

Section B – General

4-11 1. What are the starter limitations?

4-12 2. What is the procedure for starting an engine that is flooded?

4-17 3. In the Engine Securing Procedure (Feather Procedure) we are told to feather before the RPM drops below 800 RPM. Why?

7-2 4. Each engine cylinder is supplied with pressurized air in operation from sea level to maximum operating altitude _____ ft. The pressure relief valve protects the engine from inadvertently exceeding _____ in. Hg. For take-off _____ in. Hg. Is manually set with the throttles.
The turbo bypass orifice is preset for _____ in. Hg. at _____ ft. density altitude at full throttle.

5. Alternate air bypasses the _____ and provides heated induction air directly to the turbocharger. The alternate air system provides protection against induction system blockage caused by:

The primary induction system should always be used:

3-5 6. A single engine Go-Around is not recommended. List the procedure to be followed should it be necessary.

7.15 7. What powers the aux fuel pump system?

a. When is it used?

7.13 8. Irrespective of switch positions what fuel pumps are energized when the separate spring loaded "Off" primer button switches are used.

9. If the engine fuel injection system is operating normally and the Aux High is energized what indications can be expected?

3.13 10. (a) Low Auxiliary fuel pressure can be used during normal engine operation both on the ground and in flight under the following conditions:

(b) DO NOT actuate the aux fuel pumps unless:

or the:

(c) Why?

- 7.15 11. What position must the fuel selector be in on an inoperative engine if the operating engine is on Cross feed?
- 10.1 12. A high fuel pressure indication on the fuel flow indicator is a sign of?
13. Why should an extreme running turning take-off be avoided?
- 3.13 14. Thirty minutes (minimum) of fuel should be used from an operating engine before Cross Feed is selected. Why?
- a. If a tank gauge approaches "FULL", you:
14. 15. What are the indications of an engine driven fuel pump failure?
- a. What actions should be taken?
- b. If normal engine operation and fuel flow is not immediately re-established, the aux fuel pump should be turned off. Why?
- 7.9 16. What caution must be observed when using the landing gear selector? Why?

7.7 17. When will the landing gear horn sound?

(a)

(b)

7.9 18. During daytime what is the first thing to check if the green lights are not observed after the landing gear switch is placed in the down position? Why?

7.7-9 19. If you have had a gear system malfunction and have lowered the gear by the emergency gear knob, what precaution must be observed?

7.7 20. What prevents the gear from being retracted on the ground?

4.19 21. How is the landing gear maintained in the UP position?

a. What consideration must be made when planning a flight over water or between remote airfields?

- 3.17 22. What four items should be checked before extending the gear manually?
- 3.6 23. What is the procedure for manual extension of the landing gear?
- 7.11 24. The flaps are _____ operated and spring loaded to the _____ position.
- 4.35 25. The flaps can be lowered at the following maximum airspeeds:
First Notch _____ degrees _____ KTS
Second Notch _____ degrees _____ KTS
Third Notch _____ degrees _____ KTS
- 4.16 26. Normal take-off is done with the flaps at _____ degrees, accelerate to _____ KTS
accelerate to best rate of climb speed _____ KTS. Gear up when:

climb to terrain clearance altitude, reduce power to _____ manifold pressure and _____ RPM.
A cruise climb speed of _____ KTS is recommended.
- 4.17 27. What is the concern when using flaps 25 on a shortest possible ground roll and
greatest clearance distance over a 50ft obstacle?
28. Should an engine failure occur on take-off in this configuration what are your
actions? IT IS MANDATORY TO:
- 7.15 29. What is the full 2-engine operative alternator output?
- a. At approximately what engine RPM is this achieved?
- b. What is the normal alternator output at idle RPM?

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- 7.17 30. Electrical system bus voltage is regulated to:
- a. If an over voltage occur in a regulator it is taken off the line at _____.
 - b. If this should occur, the _____ on the _____ panel will illuminate.
- 7.15 31. What is the action if an ammeter is showing a load much higher than the known consumption?
32. If both ammeters are showing a load much higher than then known consumption; this would indicate:
33. A zero ammeter reading indicates _____ and should be accompanied by illumination of _____
- 3.23 34. If an alternator fails during flight in icing conditions, an attempt should be made to reset the alternate over voltage relay. How is this done?
- 7.23 35. When an engine is feathered, which annunciator lights remain illuminated?
- 7.19 36. The operating limits for the gyro pressure system are:

37. Warnings of possible malfunction of the pressure system are provided by:
- And:
- 3.29 38. If gyro pressure falls below 4.5"Hg. try:
- 1.
 - 2.
 - a. What should you use to monitor the performance of your other flight instruments?
- 4.11 39. What is the restriction on ground use of the pitot heat or heated lift detectors?
- 7.21 40. What instruments are affected by the selection of alternate static source?
- a. What is the static source when in Alternate?
- 7.25 41. How is the control console configured to obtain cabin heat?
42. How is fan and heater operation prevented when the air intake lever is in the closed position?

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43. In flight, how is cabin air circulated?
44. What indicates that an overheat malfunction has occurred and the heater is inoperative?
- a. How can it be reset?
45. What is the fuel consumption of the heater?
- a. Should this fuel be considered for flight planning purposes?
46. What is the “cool down” procedure of the Janitorial heater to prevent overheat?
- a. On the ground?
- b. In the air?
- 7.29 47. The stall warning indicator is activated by two lift detectors on the _____ of the engine nacelle. The stall warning indicator is activated _____ to _____ KTS above stall. The inboard detector activates when the flaps are in the _____ and _____ degree positions the outboard when the flaps are _____.
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- 7.33 48. Ground operation of the heated windshield panel is limited to:
- 7.35 49. Ground operation of the pilot heater is limited to:

- 7.30 50. The battery for the ELT must be replaced if:
51. How should a test of the ELT be carried out?
- 3.3 52. You have just lost an engine. What are the steps required to restore power prior to feathering?
- 3.7 53. The procedure for an Emergency descent is:

7. You are planning an IFR flight at 440 n.m. Your alternate route is 60 n.m. from your destination. You will depart ZBB with two pax and two pilots. If:

Average weight of 170lbs/person

Baggage weight is 190 lbs.

Temperature at ZBB is -10 C°

Destination airport at a pressure altitude of 2,650 ft is -25 C°

The alternate is 2,200 ft. altitude.

Enroute wx requires you to carry an additional 5% enroute reserve

****Consider this fuel to be burned off while in cruise – don't forget to add heater fuel****

Flight planned at 11,000 ft. (OAT is -15 C°)

Altitude of alternate is 8,000 ft. (-12 C°)

Basic empty weight of a/c is 3,000 lbs.

TAS is 155 KTS.

Assume zero wind component.

FIND:

1. Ramp weight
2. Landing weight
3. Fuel required
4. Total flight time