

**T-41C**

**Normal Procedures Test**

**Rocky Mountain Flight Center**



**(Ref: T.O. 1T-41C-1 Flight Manual & FTC SOP)**

*Please do not mark on booklet*

1. The T-41C has \_\_\_\_\_ gallons of usable fuel in all flight conditions, an additional \_\_\_\_\_ gallons in level flight only, for a total of \_\_\_\_\_ gallons usable fuel.
  - a) 23, 2.5, 26
  - b) 23, 5, 54
  - c) 46, 5, 51
  - d) 46, 1, 52
  
2. The oil sump capacity is \_\_\_\_\_ quarts. Do not operate the engine with less than \_\_\_\_\_ quarts.
  - a) 10, 8
  - b) 10, 6
  - c) 8, 7
  - d) 8, 6
  
3. Electrical energy for the aircraft is supplied by a \_\_\_\_\_ volt D.C. system powered by a \_\_\_\_\_ ampere engine driven alternator and a \_\_\_\_\_ volt battery.
  - a) 14, 60, 12
  - b) 12, 60, 14
  - c) 28, 35, 24
  - d) 24, 30, 28
  
4. To unlock the shoulder harness inertial reel after a sudden movement the control lever must be \_\_\_\_\_.
  - a) Moved forward
  - b) Moved back
  - c) Moved back to "Automatic", then forward to "Manual"
  - d) Moved forward to "Manual", then back to "Automatic"
  
5. During "Normal" engine starts, the Axillary fuel pump switch should be in the \_\_\_\_\_ position and the throttle advanced to obtain a fuel flow of \_\_\_\_\_ gallons/hour, then reduced to  $\frac{1}{4}$  to  $\frac{1}{2}$  inch.
  - a) High 8 – 10
  - b) High 6 – 8
  - c) Low 4 – 6
  - d) Low 8 – 10
  
6. The oil pressure gage should show a positive indication within \_\_\_\_\_.
  - a) 1 minute
  - b) 45 seconds
  - c) 30 seconds
  - d) 15 seconds

7. During engine run-up at 1800 RPM, the magneto RPM drops should not exceed \_\_\_\_\_ RPM or an RPM differential of more than \_\_\_\_\_.
- a) 150, 25
  - b) 150, 50
  - c) 125, 50
  - d) 125, 25
8. During a normal takeoff, the nose should be raised to takeoff attitude at \_\_\_\_\_ MPH.
- a) 45
  - b) 50
  - c) 50 – 60
  - d) 70 – 80
9. Perform short field or soft field takeoffs with \_\_\_\_\_ flaps:
- a) 0 degrees
  - b) 10 degrees
  - c) 15 degrees
  - d) 20 degrees
10. The best angle of climb ( $V_x$ ) speed during short field takeoffs is \_\_\_\_\_ MPH.
- a) 85 MPH
  - b) 80 MPH
  - c) 75 MPH
  - d) 70 MPH
11. Normal climb speed (flaps up) is \_\_\_\_\_ MPH.
- a) 80 MPH
  - b) 85 MPH
  - c) 90 MPH
  - d) 95 MPH
12. The flaps may be extended at a maximum speed of \_\_\_\_\_ MPH.
- a) 100
  - b) 105
  - c) 110
  - d) 115

13. Maneuvering speed, the maximum speed at which abrupt control inputs can be used, is \_\_\_\_\_ MPH.
- a) 182
  - b) 145
  - c) 127
  - d) 100
14. The following maneuvers are prohibited in the T-41C:
- a) Spins, steep turns, and aerobatic maneuvers
  - b) Spins, zero or negative "G", slips with more than 30 degrees of flaps
  - c) Stalls, steep turns, IMC flight.
  - d) Spins, engine shutdown in flight, abrupt control inputs at 120 MPH.
15. The power off stall speed of this aircraft at gross weight for normal category, flaps up and 20 degrees of bank is \_\_\_\_\_.
- a) 55 MPH
  - b) 58 MPH
  - c) 60 MPH
  - d) 66 MPH
16. Takeoff distance at maximum gross weight and 10 knots headwind, at 5,000 feet at 66 degrees Fahrenheit is \_\_\_\_\_ feet ground run and \_\_\_\_\_ feet to clear a 50 foot obstacle.
- a) 770, 1330
  - b) 902, 1485
  - c) 820, 1350
  - d) 1135, 1765
17. Optimum cruise performance in this aircraft for 6,500 feet MSL is \_\_\_\_\_ RPM and \_\_\_\_\_ MPH true air speed.
- a) 2750, 135
  - b) 2500, 125
  - c) 2800, 138
  - d) 1135, 176
18. Maximum endurance at 7,500 feet MSL and 2,600 RPM (60% BPH) with one hour reserve is \_\_\_\_\_ hours.
- a) 3.6
  - b) 4.6
  - c) 4
  - d) 5

19. The maximum gross weight landing distance at an airport with an elevation of 7,500 feet MSL, 32 degrees Fahrenheit, no obstacle and 10 knots of headwind would be \_\_\_\_\_ feet.

- a) 580
- b) 685
- c) 725
- d) 1560

20. Determine the weight and balance for the airplane for normal category operations using the graphs in the flight manual.

Basic empty weight	1492 lbs	Moment 53.7
46 gallons fuel		
2 Front seat pilots	420 lbs	
Baggage (100 lbs. Of it in rear area)	200 lbs	
(Assume oil included in A/C basic weight)		

- a) Within weight limits; Forward CG
- b) Within weight limits; Within the CG envelope
- c) Over max gross weight; Aft CG
- d) Over max gross weight; within the CG envelope

21. Is this aircraft authorized for flying in the mountains?

- a) Yes
- b) No