



Aircraft Checklist

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POH/AFM takes priority over this checklist.

CESSNA T182T G1000 KAP140 A/P, CONT. FLOW O2 SYS. NORMAL OPERATIONS EMERGENCY PROCEDURES (REVERSE)

Updated October 19th, 2022

RUNWAY ENTRY

Time for Lights, Camera, Action, Traffic

Timer START
Lights LANDING & STROBES ON
Transponder VERIFY CODE/ALT
Mixture RICH
Prop Control FULL IN
Traffic VERIFY RWY/APCH CLEAR
Runway Number CONFIRM
Heading/Compass MATCHES RWY

NORMAL TAKEOFF

Flaps 0°-20° (10° PREFERRED)
Throttle FULL
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Airspeed "ALIVE"
Rotate 55 KIAS "ROTATE"
Climb 80 KIAS

SHORT FIELD TAKEOFF

Flaps 20°
Brakes HOLD
Throttle FULL
Mixture ADJUST TO 24 GPH
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Brakes RELEASE
Airspeed "ALIVE"
Rotate 50 KIAS "ROTATE"
Climb 60 KIAS
Obstacle CLEARED
Flaps UP WHEN >70 KIAS
Climb 80 KIAS

SOFT FIELD TAKEOFF

Flaps 20°
Brakes NONE
Control Wheel FULL AFT
Throttle SLOWLY ADVANCE FULL
Engine Instruments "GREEN"
Engine RPM AT LEAST "2300 RPM"
Airspeed "ALIVE"
Main Gear LIFT OFF
Pitch NOSE OVER
Ground Effect MAINTAIN TO 60 KIAS
Flaps UP WHEN >70 KIAS
Climb 80 KIAS

AFTER TAKEOFF (400' AGL)

Airspeed 90-100 KIAS
Power 25" / 2400 RPM
Mixture 16 GPH
Flaps UP
Engine Instruments GREEN
Cowl Flaps AS REQ'D
O2 AS REQ'D
Landing/Taxi Light AS REQ'D

CRUISE

Power 15-28" / 2300-2400 RPM
Trim AS REQUIRED
Engine Instruments CHECK
Cowl Flaps CLOSE
Mixture LEAN AS REQUIRED
EGT 50°F/30°C Rich of Peak or Max TIT

PRE-MANEUVER CHECKS

Clear the area CHECK
Heading ESTABLISHED & BUGGED
Altitude ESTABLISHED & BUGGED
Place to land CHECK
Set Power & Config. CHECK
• Fuel Selector BOTH
• Mixture RICH
• Lights ON

DESCENT / APPROACH

ATIS/AWOS CHECK
Altimeters SET
PFID, Standby, KAP140 A/P
Clearance OBTAIN
Radios/GPS TUNE/IDENT
Approach Briefing COMPLETE
Fuel Selector BOTH
Lights AS REQUIRED
Cowl Flaps CLOSED
Mixture SLIGHTLY ENRICH

PRE-LANDING

Fuel Selector BOTH
Mixture RICH
Prop Control FULL IN
Lights AS REQUIRED
Flaps AS REQUIRED
Seatbelts FASTENED

NORMAL LANDING

Flaps FULL
Airspeed 65 KIAS
Touch Down MAIN WHEELS FIRST
Brakes MINIMUM REQUIRED

SHORT FIELD LANDING

Flaps FULL
Airspeed 60 KIAS
Touch Down MAIN WHEELS FIRST
Flaps UP
Brakes MAXIMUM
Control Wheel FULL AFT

SOFT FIELD LANDING

Flaps FULL
Airspeed 65 KIAS
Touch Down NOSE HIGH WITH PWR
Brakes NONE
Control Wheel FULL AFT

AFTER LANDING

Flaps UP
Mixture LEAN 1"
Elevator Trim SET FOR TAKEOFF
Cowl Flaps OPEN
Timer RESET / START
Lights LANDING / STROBES OFF
Radios CONTACT GND / CALL CLR
Flight Plan CLOSE IF REQ'D

SHUTDOWN / SECURE

Brakes AS REQUIRED
Avionics Master OFF
Timer >2 MIN.
Mixture IDLE/CUTOFF
Wait for engine to shut off
Magnetos OFF / REMOVE KEY
Tach Time RECORD
Standby Batt OFF
Master Switch OFF
Fuel Selector LEFT OR RIGHT
Control Wheel Lock INSTALLED
Aircraft TIE DOWN
Windshield CLEAN AS REQ'D
Chocks AS REQ'D
Aircraft Log COMPLETE
Cowl Plugs/Covers INSTALLED
Cowl Flaps CLOSED

SPEEDS

V_R 55 KIAS
V_X 64 KIAS
V_Y 84 KIAS
V_{FE} 100 KIAS
V_A (3100 / 2100 lb) 110 / 91 KIAS
V_S 51 KIAS
V_{SO} 41 KIAS
Pattern 95 KIAS
Abeam Numbers 85 KIAS
Base 75 KIAS
Final 65 KIAS
V_G 75 KIAS
Glide distance 1.5 NM / 1000 FT.

FREQUENCIES

Potomac Approach

Potomac (SFRA West) 127.325
Potomac 128.525

KHEF (Manassas)

ATIS 125.175
Tower 133.1
Ground 121.8

Yellow highlighted items are immediate action items that should be committed to memory.

ENGINE FIRE DURING START

Cranking CONTINUE

If Engine Starts

Throttle 1800 RPM FOR 20 SEC
Engine SHUTDOWN AND INSPECT

If Engine Fails To Start

Throttle FULL OPEN
Mixture IDLE CUTOFF
Cranking CONTINUE
Fuel Shutoff Valve PULL OUT
Fire Extinguisher OBTAIN
Engine MASTER AND IGNITION OFF
Aircraft EVACUATE
Fire EXTINGUISH
Damage INSPECT

ENGINE FAILURE PRIOR TO TAKEOFF

Throttle IDLE
Brakes APPLY
Flaps RETRACT
Mixture IDLE CUTOFF
Ignition Switch OFF
Radio Call IF ABLE
Standby Battery OFF
Master Switch OFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

Airspeed Flaps Up 75 KIAS
Airspeed Flaps Down 70 KIAS
Landing Site SELECT
Mixture IDLE CUTOFF
Ignition Switch OFF
Flaps AS REQUIRED
Radio Call IF ABLE
Standby Battery OFF
Master Switch OFF
Doors UNLATCH

ENGINE FAILURE DURING FLIGHT

A.....AIRSPEED
3 turns nose-up trim, 68 KIAS

B.....BEST PLACE TO LAND

C.....CHECKLIST

Fuel Selector..... BOTH
Mixture..... RICH
Throttle..... ADJUST
Fuel Pump..... ON
Mags..... L/R/BOTH

D.....DECLARE

Mayday..... ON 121.5
Squawk..... 7700

E.....PREPARE TO EXIT

Mixture..... OFF
Mags..... OFF
Standby Battery..... OFF
Master Switch..... OFF WHEN ABLE
Doors..... UNLATCH
Passenger Brief..... COMPLETE

ENGINE FIRE IN FLIGHT

Mixture IDLE CUTOFF
Fuel Shutoff Valve PULL OUT
Master Switch OFF
Cabin Heat and Air OFF
Airspeed INCREASE / 100+ KIAS
Forced Landing EXECUTE

CABIN FIRE

Master Switch OFF
Air Vents and Windows CLOSED
Fire Extinguisher ACTIVATE
Cabin VENTILATE
Land AS SOON AS POSSIBLE

WING FIRE

Nav Lights OFF
Pitot Heat OFF
Strobe Lights OFF

Side slip to keep flames away from the fuel tank and land as soon as possible. Only use flaps as required for final approach and touchdown

EXCESSIVE AMMETER CHARGE

Master Switch (Alt Only) OFF
Electrical Load REDUCE AS FOLLOWS
Pitot Heat..... OFF
All Lights..... OFF
Comm 1 and Nav 1 TUNE TO ACTIVE
Avionics Master OFF EXC. IN CLOUDS
Land AS SOON AS PRACTICAL

LOW VOLTS ANNUNCIATOR ABOVE 1000 RPM

Master (ALT Only) OFF
Alternator Circuit Breaker CHECK IN
Master Switch ON
Ammeter CHECK
BATT Volts CHECK 27.5 MIN
Ammeter CHECK CHARGING (+)
If Amp Discharge Remains
Master Switch (ALT Only) OFF
Electrical Load REDUCE AS FOLLOWS
Pitot Heat..... OFF
All Lights..... OFF
Comm 1 and Nav 1 TUNE TO ACTIVE
Avionics Master OFF EXC. IN CLOUDS
Land AS SOON AS PRACTICAL

AIR DATA / AHRS SYSTEM FAILURE (RED X ON PFD)

Check ADAHRS Circuit Breakers and Reset. If it Opens again, do not reset and use standby instruments.

ELECTRICAL FIRE IN FLIGHT

Master Switch OFF
Vents/Cabin Air/Heat OFF
Fire Extinguisher ACTIVATE
Avionics Master Switch OFF
All Other Switches OFF
Cabin VENTILATE
Master Switch ON
Circuit Breakers CHECK
Avionics Master ON
Electrical Equip ON ONE AT A TIME

PFD1 OR MFD1 COOLING ANNUNCIATORS

Cabin Heat REDUCE
Forward Avionics Fan FEEL FOR AIRFLOW

Fan has Failed

Standby Battery Switch OFF

Annunciator Doesn't Go Off in 3 min

Land AS SOON AS PRACTICAL

LIGHT SIGNALS (GROUND)

Cleared for Takeoff STEADY GREEN
Cleared to Taxi FLASHING GREEN
Stop STEADY RED
Taxi clear of runway FLASHING RED
Return to airport starting point
..... FLASHING WHITE
General Warning, Exercise Caution
..... ALTERNATING RED AND GREEN

LIGHT SIGNALS (FLIGHT)

Cleared to Land STEADY GREEN
Return to Land FLASHING GREEN
Give way and Circle STEADY RED
Do not land FLASHING RED
General Warning, Exercise Caution
..... ALTERNATING RED AND GREEN

POWER SETTINGS

Climb 25" / 2400 RPM
Cruise 22-24" / 2200 RPM
Descent 19" / 2400 RPM
Precision Approach 19" / 2400 RPM
Non-Precision Approach 12" / 2400 RPM
Pattern 19" / 2400 RPM
Abeam Numbers 12" / MAX RPM

PIVOTAL ALTITUDE

Groundspeed		Approximate Pivotal Altitude
Knots	MPH	
87	100	670
91	105	735
96	110	810
100	115	885
104	120	960
109	125	1050
113	130	1130



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CESSNA T182T G1000 KAP140 A/P, CONT. FLOW O2 SYS. PREFLIGHT CHECKLIST

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COCKPIT SAFETY CHECK

Magnetos OFF, KEY OUT
Mixture IDLE CUTOFF
Throttle CLOSED

PREFLIGHT PREPARATION

Weather CHECK
Inspections/ADs/Squawks CHECK
Flight Plan FILED
Weight and Balance COMPUTE
Fuel Quantity CHECK / CALL

Master MUST Be Off During Fueling

Aircraft Cover REMOVE
Cowl Plugs REMOVE
Pitot Tube Cover REMOVE
Chocks REMOVE
Engine Preheat BELOW 0 °C/32 °F
Wings CHECK FOR ICE/FROST

CABIN

Keys PLACE ON DASH
Documents S.P.A.(R.)R.O.W.
Supplements CHECK
G1000 Manual
Placards CHECK
Airworthiness Cert VISIBLE
Radio Station Lic. INT'L FLIGHT
Registration VALID
P.O.H/A.F.M. CHECK
W&B Info IN BINDER
Hobbs Meter RECORD
Fire Extinguisher GREEN/SECURE
Control Wheel Lock REMOVE
Ignition Switch OFF
Avionics (Bus 1 & Bus 2) OFF
Master Switch ON
PFD VERIFY ON
Fuel Quantity SET
LOW FUEL L & R Annun VERIFY OFF
OIL PRESS Annun. VERIFY ON
LOW VACUUM Annun. VERIFY ON
Avionics BUS 1 ON, CHK FAN, OFF
Avionics BUS 2 ON, CHK FAN, OFF
Alternate Static Source CHECK IN
O2 Supply Pressure CHECK
O2 Masks CHECK
Fuel Selector BOTH
Cowl Flaps OPEN
Elevator Trim SET T.O.
Flaps EXTEND

Cabin checklist continues...

Pitot Heat CHECK AS REQ'D
Exterior Lights CHECK AS REQ'D
Stall Warning CHECK
Master Switch OFF

LEFT WING

Door Pins INSPECT
Cabin Vents and Inlets INSPECT
Leading Edge INSPECT
Wing Tie Down REMOVE
Main Gear/Tire/Brakes INSPECT
Pitot Tube CHECK UNBLOCKED
Fuel Vent CHECK UNBLOCKED
Wing Tip/Nav Lights INSPECT
Left Aileron INSPECT
Hinges (x3) BOLTS SECURE
Weights INSPECT
Static Wicks (x2) INSPECT
Flaps INSPECT
Rod INSPECT

EMPENNAGE

Baggage Door LOCKED
Skin and Rivets INSPECT
Vertical Stabilizer INSPECT
Left Horizontal Stabilizer INSPECT
Left Elevator INSPECT
Weight SECURE
Hinges SECURE
Cables SECURE
Static Wicks SECURE (X2)
Rudder INSPECT
Hinges SECURE
Cables SECURE
Static Wicks SECURE (X2)
Tail Tie Down REMOVE
Right Elevator INSPECT
Cables SECURE
Trim Tab INSPECT
Hinges SECURE
Weight SECURE
Static Wicks SECURE (X2)
Right Horizontal Stabilizer INSPECT
Antennas INSPECT
Underside INSPECT

RIGHT WING

Door Pins INSPECT
Cabin Vents and Inlets INSPECT
Leading Edge INSPECT
Wing Tie Down REMOVE
Main Gear/Tire/Brakes INSPECT
Wing Tip/Nav Lights INSPECT
Right Aileron INSPECT
Hinges (x3) BOLTS SECURE
Weights INSPECT
Static Wicks (x2) INSPECT
Flaps INSPECT
Rod INSPECT

NOSE AND COWLING

Windshield CLEAN
A/P Static Port CHECK UNBLOCKED
Oil Level CHECK
Cold: ≥ 6 Qts, Warm: $\geq 5 \frac{1}{2}$ Qts
 ≤ 10 hrs to mx: ≥ 5 Qts
Do Not Over Tighten Oil Cap
Oil Access Door SECURE
Engine Cowling SECURE
No Consecutive Fasteners Missing
Prop/Spinner INSPECT
No Cracks, No Screws Missing
Cowling Inlets CHECK
Air Filter CHECK
Exhaust CHECK FOR CRACKS
Nose Gear/Tire/Strut INSPECT
Cowl Flaps INSPECT
Static Port CHECK UNBLOCKED

FINAL CHECK

Fuel Sumps DRAIN
Left Wing (5) DRAIN
Right Wing (5) DRAIN
Cowling (3) DRAIN
Fuel Quantity VISUAL CHECK
Fuel Caps SECURE
Last 360° Walk Around COMPLETE
Chocks CONFIRM REMOVED
Tie Downs CONFIRM REMOVED
Cowl Plugs CONFIRM REMOVED
Pitot Cover CONFIRM REMOVED
Preflight COMPLETE

PERSONAL CHECKLIST

PAVE to perceive hazards

Pilot CHECK
• Experience/recency CHECK
• Physical condition SEE IMSAFE
Aircraft CHECK
• Fuel reserves CHECK
• Performance CHECK
• Equipment CHECK
EnVironment CHECK
• Weather CHECK
External Pressures CHECK

IMSAFE to check pilot phys. condition

Injury CHECK
Medication CHECK
Stress CHECK
Alcohol CHECK
Fatigue CHECK
Emotion CHECK

PASSENGER BRIEF	AFTER START	TAKEOFF BRIEF
S – Seatbelts USAGE <i>Fastened during taxi, takeoff, landing. Recommended always.</i> A – Air vents USAGE <i>Sick? Loosen clothing, use air, look at point on horizon. Location of sick sacks.</i> F – Fire extinguisher USAGE <i>Pull pin, Aim at base, Squeeze, and Sweep</i> E – Exits LOCATION/USAGE T – Traffic EXPLAIN <i>Clock Position / Who's looking</i> Y – Yak (Sterile Cockpit) <i>No extraneous conversation under cruise or 10,000' MSL (whichever is lower)</i> Y – Yoke <i>3 way positive exchange of flight controls. Stay clear of active flight controls.</i> Y – Any questions?	Flaps UP Avionics (Bus 1 and Bus 2) ON MFD Database CHECK DATES Aux Status Pg. CHECK NO X'S Engine System Pg. SET GAL REM Radios TUNE, GET ATIS/AWOS Altimeters SET <i>PFD, Standby, KAP140 A/P</i> Heading Indicator BUG WIND Clearance OBTAIN Transponder SET/ALT G1000 Alt Sel SET KAP140 Alt Sel SET FMS/GPS Flight Plan SET	Conditions Weather (Wind, Ceilings, Etc.) Hazards Weather, Terrain, Wildlife, Traffic, etc. Runway Number (L/R), Length Return/Emergency Procedures • Before Rotation • After Rotation w/ Sufficient Rwy • Below / Above 1000' AGL • Establish PIC in emergency Takeoff (Brief) <i>Type, Rwy, Wind, Speeds</i> Departure (Brief)
BEFORE START	TAXI	RUNWAY ENTRY
Preflight COMPLETE Passenger Briefing COMPLETE Seats and Belts ADJUSTED/LOCKED Fuel Selector Valve BOTH Cowl Flaps OPEN Avionics Master Switch OFF Brakes TEST AND SET <i>Test both sides and look for drips.</i> Circuit Breakers CHECK IN Beacon ON Nav Lights ON AT NIGHT/IFR	Taxi Area CLEAR Brakes CHECK <i>Check for dip in Attitude Indicator</i> Controls POSITION FOR WIND Flight Instruments CHECK IN TURNS	<i>Time for Lights, Camera, Action, Traffic</i> Timer START Lights LANDING & STROBES ON Transponder VERIFY CODE/ALT Mixture RICH Prop Control FULL IN Traffic VERIFY RWY/APCH CLEAR Runway Number CONFIRM Heading/Compass MATCHES RWY
ENGINE START	ENGINE RUNUP	NORMAL TAKEOFF
Mixture IDLE CUTOFF Throttle 1/4" OPEN Prop Control FULL IN Stby Batt Switch TEST <i>Hold for 10 seconds verify green test lamp does not extinguish</i> Stby Batt Switch ARM <i>Verify that PFD comes on</i> Engine Indicating System CHECK <i>Verify no red X's through engine page</i> Bus E Volts 23.5 VOLTS MIN. M Bus Volts 1.5V OR LESS Batt S Amps DISCHARGE (NEG) Stby Batt Annunciator VERIFY ON Master Switch ON <i>Prime Engine for Cold Start or as req'd</i> Fuel Pump ON Mixture PRIME <i>Rich 3-5 secs, then Cutoff. Verify Fuel Flow</i> Fuel Pump OFF Prop Area CLEAR Ignition Switch ENGAGE <i>Do NOT Crank for > 10 secs. Allow 20 secs between start attempts!</i> Mixture ADVANCE SMOOTHLY <i>When Engine Catches</i> Throttle 800 RPM Oil Pres. ABOVE RED LINE (30 SEC) Amps (M Batt & Batt S) POSITIVE Low Volts Annun VERIFY OFF Mixture LEAN 1"	Aircraft POSITION INTO WIND Parking Brake SET Seats and Seat Belts SECURE Cabin Doors CLOSED AND LOCKED Flight Controls FREE & CORRECT Flight Instruments CHECK NO X'S Standby Flight Instruments CHECK Fuel Quantity CHECK Fuel Selector Valve RECHECK BOTH M.E.T Left Switch TEST <i>Verify Trim Wheel Does Not Move</i> M.E.T Right Switch TEST <i>Verify Trim Wheel Does Not Move</i> <i>Verify P.T. Annun. On A/P Within 5 Secs</i> M.E.T Both Switches TEST <i>Verify Trim Moves Correctly and no Trim Movement With A/P Disco. Btn</i> A/P ON A/P Hdg Mode TEST A/P V/S Mode TEST Yoke OVERPOWER A/P Disco. Btn PRESS <i>Verify A/P Off and Disconnect Sound</i> Elevator Trim SET FOR TAKEOFF Throttle 1800 RPM Magnetos R, B, L, B <i>Drop less than 175 and 50 between mags</i> VAC Indicators CHECK Engine Indicators CHECK Ammeters & Voltmeters CHECK Annunciators CHECK Throttle CHECK IDLE Throttle 800 RPM Throttle Friction Lock ADJUST Radios SET FMS/GPS Flight Plan VERIFY 2nd Radio 121.5 XPDR VERIFY CODE/ALT CDI Softkey SELECT NAV SOURCE Wing Flaps SET Cabin Windows CLOSED & LOCKED Brakes RELEASE	Flaps 0°-20° (10° PREFERRED) Throttle FULL Engine Instruments "GREEN" Engine RPM AT LEAST "2300 RPM" Airspeed "ALIVE" Rotate 55 KIAS "ROTATE" Climb (Flaps 0°/20°) 80/70 KIAS Flaps UP
		SHORT FIELD TAKEOFF
		Flaps 20° Brakes HOLD Throttle FULL Mixture ADJUST TO 24 GPH Engine Instruments "GREEN" Engine RPM AT LEAST "2300 RPM" Brakes RELEASE Airspeed "ALIVE" Rotate 50 KIAS "ROTATE" Climb 60 KIAS Obstacle CLEARED Flaps UP WHEN >70 KIAS Climb 80 KIAS
		SOFT FIELD TAKEOFF
		Flaps 20° Brakes NONE Control Wheel FULL AFT Throttle SLOWLY ADVANCE FULL Engine Instruments "GREEN" Engine RPM AT LEAST "2300 RPM" Airspeed "ALIVE" Main Gear LIFT OFF Pitch NOSE OVER Ground Effect MAINTAIN TO 60 KIAS Flaps UP WHEN >70 KIAS Climb 80 KIAS