

# CHECKLIST DYNAMIC WT9

# F-HVAP



## ÖSC Salzburg



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Rev.NC

Note: This checklist does not substitute a proper awareness of the latest revision of the flight handbook

**OUTSIDE CHECK****I. NOSE LANDING GEAR**

tow bar ..... remove  
wheel fairing ..... visual check  
gear leg ..... visual check  
tire ..... condition

**II. LEFT MAIN LANDING GEAR**

wheel fairing ..... visual check  
gear leg ..... visual check  
inspection hole cover ..... installed  
brakes ..... visual check  
tire ..... condition

**III. LEFT WING**

Fuel drains ..... drain (if required)  
Fuel tank cap ..... check with dip stick  
Leading edge & surface ..... visual check  
stall warner ..... check on condition  
lights ..... condition  
wingtip ..... condition  
aileron ..... condition ( pins, bolts)  
flap ..... condition ( pins, bolts)

**IV.) LEFT FUSELAGE**

surface ..... visual check

**V.) EMPENNAGE**

horizontal/vertical stabilizer ..... visual check  
elevator ..... condition ( pins, bolts, movement)  
rudder ..... condition (movement)  
fin ..... (non secured, not damaged)  
trim tab ..... check condition (no excessive

**OUTSIDE CHECK****VI.) RIGHT FUSELAGE**

surface ..... visual check

**VII.) RIGHT WING**

Fuel drains ..... drain (if required)  
Fuel tank cap ..... check with dip stick  
Leading edge & surface ..... visual check  
stall warner ..... check  
lights ..... condition  
wingtip ..... condition  
aileron ..... condition (pins, bolts)  
flap ..... condition (pins, bolts)

**VIII. RIGHT MAIN LANDING GEAR**

wheel fairing ..... visual check (cracks, debris)  
gear leg ..... visual check  
inspection hole cover ..... installed  
brakes ..... visual check (wear, fluid leaks)  
tire ..... condition (wear, inflation)

**IX.) POWER PLANT**

Propeller ..... CHECK (damages)  
Spinner ..... visual check  
air inlets ..... all unobstructed  
operating fluids ..... check for leaks  
oil quantity ..... electric ignition off  
- open cover  
- oil tank cap open  
- remove dip stick  
- turn propeller until gurgle is heard (**left turn**)  
- extract dip stick and check oil level (level to be above lower marking)  
- refuel oil if needed  
cowling ..... visual check  
landing light ..... visual check

**I. BEFORE ENGINE START**

Ground equipment ..... removed  
 Pitot cover ..... onboard  
 Pre-flight inspection ..... performed  
 Passenger briefing ..... briefed  
 Weight & balance ..... verified  
**RESCUE SYSTEM ..... lock removed**  
 Safety harness ..... locked  
 Wing flaps ..... FLAPS 0  
 Brake ..... set MAX  
 Canopy ..... closed & latched  
 Analog/digital switch ..... analog  
 Electric fuses ..... CHECK

**BEFORE ENGINE START CHECKLIST COMPLETE**
**II. ENGINE STARTING**

Fuel selector ..... switched LEFT  
**MASTER SWITCH ..... ON**  
**Starter key ..... one turn right**  
 ACL lights ..... ON  
 CHOKE  
 - cold engine start ..... OPEN  
 - warm engine start ..... CLOSE  
 THROTTLE  
 - cold engine start ..... IDLE  
 - warm engine start ..... open (1 turn)  
**FUEL PUMP ..... ON establish  
 pressure, then off**  
**IGNITION ..... ON (both)**  
 Propeller area ..... Clear  
 Starter key ..... START (10s max)

**After engine start**

THROTTLE ..... adjust 2000rpm  
 Oil pressure ..... **min. 2bar in 10s**  
 CHARGE warn. light ..... CHECK OFF  
 CHOKE ..... CLOSE

**ENGINE START CHECKLIST COMPLETE**
**III. BEFORE TAXI CHECK**

AVIONICS ..... ON  
 D1000 LH/RH ..... ON  
 AUTOPILOT ..... ON  
 Radio ..... ON  
 Transponder ..... ON  
 ANALOG/DIGITAL SWITCH ..... DIGITAL  
 THROTTLE ..... 2000 rpm  
 Voltmeter ..... loading  
 SCREEN ..... PFD/EMS  
 Altimeter ..... Set  
 BUGS HDG/ALT/IAS ..... as  
 required  
 Transponder ..... set VFR  
 HSI SCE, BRG 1 & 2 ..... as  
 required  
 Fuel computer ..... adjust  
 oil pressure ..... > 2 bar  
 oil temperature ..... min. 50°C  
 Taxi Clearance ..... OBTAIN  
 Taxi area ..... clear  
 Brake ..... release

**BEFORE TAXI CHECKLIST COMPLETE**
**IV. TAXI CHECK**

Brakes ..... CHECK  
 Directional Controls ..... CHECK  
 Power Setting ..... as required  
 Flight instruments ..... CHECK

**TAXI CHECKLIST COMPLETE**



## X. CRUISE

THROTTLE ..... as required  
 TRIM ..... as required  
 Engine parameters ..... monitor  
 Fuel selector ..... monitor  
     *change regularly at least all 60 min*

Flight instruments ..... check & set  
 Carburator ..... as required

*optimum cruise speed: 97-118 KIAS  
 power setting 65%: 4800 rpm / 26"*

## XI. ARRIVAL

Altimeters ..... set QNH, compare  
 Carburator ..... as required  
 Fuel selector ..... select fullest  
 Safety harness ..... Fasten  
 Briefing ..... complete

ARRIVAL CHECKLIST

COMPLETE

## XII. DESCENT

THROTTLE ..... as required  
 AIRSPEED ..... as required  
 TRIM ..... as required  
 Engine parameters ..... monitor

*avoid undercooling during descent.....increase  
 rpm to 3000*

DESCENT CHECKLIST

COMPLETE

## XIII. APPROACH

Fuel selector ..... LEFT  
 FUEL PUMP ..... ON  
 LAND lights ..... ON  
 Carburator heat ..... ON (OAT<24°C)  
 Wing flaps ..... as required  
 AIRSPEED ..... 65 - 70 KIAS  
 TRIM ..... as required  
 THROTTLE ..... as required  
 Engine parameters ..... check

flap speeds:

FLAPS 1 at 70 KIAS

FLAPS 2 at 65 KIAS

APPROACH CHECKLIST

COMPLETE

## XIV. LANDING

### Downwind/Base

AIRSPEED ..... <70 KIAS  
 Wing flaps ..... Set 1 (lock)  
 Trim ..... as required

### Base

Wing flaps ..... Set 2 (lock)  
 AIRSPEED ..... ~65 KIAS  
 Trim ..... as required

### Final

Wing flaps ..... 2-3 (lock)  
 AIRSPEED ..... 60 KIAS,  
     *Flare 50 - 55 KIAS*  
 THROTTLE ..... IDLE  
 Brake ..... as required

LANDING CHECKLIST

COMPLETE

## XV. AFTER LANDING

Carburator ..... OFF  
 THROTTLE ..... adjust for taxi  
 Wing flaps ..... FLAPS 0  
 TRIM ..... set neutral  
 FUEL PUMP ..... OFF  
 LAND lights ..... OFF  
 Transponder..... STBY

AFTER LANDING CHECKLIST

COMPLETE

## XVI. SHUTDOWN

BRAKE ..... PARK  
 THROTTLE ..... IDLE  
 Block on ..... record  
 Radio ..... OFF  
 Transponder ..... OFF  
 Electrical Consumers ..... OFF  
 Autopilot ..... OFF  
 Magneto 1 ..... OFF  
 Magneto 2 (wait 3s) ..... OFF  
 Starter key ..... OFF  
 NAV/ACL lights ..... OFF  
 MASTER SWITCH ..... OFF  
**RESCUE SYSTEM** ..... **install lock**  
 Aircraft ..... secured

SHUTDOWN CHECKLIST

COMPLETE

## MEMORY ITEMS

### OPERATION SPEEDS

#### START

$v_r$  (flaps 1, stalling speed) ..... 37 kts  
 normal 15ft obstacle ..... 54 kts  
 $v_x$  (best angle at T/O) ..... 54 kts  
 $v_y$  (best ratio at T/O) ..... 69 kts  
 ENGINE OUT af. rotation ..... 65-70 kts

#### FLIGHT

$V_A$  Maneuver ..... 97 kts  
 $V_{FE}$  flaps full ..... 75 kts  
 $V_{NO}$  calm air ..... 135 kts  
 $V_{NE}$  never exceed ..... **150 kts**  
 $V_{RA}$  rough air speed ..... 118 kts  
**Limit cross-wind take-off** ..... **16 kts**  
**Limit cross-wind landing** ..... **14 kts**

#### LANDING

normal (flaps LDG) ..... 65-70 kts  
 GO-AROUND (min. speed) ..... 51kts  
 EMERGENCY landing without engine ..... 59-62 kts  
 PRECAUTIONARY LDG ..... 59-62 kts  
 gliding speed ..... 70 kts

#### STALL SPEEDS

**Take-Off (flaps 1)** ..... **37 kts**  
**Cruise (flaps 0)** ..... **42 kts**  
**Landing (flaps 2)** ..... **35 kts**  
**Landing (flaps 3)** ..... **33 kts**

#### ENGINE

use of starter ..... 3 times max  
 time to use starter ..... 10s max  
 cooling btw. 2 start cycles ..... min. 2min  
 take off power ..... max.5800 rpm  
 continous power ..... 5500 rpm

oil refuilling ..... max. 0,5l  
 oil pressure ..... min 12psi  
 normal oil pressure ..... 29-73 psi  
 oil temperature T/O ..... min 50°C  
 oil temperature max. ..... 130°C  
 cooling liquid temp max. ..... 120°C

MTOW ..... 600kg

## Performance at MTOW

### TAKE OFF (obstacle 50ft)

pressure altitude	temperature	paved runway	grass field
0 ft	15°C	336m	374m

### LANDING (obstacle 50ft)

pressure altitude	temperature	paved runway	grass field
0 ft	15°C	263m	272m

### Sideslip

airspeed ..... 65 KIAS  
 Flaps ..... Position 2  
 Fuel selector ..... set to higher wing side  
 Power ..... Idle

## EMERGENCY PROCEDURES

all emergency procedures are based on manufacturer specifications

### EMERGENCY SHUTDOWN ON GROUND

IGNITION ..... OFF  
 FUEL PUMP ..... OFF  
 Fuel Selector ..... OFF  
 Starter key ..... OFF  
 MASTER SWITCH ..... OFF  
**THROTTLE ..... IDLE**

### ENGINE FAILURE on TAKE OFF ROLL

THROTTLE ..... IDLE  
 FUEL PUMP ..... AS REQUIRED  
 Fuel Selector ..... OFF  
 Starter key ..... OFF  
 MASTER SWITCH ..... OFF  
 MASTER SWITCH ..... OFF  
 Fuel Selector ..... OFF  
 All switches ..... OFF  
 Brake ..... PARK

### ENGINE FAILURE on TAKE OFF UP TO 500ft

NOSE ..... down maintain speed  
 AIRPSEED ..... 65-70 KTS  
 Perform landing ..... straight ahead  
 Starter key ..... OFF  
 MASTER SWITCH ..... OFF  
 MASTER SWITCH ..... OFF  
 Fuel Selector ..... OFF  
 All switches ..... OFF  
 Brake ..... PARK

**PRECAUTIONARY LANDING WITH ENGINE POWER**

LANDING AREA ..... Select (check wind)  
Radio ..... MAYDAY (121.5MHz)  
Transponder ..... Set 7700  
ELT remote control ..... ACTIVATE (off airfield)  
Field check ..... estimate landing area  
Field pattern ..... fly, if possible  
Fuel selector ..... LEFT  
Fuel pump ..... ON  
Flaps ..... FLAPS 3 (check locked)  
Airspeed ..... 59-62 KIAS  
THROTTLE ..... as required  
ELT remote control ..... if OK switch OFF

**EMERGENCY LANDING WITHOUT ENGINE POWER**

Airspeed ..... 65-70 KIAS  
Landing area ..... select suitable area  
Radio ..... 3x MAYDAY  
(121,500 MHz)  
Transponder ..... Set 7700  
Flaps ..... as required  
Airspeed ..... 59-62 KIAS  
Fuel pump ..... OFF  
Fuel selector ..... OFF  
IGNITION ..... OFF  
Starter key ..... OFF  
MASTER SWITCH ..... OFF  
Safety harness ..... Fasten  
ELT remote control ..... if OK switch OFF

**EMERGENCY PARACHUTE SYSTEM ACTIVATION**

Activate in case of life-threatening emergency

Impact area ..... determine terrain  
Landing area ..... select suitable area  
Radio ..... give emergency call  
Ignition ..... OFF

**RESCUE SYSTEM** ..... lift protector  
**RESCUE SYSTEM** ..... PULL STRONGLY

**After deployment:**

FUEL PUMP ..... OFF  
Fuel selector ..... OFF  
Starter key ..... OFF  
MASTER SWITCH ..... OFF  
Safety harness ..... Fasten  
Emergency landing body position ..... assume

**LOSS OF GENERATOR**

Activate in case of life-threatening emergency

Generator ..... OFF  
lights ..... OFF  
unessential consumers ..... OFF  
**Use of battery only** ..... 30min

Note:

The engine will continue to function without generator.  
Landing within 30minutes on suitable field. There is risk of losing COM and Transponder.



**LOSS OF BOTH DYNON SCREENS**

Airspeed Indicator, Altimeter..... use back-up instruments  
Compass ..... use back-up instrument

Note:  
Decide to land at nearest airfield, there is no monitoring of engine instruments anymore.

**OPENING OF CANOPY IN FLIGHT**

flight attitude ..... ensure symmetric  
ventilation window ..... open  
window handle ..... clutch tightly  
airspeed ..... 65kts  
Canopy ..... close and latch

**ENGINE PARTIAL POWER LOSS**

Fuel selector ..... fullest  
FUEL PUMP ..... ON (LH tank)  
Engine parameters ..... Check  
irregular running due to carburetor icing  
carburetor ..... ON  
Engine parameters ..... CHECK  
smooth running not recovered ..... perform emergency landing without engine power

inconsistent fuel supply (loss of fuel pressure)  
Fuel selector ..... change tank  
FUEL PUMP ..... ON  
Engine parameters ..... CHECK

**AIR START**

Air speed ..... 65-70 KIAS  
Altitude ..... Check  
Field selection ..... Select  
Avionics, AP ..... OFF  
External lights ..... OFF  
CHOKE ..... OFF  
THROTTLE ..... slightly open  
MASTER SWITCH ..... ON  
Fuel selector ..... fullest tank  
FUEL PUMP ..... ON  
IGNITION ..... ON  
Starter key ..... OFF-START-CHARGE  
*when engine is running*  
Engine parameters ..... check  
Avionics ..... ON  
FUEL PUMP ..... OFF  
*Unsuccessful start*  
Emergency landing ..... land without power

**ENGINE FIRE ON GROUND**

Brake ..... MAX  
FUEL PUMP ..... OFF  
Fuel selector ..... OFF  
THROTTLE ..... MAX  
IGNITION ..... OFF (af. engine stop)  
Starter key ..... OFF  
*Master switch* ..... *OFF*  
*Saftey harness* ..... *release*  
*Canopy* ..... *Open*  
Fire ..... try to extinguish

**ENGINE FIRE ON TAKEOFF**

FUEL PUMP ..... OFF  
Fuel selector ..... OFF  
THROTTLE ..... MAX  
Cabin heating ..... Close  
Windows ..... Close  
IGNITION ..... OFF  
Emergency LDG ..... perform  
Safeter harness ..... release  
*Canopy* ..... *Open*  
*Aircraft* ..... *exit*  
Fire ..... try to extinguish

**ENGINE FIRE ON TAKEOFF and IN FLIGHT**

MASTER SWITCH ..... OFF  
Cabin heating ..... Close  
Fire source ..... Locate  
Fire ..... try to extinguish  
Cabin ventilation ..... Fully Open  
Emergency LDG ..... perform  
Safeter harness ..... release  
*Canopy* ..... *Open*  
*Aircraft* ..... *exit*  
Fire ..... try to extinguish

**ENGINE FIRE IN FLIGHT**

FUEL PUMP ..... OFF  
Fuel selector ..... OFF  
THROTTLE ..... MAX  
Cabin heating ..... Close  
Windows ..... Close  
IGNITION ..... OFF  
Fire ..... try to extinguish with  
sideslip  
Airspeed ..... smooth air: max 148 kts  
rough air: max 118 kts  
Emergency LDG ..... perform  
Safeter harness ..... release  
*Canopy* ..... *Open*  
*Aircraft* ..... *exit*  
Fire ..... try to extinguish

**ENGINE FIRE ON GROUND**

Brake ..... MAX  
Fire source ..... Locate  
IGNITION ..... OFF both circuits  
Starter key ..... OFF  
*Master switch* ..... *OFF*  
*Saftey harness* ..... *release*  
*Canopy* ..... *Open*  
*Aircraft* ..... *Exit*  
Fire ..... try to extinguish