

N42° 13' 08" E02° 51' 00"

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STALL SPEED

Conditions: Weight: 550 kg - Engine: IDLE - No ground effect

	Lateral Banking			
	0°	30°	45°	60°
Flaps	KIAS	KIAS	KIAS	KIAS
0°	44	47	52	63
15°	42	45	50	60
38° (Full)	39	42	47	56

CRUISE PERFORMANCE

Conditions: Pressure Altitude 0 ft. OAT +15°C

Propeller RPM	Speed KIAS	Consumption	Endurance (hours)	Range (N. Miles)	
55%	1900	96	15 lts/h	5.8	599
65%	2050	102	18 lts/h	4.9	495
75%	2150	108	20 lts/h	4.4	472

Conditions: Pressure Altitude 2000 ft. OAT +11°C

Propeller RPM	Speed KIAS	Consumption	Endurance (hours)	Range (N. Miles)	
55%	1950	98	15 lts/h	5.8	571
65%	2070	106	18 lts/h	4.9	517
73%	2150	109	19 lts/h	4.6	501

Conditions: Pressure Altitude 4000 ft. OAT +7°C

Propeller RPM	Speed KIAS	Consumption	Endurance (hours)	Range (N. Miles)	
55%	2020	101	15 lts/h	5.8	588
65%	2080	105	17 lts/h	5.1	540
70%	2150	110	18.5 lts/h	4.7	520

Conditions: Pressure Altitude 6000 ft. OAT +3°C

Propeller RPM	Speed KIAS	Consumption	Endurance (hours)	Range (N. Miles)	
55%	2060	104	15 lts/h	5.8	606
60%	2160	108	17 lts/h	5.1	556

Conditions: Pressure Altitude 8000 ft. OAT -0.8°C

Propeller RPM	Speed KIAS	Consumption	Endurance (hours)	Range (N. Miles)	
55%	2120	99	15 lts/h	5.8	578
58%	2150	102	16 lts/h	5.4	556

PRE-FLIGHT INSPECTIONS

COCKPIT

Flight Manual:
 Weight and Balance:
 Parking brake:
 Engine throttle:
 Magnetos:
 Fuel shutoff valves:
 Electric Fuel pump:
 Radio and Avionics:
 All Lights:
 Master switch:
 Generator switch:
 Fuel level:
 Stall Warning:
 Trim disconnect switch:
 Trim control:

Navigation and Strobe Lights:
 Flaps control:

Master and Generator switch:

LEFT WING

Fuel level:

 Pitot:
 Left side leading and edge:
 Left aileron, Left Flap and hinges:
 Left main Landing gear:

FUSELAGE AND EMPENNAGE

Fuselage:
 Horizontal tail and Tab:
 Vertical tail and Rudder:

RIGHT WING

Right main Landing gear:
 Right aileron, Left Flap and hinges:
 Right side leading and edge:
 Fuel level:

- Check that a copy is on board
- Check if within limits
- ON
- Adjust friction lock
- OFF
- Left / Right: ON
- OFF
- OFF
- OFF
- ON
- ON, check generator light is illuminated and ammeter operational.
- Check level on the basis of the flight plan.
- Check acoustic operation
- ON
- Activate control to full scale checking travel limits and instrument indication.
- Check operation and OFF
- Activate controls to full extension checking travel limits and instrument indication.
- OFF
- Checking visually for desired fuel level and secure left tank vent: check for obstructions.
- Remove protection cap and check that is unobstructed.
- Visual inspection
- Visual inspection
- Check inflation, tire condition and alignment.
- Check skin condition
- Visual inspection
- Visual inspection
- Check inflation, tire condition and alignment.
- Visual inspection
- Visual inspection
- Checking visually for desired fuel level and secure right tank vent: check for obstructions.

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PRE-FLIGHT INSPECTIONS

NOSE SECTION

- Right & Left side static port: Check for obstructions
- Nose wheel and tire: Check inflation, tire condition and condition of rubber shock absorber discs.
- Propeller and spinner: Check for nicks and security

ENGINE

- Open engine cowling and perform the following:
- Check no foreign objects are present.
 - Check the cooling circuits for losses, check coolant reservoir level, insure radiator honeycomb is unobstructed.
 - Check oil level by rotating the propeller in counterclockwise until an audible sound is present. Check lubrication circuit for losses, check oil reservoir level and insure radiator honeycomb is unobstructed.
 - Inspect fuel circuit for losses, check integrity of fireproof protection braids, drain circuit using the specific drainage valve located on the firewall. Drainage operation must be carried out with aircraft parked on level surface.
 - Check connection and integrity of air intake system.
 - Check integrity of silent-block suspensions.
 - Check that all parts are secure or safe tied.
 - Close engine cowling.

BEFORE STARTING ENGINE

- Pre-Flight inspection: Complete
- Doors: Close and Secure
- Seat and seat belts: Adjust and Lock
- Circuit Breakers: Check In
- Parking brake: ON

STARTING ENGINE

- Generator & Master switch: ON
- Electric fuel pump: ON
- Engine throttle: IDLE
- Choke: As needed
- Magnetos: Set switch to Both
- Propeller area: Clear
- Strobe Light: ON
- Ignition key: Start
- Propeller RPM: 1000-1100 rpm
- Choke: OFF
- Instruments: Check oil pressure rise within 10 sec. (max. cold value 7 bar)
- Electric fuel pump: OFF and Check fuel pressure and then switch ON again.

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LANDING WITH FLAT TIRE

- Pre-landing checklist: Complete
- FLAT NOSE TIRE:** Flaps: Full
Maintain aircraft **nose high** attitude as long as possible
 - FLAT MAIN TIRE:** Approach: As usual
Touchdown with **good tire first** and hold aircraft off flat tire as long as possible

ELECTRICAL POWER SYSTEM MALFUNCTION

- Master and Generator switch: OFF if Generator light illuminates
- Master and Generator switch: ON
- Master and Generator switch: OFF if Generator light remain illuminates

TRIM SYSTEM FAILURE

- LOCKED CONTROL:** Trim control: Check correct position
 - RUNAWAY:** Trim disconnect switch: OFF
- Speed: Adjust to control the aircraft without excessive stick force and land as soon as possible

UNINTENTIONAL FLIGHT INTO ICING CONDITIONS

- Warmer external Temp: Locate and change attitude and direction of flight
- Flight controls: Move regularly
- Carburetor Heat: ON
- Propeller rpm: Increase to avoid ice formation on the propeller blades
- Cabin Heat: ON

RECOVERY FROM UNINTENTIONAL SPIN

- Engine throttle: IDLE
- Flight controls: Apply and hold full rudder opposite to the direction of spin.
Move and hold stick forward until spin is halted.
Neutralize rudder. Make a smooth recovery by pulling the stick back gently averting speeds in excess of V_{NE} and maximum load factor.
- Engine throttle: Readjust to restore power

REFERENCE SPEEDS

Rotation V_R :	47 Kt	Maneuver (550 Kg) V_A :	93 Kt
Lift off V_{LO} :	49 Kt	Flaps extended V_{FE} :	68 Kt
Obstacle T/O V_{OBS} :	56 Kt	Normal operation V_{NO} :	106 Kt
Obstacle Land V_{OBS} (0° / 38°):	58 / 48 Kt	Stall (normal) V_S :	44 Kt
Max rate of climb V_Y :	73 Kt	Stall (landing) V_{S0} :	39 Kt
Never exceed V_{NE} :	134 Kt	Glide 12.2:1 (550 Kg / 450 Kg):	66 / 60 Kt

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SMOKE & FIRE – WHILE PARKED OR DURING TAKE-OFF

Fuel shutoff valves:	OFF
Electric Fuel pump:	OFF
Cabin Heat:	OFF
Take-Off:	Abort if possible
Engine running:	Maintain, use up remaining fuel in carburetors
Magnetos:	OFF
Master and Generator switch:	OFF

Warn bystanders to clear the area as fast as possible. Without removing the engine cowling use CO₂ or a powder fire extinguisher to put out the flames directing spray towards cowling's air intakes.

ENGINE FIRE – DURING FLIGHT

Fuel shutoff valves:	OFF
Electric Fuel pump:	OFF
Cabin Heat:	OFF
Engine throttle:	All IN
Magnetos:	OFF
Flaps:	As needed

Do not attempt Air Start. Carry out emergency procedure for "Forced Landing"

CABIN FIRE DURING FLIGHT

Master and Generator switch:	OFF
Cabin Heat:	OFF
Door vents:	Open

Direct fire extinguisher towards flame base. Carry out emergency procedure for "Forced Landing"

FORCED LANDING WITHOUT ENGINE POWDER

Speed:	66 Kt
Landing area:	Locate
Fuel shutoff valves:	OFF
Electric Fuel pump:	OFF
Magnetos:	OFF
Seat and seat belts:	Tighten, release door safety lock and unlatch doors.
Flaps:	Full
Master and Generator switch:	When certain to land: OFF

POWER-ON FORCED LANDING

Descend slope:	Prompt
Flaps:	As needed
Fuel shutoff valves:	OFF
Seat and seat belts:	Tighten, release door safety lock and unlatch doors.
Fuel shutoff valves:	OFF
Electric Fuel pump:	OFF
Flaps:	Full
Magnetos:	OFF
Master and Generator switch:	OFF

BEFORE TAXIING

Radio and Avionics:	ON
Transponder:	Set Squawk to 7000 and Switch to Stand by
Navigation Lights:	ON
Trim control:	Move to LH
Trim position:	Take-off (Center position)
Fuel shutoff valves:	Left / Right: ON
Flaps:	Up
Request control to Tower:	Authorization received

TAXIING

Brakes:	Check
Flight instruments:	Check
Directional gyro:	Check Left / Right turns and Set

BEFORE TAKE-OFF

Parking brake:	ON
Landing Light:	ON
Engine instruments:	Check Oil Temp: 50-110°C Cylinder heads Temp: max135°C Oil pressure: 2 – 5 bar Fuel pressure: 2.2 to 5.8 psi
Ammeter:	Check ammeter is charging
Magnetos:	Propeller at 1700 rpm and Test both Magnetos (max. 130 rpm)
Fuel indicators:	Check instrument levels
Flaps:	Take-Off - 15°
Flight controls:	Stick free and zero trim
Request control to Tower:	Authorization received

TAKE-OFF AND CLIMB

Traffic and Wind:	Clear final and check Wind on runway
Parking brake:	OFF
Carburetor Heat:	OFF
Transponder:	Switch to ALT
Engine Throttle:	Full (Take-Off 2100 +/- 100 rpm Propeller)
Rotation Speed:	Vr = 47 kt
Climb Speed:	Vy = 73 Kt / Vx = 56 kt

AT 500' AGL

Flaps:	Retracted
Landing Light:	OFF
Electric Fuel pump:	OFF
Propeller rpm:	Adjust to max 2050 rpm



Tecnam P92-JS - Checklist

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Tecnam P92-JS - Checklist

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CRUISE

Propeller rpm:	Set to max 2000 rpm
Engine instruments:	Check Oil Temp: 90-110°C Cylinder heads Temp: 90-135°C Oil pressure: 2 –5 bar Fuel pressure: 2.2 to 5.8 psi
Carburetor Heat:	As required
Fuel shutoff valves:	Close Left shutoff valve as required

BEFORE LANDING

Electric Fuel pump:	ON
Landing Light:	ON
Seat and seat belts:	Adjust and Lock
Carburetor Heat:	As required
Flaps:	Extend gradually to Full flap position
Fuel shutoff valves:	Left / Right: ON
Approach reference Speeds:	60 Kt - Full Flap 68 Kt – 15° Flap 70 Kt – 0° Flap 44 Kt – Touchdown / Full Flap

BALKED LANDING

Engine throttle:	Full (Take-Off 2100 +/- 100 rpm Propeller)
Flaps:	Take-Off - 15°
Carburetor Heat:	As required
Climb Speed:	60 Kt

AFTER LANDING

Flaps:	Up
Landing Light:	OFF
Transponder:	Switch to Stand by
Carburetor Heat:	OFF
Electric Fuel pump:	OFF

ENGINE SHUTDOWN

Parking brake:	ON
Propeller rpm:	Keep engine running at 1200 rpm for about 1 minute.
Radio and Avionics:	OFF
Navigation Light:	OFF
Magnetos:	OFF
Strobe Light:	OFF
Master and Generator switch:	OFF

ENGINE FAILURE DURING TAKE-OFF

Engine throttle:	IDLE
Magnetos:	OFF
Flaps:	Up
Electric Fuel pump:	OFF
Fuel shutoff valves:	OFF
Call Tower:	Declare Emergency
Master and Generator switch:	OFF

ENGINE FAILURE AFTER TAKE-OFF

Speed:	60 Kt
Landing area:	Locate
Engine throttle:	IDLE
Electric Fuel pump:	OFF
Fuel shutoff valves:	OFF
Magnetos:	OFF
Flaps:	As needed
Call Tower:	Declare Emergency
Master and Generator switch:	OFF

ENGINE FAILURE DURING FLIGHT - IRREGULAR RPM

Engine throttle:	Check
Carburetor Heat:	ON
Electric Fuel pump:	ON
Fuel shutoff valves:	Left / Right: ON
Irregular RPM condition persist:	Land at the closest airport

ENGINE FAILURE DURING FLIGHT – LOW FUEL PRESSURE (<2.2 psi)

Electric Fuel pump:	ON
Fuel shutoff valves:	Left / Right: ON
Low Fuel pressure condition persist:	Land at the closest airport

ENGINE FAILURE DURING FLIGHT – LOW OIL PRESSURE

Oil Temp:	If stable: Land at closest airport. If increasing: Engine throttle: 70 Kt Land at the closest airport and be alert for impending engine fault.
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ENGINE AIR START

Carburetor Heat:	ON
Fuel shutoff valves:	Left / Right: ON
Electric Fuel pump:	ON
Engine throttle:	50%
Master and Generator switch:	ON
Ignition key:	Start
Engine instruments:	Check readings and land at the closest airport