F/F RPM MP F/F RPM MP F/F RPM MP MP	(ISA) 55% 65% 75% 85% RPM MCP T RPM MP F/F RPM MP F/F RPM MP F/F RPM MP [°C] [1/min] [1/min]	USA) Table Table	1.5 1.5	(ISA) FF RPM MF RPM MF	(ISA) T55% FIF RPM MP RPM <	(ISA) FF RPM MF FF RPM MF FF RPM MF FF RPM MF RPM RPM <td>(ISA) FF RPM MF RPM RPM</td>	(ISA) FF RPM MF RPM RPM

Н	TAKE off				N	AFTER LA	NDING CHEC	K			
	Throttle		full open		1.	Carburetor		off			
2.	Tachometer		2200-2260 F	RPM	2.	Flaps		up			
3.	Elevator control		neutral		3.	Transponde					
4.	Rudder pedals		hold direction	n		. Electric fuel pump		off			
5.	V rotate		50 kts			Landing ligh		off			
6.	Climb speed 65 kts			6.	Landing tim	е	note				
7.	Pos. ROC / Brakes		check / appl	y	7.	After landin	g checklist	comp	lete		
<i>8</i> .	Take off checklist		complete								
					0		OFF CHECK				
I	CLIMB 400 FT CH	ECK			-	Throttle		idle			
1.	Propeller		2260 RPM			Parking bra	ke	set			
	Throttle		open		-	Flaps			ING po	sition	
	Engine instruments		check		-	Electrical co		off			
	Climb speed		65 kts		-	Avionic Mas	ster Switch	off			
	Flaps		cruise positi	on	-	Ignition		off			
	Fuel pump		off			Anti-collisio	n light	off			
	Landing light		off			Bat switch		off			
<i>8</i> .	Climb check		complete			Aircraft		secur			
_	0011105 01150	.,				FPL		CLSE			
J	CRUISE CHEC	K			11	. Shutoff che	<u>cklist</u>	comp	<u>lete</u>		
	Level off		trim			A i wa wa a a ala	fa., aafa a., a.,	4:			
	Power setting 65%	7.140	0000 DDM	401	Р		for safe opera	itions			
		,7 MP	2000 RPM	161	1		Start				
		,3 MP	2100 RPM	16,8	1	Lift off spee	le (flaps TO)		50		
		,7 MP ,5 MP	2200 RPM 2200 RPM	19,3 I 21,5 I	1	V _y best rate			52 65		
	Cruise checklist	, J IVII	complete	21,01	1		re after take of	ff	70		
J.	Citaise checklist		complete				Cruise	11	70		
K	DESCENT CHEC	CK			1	VFE full flaps			90		
	ATIS		note			V _A maneuve			112		
	Altitude		set QNH				ructural cruise		130		
	Carburetor heat		as required			V _{NE} never e	xceed		165		
	Throttle		as required			La	anding		100		
<i>5</i> .	Descent checklist		complete			Normal land	ding (full flaps)		60		
						Ldg. without engine power			-		
L	APPROACH						- flaps in TC)	65		
1.	Electric fuel pump		on				 flaps up 		70		
	Landing light		on								
3.	Carburator heat		on			Precautiona			60		
	Throttle		as required				lide flaps up		78		
5.	Speed		below 90 kts	s(IAS)			lide flaps TO		73		
_	Flaps		set (T/O)				I speeds				
	Approach speed		90 kts - flaps	s T/O		0°	30°	45°		60°	
	Trim		set			UP 52					
	Final approach speed		60 kts - flaps	s full		T/O 48					
-	Propeller control lever		full forward		L	LDG 43					
	Runway		idendified								
	Approach checklist		complete		<u> </u>						
М	GO AROUND										
	Throttle		full								
2.	Carburetor heat		off		l						
2. 3.	Carburetor heat Flaps Speed		off T/O 65 kts								