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

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
13	Departure A/D	LOAV
	Departure Time	0830
15	Speed	N0110
	Flight Level	VFR
	Route	SOPRON
16	Destination A/D	LHFM
	Total EET	0025
	Alternate A/D	LOAN
18	Other Info	EET/SOPRON0015
19	Endurance	0430
	Persons on Bord	2
	Emerg. Equipm.	ELT
	A/C Colour	WHITE
	Name PIC	NAME

OPERATOR

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CONTACT

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FUEL

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

OIL

Aero Shell SPORT PLUS 4 ☞
Minimum
Maximum DIFF = 0.45 L

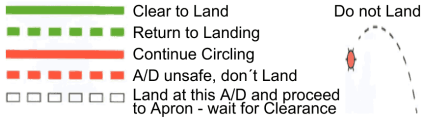
TIRE

Front Tire	36 psi / 2.5 bar
Main Tires	36 psi / 2.5 bar

SPEED

V_{S0} (Stall- Flps max)	39 KIAS
V_G (best glide, Flps up)	78 KIAS
Max. Demo. X-Wind	15 knots

COM FAIL



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

This document does not replace POH/AFM - (AKI 2023 V2.2)

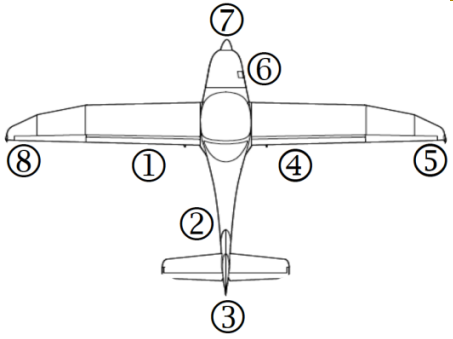
DAILY INSPECTION

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

CABIN CHECK

3	A/C Documents	CHECK
4	Ignition Key	REMOVE
BATTERY	Master – ALT1/BAT	ON
BATTERY	Lights (ALT1, Fuel)	ILLUM
BATTERY	Lights (ALT2, Volt)	ILLUM
BATTERY	Master – ALT1	OFF
BATTERY	Eng. Instrument	CHECK
BATTERY	Fuel Quantity	CHECK
BATTERY	Light: Nav, Ldg, Instr	CHECK
BATTERY	ACL, Stall Warning	CHECK
BATTERY	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 Winterkit Temp Lmt. +10°	CHECK
48 Cowling Fasteners	CHECK
49 Propeller/Spinner	CHECK

▼

7. Nose Ldg Gear	
50 Wheel Fairng/Strut	CHECK
51 Gear Strut Mount	VIS INSP
52 Tire Pressure	CHECK
53 Tire/Wheel	VIS INSP
54 Shock Absorber	CHECK
55 Chocks/Tow Bar	REMOVE

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

PREFLIGHT	
1 Daily Inspection	COMPL
2 Tow Bar	REMOVE
3 Fuel Quant. Dipstk	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

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
COLD	Throttle - when cold	IDLE
	Choke - when cold	PULL/HOLD
HOT	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$_{rpm}$	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
ALTERNATORS TEST	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
TAXI	Brakes	CHECK
	Steering	CHECK
	Flight Instruments	CHECK

BEFORE TAKEOFF

1	Transponder	CHECK
2	Brakes	APPLY
3	Parking Brake	SET
4	Compass/Gyro	CHECK/SET
5	Fuel Selector	FULLER TANK
6	Fuel Warng Light	OFF ☞
7	Engine Instruments	IN GREEN
8	Throttle	1700 rpm
MAGNETOS	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)
GOVERNOR	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)	**50 KIAS**
11	Climb Initially	**57 KIAS**
12	Short T/O (V_X)	**52 KIAS**

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)	**65 KIAS**
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

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_A)	**112 KIAS**
8	Turbulent Air (V_{NO})	**130 KIAS**

☞ Full Throttle: → Prop min. 2140 rpm

DESCENT

1	Throttle	AS REQ
2	Prop	MIN 2000 rpm
3	Carburetor Heat	AS REQ
RAPID DESCENT	Throttle	IDLE
	Prop	FULL FWD
	Carburetor Heat	PULL (ON)
	Flaps	UP
	Airspeed Max.	**130 KIAS**
	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_{FE}) Max.	**90 KIAS**
7	Flaps	T/O OR LDG
8	Trim	AS REQ
9	Flaps ☞	LDG
10	Fin. Appr. Spd. ☞	**60 KIAS**
11	Prop	FULL FWD
GO AROUND	Throttle	FULL FWD
	Prop	FULL FWD
	Carburetor Heat	PUSH (OFF)
	Flaps	T/O
	Climb Airspeed	**65 KIAS**

☞ **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

Pressure altitude	Standard temperature		Engine performance in % of MCP																			
			55%				65%				75%				85%				MCP			
H	T	T	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]
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
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
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				
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				
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
No Engine Power	
Flaps T/O	65 KIAS
Flaps UP	70 KIAS