



PILOTENCLUB WIEN
Wiener Luftfahrerverband

3fly.at

OE-AKI

Aquila A211 / GTN 650

MTOW = 750 kg / 1.653 lb

A/C-Size: W: 10,3 m H: 2,4 m L: 7,4 m

F P L (E X A M P L E)

7	A/C ID	OE-AKI
8	Flight Rules	V
	Type of Flight	G
9	Type of A/C	A 211
	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

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FUEL

Fuel EN228 SUPER

Fuel (alternative)* 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 DIFF = 0,45 L

Maximum

TIRE

Front Tire 36 psi / 2,5 bar

Main Tires 36 psi / 2,5 bar

SPEED

V_{S0} (Stall- Flaps max) 39 KIAS

V_G (best glide, Flaps up) 78 KIAS

Max. Demo. X-Wind 15 knots

COM FAIL

	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	



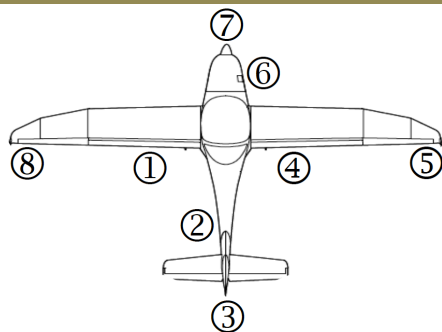
Consult POH / AFM for "Warnings, Cautions and additional Information"

DAILY INSPECTION

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

**CABIN CHECK**

3 A/C Documents	CHECK	
4 Ignition Key	REMOVE	
BATTERY	Master - ALT1 / BAT	ON
	Lights (ALT1, Fuel)	ILLUMIN
	Lights (ALT2, Volt)	ILLUMIN
	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**

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1. Left Main Gear

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

**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

**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

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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 FORWD
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 FORWD
13	Avionic - Master	OFF
14	P/S Heat	OFF
15	All CB's	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 1000rpm	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
ALTERNATOR TEST	Throttle 1.000 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

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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 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 3 x to start / cruise 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 CB's	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 FORWD
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 Initialy	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


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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 _A)	112 KIAS
8	Turbulent Air (V _{No})	MAX 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 FORWD
	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
5	Airspeed (V _{FE})	MAX 90 KIAS
6	Flaps	T/O OR LDG
7	Trim	AS REQ

8	Flaps	 LDG
9	Fin. Appr. Spd.	 60 KIAS
10	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	Avionic Master	OFF
6	Ignition	OFF
7	Electr. Equipment	OFF
8	Instrument Lights	OFF
9	Master - ALT1 / BAT	OFF
10	Seats Pos. (L & R)	FULL AFT
11	Chocks / Tiedowns	AS REQ.

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Pressure altitude		Standard temperature		Engine performance in % of MCP																		
				55%			65%			75%			85%			MCP						
				RPM	MP	FF	RPM	MP	FF	RPM	MP	FF	RPM	MP	FF	RPM	MP	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]				
0	15	59	1900	24.6	14.0	3.7	2000	25.7	15.6	4.12	2100	27.0	21.0	5.65	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																

Correction for non ISA temperature conditions:

MCP: maximum continuous power

RPM: revolutions per minute

MP: manifold pressure

FF: fuel flow

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%



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Airspeeds for Normal Operations

TAKE OFF

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 KIAS
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



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