

This Checklist is based on the effective POH and customized for
OSCAR Luchtvaartbedrijf BV NL - ATO - 227

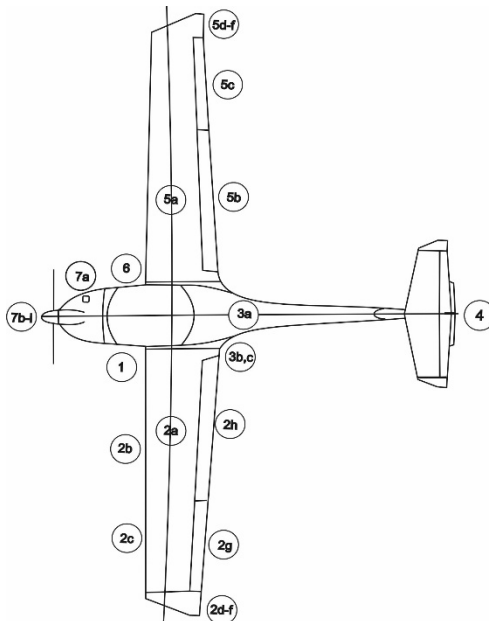


CHECKLIST DV 20 KATANA

PH-SKM and PH-MFT

In-Cabin Check

Airplane documents	Check
Checklist	Present
Parkingbrake	Set
Ignition key	Pulled out
Canopy	Clean, undamaged
Circuit breakers	Pressed in
Battery (Master) switch	On
Fuel Quantity	Sufficient
Battery (Master) switch	Off
Throttle	Idle
Propeller Speed Control Lever	Max RPM
Carburetor Heat	Off
Foreign Object inspection	Done
Emergency Locator Transmitter (ELT)	Auto
Main Bolts	Secured
Baggage	Stowed, baggage harness attached



CAUTION

Visual inspection is defined as check for: Defects crack, delamination, excessive play, insecure or improper Mounting, and general condition. Additionally, freedom of movement for Control surfaces.

Outside check

1 - Left Main Landing Gear

Landing Gear Strut		Visual inspection
Wheel Fairing		Visual inspection
Tire Pressure (2.3 bar / 33 psi)		Check
Tire, Wheel, Brake		Visual inspection
Skid Marks		Visual inspection

2 - Left Wing

Entire Wing	- 2a	Visual inspection
Stall Warning	- 2b	Check (suck on opening)
Pitot-Static Probe	- 2c	Clean, hole open
Wing Tip, Balancing Mass	- 2d	Visual inspection
Position Light	- 2e	Visual inspection
Mooring Harness on Wing Tip	- 2f	Release
Aileron	- 2g	Visual inspection
Wing Flap	- 2h	Visual inspection

3 - Fuselage

Skin	- 3a	Visual inspection
Tank Vent	- 3b,c	Check
Tank Drain	- 3b,c	Drain water
Fuel Quantity	- 3b	Check with fuel pipette

Empennage

Fins and control surfaces	- 4	Visual inspection
Mooring Harness on Tail Fin	- 4	Release
Trim Tab	- 4	Visual inspection

Right Wing

Entire Wing	- 5a	Visual inspection
Wing Flap	- 5b	Visual inspection
Aileron	- 5c	Visual inspection
Mooring Harness on Wing Tip	- 5d	Release
Wing Tip, Balancing Mass	- 5e	Visual inspection
Position Light	- 5f	Visual inspection

Right Main Landing Gear

Landing Gear Strut	- 6	Visual inspection
Wheel Fairing	- 6	Visual inspection
Tire Pressure (2.3 bar / 33 psi)	- 6	Check
Tire, Wheel, Brake	- 6	Visual inspection
Creep Marks	- 6	Visual inspection

Nose

Oil Level	- 7a	Check using dip-stick
Coolant Level	- 7a	Check using dip-stick

Note: Notable consumption of oil or coolant does normally not occur. It is therefore necessary nor sensible to refill before the level has dropped below minimum marking.

Cowling	- 7b-i	Visual inspection
Air intakes (vents)	- 7b-i	Free
Propeller	- 7b-i	Visual inspection – Ground Clearance minimum approx. 25cm (10 in)
Spinner	- 7b-i	Visual inspection
Nose Gear	- 7b-i	Visual inspection
Tire and Wheel	- 7b-i	Visual inspection
Wheel Fairing	- 7b-i	Visual inspection
Tire pressure (1.8 bar / 26 psi)	- 7b-i	Check

Before Starting Engine

Pre-flight inspection	Performed
Pedals	Adjusted
Seat belts	Fastened
Canopy	Closed and locked
Fuel Shut-off Valve	Open
Trim	Neutral
Trottle	Free, IDLE
Pro. Speed Control Lever	Free, max RPM
Carburetor Heat	Free, Off
Friction Device of Trottle Quadrant	Adjust
Avionics Master Switch	Off
Master Switch (Battery)	ON
Generator Warning Light	ON
Low Voltage Caution Light	ON
Fuel Pressure Warning Light	ON

Starting Engine

Electrical Fuel Pump	ON (noise of pump audible)
Fuel Pressure Warning Light	Off
Trottle – Cold Start	Idle
– Warm Engine	Approx. 2 cm forward
Choke – Cold Start	ON, fully pulled
– Warm Engine	Off

WARNING

Ensure people are clear of the propeller danger zone

Ignition Key	START
Trottle (after 2min. on 1000 RPM)	Maximum 1500RPM
Oil Pressure	Within green range after max 10sec.

CAUTION

If oil pressure is below 1.5 (22 psi) Shut engine immediately

Generator Warning Light	Off
Electrical Fuel Pump	Off
Fuel Pressure Warning Light	Off (wait for 10 sec)
Electrical Fuel Pump	ON

Before Taxiing

Electric Consumers	On as required
Powerplant Instruments	Check
Wing Flaps (indicator- and Flap Actuation)	Check, extend and retract fully
Avionics Master Switch	ON, radio check
Intercom	ON
Flight Instruments and Avionics	Set
Parking Brake	Release

CAUTION

Warm-up the engine to a minimum of 50 °C (122 °F) at 1100 to 1500 RPM (also possible during taxiing).

Taxiing

Brake	Check
Direction Control	Check
Flight Instruments and Avionics	Check

Before Take-off

Parking Brake	Set
Throttle	1000 RPM
Safety Harnesses	Fastened
Canopy	Closed and locked
Fuel Shut-off Valve	Check open
Powerplant instruments	Within green range
Fuel Quantity Indicator	Check
Wing Flaps	T/O
Trim	Neutral
Controls	Free
Throttle	1700 RPM
Propeller Speed Control Lever	Pull completely 3 times (RPM drop: 100-200RPM)
Ignition Switch	L – both – R – both (max drop 150RPM – diff. L/R 50RPM)
Carburetor Heat	Check for ice than – Off
Throttle CAUTION not on (wet)grass	Full for 5 sec. than idle – check RPM
Throttle	1000 RPM
Electrical Fuel Pump	ON
ACL	ON
Propeller Speed Control Lever	Max. RPM
Radio's and Transponder	Set
Parking Brake	Release

Take - Off

Throttle	Full (check 2400RPM \pm 100 RPM))
Elevator – at beginning of rolling	Neutral (on grass slightly backwards)
Control direction	Using rudder
Lift Nose wheel	51kts
Climb Speed	65kts
Flaps	Up after reaching 200 ft height
Prop Speed Control Lever	2400 RPM (after reaching safe height)
Electrical Fuel Pump	Above 1000ft OFF

Note: In crosswind conditions, directional control can be enhanced by using the single wheel brakes. Note that using the brakes for directional control increases the take-off roll distance. **(Never do this on a grass runway).**

Caution

For the shortest possible take-off distance to clear a 15 meter obstacle Lift-off Speed 57kts and Climb Speed 58kts

Note: In order to avoid excessive noise, reduce prop speed to 2400 RPM as soon a safe altitude has been reached.

Climb

Prop Speed Control Lever	2400 RPM
Throttle	Full
Powerplant instruments	Within green range
Flaps	UP (min. height 200ft)
Airspeed	65kts
Trim	Adjust (set)

Note: The best rate of climb speed decreases with increasing altitude

0 – 4000ft	Flaps T/O	65kts	Flaps UP	70kts
4000 – 7000ft	Flaps T/O	63kts	Flaps UP	67kts
7000 – 10000ft	Flaps T/O	62kts	Flaps UP	-----
10000 ft.	Flaps T/O	59kts	Flaps UP	-----

Cruise

Wing Flaps	Up
Throttle	As required
Prop Speed Control Lever	1900 - 2400 RPM
Trim	As required

Note: For favourable manifold pressure/RPM combination refer to Chapter 5

Caution

Max operating time of position lights: 50% of flight time

Decent

Altimeter	Set
Throttle	As required
Prop Speed Control Lever	1900 - 2400 RPM
Carburetor Heat	ON

Caution

To archive a fast decent	Prop Speed Control Lever	2400 RPM
	Throttle	Idle
	Carburetor Heat	ON
	Wing Flaps	UP
	Airspeed	117kts

Landing Approach

Airspeed	Max 81kts
Wing Flaps	T/O
Trim	As required
Throttle	As required
Prop Speed Control Lever	Max RPM
Carburetor Heat	ON
Electric Fuel Pump	ON
Wing Flaps	Landing
Approach Speed	60kts

Caution

Maximum operating time of landing light is 10% of flying time, but no longer than 5 minutes.

Note: Under conditions like strong headwind, danger of wind-shear or turbulence, a higher approach speed should be selected.

Balked Landing

Prop Speed Control Lever	Max RPM
Throttle	Full
Carburetor Heat	Cold
Wing Flaps	T/O
Airspeed	58kts

After Landing

Throttle	Idle
Wing Flaps	UP
Carburetor Heat	OFF
Landing Light	OFF
Transponder	SBY

Engine Shut-Down

Throttle	Idle
Parking Brake	Set
Electric Fuel Pump	OFF
Avionics Master Switch	OFF
Ignition Switch	OFF (key removed)
Master Switch (Battery)	OFF
After Flight Check	ELT check if triggered (auto/ARMED)

Note: In case of Post ignition due to hot weather conditions and the use of MOGAS, the ignition should be switched on, choke pulled and after ± 3 sec, ignition should be turned off again.

LIMITATIONS

Manoeuvring speed	Va	104 kts
Max flap extended	Vfo	81 kts
Max. structural cruising speed	Vno	116 kts
Never exceed speed	Vne	157 kts
Maximum Take-off RPM (5 min)		2550 RPM
Maximum continuous RPM		2400 RPM
Total Fuel quantity		79 litres
Usable Fuel quantity		77 litres

EMERGENCY CHECKLIST

FIRE ON THE GROUND

Fuel Shut-off Valve	Closed
Throttle	Full
Master Switch	OFF
Ignition Switch	OFF
Evacuate Airplane Immediately	Canopy

ELECTRICAL FIRE incl. SMOKE (ground)

Master Switch	OFF
IF ENGINE IS RUNNING	
Throttle	Closed
Ignition Switch	OFF
Open	
Fire Extinguisher	As required

FIRE DURING TAKE-OFF

Sufficient Runway	Brakes max
Throttle	Idle
Further action as Fire on the ground	

ELECTRICAL FIRE incl. SMOKE(in flight)

Master Switch	OFF
Cabin Heat	Closed
Cabin Air	Open
Fire Extinguisher	As required

FIRE IN FLIGHT

Flaps	Take-off
Shut-off Valve	Closed
Throttle	Full
Electrical Fuel Pump	OFF
Cabin Heat	Closed
Master Switch	OFF
Preform Emergency Landing	

CABIN FIRE IN FLIGHT

Airspeed	70 KTS Fuel
Master Switch	OFF
Cabin Air	Open
Cabin Heat	Closed
Fire Extinguisher	As required
Land	ASAP

EMERGENCY LANDING POWER OFF GLIDING

Airspeed	59 KTS	600 kg: 64 KTS	730 kg: 70 KTS
Fuel Shut-off Valve	Closed		
Ignition Switch	OFF		
Flaps	As required		
Master Switch	OFF		