Cessna 182T – G1000 'check out' requirements for Transition (VFR) and Advanced Transition (IFR)

The aircraft check-out is not based on fight time, it is based on the pilot's displayed capabilities / proficiency.

The following items must be covered by the CFI performing the checkout. How in-depth the CFI must go depends upon the knowledge and demonstrated skills of the pilot.

All pilots must complete the Mach 5 Generic Aircraft Checkout sheet to include demonstrating computation of weight and balance for a CFI given scenario.

The items below are the identified as 'Demonstrated Proficiency' (DP) or 'Introduce'. The DP items are the minimum required items and the pilot must demonstrate be able to accomplish them without assistance. The 'I' items are the minimum additional items that must be briefed / shown to the pilot.

TRANSITION (VFR Only)

1. (DP) Perform a pre-flight inspection to include obtaining HOBBS and engine TAC times.
2. (I) Ensure the pilot is briefed on the Air Conditioning system and system limitations
3. (I) Ensure pilot is aware of turbocharger operations, normal/abnormal/emergency situations
4. (I) Discuss proper wear of air bag seat belts (front and back seats)
5. (DP) Preflight, use and cleaning of Oxygen system
6. (I) Discuss altitude capabilities of aircraft, Oxygen requirement, & hypoxia
7. (DP) Engine start through before takeoff:
    a. Checklist use (normal and hot-start procedures)
    b. Avionics setup (G1000); start up, able to correctly input fuel, set system to fly-to another airport, pull up and use normal checklists (electronic), able to set / modify radio and nav frequencies to include use of intercom controls (i.e. radio #1 vs Radio #2), set / change XPDR code, and use of reversionary mode.
    c. Complete taxi and before takeoff checklists to include autopilot check.
8. (DP) Normal, cross-wind and short-field takeoffs
9. (DP) Abort procedures
10. (DP) Normal climb out / power settings / engine temperature(s) management (EGT, CHT, TIT)
11. (DP) Use of autopilot (HDG, NAV, FLC, VS and ALT) for climb, level-off, cruise and descents.
12. (DP) Climb to at least 13,500ft, use O2 system, perform autopilot engaged, level stall / stall recovery
13. (DP) Perform emergency descent to below 8,000ft.
14. (DP) Power off stall / stall recovery (to full stall)
15. (DP) Power on stall / stall recovery (20 deg bank turning, to full stall)
16. (DP) Simulated engine failure to an off-field location.
17. (DP) Towered airport operations / pattern (ideally a straight-in approach from at east 2nm final)
18. (DP) Non-towered airport operations / pattern
19. (DP) Normal / cross-wind landing
20. (DP) Balked landing
21. (DP) Short Field Landing
22. (DP) No-Flap Landing
23. (DP) Simulated engine failure landing (ideally from >4,000ft AGL over a runway to a landing).

ADVANCED TRANSITION (VFR and IFR)

1. (DP) Complete Transition (VFR) items.
2. (I) Review lost-comm procedures
3. (I) Review IFR filing procedures (towered and non-towered locations)
4. (DP) Able to input an IFR flight plan into the G1000 system before takeoff to include a 'V' airway
5. (I) Set up an enroute descent plan (Vnav) and use vertical navigation capability of autopilot.
6. (DP) Unusual attitude recoveries (using both PFD and backup instruments only)
7. (DP) Use of autopilot Approach Mode for applicable approaches
8. (DP) Holding (speeds, entry, maintain, leg timing corrections)
9. (DP) ILS approach flown to minimums using autopilot, to a missed approach.
10. (DP) Missed approach procedures to include use of autopilot and G1000 sequencing
11. (DP) ILS approach flown to minimums (hand flown), raw data – to a landing
12. (DP) VOR approach
13. (DP) RNAV approach (LNAV only)
14. (DP) Circling approach to a landing

- At least one approach using towered procedures at a control tower operated airport