

### LOW CRUISE

800 BHP - AUTO LEAN - 61 GPH P/Engine

<u>Alt</u>	<u>RPM</u>	<u>MAP</u>	<u>Std. Temp.</u>
2000	1700	32.9	+ 11
3000	1700	32.5	+ 9
4000	1700	32.0	+ 7
5000	1700	31.6	+ 5
6000	1700	31.2	+ 3
7000	1700	30.8	+ 1
8000	1700	30.5	- 1
9000	1750	29.5	- 3
10000	1850	28.7	- 5
11000	1850	27.9	- 7
12000	1900	27.1	- 9

### HOLDING

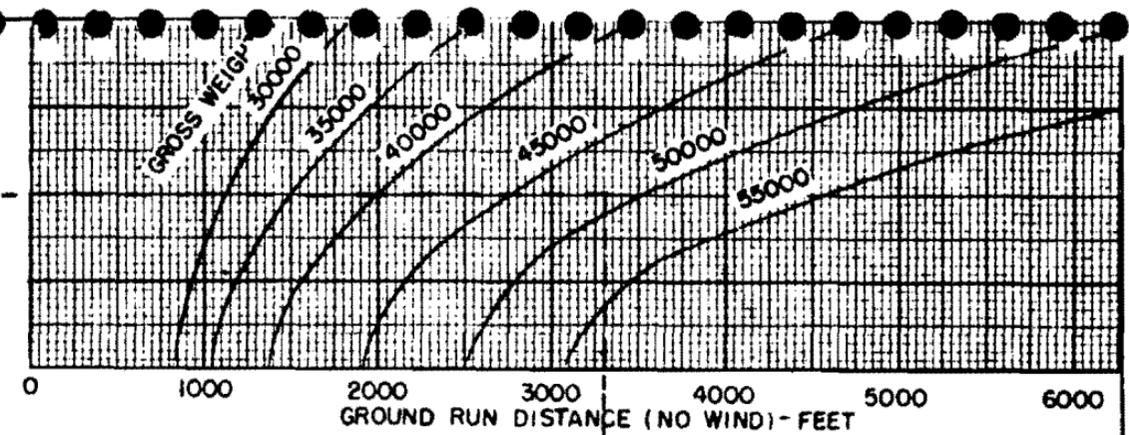
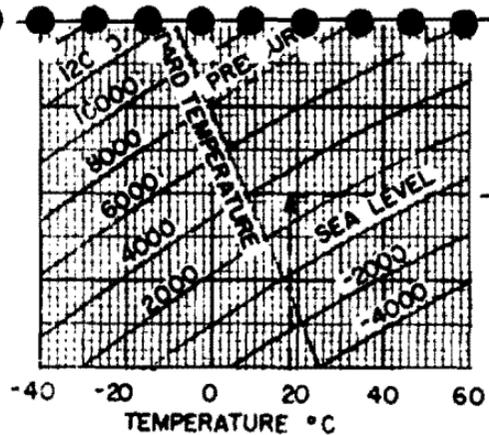
600 BHP - AUTO LEAN - 46 GPH P/Engine

1000	1700	28.0	+ 13
2000	1700	27.6	+ 11
3000	1700	27.2	+ 9
4000	1700	26.8	+ 7
5000	1700	26.4	+ 5
6000	1700	26.0	+ 3
7000	1700	25.7	+ 1
8000	1700	25.3	- 1
9000	1700	25.0	- 3

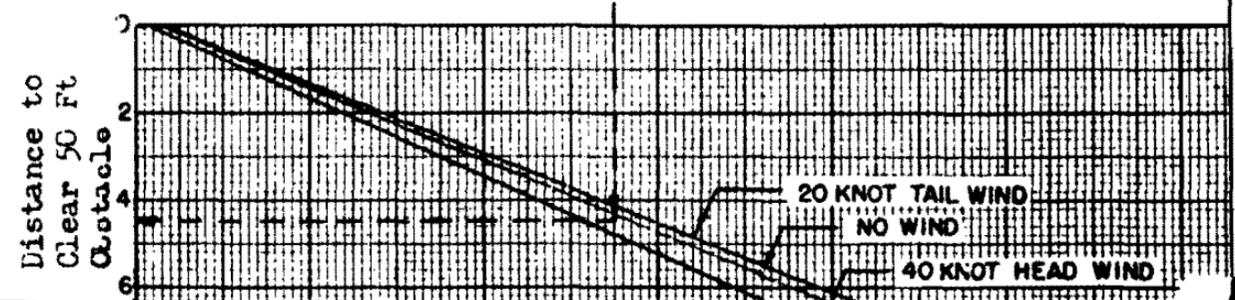
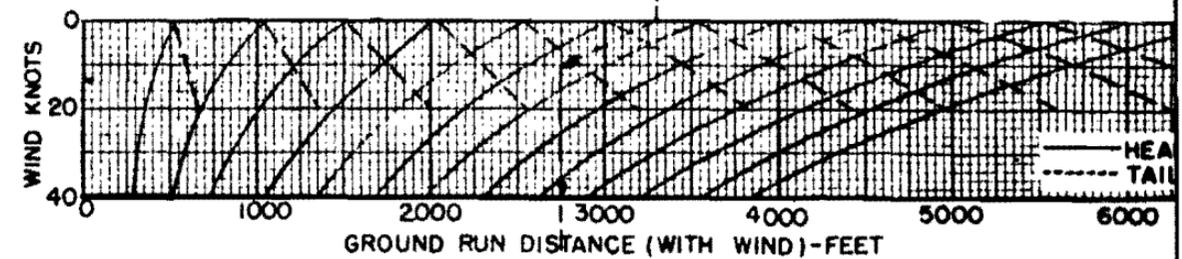
### HIGH POWER CRUISE

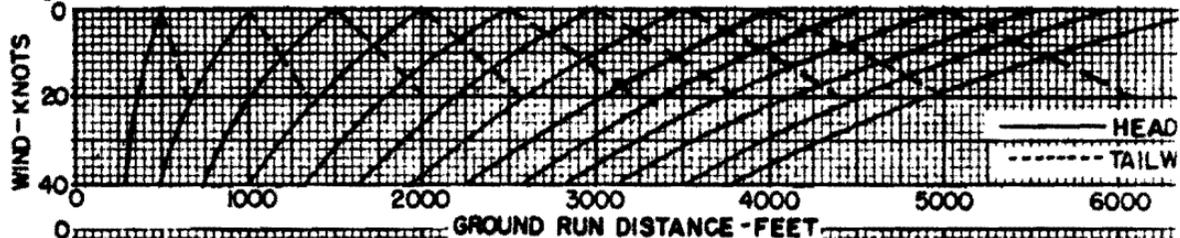
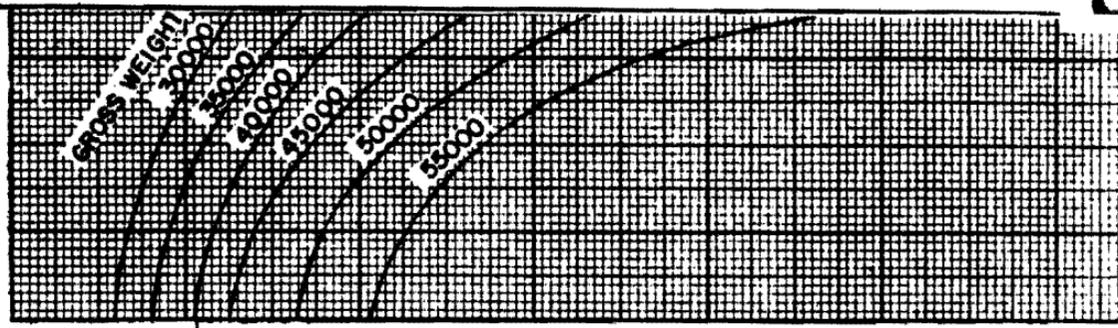
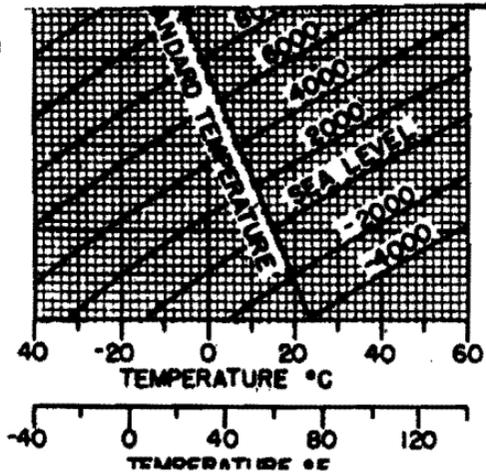
960 BHP - AUTO LEAN - 74 GHP P/Engine

1000	2000	33.3	+ 13
2000	2000	32.9	+ 11
3000	2000	32.5	+ 9
4000	2000	32.2	+ 7
5000	2000	31.9	+ 5
6000	2000	31.6	+ 3
7000	2000	31.3	+ 1
8000	2000	31.0	- 1
9000	2000	30.7	- 3
10000	2000	30.3	- 5
11000	2000	30.0	- 7
12000	2100	28.7	- 9
13000	2100	28.4	- 11

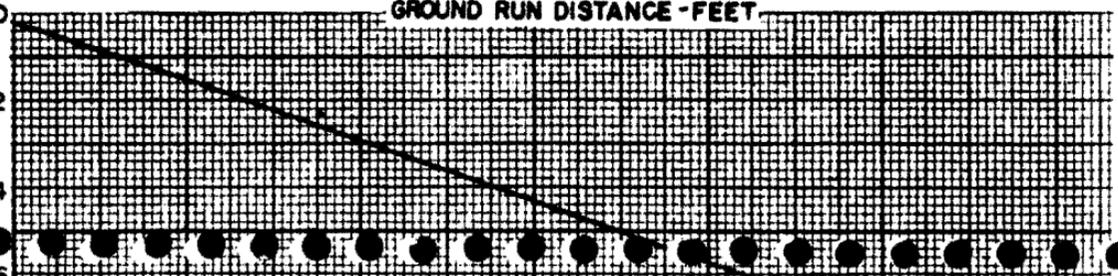


TAKE-OFF DISTANCE

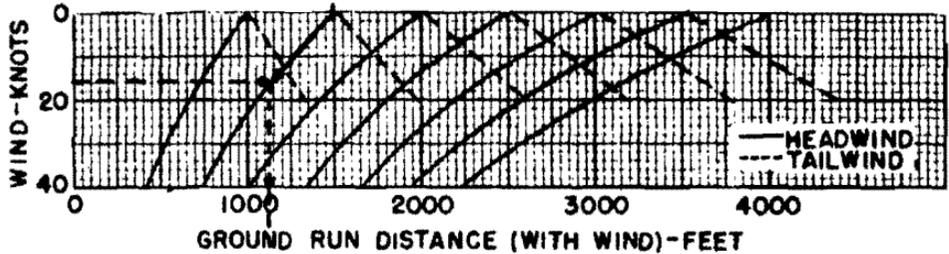
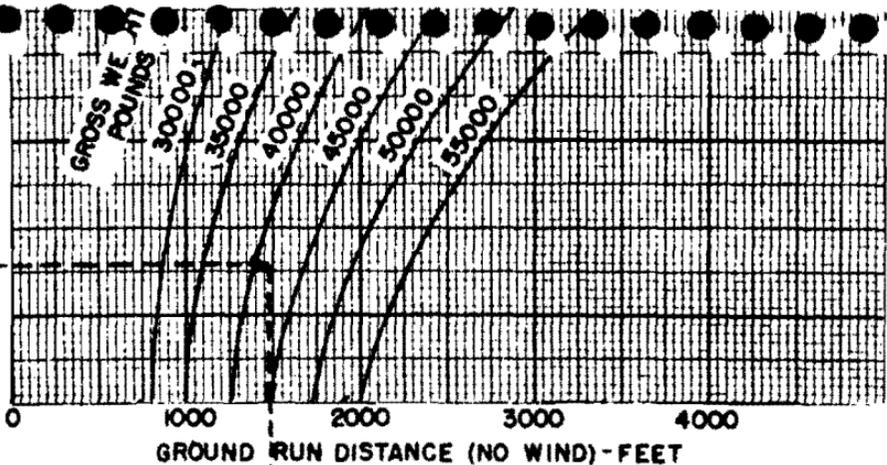
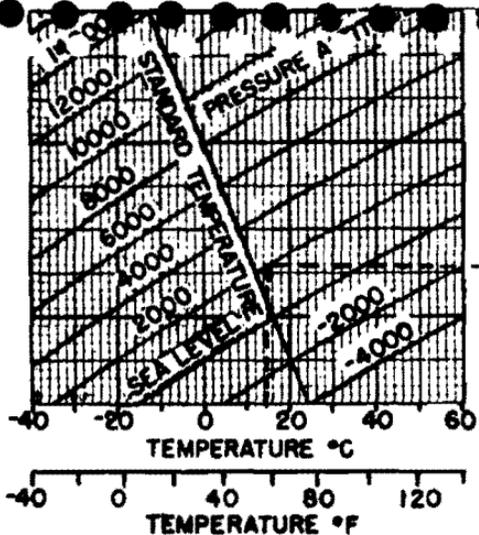




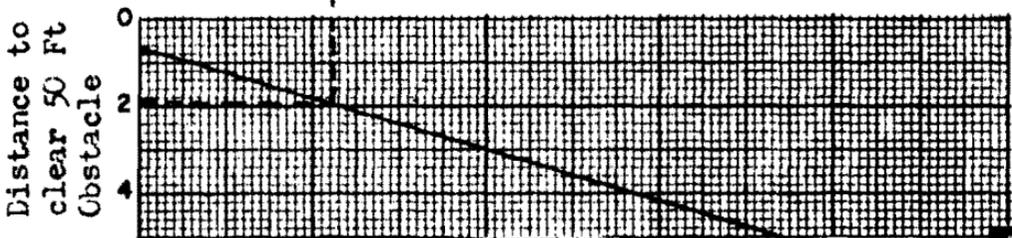
Distance to  
 Clear 50 Ft  
 Obstacle

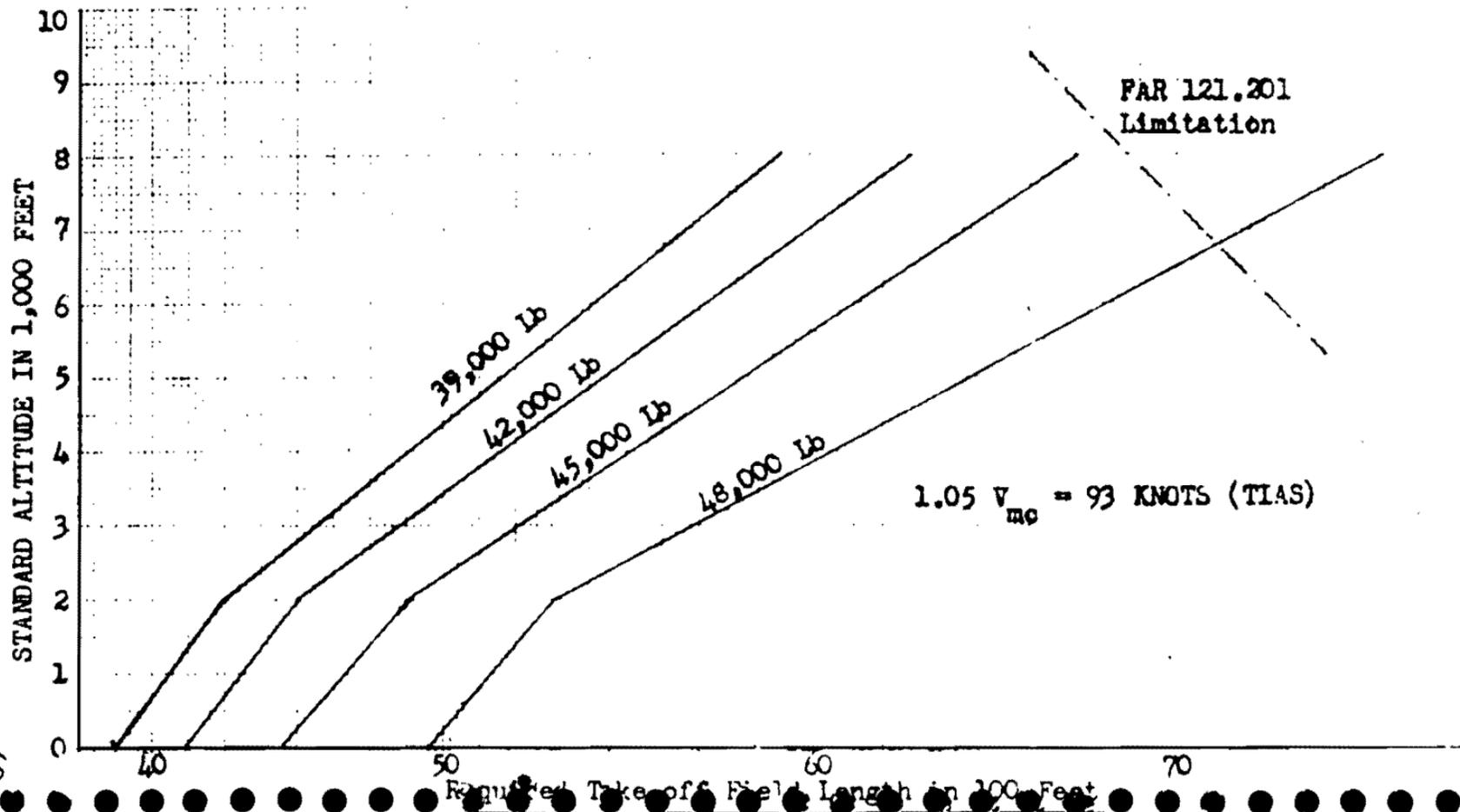


MAXIMUM PERFORMANCE  
 TAKE-OFF DISTANCE



LANDING DISTANCE





STANDARD ALTITUDE IN 1,000 FEET

10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0

30

40

50

60

REQUIRED LANDING FIELD LENGTH IN 100 FEET

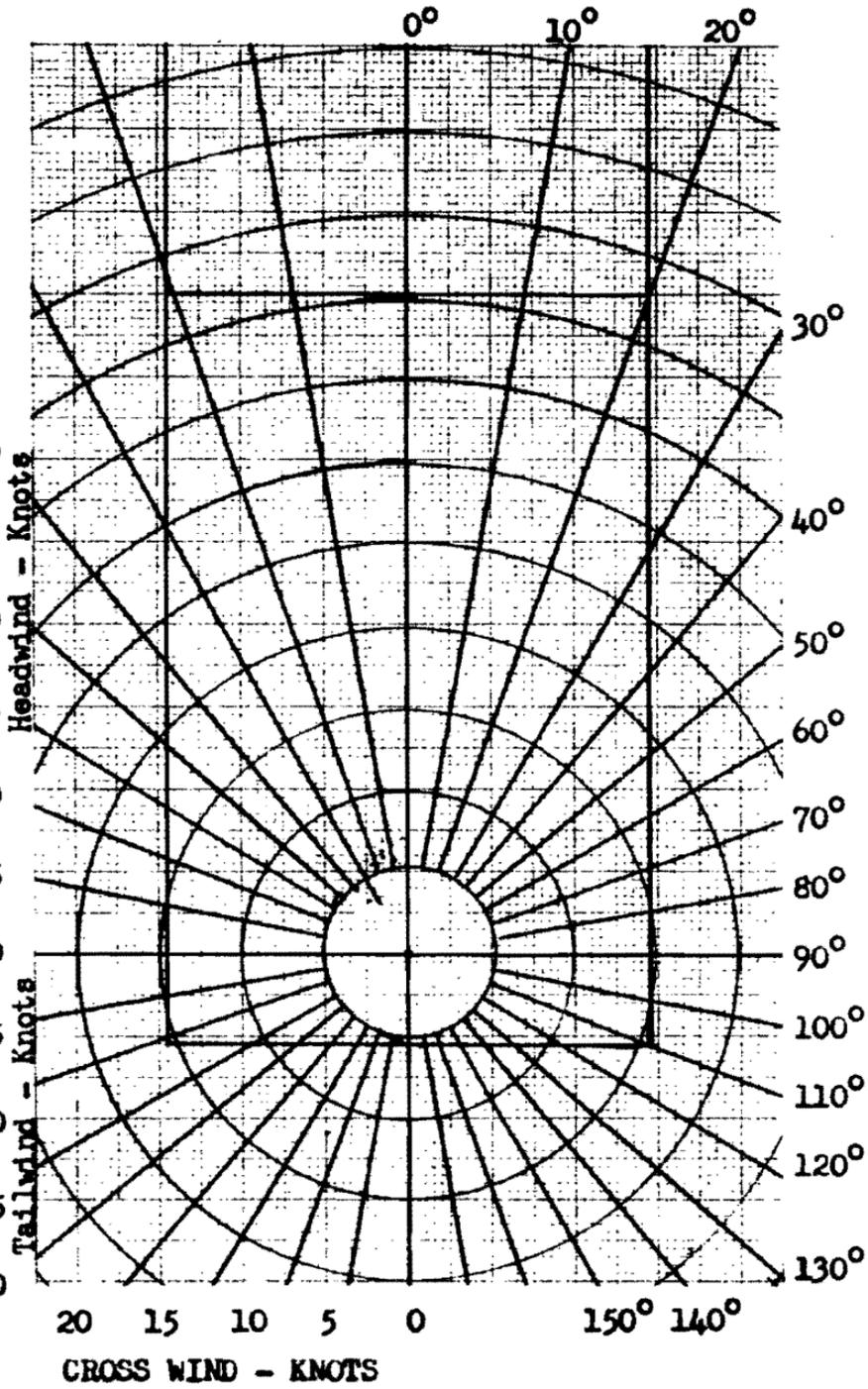
42,000 LB

44,000 LB

46,000 LB

48,000 LB

STEADY APPROACH SPEED OF 86 KNOTS (TIAS)  
THROUGH 50 FT. HEIGHT AT 48,000 LBS. SEE  
TABLE 3(c)(2) FOR SPEED AT OTHER WEIGHTS



CROSS WIND - KNOTS

CROSS WIND COMPONENT

1. Which of the following is required during operations involving "N" registered C-46 aircraft?
  - a. One hand fire extinguisher in the pilots' compartment.
  - b. A Certificate of Airworthiness.
  - c. Two fire extinguishers in the passenger compartment if it accommodates more than 30 passengers.
  
2. The maximum allowable oil consumption for the C-46 is:
  - a. 5.0 Gallons per hour.
  - b. 3.5 Gallons per hour.
  - c. 3.0 Gallons per hour for a flight durations of 8 hours.
  
3. During flight at 9000 ft. fuel pressure suddenly drops to 10 psi or less on an engine, but the engine continues to operate normally. The gross weight of the aircraft is 40,000 lbs and the minimum enroute altitude to destination is 2000 ft. Your first reaction will be:
  - a. Place fuel boost pump on high.
  - b. Reduce power and descent to a lower altitude.
  - c. Place mixture on that engine to IDLE CUT-OFF.
  - d. Continue to destination and report discrepancy to maintenance.
  
4. During flight, an engine driven hydraulic pump pressure line ruptures and visual check of the hydraulic reservoirs sight gauge indicates the reservoir is empty. A check of the brake pressure gauge should indicate:

- a. Accumulator pressure.
  - b. The trapped pressure in the system just prior to the rupture.
  - c. Zero
  - d. Accumulator pressure or less.
5. Under the conditions outlined in question 4 you discover that there is no spare hydraulic fluid on board. To stop the airplane after landing:
- a. Retract the landing gear because you will not have hydraulic pressure for brakes.
  - b. Use the hand pump to supply pressure to the brakes.
  - c. Use trapped brake pressure and have the First Officer operate the hand pump if needed.
  - d. You should ground loop the airplane instead of retracting the landing gear as there will be no brake pressure available.
6. Under the conditions outlined in question 4 you could extend the wing flaps:
- a. Not true.
  - b. By operating the hand pump after placing the flap handle in the desired position.
  - c. By operating the hand pump after placing the flap handle in the desired position and turning off the engine driven hydraulic shut off valves.
7. Had there been spare hydraulic fluid on board the airplane, stopping the airplane and extending the landing gear and flaps normally could have been accomplished:
- a. Not true.
  - b. By refilling the reservoir just prior to operating the desired system because this would replenish the system faster than the

- ruptured pump would expel fluid.
- c. By turning off the hydraulic shut off valve on the affected engine driven pump, replenishing the reservoir, and operating the system normally.
8. Proper fuel crossfeed is accomplished in the following sequence:
- a. Pull out crossfeed handle, turn boost pumps to "LOW", turn off boost pump on tank not being used, and turn off corresponding fuel selector.
  - b. Turn booster pump to "HIGH", select desired fuel tank, pull out cross feed handle, turn off boost pump on tank not being used and turn off corresponding fuel selector.
  - c. Neither of the above.
  - d. Federal Aviation Regulation prohibits crossfeed operation on C-46 aircraft because the system is unreliable and causes fuel fumes in the passenger compartment.
9. You have made an error in fuel computation and doubt exists if your fuel supply will last to your overwater destination which is located at the nearest shore. To get the last ounce of usable-fuel from the tanks you should:
- a. Run the center and rear tanks dry and then select the front tanks.
  - b. First select Front, then center, then rear and back to center.
  - c. Sequence of selection has no affect except when the airplane is loaded out of C.G. limits.
  - d. Rear tanks first, front tanks and then center tanks.

10. The purpose of the boost pump case drain is:
- To drain excess fuel from the boost pumps during flight.
  - To drain fuel from the boost pumps during preflight.
  - None of the above.
  - To provide pressure relied to the boost pumps when climbing and descending.
11. Concerning fuel requirements or IFR flight, your destination has an approach facility approved for a ceiling of 400 feet and one mile. Your forecast weather for 2 hours before until 2 hours after your ETA is 1500 ft. overcast and visibility 3 miles. What are your fuel requirements for this flight?
- Fuel from departure point to destination plus 45 minutes reserve computed at cruise fuel consumption.
  - Fuel from departure point to destination, thence to your alternate computed at cruise fuel consumption plus 45 minutes reserve computed at maximum endurance fuel consumption.
  - Fuel from departure point to destination, thence to your alternate plus 45 minutes reserve computed at cruise fuel consumption.
  - None of the above.
12. For your IFR flight, the destination has a forecast weather of 1000 overcast and visibility 2 miles. What are your fuel requirements for this flight?
- Fuel from departure point to destination plus 45 minutes reserve computed at cruise fuel consumption.
  - Fuel from departure point to destination, thence to your alternate computed at

cruise fuel consumption plus 45 minutes reserve computed at maximum endurance fuel consumption.

- c. Fuel from departure point to destination, thence to your alternate plus 45 minutes reserve computed at cruise fuel consumption.
- d. None of the above.

13. During flight, you place the fuel boost pump on the right tank to "HIGH" in order to change fuel tanks; However, you notice that the fuel pressure did not change. Looking around the cockpit, you notice that the circuit breaker switch for that boost pump is OFF. Your course of action will be:

- a. Place the circuit breaker switch ON and re-check fuel pressure.
- b. Gravity feed fuel from the side with the inoperative boost pump.
- c. Go on cross feed operation and land as soon as practicable.

14. The autopilot on the airplane which you are flying does not have a "Bleed" valve. During descent for landing, you turn the auto-pilot OFF and notice that the auto pilot does not disengage. Your best course of action would be:

- a. Bail out of the airplane as it cannot be controlled.
- b. Do your best to over-power the auto pilot and land.
- c. Place the speed control valves to "SMO" which should relieve control forces enabling you to overpower the auto pilot.
- d. Place the engine driven hydraulic pump shut-off valves in the OFF position which will eliminate hydraulic pressure to the auto pilot.

15. The engine fire extinguishing system on all aircraft will discharge extinguisher agent to:
- Cylinders, accessory section, wheel well area, fuel strainer and oil cooler.
  - Cylinders, fuel strainer, oil cooler and carburetor.
  - Cylinders, wheel well area, fuel strainer and carburetor.
  - None of the above.
16. While attempting to extend the wing flaps to one quarter position, you notice that the flaps go to the full down position and that you are unable to re-position them with the flap selector handle. It is imperative that the flaps be UP as you have just lost an engine. You will:
- Have the First Officer turn OFF the good engine driven hydraulic pump shut off valve which will allow the flaps to be blown up to the trail position.
  - Have the First Officer actuate the emergency flap release handle if installed.
  - Dive the aircraft which will force the flaps up because of the slip stream action.
  - Have the First Officer actuate the emergency flap release handle, and if this fails have him enter the forward compartment and position the "Chicken Leg" which will enable the flaps to retract.
17. While extending the landing gear manually, the hydraulic reservoir quantity will, after pulling up on the emergency dump valve handle:
- Remain the same.
  - Go down slightly.
  - Go down considerably.

d. Not sure of this, since the dump valve will port all fluid overboard which was in the landing gear return lines.

18. You are taking off from your departure airport, and just as you have a positive rate of climb established, the left engine quits. Your first action will be:

- a. Command the First Officer to feather the left propeller.
- b. Close both throttles and land on the remaining runway.
- c. Leave the gear down, feather the propeller and enter traffic for landing.
- d. Command the First Officer to raise the landing gear.

19. The following are mandatory weather and safety of flight reports:

1. The time and altitude of passing reporting points.
2. Any unforecast weather and conditions encountered.
3. Any other information relating to safety of flight.

- a. True
- b. False

20. The following are mandatory ATC reports:

1. The time and altitude reaching a holding fix or point to which cleared.
2. When vacating any previously assigned altitude.
3. When leaving any assigned holding fix.
4. When leaving final approach fix inbound on final approach.
5. When an approach has been missed.
6. A correct estimate any time it becomes apparent that a previously submitted estimate to a reporting point will be in error in excess of 3 minutes.

7. A revised true airspeed any time the average true airspeed at cruising altitude between reporting points varies or is expected to vary from that given in the flight plan by plus or minus 10 Knots.

- a. True.
- b. False.