N9699G 1974 182P Checklists

(Develop your own. For N9699G and POH)
(Formatted for Sony e-reader)

Before Start

Seat Belts
Fuel Select: both
Trim for takeoff
Mag, Master, Radio Master off
Circuit Breakers ok
Brakes on

Engine Start (Carburated)

Mixture Rich
Carb Heat off
Master on
Prime if cold (2-6)
Throttle 1/8 “
Area Clear, Mag Start
Check: oil pressure
700 RPM
Align DG
Avionics master on
Lean for taxi
Cowl Flaps open

PreTakeoff (CIGAR)

Controls fullthrow
Instruments set
    (Radios, Beacon)
Gas both
Attitude: Trim set for takeoff, flaps
Cowl Flaps open
Run-up 1700 rpm
    Lean if high altitude
    prop (check rpm,oil,mp)
    mag 125 max drop,
    carb heat
    oil press, vacuum, Alt chk
    Alternate vacuum, static
Seat belts, Door

PreTakeoff (Lights, camera, action)

Lights: on,
Camera: Transponder on
Action: Flaps 10-20 degrees
Lift nose 60mph
Climb at 80-90mph,
    60mph until obstacle clear

PreLanding (LCGUMPS)

Landing light on
Carb Heat, Cowl Flaps
Gas selector, gas indicator check
Undercarriage: none
Mixture: enrichen for full power for go-around
Power RPM around 1800, Prop forward, MP, flaps
Seatbelts, safety check

After Landing

Flaps up
Transponder Standby, landing light off
Cowl Flaps open, Carb Heat off

Shutdown (SLIM)

Switches (all electrics, but master)
Lean
Ignition off
Master off
Control Lock,Fuel Left Side on 182

Cruise (LCGUMPS)

Landing light off
Cowl Flaps closed
Gas selector, indicator check
Undercarriage: none
Mixture: Lean appropriately
Prop, MP as desired, no flaps
Seatbelts/Safety check

Speeds (mph) 1974 182P

Vrot	63, 20°
Vx	70 2600rpm
Vy	90, 85 at 10,000
Land	70-80
Balked	63
Short TO	60 2600rpm, 20° flaps
Short Land	70
Glide	80

N9699G Stall Speeds w/ Stol kit

20° flaps:	55 Horn, 45 break
40° flaps:	50 Horn, 40 break

Leaning

EI UBG-16 Leaning Operation

Mode switch right until “Lean” indication
½ turn lean, wait 5 seconds
Repeat until “Peak”
  Warning blinks
  Peaked cylinder will blink
Step switch right
Mode switch left
½ turn rich, wait 5 seconds
Repeat until “Peak – 100”

Use 10 degrees C Carb temp

16” 2450	51%hp	Any ROP or LOP
18” 2450	58%hp	Any ROP or LOP
20” 2450	67%hp	100 ROP
22” 2450	72%hp	125 ROP
23” 2450	78%hp	180 ROP
19” 2300	58%hp	Any ROP or LOP

(verify RPM gauge with optical Tach, many are off)
During Climb and Touch & Goes
Full Rich or (1300EGT or lower)
Taxi:
Lean aggressively

Red Box for Leaning

At about 65% power or so, 100ºF ROP to Peak.
At about 70%, 125ºF ROP to 25ºF LOP.
At about 75%, 180ºF ROP to 40ºF LOP.
At about 80%, 200ºF ROP to 60ºF LOP.
(On most of these engines, with a properly set mixture at full rich, at sea level, full power, the EGT ends up at about 250ºF ROP, with some as high as 300ºF ROP.)

Autopilot

Stec 55 Operation

HDG+NAV, HDG+APR, HDG+REV
Intercept angle different than 45
Keep Heading bug on desired intercept
Until HDG symbol goes out

ALT One extra time to force intercept GS
After APR+ALT already active
GS symbol blinks

NAV One extra time while in APR mode
Stops glideslope intercept.
GS symbol will flash.
ALT symbol stays on.

Autopilot Stec 55 Vertical Preselect

MAN disable box
ALR altitude alert
ALT current Altitude,
press again for preselect value
DATA, DH, rotate, DATA,
Decision height warn
DATA, BAR, rotate, DATA
New altimeter setting
DATA, ALT, rotate, DATA
New preselect
VS+ALT on main Autopilot
to activate preslect
VS on main Autopilot, rotate on Preselect
To set vertical speed.

Emergency

Engine Failure (ALARMS)

Airspeed: 80mph
Location to land
Air restart
- (Carburated)
- Prop high
- Carb Heat
- Fuel select full tank or other tank
- Mixture: rich
- Throttle: ¼
- Mag: Start if not windmilling
- Try only one mag

Radio set 121.5 or local frequency, 7700 Transponder
Mayday
Secure
- Mag off
- Mixture cutoff
- Fuel select off
- Master off just before landing
- Open Door

Engine Fire in Air

Mixture: off
Fuel: off
Master: off
100Mph
Heat, Fresh Air off
Speed to put out fire
Land

Engine Fire on Ground

Continue cranking
If start, run Engine at 1700 for a few minutes
If no start, crank for 2-3 minutes throttle open
    2nd person get extinguisher
    When ready,
        stop starter, master, ignition, fuel selector.
    Extinguish and smother flames
Inspect for damage

Electrical Fire

Master off, vents off
Other switches off (except ignition)
Check circuit breakers
Master Switches on
Select switches on successively slowly
Open vents only after fire fully out

Excessive Rate of Charge

Turn off both sides of Master
Turn on both sides of Master
If not ok, turn off Alternator side of master
Reduce avionics that is on

Preflight

Some numbers

Oil Check: 182: 9-12 qts
Tire Pressure:
Main: 42psi
Front: 49psi
Strut: 55-60psi

N9699G Weight & Balance

1847 Empty
2950 Gross
474 Max fuel
628 Max load with full fuel

Stec 55 Autopilot preflight

HDG+VS
CWS
VS rotate cw, yoke out
VS rotate ccw, yoke in
AP disconnect
HDG
Bug left, then right
Alt
Push yoke, watch trim
Pull yoke, watch trim

Miscellaneous

Flight Plan

IFR,VFR
*Aircraft ID
*Plane Type/transponder: C182/G
Airspeed: 120knots
Departure point
Departure time
Altitude
Route of flight
*Destination
Time en-route
Remarks
Fuel on Board
Alternate Airport
Pilot Name, Phone number, home base
People on Board
Color of plane

Pirep

Nearest Airport/VOR
Time if not now
Altitude/ direction of flight
Aircraft Type
Clouds
Visibility
Temperature
Wind dir/speed
Turbulence
Icing
Wind Sheer (knots loss/gain)
Destination

Weather

Tailwind: better weather to right
Headwind: better weather to left
Standard Lapse 2C 3.5F
High Pressure- clockwise and out in North Hemisphere
Cold or Low look out below

VFR

Class C,D,E below 10,000:
3 Mile Vis, 1000 above, 500 below, 2000 beside

Class E above 10,000:
5 Mile Vis, 1000 above, 1000 blw, 1 mile beside

0-179 Odd Thousands+500
180-359 Even Thousands+500

MST +7 hr, MDT +6 hr

Light Signals

Steady G:	Takeoff	Land
Flashing G:	Taxi	Return to Land
Steady R:	Stop	Give way/circle
Flashing R:	Taxi off	Do not land
Flashing W:	Return	-
Altern RG:	Caution	Caution

Intercept Procedures

Interceptor	Meaning	You	Meaning
Rocks wings, slow turn to desired direction	Turn this direction	Rock wings	Understand
Abrupt climbing 90° turn away	You may proceed	Rock wings	Understand
Circles airport, lowers gear, overflies runway	Land at this airport	Lower gear, land	Understand

You	Meaning	Interceptor	Meaning
Raise gear while overflying runway 1000’ AGL, flash lights	Airport not ok	Goes to other airport	Understand
Flash lights regular intervals	Cannot comply	Abrupt climbing 90° turn away	Understand
Flash lights irregular intervals	In distress	Abrupt climbing 90° turn away	Understand

Altimeter/Compass Errors

ANDS- accelerate- north, decelerate- south
Heading North – Compass lags turns by latitude
Heading South – Compass leads turns by latitude

SPOT

ON: push on button, wait 2 seconds
OFF: push on button for 3 seconds
911: push 911 button for 2 seconds
911 off: push 911 button for 3 seconds
Help: push Help button for 2 seconds
Help off: push Help button for 3 seconds
OK: press Ok button briefly
Tracking: press Ok button for 5 seconds
Tracking off: press ok for 3 seconds
Do OK once before and after Tracking
Wait for OK light to stop blinking before track

Frequencies/Transponder

122.0 Enroute Flight Advisory: weather (xxx FlightWatch)
122.2 FSS- weather, flight plans (xxx Radio)
121.5 Emergency
122.8 Multicom for airports without Unicom/CTAF
122.1 Receive Only for FSS
122.75 Plane to plane
122.85 Plane to plane
121.7,.8,.9 Ground
122.7 BDR
122.75 FNL
122.975 LMO (AWOS 120.0)

1200 VFR
7500 Hijack
7600 Radio Failure
7700 Emergency
0000, 7777 Do not use

Mnemonics

WRIMTIM

weather, radio comms and navs, instruments, missed approach point, time, inbound course, minimum altitude

UNOS

undershoot north, overshoot south (by lattitude for standard rate turn)

ANDS

accelerate north, decelerate south

ALARMS

airspeed, landing site, air restart, radios, mayday, secure plane

ARROW

air worthiness, registration, radio certificate (only outside US now), owners manual, weight/balance

TTTTT

turn, time, twist, throttle, talk

CRAFT

cleared to, route, altitude, frequency, transponder

CIGAR

controls, instruments, gas, attitude (trim and flaps), runup

LCGUMPS

Landing light, carb heat/cowl flaps, gas, undercarriage, mixture, prop/power, safety

SLIM

switches, lean, ignition off, master off

PARE

power, aileron, rudder, elevator

TOMATOFLAMES

tach, oil press, manifold press, altimeter, temp, oil pressure, fuel guage, landing gear position, air speed, magnetic compass, elt, seat belts

FLAPS night time equipment

fuses, landing light (if for hire), anticollision lights, position lights, source of electricity

GRABCARD ifr equipment

generator, radios, attitude indicator, ball, clock, adjustable altimeter, rate of turn indicator, directional gyro

IMSAFE

illness, medication, stress, alcohol, fatigue, eating

RAWFAT (preflight requirements)

runway lengths, alternates, weather, fuel requirement, atc delays, takeoff/landing distance data

CCCC (Missed approach start)

cram it, clean it, cool it, call it

AVEF (IFR route for lost comms)

assigned, vectored, expected, filed

MEA (IFR altitude for lost comms)

minimum, expected, assigned