



# Aircraft Checklist

MFU - Pilotenclub - LOAV



3fly.at

## OE-AKI

AQUILA A211

MTOM = 750 kg / 1.653 lb

A/C-Size: W: 10.3 m H: 2.4m L: 7.4 m

<b>OPERATOR</b>	<b>MFU Pilotenclub</b>	
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<b>FUEL</b>	Fuel	EN228 SUPER
	Fuel (alt.)*	AVGAS 100LL
	Maximum Fuel	120 L / 31.7 gal
	Unusable Fuel	10.4 L / 2.8 gal

\*) If alternative Fuel used → Entry in A/C LOG

<b>OIL</b>	Aero Shell SPORT PLUS 4	
	Minimum	DIFF = 0.45 L
	Maximum	

<b>TIRE</b>	Front Tire	36 psi / 2.5 bar
	Main Tires	36 psi / 2.5 bar

<b>SPEED</b>	V <sub>S0</sub> (Stall- Flaps max)	39 KIAS
	V <sub>G</sub> (best glide, Flaps up)	78 KIAS
	Max. Demo. X-Wind	15 knots

<b>COM FAIL</b>		Clear to Land	
		Return to Landing	
		Continue Circling	
		A/D unsafe, don't Land	
		Land at this A/D and proceed to Apron - wait for Clearance	

FPL (EXAMPLE)		
7	A/C ID	OE-AKI
8	Flight Rules	V
	Type of Flight	G
9	Type of A/C	A211
	Wake Turbul. Cat.	L
10	Equipment	SY/S
	Departure A/D	LOAV
13	Departure Time	0830
	Speed	N0110
15	Flight Level	VFR
	Route	SOPRON
16	Destination A/D	LHFM
	Total EET	0025
18	Alternate A/D	LOAN
	Other Info	EET/SOPRON0015
19	Endurance	0430
	Persons on Bord	2
	Emerg. Equipm.	ELT
	A/C Colour	WHITE
	Name PIC	NAME

Consult POH/AFM for "Warnings, Cautions and additional Information"

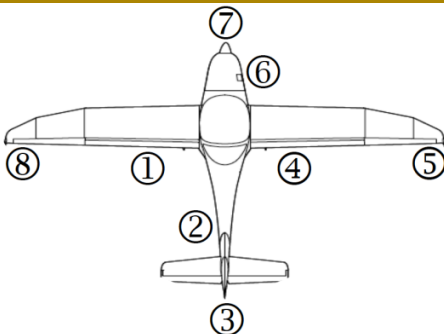
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**DAILY INSPECTION**

1 Fuel Tank Sumps	2x DRAIN
2 Electr. Fuel Pump	DRAIN

**CABIN CHECK**

3 A/C Documents	CHECK	
4 Ignition Key	REMOVE	
<b>B A T T E R Y</b>	Master – ALT1/BAT	ON
	Lights (ALT1, Fuel)	ILLUM
	Lights (ALT2, Volt)	ILLUM
	Master – ALT1	OFF
	Eng. Instrument	CHECK
	Fuel Quantity	CHECK
	Light: Nav, Ldg, Instr	CHECK
	ACL, Stall Warning	CHECK
Master – BAT	OFF	
14 ELT	ARM	
15 Foreign Objects	REMOVE	
16 Baggage stowed	SECURE	
17 Canopy clean	NO DAMAGE	
18 Flashlights	CHECK	

**EXTERIOR CHECK****1. Left Main Gear**

19 Wheel Fairng/Strut	CHECK
20 Tire Press/Slip Mkr*	CHECK
21 Tire/Wheel/Brake	VIS INSP
22 Chocks	REMOVE

\*) Red dot under tire valve

**2. Fuselage**

23 Shell & Skid Plate	VIS INSP
24 Tail Tiedown	DISCON

**3. Empennage**

25 Elevat. & Stabilizer	VIS INSP
26 Rudder	VIS INSP
27 Fitting Bolt Connect	CHECK
28 Vertical Stabilizer	VIS INSP

**4. Right Main Gear**

29 Wheel Fairng/Strut	CHECK
30 Tire Press/Slip Mkr*	CHECK
31 Tire/Wheel/Brake	VIS INSP
32 Chocks	REMOVE

\*) Red dot under tire valve

**5. Right Wing**

33 Wing Surfaces	VIS INSP
34 Fuel Vent – clear	CHECK
35 Flap	CHECK
36 Aileron/Insp. Wndw.	VIS INSP
37 Wing Tip	VIS INSP
38 Fuel Level- Dipstick	CHECK
39 Fuel Filler Cap	CLOSE
40 Wing Tiedown	DISCON

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**6. Nose Section / Cowling**

41	Ignition/ALT1/BAT	CHECK OFF
42	Parking Brake	SET
43	Crank Engine	CHECK NOISE
44	Oil level/diff. 0.45L	CHECK
45	Coolant Level	CHECK
46	Air+Cooler Intakes	FREE
47	Cowling Fasteners	CHECK
48	Propeller/Spinner	CHECK

**7. Nose Ldg Gear**

49	Wheel Fairing/Strut	CHECK
50	Gear Strut Mount	VIS INSP
51	Tire Pressure	CHECK
52	Tire/Wheel	VIS INSP
53	Shock Absorber	CHECK
54	Chocks/Tow Bar	REMOVE

**8. Left Wing**


55	Wing Surfaces	VIS INSP
56	Fuel Vent - clear	CHECK
57	Pitot / Static Cover	REMOVE
58	Pitot / Stat Opening	CLEAR
59	Wing Tip	VIS INSP
60	Aileron Insp. Wndw.	VIS INSP
61	Fuel Level / Dipstick	CHECK
62	Fuel Filler Cap	CLOSE
63	Flap	CHECK
64	Wing Tiedown	DISCON

**PREFLIGHT**

1	Daily Inspection	COMPL
2	Tow Bar	REMOVE
3	Fuel Quant. Dipstck	2 x CHECK
4	Ignition, ALT1/BAT	CHECK OFF
5	Parking Brake	SET
6	Crank Engine	CHECK NOISE
7	Oil level / diff. 0,45L	CHECK
8	Coolant Level	CHECK
9	Tiedown Straps	REMOVE
10	Baggage Door	CLOSE/LOCK
11	Pitot Cover	REMOVE
12	Control Locks	REMOVE
13	Seating Positions	ADJUST/LOCK
14	Carburetor Heat	FREE - PUSH
15	Cabin Heat	FREE - PUSH
16	Choke free move	AUTO RESET
17	Throttle free move	IDLE
18	Prop free move	FULL FWD
19	Mass & Balance	IN LIMITS

**BEF. ENGINE START**

1	Preflight Check	COMPL
2	Passenger Briefing	COMPL
3	Seats	ADJUST
4	Seat Belts / Harn.	FASTEN
5	Canopy Closed	LOCK
6	Canopy Locked	CHECK
7	Parking Brake	SET
8	Controls Movement	CHECK

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9	Fuel Selector	FULLER TANK
10	Carburetor Heat	PUSH (OFF)
11	Throttle	IDLE
12	Prop	FULL FWD
13	Avionic - Master	OFF
14	P/S Heat	OFF
15	All CBs	CHECK
16	Attitude Indicator	CAGE
17	Master - ALT1/BAT	ON
18	ALT1/ALT2 Light	ILLUMIN
19	Fuel Warning Light	ILLUMIN
20	P/S HEAT Light	ILLUMIN
21	ACL	ON

### ENGINE START

1	Before Start Check	COMPL
2	Fuel Pump	ON
3	Fuel Warning Light	OFF
<b>COLD</b>	Throttle - when cold	IDLE
	Choke - when cold	PULL/HOLD
<b>HOT</b>	Throttle - when hot	1-2 cm OPEN
	Choke - when hot	PUSH
6	Brakes Both Pedals	PRESS
7	Prop Area	CLEAR
8	Ignition	START/BOTH
9	Oil Press < 10 sec	RISING
10	ALT1 Warning Light	OFF
11	ALT2 Warning Light	OFF
12	Fuel Pump	OFF
13	Fuel Warning Light	OFF


### BEFORE TAXI

1	Warmup max 1000 <sub>rpm</sub>	OIL MIN 50°C
2	Avionics	ON/SET
3	Engine Instruments	CHECK
4	Volt Meter in green	CHECK
5	Trim Sw. + Indicator	CHECK
6	Flap Sw. + Indicator	CHECK+UP
7	P/S Heat ON	LIGHT OFF
8	P/S Heat OFF	LIGHT ON
<b>TEST ALTERNATORS</b>	Throttle 1000 rpm	SET
	NAV Lights	ON
	Landing Light	ON
	Instrument Lights	ON
	Ammeter Charge	CHECK
	Master - ALT1	OFF
	Ammeter Discharge	CHECK
	ALT2 CB	PULL (OFF)
	If Discharge increase	→ ALT2 OK
	If no Change	→ ALT2 U/S
	If one ALT u/s	→ NO NVFR
	ALT2 CB	PUSH (ON)
	Master - ALT1	ON
	If Charge increase	→ ALT1 OK
	If no change	→ ALT1 U/S
	If one ALT u/s	→ NO NVFR
All Switches	AS REQ	
26	Parking Brake	RELEASE
<b>TAXI</b>	Brakes	CHECK
	Steering	CHECK
	Flight Instruments	CHECK

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**BEFORE TAKEOFF**


1	Transponder	CHECK
2	Brakes	APPLY
3	Parking Brake	SET
4	Compass/Gyro	CHECK/SET
5	Fuel Selector	FULLER TANK
6	Fuel Warnng Light	OFF 
7	Engine Instruments	IN GREEN
8	Throttle	1700 rpm
<b>MAGNETOS</b>	L - B - R - B	SWITCH
	Drop max. 120 rpm	CHECK
	Diff L/R max 50 rpm	CHECK
	Ignition Switch Both	CONFIRM
13	Carburetor pull (on)	DROP 20-50 rpm
14	Carburetor	PUSH (OFF)
<b>GOVERNOR</b>	Prop 3x Cycle Slowly	END STOPS
	→ Drop	200 ±50 rpm
	→ Oil Press	CONSTANT
	→ Manifold Press	CHANGE
19	Throttle	IDLE
20	Fuel Pump	ON
21	Flaps	T/O
22	Trim	WHITE MARK
23	All CBs	CHECK
24	Contr. Movement	FREE
25	Lap Belt	TIGHTEN
26	Canopy → closed	LOCK
27	Departure Briefing	COMPL
28	T/O Briefing	COMPL
29	Parking Brake	RELEASE

**LINE UP / TAKEOFF**

1	Before T/O Check	COMPL
2	Landing Light	AS REQ
3	Approach Sector	CLEAR
4	Runway Heading	CONFIRM
5	Throt/Prop/Carb	FULL FWD
6	RPM=2300-2385	CHECK
7	T/O Power Values	CORRECT
8	Elevator	NEUTRAL
9	Rudder	DIRECTION
10	Rotate ( $V_R$ )	<b>50 KIAS</b>
11	Climb Initially	<b>57 KIAS</b>
12	Short T/O ( $V_X$ )	<b>52 KIAS</b>


**CLIMB**

1	Throttle	FULL
2	Prop full forward	MAX 5 MIN
3	Prop 2260 rpm	REDUCE
4	Engine Instruments	IN GREEN
5	Climb Speed ( $V_Y$ )	<b>65 KIAS</b>
6	min. 400 ft AGL	CHECK Safe Spd
7	Flaps	UP
8	Trim	AS REQ
9	Landing Light	OFF
10	Fuel Pump	OFF
11	Fuel Warning Light	CHECK

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**CRUISE**


1	Throttle 	AS REQ
2	Prop	1650-2260 rpm
3	Flaps	CHECK UP
4	Trim	AS REQ
5	P/S Heat as req.	OAT > 15°C OFF
6	Engine Instruments	IN GREEN
7	Manvr. Speed (V <sub>A</sub> )	<b>112 KIAS</b>
8	Turbulent Air (V <sub>NO</sub> )	<b>130 KIAS</b>


 Full Throttle: → Prop min. 2140 rpm


**DESCENT**

1	Throttle	AS REQ
2	Prop	MIN 2000 rpm
3	Carburetor Heat	AS REQ
<b>RAPID DESCENT</b>	Throttle	IDLE
	Prop	FULL FWD
	Carburetor Heat	PULL (ON)
	Flaps	UP
	Airspeed Max.	<b>130 KIAS</b>
Engine Instruments	IN GREEN	

**LANDING**

1	Lap Belt	TIGHTEN
2	Fuel Pump	ON
3	Landing Light	AS REQ
4	Carburetor Heat	PULL (ON)
5	Throttle	AS REQ
6	Airspeed (V <sub>FE</sub> ) Max.	<b>90 KIAS</b>
7	Flaps	T/O OR LDG
8	Trim	AS REQ
9	Flaps 	LDG

10	Fin. Appr. Spd. 	<b>60 KIAS</b>
11	Prop	FULL FWD
<b>GO AROUND</b>	Throttle	FULL FWD
	Prop	FULL FWD
	Carburetor Heat	PUSH (OFF)
	Flaps	T/O
	Climb Airspeed	<b>65 KIAS</b>


 **CAUTION:** Strong cross/head winds may require less flaps/higher airspeeds

**AFTER LANDING**

1	Throttle	AS REQ
2	Flaps	UP
3	P/S Heat	OFF
4	Carburetor Heat	PUSH (OFF)
5	Fuel Pump	OFF
6	Landing Light	OFF
7	XPDR GND Mode	CHECK

**SHUT DOWN**

1	Throttle	IDLE
2	Parking Brake	SET
3	Flaps	LDG
4	ELT (121,5 MHz)	CHECK
5	Flight Plan	CLOSED
6	Avionic Master	OFF
7	Ignition	OFF
8	Electr. Equipment	OFF
9	Instrument Lights	OFF
10	Master - ALT1/BAT	OFF
11	Seats Pos. (L&R)	FULL AFT
12	Flight Logger	SLIDE CARD
13	Chocks/Tiedowns	AS REQ

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Pressure altitude		Standard temperature		Engine performance in % of MCP																													
				55%						65%						75%						85%						MCP					
				H	T	RPM	MP	FF	FF	RPM	MP	FF	FF	RPM	MP	FF	FF	RPM	MP	FF	FF	RPM	MP	FF	FF	RPM	MP	FF	FF				
	[ft]	[°C]	[°F]	[U/min]	[in Hg]	[l/h]	[gal/h]	[U/min]	[in Hg]	[l/h]	[gal/h]	[U/min]	[in Hg]	[l/h]	[gal/h]	[U/min]	[in Hg]	[l/h]	[gal/h]	[U/min]	[in Hg]	[l/h]	[gal/h]	[U/min]	[in Hg]	[l/h]	[gal/h]						
0	15	59	1900	24.6	14.0	3.7	2000	25.7	15.6	4.12	2100	27.0	21.0	5.55	2260	27.7	24.0	6.34	2260	28.0	26.0	6.87	2260	27.0	26.0	6.87							
2000	11	52	1900	24.0	15.0	4.0	2000	24.7	16.0	4.23	2200	25.7	21.3	5.63	2260	26.7	22.0	5.81	2260	27.0	26.0	6.87	2260	27.0	26.0	6.87							
3000	9	48	1900	23.7	15.5	4.1	2050	24	16.4	4.33	2230	25.0	21.4	5.65	2260	26	22.0	5.81	2260														
4000	7	44	1900	23.3	16.0	4.2	2100	23.3	16.8	4.44	2260	24.3	21.5	5.68	2260	25.2	22.0	5.81	2260														
5000	5	41	1950	22.7	16.5	4.4	2150	23	18.1	4.77	2260	23.8	21.9	5.79																			
6000	3	37	2000	22.0	17.0	4.7	2200	22.7	19.3	5.1	2260	23.3	22.3	5.89																			
8000	-1	30	2100	21.0	18.0	4.8	2200	21.5	21.5	5.68	2260	21.5	23.0	6.08																			
10,000	-5	23	2200	19.7	19.0	5.0	2260	20.1	22.0	5.81																							
12,000	-9	16	2260	18.5	19.0	5.0																											

MCP: maximum continuous power

RPM: revolutions per minute

MP: manifold pressure

FF: fuel flow

Correction for non ISA temperature conditions:

For each 50°F (10°C) above ISA: increase Manifold Pressure by 3%,

Fuel consumption increases by 5%

For each 50°F (10°C) below ISA: decrease Manifold Pressure by 3%,

Fuel consumption decreases by 5%

## Airspeeds for Normal Operations

### TAKEOFF

Climb Flaps T/O	57 KIAS
$V_X$ Flaps T/O	52 KIAS
$V_Y$ Flaps UP	65 KIAS 

### LANDING

Final APP Flaps LDG	60 KIAS
Balked Ldg Flaps LDG	60 KIAS
Max. demo X Wind	15 knots
$V_{FE}$ max, Flaps LDG	90 KIAS

### CRUISE

$V_A$ Maneuvering	112 KIAS
$V_{NO}$ Max turbul. Air	130 KIAS
$V_{NE}$ Max Airspeed	165 KIAS

## Airspeeds for Emergency Operations

$V_A$ Maneuvering	112 KIAS
Best Glide Flaps UP	78 KIAS
Best Glide Flaps T/O	73 KIAS
Precaut. Flaps LDG	60 KIAS

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### No Engine Power

Flaps T/O	65 KIAS
Flaps UP	70 KIAS