

CV-2 STUDY GUIDE (MASTER QUESTION FILE)

4449th COMBAT CREW TRAINING SQUADRON

1. What is the length of the fuselage on the CV-2?

a. 70' 7"
b. 72' 7"

c. 74' 7"
d. 76' 7"

2. The CV-2B is described as an all metal, twin engine, monoplane with a wing span of:

a. 93' 6"

b. 95' 7"

c. 97' 8"

d. 98' 9"

3. What is the cylinder arrangement on the R-2000 engine?

a. 1 row of 14 cylinders

c. 2 rows of 7 cylinders each

b. 1 row of 8 cylinders

d. 2 rows of 9 cylinders each

4. With an electrical failure the carburetor air induction actuators will:

a. Position themselves to the RAM position from what ever position they were in before

b. Revert to the filtered position

c. Revert to the alternate position

d. Remain in the position at which the failure occurred

5. What is the minimum turning radius of the wing tip?

a. 54' 11"

c. 58' 11"

b. 56' 11"

d. 60' 11"

6. Ground clearance of the prop is:

a. 22.4"

b. 26.1"

c. 21.7"

d. 21.9"

7. How many doors on each engine cowling are provided to increase the flow of cooling air to the accessory compartment?

a. 2

b. 3

c. 4

d. 5

8. What determines the position of the engine accessory door's?

a. Right gear wt. switch

b. Left gear and nose wt. switch

c. Nose gear wt. switch

d. Left gear wt. switch

9. The ignition switches are located on the:
- a. Center switch panel
 - b. AC - DC power panel
 - c. Engine switch panel
 - d. Overhead console
10. The purpose of the induction vibrator is to provide:
- a. AC current for windshield heater elements
 - b. A boosted spark for engine starting
 - c. Electrical current to operate stick shaker
 - d. Electrical current for operation of AC instruments
11. Static pressure is supplied to the pilot's flight instruments through:
- a. Lower static vents on both sides of fuselage
 - b. Upper static vents on both sides of fuselage
 - c. Both static vents on the right side of fuselage
 - d. Both static vents on the left side of fuselage
12. The engine primer switch located on the engine switch panel will provide:
- a. A small stream of fuel into each cylinder head preparatory to starting the engine
 - b. Atomized fuel to be injected into the super-charger throat
 - c. Atomized fuel to be injected into the throat of the carburetor
 - d. All of the above
13. If the 26 VAC warning light came on while in flight what engine instrument (a) would be affected?
- a. Fuel, oil and manifold pressure gages
 - b. Manifold and thrust indicators
 - c. Oil and cylinder head temperature gages
 - d. All pressure instruments and tachometer
14. The tachometer is powered by:
- a. 26V 400 Cycle AC from the instrument bus
 - b. 26V DC from the Main bus
 - c. 26V DC from the Emergency bus
 - d. AC from it's own generator located on the engine rear case
15. What power source is required for operation of the engine pressure instruments?
- a. 115V AC
 - b. 26V AC
 - c. 28V DC
 - d. 24V DC
16. What bus supplies power to the oil temperature gage?
- a. Main
 - b. Secondary
 - c. Emergency
 - d. Battery

17. What condition exists when the low oil level warning light located on the engine instrument panel is illuminated?
- a. The engine oil tank has used 3 to 4 quarts of oil
 - b. The propellers have used 3 to 4 quarts of oil
 - ☒ c. The engine oil tank is approximately half full
 - d. The pilot knows he is out of oil and must land immediately
18. What condition exists when the engine low fuel pressure warning light comes on?
- ☒ a. Inlet pressure is below 15 PSI
 - b. Inlet pressure is below 18 PSI
 - c. Inlet pressure is above 15 PSI
 - d. Inlet pressure is above 18 PSI
19. The fuel low pressure warning lights are set to come on when the fuel pressure drops below how many pounds?
- ☒ a. 15 b. 16 c. 17 d. 18
20. What device automatically adjusts the pitch angle of the propeller blades to maintain constant engine speed under varying flight conditions?
- a. Boosters
 - ☒ b. Propeller governor
 - c. Propeller feathering motor
 - d. Auto-feathering switch
21. What force or forces feather (s) the propeller?
- a. Hydraulic system pressure
 - b. Pitot and static pressure
 - c. Electrical pulsations
 - ☒ d. Oil pressure
22. In what position(s) can you feather the propellers?
- a. On Speed
 - b. Over-Speed
 - c. Reverse
 - ☒ d. Any position
23. Why is it necessary to recycle the auto-feathering switch after the auto-feathering check?
- a. To energize the blocking relay
 - ☒ b. To de-energize the blocking relay
 - c. To re-energize the feathering timer
 - d. To de-energize the feathering relay
24. What percentage in thrust variation is required to actuate the auto-feathering system?
- a. 30 b. 35 c. 40 ☒ d. 45

25. The automatic feathering cycle begins when the variation in thrust between the two engines is:
- a. In excess of 4" water pressure
 - b. 45 percent between engines
 - c. 1000 RPM difference between engines
 - d. All of the above
26. When is the Auto-feathering light illuminated?
- a. Completion of the auto-feathering cycle
 - b. When the system is turned on
 - c. When the system is turned off
 - d. Starting of the auto-feathering cycle
27. Why are the RPM limits in reverse easily exceeded if not monitored closely?
- a. The propeller governor is inoperative while in reverse
 - b. The reversing solenoid is inoperative while in reverse
 - c. The aerodynamic forces working on the prop'a while in the reverse position
 - d. None of the above
28. What is the blade angle in degrees, for full reverse pitch?
- a. -8
 - b. 8
 - c. -7
 - d. 7
29. What is the blade angle in degrees when the reverse lights come on:
- a. -8
 - b. 8
 - c. -7
 - d. 7
30. Maximum allowable RPM while in reverse is:
- a. 2600 RPM
 - b. 2700
 - c. 3050
 - d. 3300
31. The propeller fluid low level lights illuminate when level drops to:
- a. 10 Quarts
 - b. 10 Gallons
 - c. 9 Quarts
 - d. 6 Quarts
32. Pressure flow in the oil system is provided by:
- a. Independent pumps
 - b. Engines driven pumps
 - c. Electrical pumps
 - d. Vacuum pumps

33. Activation of the emergency shut-off switch located on the emerg panel marked "HYD & ENG" will shut-off:
- a. Hydraulic fluid and the engine
 - b. Hydraulic fluid, oil and propeller de-icing fluid
 - ☒ c. Hydraulic fluid, oil, fuel, and propeller de-icing fluid
 - d. Hydraulic fluid and fuel
34. The fuel cells are made of:
- ☒ a. Rubber
 - b. Acetate
 - c. Aluminum alloy
 - d. Plastic
35. Where are the booster pumps located?
- a. Main fuel manifold
 - b. Aft face of fire wall
 - c. Number 1 cell in each wing
 - d. Number 5 cell in each wing
36. How many positions does the fuel selector switch have?
- a. 2
 - ☒ b. 4
 - c. 5
 - d. 6
37. The fuel filler neck is located in what cell?
- ☒ a. 7
 - b. 8
 - c. 9
 - d. 10
38. When a fuel low-level warning light comes on how much do you have remaining?
- a. 500 pounds: 30-40 minutes flying time
 - ☒ b. 100-110 pounds
 - c. 100-110 pounds: 5-10 minutes flying time
 - d. 320 pounds: 15-20 minutes flying time
39. The appropriate generator warning light will come on if the voltage output of the respective generator does not exceed the main by:
- a. .1 to .35
 - ☒ b. .35 to .70
 - c. 170 to 280
 - d. .80 to .95
40. The FM Limison radio interphone is powered by:
- ☒ a. Main bus
 - b. Emergency bus
 - c. Secondary bus
 - d. Instrument bus
41. With a generator failure we know that we lose the secondary bus. What bus and what inverter are we working off of in the situation?
- a. Battery bus to main bus to main inverter
 - b. Battery bus to main inverter
 - ☒ c. Main bus to emergency bus to standby inverter
 - d. Battery bus to main bus to standby inverter

42. Standby electrical power is provided by a battery of how many volts?

- a. 22 ☒ b. 24 c. 26 d. 28

43. The battery may activate the main bus only when the:

- a. Continuity relay is closed ☒ c. Master battery switch is in battery master position
b. Current relay is closed d. APU is connected

44. With the emergency bus switch in the emergency position the emergency bus is powered by:

- a. Battery bus c. Secondary bus
b. Main bus ☒ d. Battery

45. The secondary bus supplies current to those components that are considered:

- a. Essential to flight safety
☒ b. Secondary to flight safety
c. Essential to normal operation of the engine
d. Secondary to operation of the utility engine

46. To activate the secondary bus following the loss of one generator, the pilot must activate:

- a. The generator reset switch c. The emergency bus switch
☒ b. The secondary bus reset switch d. None of the above

47. With an external power source connected to the aircraft's electrical system, what bus or buses are energized?

- ~~a. Main and Secondary~~
~~b. Main and Emergency~~
~~c. Main and Battery~~
☒ d. All of above

PARA-2-80
63 Mod A/e
All Buses

48. If the aircraft AC electrical system becomes inoperative which of the following instruments would become inoperative?

- a. Turn and slip indicator
☒ b. Manifold pressure gage
c. Cylinder head temperature
d. Tachometer

49. The standby inverter is powered from the:

- a. Main bus c. Battery bus
b. Secondary bus ☒ d. Emergency bus

50. The power supplies for the hydraulic system are:
- a. one engine pump and one hand pump
 - ☒ b. two engine pumps and one hand pump
 - c. one engine pump and two hand pumps
 - d. None of the above
51. What is the normal operating pressure of the hydraulic system?
- a. 2900 b. 2800 c. 3100 ☒ d. 3000
52. When the hydraulic shutoff pressure lever is selected to the "OFF" position what hydraulic circuit or circuits are shut off?
- a. Flaps and nose wheel steering
 - b. Flaps, gear and brakes
 - c. Gear, brakes and nose wheel steering
 - ☒ d. All hydraulic circuits
53. The low pressure warning light on hydraulic system operates at what pressure?
- ☒ a. Comes on at 1100 PSI and out at 1500PSI
 - b. Comes on at 1400 PSI and out at 1800 PSI
 - c. Goes out at 1900 PSI and on at 1000 PSI
 - d. Goes out at 2000 PSI and on at 1200 PSI
54. With illumination of the hydraulic warning light(s) located on the pilot's pedestal, this indicates:
- a. An electrical failure of the hydraulic pump(s)
 - ☒ b. He has a loss of more than half the hydraulic pressure
 - c. He has a runaway hydraulic pump(s)
 - d. He has lost approximately 500 PSI in his hydraulic system
55. With the handpump selector on the hydraulic emergency selector panel positioned to the emergency system, what system can be operated?
- ☒ a. Nose gear extension and wheel brake hydraulic accumulator
 - b. Nose gear extension and main gear extension
 - c. Flaps and nose wheel steering
 - d. Nose wheel steering and nose gear extension
56. When you have a hydraulic failure in flight and you activate the emergency system, what hydraulically operated systems will not function?
- a. Brake and main gear
 - ☒ b. Nose wheel steering and flaps
 - c. Nose gear and main gear
 - d. Flaps and nose gear

57. What is the location of the aileron trim tab?
- a. Right inboard aileron
 - ☒ b. Right outboard aileron
 - c. Left inboard aileron
 - d. Left outboard aileron
58. How is the rudder trim tab operated?
- a. Hydraulically
 - ☒ c. Mechanically
 - b. Electrically
 - d. Hydraulically and mechanically
59. What other purpose does control gust lock perform?
- a. Locks control in reverse
 - b. Prevents starting with lock engaged
 - c. Prevents reversing of props
 - ☒ d. Restricts throttle movement to approx 1600 RPM
60. Under normal conditions, selection of a flap position by the selector lever will move what surfaces?
- a. Flaps and elevator
 - b. Flaps, aileron and rudder
 - c. Flaps, aileron and vertical stabilizer
 - ☒ d. Flaps, aileron and horizontal stabilizer
61. Selection of a flap position on the flap selector lever will move the surfaces by means of:
- a. An electric solenoid switch
 - ☒ b. A hydraulic actuator
 - c. A ram air pressure switch
 - d. A fuel pressure switch
62. The wing flap position indicator is adjacent to what instrument?
- a. Vertical speed
 - b. Altimeter
 - c. Attitude indicator
 - ☒ d. Airspeed indicator
63. What other action takes place when flaps are operated?
- a. Warning horn blows
 - b. Stick shaker operates
 - ☒ c. Ail, stab and slip ring airspeed ind move
 - d. Elevators move
64. Where is the emergency hydraulic panel located?
- a. Top of engine instrument panel
 - b. Console between pilot's rudder pedals
 - ☒ c. Flight deck floor
 - d. Cockpit bulkhead

65. The low intensity shaker (stall warning system) are automatically energized during flight at approximately 8 knots above stall speed and the high intensity shakers at approximately 4 knots above the stall speed.
- ☒ a. True b. False
66. At what airspeed's do the stick shaker energize?
- a. Low, 9 knots above, high 5 knots above stall
☒ b. High shaker at 4 knots, low at 8 knots above stall
 c. Low 7 knots above, high 4 knots above stall
 d. Low 8 knots above, high at 2 knots above stall
67. How many lift transducers are involved in the operation of the low intensity stage of the stall warning system?
- ☒ a. 1 b. 2 c. 3 d. 4
68. The high intensity stage stall warning operates when either or both throttles are more than 3/4 inch forward of the fully closed position measured on the console, and the flap setting is 19 degrees or more.
- ☒ a. True b. False
69. The CV-2 brakes can be best described as:
- a. Single hub, self adjusting
 b. Split hub, double spot
☒ c. Split hub, single disc, self adjusting
 d. Single hub, triple spot
70. The engine nacelle wheel well doors are operated:
- a. Hydraulically ☒ c. Mechanically
 b. Electrically d. Pneumatically
71. What is the function of the nose gear drag strut?
- a. Retraction
 b. Absorbs fore and aft loads
 c. Extension
☒ d. All of the above
72. The nose gear steering switch should always be on while operating nose steering because it will:
- a. Damage the drag strut
☒ b. Empty fluid from the shimmy damper
 c. Cause nose gear tire wear
 d. Cause cable damage

73.

73. A white and red index mark is painted on the inboard side of each main gear locking mechanism and are visible from the cabin, alignment of the marks on the individual gear indicates a locked down condition.
- a. True
 - b. False
74. When the gear warning horn sounds what following conditions exists?
- a. You are 8 knots above stalling speed, gear up
 - b. You are 5 knots above stalling speed, gear down
 - c. Gear up, manifold pressure 10" HG
 - d. Gear down, manifold pressure 15" HG
75. At what MAP, approximately does the warning horn sound?
- a. 16 to 14"
 - b. 12 to 16"
 - c. 13 to 15"
 - d. 10 to 13"
76. What will happen if you attempt to use the nose wheel steering with the nose wheel switch off?
- a. Nothing you just have to work harder
 - b. Fluid will be ported over-bd and you will lose shimmy damper effect
 - c. You will bend or break the cables
 - d. You bypass the hydraulic actuator and steer mechanically
77. By what means is the aircraft normally steered during taxi operation?
- a. Wheel brakes
 - b. Nose wheel steering
 - c. Differential power
 - d. Differential braking and Nosewheel steering
78. When the nose wheel steering system is being operated, what is the max. range of directional movement of the dual nose wheels, in degrees?
- a. 56
 - b. 58
 - c. 60
 - d. 62
79. What force or forces operate the normal wheel brake system?
- a. Hydraulic pressure
 - b. Pitot and static pressure
 - c. Electrical pulsations
 - d. Pressure and suction
80. When the emergency wheel brake lever is actuated, how is the compressed air transmitted into braking action?
- a. Supplies air pressure to the brake accumulator which in turn supplies hydraulic pressure to the brake discs
 - b. Supplies air pressure to a control valve which in turn supplies air pressure directly to the brake discs
 - c. Supplies air pressure to a control valve which in turn supplies hydraulic pressure directly to the brake discs
 - d. By applying pressure to the brake pedals and then pull out on the emergency wheel brake lever

81. What precaution should be taken when operating emergency brakes?

AIR

- ☒ a. Hydraulic pressure at 2500 PSI
☒ b. Hand pump must not be used
☐ c. Hand pump must be used
☐ d. Hydraulic pressure at 850 PSI or above

82. The left pitot head is connected to what instrument?

- a. Copilot's altimeter
b. Pilot's altimeter
c. Copilot's airspeed indicator
☒ d. Pilot's airspeed indicator

83. The thrust indicator located on the engine instrument panel receives its indication by one of the following methods:

- a. Direct dynamic pressure from the engine pitot heads
b. Direct dynamic pressure from the co-pilot's pitot head
☒ c. A pressure difference between propeller slip-stream and the aircraft's free-air stream that is connected into co-pilot's pitot head
☒ d. All of the above

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84. The co-pilot's pitot head serves as an alternate pitot system for thrust indication in flight.

- a. True
☒ b. False

85. If the thrust indicator free stream pressure selector handle is moved to EMER OFF in flight and the cabin heater was on, the heating fan air pressure switch would be inoperative and the cabin heating system would revert to ground mode. What corrective action should be taken by the pilot?

- a. None, the cabin heater is completely automatic
☒ b. The combustion air fan circuit breaker should be pulled
c. Turn all heaters off
d. Turn the cabin heater mode switch from AUTO to MAN hot which in turn by-passes the pressure switch

86. If the thrust indicator selector is placed in EMERGENCY OFF, what other system is affected?

- ☒ a. Cockpit heating system
☒ b. Cabin heating system
c. Pilot's pitot inoperative
d. Co-pilot's pitot inoperative

87. The most probable cause in difference in pilot's and co-pilot's air speed indicators would be:

- a. Co-pilot's indicator inoperative
☒ b. Malfunction of thrust indicator or fan air press switch
c. Pilot's indicator inoperative
d. Cockpit heater inoperative

88. What does the yellow radial located on the outer ring of the airspeed indicator tell the pilot?
- Maximum airspeed for gear extension
 - ☒ Maximum airspeed for flap extension
 - Level flight stall speed at maximum gross weight
 - Indicates safe single engine for that flap selection
89. What is the purpose of the moving yellow radials on the airspeed indicators?
- Constantly indicate stalling speed
 - Constantly indicate safe single engine speed
 - Constantly indicate minimum single engine speed
 - ☒ Constantly indicate the maximum speed for each flap setting
90. The turn and slip indicator is powered by:
- 115 Volt 400 Cycle AC front instrument bus
 - ☒ 27.5 V DC from Emergency bus
 - Pitot Static System
 - 28 V DC from Main bus
91. The attitude indicator instrument is unlimited in bank, but the pitch is limited to indicate:
- 25°
 - ☒ 27°
 - 45°
 - 70°
92. Each engine nacelle is divided into three zones:
- ☒ True
 - False
93. Zone 1 is the front of the engine forward of the auxiliary firewall, zone 2 is between the auxiliary and the main firewall and forms the engine accessories compartment, while zone 3 extends from the main firewall aft to the front spar and includes the main gear well.
- ☒ True
 - False
94. What two types of extinguishing agents are used in fixed position?
- CF3BR and CO2
 - CO2 and CB
 - ☒ CO2 and Freon
 - Freon and carbon tet
95. The provisions for extinguishing a fire in the nacelle are found only in what zone(s)?
- 1 and 2
 - ☒ 2 and 3
 - 3
 - 2

96. After discharging the first "shot" of fire extinguisher from the left engine to extinguish a fire in the left engine nacelle, you decide to discharge a second "shot". The second "shot" would be discharged from the:
- a. Left extinguisher to zones 1 and 2 of the left engine
 - b. Left extinguisher to zones 2 and 3 of the left engine
 - c. Right extinguisher to zones 1 and 2 of the left engine
 - ☒ d. Right extinguisher to zones 2 and 3 of the left engine
97. If you had an engine fire in No. 1 engine, zone 2, and you fired the extinguisher bottle by pulling the T-handle and you wanted a second "shot" how and where would it come from?
- a. Pulling further aft on the T-handle, second shot comes from zone 1, engine No. 1 fire bottle
 - b. Pulling opposite T-handle, second shot comes from number 2 engine fire bottle
 - ☒ c. Push-in on left T-handle turn 90 degrees counter-clockwise and pull again, second shot comes from engine number 2 fire bottle
 - d. Push-in on left T-handle turn 90 degrees clockwise and pull again, second shot comes from engine number 1 fire bottle
98. How is the fire bottle activated when the fire extinguisher handle is pulled?
- a. By a mechanical cable to an ON-OFF valve located on the ext. bottle
 - b. By an electrical solenoid to activate an ON-OFF valve located on the extinguisher bottle
 - ☒ c. By a cartridge that is electrically detonated and a slug fired into the appropriate extinguisher container
 - d. By a hydraulic valve located behind the handle to allow hydraulic pressure to turn ON or OFF the valve on the extinguisher bottle
99. What indication would a pilot have on the emergency panel if he had a fire in the wheel well?
- a. Zone 1 light comes ON
 - b. The left light in the T-handle comes ON
 - c. The right light in the T-handle comes ON
 - ☒ d. Both lights in the T-handle come ON
100. What occurs when the heater extinguisher switch is operated?
- a. The extinguisher bottle is discharged into the combustion chamber and the RED indicator disc is displaced
 - ☒ b. The extinguisher bottle is discharged into the combustion chamber and the YELLOW indicator disc is displaced
 - c. The fuel and electric circuit are shut off to the heater
 - d. The red indicator light on the emergency panel above the heater extinguisher switch will come on

101. Portable fire extinguishers are charged with CF3BR.
- ☒ a. True b. False
102. What are the emergency exits during flight?
- a. Bottom cockpit hatch, right side passenger door, cargo door, roof hatch
b. Bottom cockpit hatch, left side passenger door, cargo door, roof hatch
☒ c. Bottom cockpit hatch, right side passenger door, cargo, cabin emergency exit on left side
d. Bottom cockpit hatch, left side passenger door, cargo door-jettison and cabin emergency exit on left side
103. The cabin/flight compartment sliding door separating the cabin from the cockpit can be opened from either side, but:
- ☒ a. The door can be locked from the cockpit side only
b. The door can be locked from the cabin side only
c. The door must be closed when cargo is carried
d. The door must be open when transferring fuel
104. What is the total capacity of the fuel tanks in pounds? (Standard)
- a. 4268 b. 4768 ☒ c. 4968 d. 5168
105. In Standard configuration what is capacity of fuel tanks in gallons?
- a. 728 b. 808 c. 818 ☒ d. 828
106. Where are the engine oil tanks located?
- ☒ a. Outboard of engine nacelle in leading edge of wing
b. Outboard of engine nacelle near trailing edge of wing
c. Inboard of engine nacelle in leading edge of wing
d. Inboard of engine nacelle near trailing edge of wing
107. Where are the anti-icing fluid tanks located?
- ☒ a. Outboard of engine nacelle in leading edge of wing
b. Outboard of engine nacelle near trailing edge of wing
c. Inboard of engine nacelle in leading edge of wing
d. Inboard of engine nacelle near trailing edge of wing
108. The Form which must be filled out and filed with the DD Form 175 is?
- a. DD Form 365C ☒ c. DD Form 365F
b. DA Form 2408 d. DA Form 2028
109. The first item to be checked on the pilots checklist is:
- a. Battery master switch ☒ c. AFPO Form 781
b. Ignition switches d. Ground safety locks

110. When starting engines with external power you must have:
- a. Battery master switch to battery master
 - b. Secondary bus switch on
 - ☒ c. Battery master switch off
 - d. Emergency bus switch - Emergency
111. What is the pressure of the air bottle for the emergency nose gear extension?
- a. 1000 PSI
 - ☒ c. 1200
 - b. 1100
 - d. 1500
112. When should the pressure level for the emergency nose gear air bottle be checked?
- a. Intermediate inspection
 - ☒ c. Daily Inspection
 - b. Periodic Inspection
 - d. Special Inspection
113. The maximum permissible initial surge in RPM on engine starts is:
- a. 1000 RPM
 - ☒ b. 1100
 - c. 1050
 - d. 1150
114. What is the minimum oil temperature in degrees centigrade, before engine run-up?
- a. 20 PSI
 - ☒ b. 40
 - c. 60
 - d. 80
115. You must warm engines at:
- a. 1100 RPM until oil temp is 40°C
 - ☒ b. 1000 RPM and oil pressure 30 PSI minimum
 - c. 800 RPM with oil pressure 30 PSI max
 - d. 800 RPM until oil temp is 300°C
116. Propeller check is performed at:
- a. 1700 RPM and should drop 600 RPM
 - b. 1800 RPM and should drop 400 RPM
 - ☒ c. 1900 RPM and should drop 500 RPM
 - d. 1900 RPM and should drop 500 RPM
117. The max RPM drop on ignition check is:
- a. 50 RPM
 - ☒ b. 100
 - c. 75
 - d. 60
118. The max differential between L and R mag is:
- a. 45 RPM
 - ☒ b. 40
 - c. 60
 - d. 50

119. If auto feathering is inoperative, what RPM is used to check manual feathering?

- a. 1800 RPM ☒ b. 1900 c. 2000 d. 2200

120. METO power setting is:

- a. 42 in Hg at 2500 RPM c. 42.5 Hg at 2700 RPM
☒ b. 42.5 Hg at 2550 RPM d. 50 in Hg at 2700 RPM

121. Leaning beyond the auto-lean mixture position is:

- ☒ a. Prohibited
b. Can be used if done properly
c. Not recommended for constant use
d. Used if in accordance with the -10

122. During descent if a considerable reduction in manifold pressure is required, the RPM should be reduced accordingly to provide 100 RPM per in. Hg, e.g., 1800 RPM at 18 in. Hg.

- ☒ a. True b. False

123. Do not transmit on HF frequencies when flying below 90 knots IAS with flaps less than 19 degrees down or below 70 knots IAS with flaps 19 degrees or more down. The high RF level generated during transmission will affect lift transducer signals near stall speeds and nullify stick shaker operation and short field approach speed indication.

- ☒ a. True b. False

124. What do the GREEN arcs of the Tach. and Manifold pressure indicate?

- a. Normal range
b. Safe operation
☒ c. Auto-rich required
d. Auto-lean required

125. On engine shutdown you must operate the engine at:

- a. 800 RPM until CHT is 200°C
b. 1100 RPM and oil dilute
c. 550 RPM with mixture rich
☒ d. 1000 RPM until CHT is below 200°C

126. What is the safe single engine IAS, in knots, at maximum gross weight configuration B?

- a. 54 b. 64 c. 74 ☒ d. 84

127. What is the safe single engine airspeed?

- a. 74 knots conf (A) 84 knots (B) c. 75 knots conf (A) 85 knots (B)
☒ b. 75 knots conf (A) 84 knots (B) d. 74 knots conf (A) 85 knots (B)

128. What is the single engine minimum control speed in knots IAS at max. gross weight conf. (8) 7 degrees flaps, gear down?
 a. 50 b. 60 (c) 70 d. 80
129. Flap retraction speed in degrees per second is:
 a. 2 b. $2\frac{1}{2}$ c. 1 (d) $1\frac{1}{2}$
130. The minimum airspeed for unfeathering a propeller is 130 KIAS:
 a. True (b) False
131. At 120 knots IAS or below the airflow may be insufficient to windmill the propeller, and the starter may have to be used.
 (a) True b. False
132. What is maximum airspeed for unfeathering?
 a. 140 KIAS b. 120 (c) 130 d. 135
133. The feathering button should be released before what RPM is reached?
 a. 500 RPM (b) 800 c. 700 d. 400
134. In the event of engine overspeeding, proceed as follows:
 a. Throttle - retard, flight conditions permitting, reduce airspeed to just above stalling speed
 b. Propeller lever - operate through complete range to exercise pitch control mechanism
 c. If the propeller cannot be brought under control, it must be feathered immediately
 (d) All of the above
135. Approximately what RPM should prop govt hold after unfeathering?
 a. 1000 RPM (b) 1200 c. 1400 d. Below 2700 RPM
136. In what position should the propeller lever be before an air restart is attempted?
 (a) Full decrease c. 2000 RPM
 b. Full increase d. Same as the good engine
137. What is the immediate action which must be taken if you had an engine overspeed?
 a. Feather the engine
 b. Exercise the propeller lever
 c. Continue because the propeller governor is slow to react
 (d) None of the above

138. A red colored panel located to the rear of each engine nacelle at the lower left cowling is used for:
- a. Engine cooling while on the ground
 - b. Pushing in on the panel will discharge an extinguisher
 - c. An access panel for inspections of the engine accessories compartment
 - ☒ d. Pushing in the panel will allow access for a hand fire ext.
139. What is the procedure for an engine fire during starting?
- a. Release prime and fire ext
 - b. Cranking action stopped and fire ext
 - ☒ c. Release prime and continue cranking to blow out
 - d. Try to start to blow out fire
140. A fire will be indicated by either or both zone 1, zone 2 and 3 warning lights:
- a. True
 - b. False
141. In event of fire in the right hand engine, both the flight compartment and cabin heaters must be shut down.
- ☒ a. True
 - b. False
142. What are smoke elimination procedures?
- a. Cargo door open
 - b. Ventilation system on
 - ☒ c. Pilot's side windows and cargo doors open, ventilating sys on
 - d. Co-pilot's window and cargo door open
143. Fuel low pressure warning light illuminates is indication of low pressure regardless of pressure gauge indication.
- ☒ a. True
 - b. False
144. If a fuel low pressure warning light illuminates and the fuel pressure gauge shows normal indication, the pilot should:
- ☒ a. Accept the warning light as indication of low fuel pressure
 - b. Disregard and rely on the pressure gauge
 - c. Press-to-test the other warning light for possible failure of pressure transmitter
 - d. Crossfeed fuel to the low pressure fuel tank
145. How many times should a failed generator be reset?
- a. Three
 - b. Two
 - ☒ c. One
 - d. Five

146. What is the first action you should take if one generator failure light comes on?
- Reset generator field relay circuit breaker
 - ☒ Generator switch is in the on position
 - Check battery master switch
 - Reset generator switch
147. With a known hydraulic leak and the ^{forward} emergency hydraulic shut-off lever in the OFF position, how can the pilot activate the necessary hydraulic components for landing?
- Move the hydraulic shut-off lever to the ON position temporarily until the circuit he wants had been selected
 - Move the hydraulic shut-off lever to the ON position and select EMERGENCY on the hand pump selector
 - Select emergency on the hand pump selector and then activate whatever hydraulic system normally
 - ☒ Select EMERGENCY on the hand pump selector and then activate the hand pump for nose gear extension and brake accumulator
148. With failure of both engine driven hydraulic pumps will the hand pump operate the normal system?
- ☒ True
 - b. False
149. Emergency extension of the landing gear is treated as one procedure?
- a. True
 - ☒ b. False
150. What is emergency operation of nose gear?
- a. Cable pull down
 - b. Cable to release lock and cable to pull to lock
 - ☒ c. Pull emergency air handle and hold until locked
 - d. Turn emergency air valve to down and locked
151. The nose gear emergency air bottle should be operated only in an emergency and immediately prior to landing as the nose gear must remain extended until the system has been bled on the ground.
- ☒ a. True
 - b. False
152. In case of hydraulic pressure failure, how may the wing flaps be operated?
- a. Activating the hand pump - emergency system
 - ☒ b. Activating the hand pump - normal system
 - c. Emergency air pressure
 - d. Normal air pressure

153. When using the emergency hydraulic brake system, what operating pressure in PSI should be shown on the brake pressure gage?
- a. 850PSI b. 1200 c. 2000 ☒ d. 3000
154. If hydraulic brake pressure is insufficient to stop the aircraft, how should the emergency brake handle be operated?
- ☒ a. Steady soft
b. Back, with a pumping action
c. Back with rapid pumping action, if hyd fluid is low
d. Back with any action if hydraulic fluid level is normal
155. What is the signal for crash landing?
- a. 1 long ring of alarm bell
b. 3 long rings of alarm bell
c. Inter-com to get set for crash
☒ d. 6 short rings for preparation
156. Should one main gear fail to extend what is the procedure after all other emergency procedures have been tried?
- a. Land normally
b. Land with that gear retracted
☒ c. Land with both main gear retracted
d. Declare an emergency and bail-out
157. How many emergency exits are in the CV-2 aircraft?
- a. 4 b. 5 c. 7 ☒ d. 6
158. The flight compartment bottom hatch may be used for exit during flight but the roof hatch, due to its proximity to the propellers is for use on the ground only with the engines stopped.
- ☒ a. True b. False
159. What door or doors may be jettisoned from outside the aircraft?
- ☒ a. Cargo door
b. Cargo door, right passenger door
c. Cargo door, right passenger door, cabin emergency door
d. Cargo door, right passenger door, cabin emergency door and flight compartment bottom hatch
160. How many cockpit emergency exits may be jettisoned from outside the aircraft?
- a. 4 ☒ b. 0 c. 2 d. 1

161. How many cargo compartment escape hatches can be jettisoned in flight?
 a. 4 b. 3 ☒ c. 2 d. 5 3 if cargo door
162. The cargo door may be jettisoned during flight.
 a. True ☒ b. False
163. What is the flap setting for ditching?
 a. 25 degrees c. 35 degrees
☒ b. 40 degrees d. 30 degrees
164. The recommended speed for bailout is 100 KIAS.
☒ a. True b. False
165. What is the signal for bailout?
 a. Three short rings on alarm bell c. Six short rings
 b. Two long rings ☒ d. One long ring
166. What is recommended airspeed for bailout?
 a. 95 KIAS c. 120
☒ b. 100 d. Low airspeed as possible
167. The emergency frequency of UHF is:
 a. 240.3 b. 269.5 ☒ c. 243.0 d. 241.6
168. The emergency VHF radio are powered by what bus?
 a. Main b. Secondary ☒ c. Emergency d. Battery bus
169. How many channels are contained in the emergency VHF transmitter?
 a. 3 ☒ b. 5 c. 7 d. 9
170. Where are all radio controls located?
☒ a. Behind pilot c. Over head between pilot and co-pilot
☒ b. Sliding console d. Co-pilot's side under window
171. The FM antenna is of what type?
☒ a. Tail tip c. Vertical stabilizer tip
☒ b. Whip d. Bottom of aircraft blade type

172. The IFF antenna is of what type and where is it located?
- a. Horizontal stabilizer, blade type
 - b. Top of aircraft, long wire type
 - c. Vertical stabilizer tip, flush type
 - ☒ d. Bottom of aircraft, blade type
173. What is the location of the ILS glide slope antenna?
- ☒ a. In the nose
 - b. Under side of the fuselage
 - c. Vertical stabilizer
 - d. Right wing tip
174. The OMNI radio antenna is located?
- a. On nose wheel door
 - b. On top of fuselage
 - c. Underneath fuselage
 - ☒ d. Inside vertical stabilizer
175. The emergency VHF antenna is located?
- ☒ a. On the underside of fuselage
 - b. Inside the vertical stabilizer
 - c. On the top of the fuselage
 - d. Inside the left wing tip
176. The master switch on the transponder radio set has how many positions?
- a. 3
 - b. 4
 - ☒ c. 5
 - d. 6
177. What bus is used to power most of the radio equipment?
- ☒ a. Main
 - b. Secondary
 - c. Emergency
 - d. Battery bus
178. How long should the FM radio be warmed up prior to use?
- a. 1 Min
 - b. 5 Min
 - c. 10 Min
 - ☒ d. 2 Min
179. In the event of failure of the pilot's interphone panel (SB-329/AR) what system(s) are affected and what is the pilot's corrective action.
- a. Loss of the interphone panel only, no corrective action
 - b. Loss of UHF transmitter only, use HF instead
 - c. Loss of UHF, HF and VHF, turn the FM power switch OFF
 - ☒ d. Loss of UHF, HF, VHF and FM, turn the FM power switch to off to receive signals from all facilities except the FM liaison radio
180. What is the power source for the J-2 compass system?
- a. Battery bus
 - ☒ b. Inverter and transformer
 - c. Inverter only
 - d. Transformer only
181. What is the temperature range of the heaters?
- a. 40 to 60 C
 - b. 40 to 80 C
 - ☒ c. 40 to 80 F
 - d. 40 to 60 F

182. What type of heat is available in the CV-2?
- a. Heat exchangers
 - b. Augmentor tube
 - ☒ c. Combustion heater
 - d. Electric heat
183. What is rated output of the cockpit heater?
- a. 100,000 BTU
 - ☒ b. 50,000
 - c. 30,000
 - d. 75,000
184. What is fuel consumption of the cockpit heater?
- a. 1.66 GPH
 - ☒ b. 0.66 GPH
 - c. 0.68 GPH
 - d. 1.42 GPH
185. The heater discharge temperature must be less than _____ °F for starting
- a. 250
 - b. 150
 - c. 400
 - ☒ d. 350
186. The fuel switch for the heater systems is located on the:
- a. Cabin heater control panel
 - ☒ b. Cockpit heater control
 - c. Center switch panel
 - d. Fuel control panel
187. Which bus supplies power for the heaters?
- a. Main
 - ☒ b. Secondary
 - c. Emergency
 - d. Battery bus
188. When does the light in the start push type switch illuminate?
- a. Heater is Off
 - ☒ b. Circuit is energized
 - c. Circuit is de-energized
 - d. Heater is ON
189. Where is the flight compartment air control handle?
- a. Top of the engine instrument panel
 - b. On pilot's altimeter
 - c. Co-pilot's airspeed indicator
 - d. Pilot's airspeed indicator
 - e. Pilot's pedestal
190. What is rated output of cabin heater?
- a. 150,000 BTU
 - b. 50,000 BTU
 - c. ☒ 200,000 BTU
 - d. 100,000 BTU

191. What is fuel consumption rate of the cabin heater?
- a. 2.50 GPH
 - ☒ b. 2.66
 - c. 0.66
 - d. 0.68
192. What airspeed is required for flight operation of the heaters?
- a. 90 KIAS
 - ☒ b. 85
 - c. 80
 - d. 70
193. What does the amber colored light marked "CAUTION" on the heater control panel indicate when illuminated?
- a. The heater is operating properly but the temp has reached 150°F
 - b. The heater has temporary stopped functioning
 - ☒ c. That combustion and ventilation fans are operating
 - d. That the normal vibrator contacts are not functioning properly and he must select the emergency set of contacts
194. What is the temperature range of windshields?
- ☒ a. 68 to 130 F
 - b. 68 to 130 C
 - c. 74 to 95 C
 - d. 74 to 95 F
195. What are the three positions of the wind shield anti-icing switch?
- a. High-Medium-Low
 - ☒ b. Normal-Off-Emergency
 - c. Pilot-Copilot-Off
 - d. Normal-High-Low
196. The pilot heat switch located on the de-icing panel will activate the following heater elements:
- a. Pilot and co-pilot's pitot heads and engine thrust measuring pitot heads
 - b. All pitot heads on the aircraft to include both lift transducer and combustion air inlets for both cockpit and cabin heaters
 - ☒ c. Pilot and co-pilot's pitot heads, engine thrust measuring pitot head and both lift transducers
 - d. Pilot's and co-pilot's pitot heads only
197. What is the tank capacity of the propeller de-icing system for each engine and how long will it give protection with continuous operation?
- a. 13.5 qts for 5.6 hours
 - b. 10.1 gals for 4.5 hours
 - ☒ c. 8.4 gals for 6.5 hours
 - d. 9.4 gals for 5.6 hours
198. Windshield anti-icing is provided by:
- a. Alcohol anti-icing fluid
 - ☒ b. Electrically heated laminations
 - c. Saline solution
 - d. Shaker system

199. What equipment is provided for wing and tail de-icing?
- a. Electric heaters
 - b. Alcohol
 - c. Saline solution
 - d. Rubber boots
200. When operating the airframe de-icing system in the auto-position you find it inoperative but the manual is operative, what possible component of the system is malfunctioning?
- a. Electronic timer
 - b. Distributing valve
 - c. Combination unit
 - d. Air vacuum pump
201. The upper anti-collision light draws current from the:
- a. Emergency bus
 - b. Battery bus
 - c. Main bus
 - d. Secondary bus
202. The taxi light switch is located on the:
- a. Center switch panel
 - b. AC - DC power panel
 - c. Engine switch panel
 - d. Overhead console
203. The landing light switches are located on the:
- a. Center switch panel
 - b. AC - DC power panel
 - c. Engine switch panel
 - d. Overhead console
204. The emergency exit lights are operated by the:
- a. Battery master switch
 - b. Inertia switch
 - c. Emergency bus switch
 - d. Main inverter switch
205. The emergency lighting system will power the lights for a minimum period of at least:
- a. 10 Min
 - b. 15 Min
 - c. 30 Min
 - d. 60 Minutes
206. How do you determine your main system mask is receiving oxygen?
- a. No way of telling
 - b. Noting the drop on the system pressure gage
 - c. Watching the visual flow indicator
 - d. By tasting it
207. What electrical bus powers the motor for the windshield wipers?
- a. Secondary
 - b. Emergency
 - c. Battery bus
 - d. Main
208. How many formation lights are on the CV-2 aircraft?
- a. 6
 - b. 7
 - c. 8
 - d. 9

209. Max. CHT for engine shutdown is:
 a. 170' b. 232' ☒ c. 200' d. 260'
210. Max CHT for take-off is:
☒ a. 170' b. 232' c. 200' d. 260'
211. Minimum oil pressure at idling RPM is:
 a. 45 PSI b. 25 PSI ☒ c. 15 PSI d. 40 PSI
212. If upon take-off the co-pilot observed the RPM surged and stabilized at 3100 RPM, the pilot should:
 a. Report it to the tower
 b. Land as soon as possible and have the engine inspected
☒ c. Land as soon as possible and have the engine replaced
 d. Continue with the flight
213. What RPM is considered as a propeller overspeed?
 a. 2750 RPM b. 3050 c. 3300 ☒ d. Any RPM over 2700 2800?
214. At what RPM does the engine have to be replaced because of overspeed?
☒ a. In excess of 3050 RPM c. In excess of 2800 RPM
 b. In excess of 3000 RPM d. In excess of 2950 RPM
215. At what RPM must a write-up be put in forms due to engine overspeed?
 a. 3050 RPM b. 2800 RPM c. 2950 RPM ☒ d. All of the above
216. An engine inspection is a requirement whenever engine speed exceeds a limit of: e, 2800
 a. 2700 RPM b. 3000 RPM c. 3050 RPM d. 3100 RPM
217. What does the green range marks on the engine instruments indicate?
☒ a. Normal range c. Auto-rich required
 b. Safe range d. Auto-lean required
218. What is Max fuel pressure (engine and booster pump).
 a. 14 to 16 PSI c. 18 to 20 PSI
☒ b. 16 to 18 PSI d. 18 to 22 PSI
219. What is max CAT when using carb heat?
 a. 55' ☒ b. 38' c. 30' d. 15'

220. What is the maximum manifold pressure permitting the use of auto-lean mixture for the R-2000 engine (in inches of mercury)?
 a. 29 b. 31 ☒ c. 33 d. 35
221. The maximum take-off manifold pressure at sea level, in inches of mercury for the R-2000 engine is:
 a. 30 b. 40 ☒ c. 50 d. 55
222. What is the engine idling speed?
 a. 450 ☒ b. 550 c. 650 d. 750
223. At what RPM is crank shaft failure most likely?
 a. 2200 - 2400 c. 2700
☒ b. 2310 - 2510 d. 3050 - 3350
224. Continuous engine operation in the range of 2310 to 2510 RPM is prohibited:
☒ a. True b. False
225. What is the max. airspeed for 40' flaps?
 a. 100K b. 95K c. 90K ☒ d. 80K
226. What is maximum IAS for flap settings from 0 to 15' ?
 a. 100 ☒ b. 105 c. 110 d. 107
227. What is the maximum penetration airspeed?
☒ a. 119K b. 120K c. 105K d. 100K
228. What is maximum never exceed IAS for the CV-2 aircraft?
 a. 205 b. 210 ☒ c. 208 d. 232
229. What is maximum IAS for gear extension?
☒ a. ~~105~~ ¹²⁰ b. 105 c. 110 d. 107
230. When the CG is forward the stall speed is at its highest value.
☒ a. True b. False

231. The zero wing fuel limiting weight is:
 26,000 b. 28,500 ☒ c. 27,000 d. 26,500
232. With a cargo load of 5,000 lbs, what is the maximum amount of fuel in lbs that can be carried under normal conditions, if the Form F operating weight is 19,400 lbs?
 a. 3500 b. 3700 c. 3900 ☒ d. 4100
233. With a cargo load of 5,400 lbs in the aircraft what is the maximum amount of fuel, in lbs, that can be carried under normal conditions, if the Form F operating weight is 19,525 pounds?
 a. 3275 b. 3375 c. 3475 ☒ d. 3575
234. The stall warning stick shaker system consists of how many stages?
 a. 1 ☒ b. 2 c. 3 d. 4
235. Approaching or during a stall, aerodynamic buffet is:
☒ a. Very slight
 b. More apparent with stick shaker operating
 c. Different with CG changes
 d. Well pronounced with a heavy load
236. Stall speed for an aircraft with a gross weight of 26,000 flaps up, gear up, and zero thrust with 45° bank is:
 a. 85 b. 80 c. 74 d. 64
237. Stall speed for an aircraft with a gross weight of 24,000, gear down, flaps 40° and zero thrust, 0° angle of bank is:
 a. 64 b. 74 ☒ c. 52 d. 47
238. Maneuvers which involve full application of controls must be confined to a maximum IAS of how many knots?
☒ a. 119 b. 129 c. 139 d. 149
239. What is the total range of movement in degrees of the outer aileron when full flaps are applied?
 a. 20 b. 22.5 c. 37.5 ☒ d. 45
240. With full flaps lowered the outer aileron range upward is:
 a. 14.5 b. 16.5 ☒ c. 22.5 d. 24.5

241. How many tabs are found on the wing control surfaces?
a. 2 b. 3 **c. 4** d. 5
242. How many tabs are on the rudder control surface?
a. 1 **b. 2** c. 3 d. 4
243. When flying the aircraft at slow speed, if the wing is allowed to drop beyond the corrective action of full aileron the pilot should:
a. Reduce power c. lower nose and add top rudder
b. Add top rudder **d. Increase power immediately to regain level flight**
244. What is the purpose of the augmenters?
a. Cabin heat c. Added thrust
b. Engine cooling **d. Engine cooling and added thrust** *Para = 9-4*
245. What is the only warning the pilot receives to indicate detonation in an engine?
a. An increase in oil temperature
b. Rapid increase in cylinder head temperature
c. Rapid increase in carburetor air temperature
d. An increase in manifold temperature
246. Manifold pressure should be at least _____ inches for each _____ RPM.
a. 2" to 100 RPM **c. 1" to 100 RPM**
b. 2" to 200 RPM d. 1" to 200 RPM
247. What is the carb. icing range?
a. Below 15°C c. Below 10°F
b. Below 15°F **d. Below 10°C**
248. What is indication of carb ice?
a. RPM drop c. Thrust drop
b. CAT plus 15 **d. Manifold drop**
249. When should carb heat be applied?
a. Below plus 15°C c. Below plus 10°F
b. Below plus 15°F d. Below plus 10°C

250. If carburetor ice has formed what is the best method for removal?
- a. Mixture to rich for 30 seconds
 - b. Primer
 - c. Fuel preheat
 - ☒ d. Mixture rich, carb heat hot for 30 seconds
251. What is the proper procedure to prevent spark plug fouling on the ground?
- a. Mixture rich
 - ☒ b. Field barometric each 10 minutes
 - c. Field barometric each 5 minutes
 - d. 2300 RPM for 5 minutes
252. In flight plug fouling is prevented by:
- a. Rich mixture each hour
 - b. Manifold change of 3 to 5" each hour
 - c. Change RPM 100 to 130 each hour
 - ☒ d. All of the above
253. The fuel boost pump switch in the normal position is used for:
- a. Starting
 - b. Climb
 - c. Above 10,000 ft
 - ☒ d. All of the above
254. What is the main purpose of oil dilution?
- a. Prevent plug fouling
 - ☒ b. Easier starting
 - c. Prevent liquid lock
 - d. Prevent engine damage
255. What is the minimum between landings, gear down and gear retracted when brakes have been used excessively?
- a. 15 and 40 Minutes
 - ☒ b. 15 and 30 Minutes
 - c. 10 and 20 Minutes
 - d. 10 and 40 Minutes
256. When do peak temperatures occur in the wheel and brakes?
- a. 5 to 10 Minutes
 - ☒ b. 5 to 15 Minutes
 - c. 5 to 20 Minutes
 - d. 10 to 20 Minutes
257. What is the recommended airspeed for 31,000 lbs landing?
- a. 90 Knots
 - ☒ b. 95 Knots
 - c. 82 Knots
 - d. 87 Knots
258. The anti-collision light should be turned off during night instrument flight because:
- a. It can not be seen by other aircraft due to cloud cover
 - b. Moisture in the clouds may cause a short in electrical wiring
 - ☒ c. The rotating reflections may subject the pilot to vertigo
 - d. Electrical load too great during storms.

259. When use of the magnetic standby compass is necessary, the windshield heat switch must be selected to:
- a. Normal ☒ b. OFF c. Emergency d. ON
260. What cruise RHP is recommended for Instrument flight?
- a. 620 b. 720 ☒ c. 725 d. 650
261. During night flying what additional items should be checked?
- a. Intensity of instrument light checked
 - b. Navigation and Anti-collision light checked
 - c. Landing lights
 - ☒ d. All of the above
262. Engine preheat is required if the temperature is below what point on the Fahrenheit scale?
- a. Plus 15° b. Plus 10° c. Plus 5° ☒ d. 0°
263. If sufficient heat has been applied during cold weather and the starter clutch slips, the probable cause is:
- ☒ a. Hydraulic lock exists c. Circuit breaker weak
 - b. Starter dog slipping d. Starter brushes worn
264. If oil pressure is abnormally high during cold weather starts, you should:
- a. Idle engine at 500 RPM for 2 minutes for warm up
 - b. Shut down engine and investigate
 - c. Idle engine at 500 RPM for 3 minutes for warm up
 - ☒ d. Not increase engine speed until oil temperature and pressure are within limits
265. During take-off the maximum allowable carburetor heat is:
- a. Plus 50°C c. Plus 20°C
 - ☒ b. Plus 38°C d. Plus 38°F
266. For take-off in colder than standard conditions avoid over powering the engine beyond its rating. Reduce take-off Manifold pressure _____ below standard carburetor air temp.
- a. 1 in Hg for each 20C c. 1 in Hg for each 15C
 - ☒ b. 1 in Hg for each 10C d. 2 in Hg for each 5C
267. Do not attempt oil dilution at oil temperatures above:
- a. 40°C ☒ b. 45°C c. 43°F d. 45°F

268. During manual operation, in what manner should the wing and tail de-icing equipment be used?
- In anticipation of icing conditions
 - Continuously during flight in icing conditions
 - ☒ Intermittently during icing conditions
 - For all flights in air masses with a temperature range of 0 to -10°C
269. If a dust or sand storm is anticipated you should:
- Evacuate aircraft
 - Put aircraft in hanger
 - ☒ Insure doors and windows are closed for air intakes, vents and engine nacelles covered.
 - None of the above
270. What is the optimum penetration speed for entering moderate or severe turbulence?
- 120 KIAS
 - 125
 - 119
 - ☒ 110
271. During night flying in a thunderstorm the instrument lights should be:
- Off
 - Dim
 - ☒ Full bright
 - On
272. Prior to entering a storm some propellers should be adjusted to what RPM?
- 1900
 - 2000
 - 2100
 - ☒ 2200
273. In flight, if passengers are carried, who normally checks that the cabin heating and ventilation system has been properly adjusted?
- Crew Chief
 - Pilot
 - Passengers
 - ☒ Co-pilot
274. In a normal situation who calls out the before-landing check list prior to each landing?
- Pilot
 - ☒ Copilot
 - Crew Chief
 - Passengers
275. During the pre landing check who normally makes the visual inspection of the main gear down locks?
- Copilot
 - ☒ Crew Chief
 - Pilot
 - Passengers
276. The basic weight is defined as the:
- Weight of the aircraft as it comes from the factory
 - Weight of the aircraft with all special equipment installed
 - Total weight of the aircraft and its components
 - ☒ Weight which includes all fixed operating equipment and trapped fuel and oil

277. The gross weight is defined as the:

- a. Weight of the aircraft as it comes from the factory
- b. Weight of the aircraft with all special equipment installed
- ☒ c. Total weight of the aircraft and its contents
- d. Weight of trapped fuel plus the basic weight

278. The take-off gross weight is defined as the:

- a. Weight of the aircraft as it comes from the factory
- b. Weight of the aircraft with all special equipment installed
- ☒ c. Operating weight plus the variable and expendable load items which vary with the mission
- d. Weight of trapped fuel plus the basic weight

279. Where is the reference datum taken on the CV-2 aircraft?

- a. Nose section
- b. Jig point
- ☒ c. 193.0 forward of Jig point
- d. 193.0 aft of Jig point

280. What is the formula used for computing the CG of an aircraft?

- | | |
|---|--|
| <input checked="" type="radio"/> a. $CG = \frac{\text{Total moments}}{\text{Total Weight}}$ | c. $CG = \frac{\text{Total Weight}}{\text{Total moments}}$ |
| b. $CG = \text{Weight} \times \text{Distance}$ | d. $CG = \text{Total moments} \times \text{Weight}$ |

281. What is the DD Form 365C ?

- a. Airplane weighing record
- ☒ b. Basic weight and balance record
- c. Weight and Balance clearance form
- d. Record of weight and balance personnel

282. With full fuel tanks, what is the maximum cargo load in pounds, that can be carried under zero fuel weight conditions if the Form F operating weight is 19,532?

-  ☒ a. 2500 b. 3500 ☒ c. 4000 d. 4300

283. The maximum permissible CG limits at 28,500 lbs is ?

- | | |
|--------------|---|
| a. 26 to 39% | <input checked="" type="radio"/> c. 31 to 39% |
| b. 39 to 26% | d. 30 to 39% |

284. What are the center of gravity limits in % MAC with a gross weight of 26,000 lbs?

- | | |
|---|----------------|
| <input checked="" type="radio"/> a. 29.4 to 39% | c. 30.4 to 39% |
| b. 28.5 to 39% | d. 28.4 to 39% |

285. During loading and unloading the vehicle treadways must not exceed a maximum of how many pounds per wheel?

- a. 1000 b. 1500 c. 1750 ☒ d. 2000

286. If it becomes necessary to lower the ramp below 15° position while in flight you would have to:

- a. Activate the ramp switch
b. Activate the override switch
☒ c. Operate the ramp and override switch simultaneously
d. Manually operate the door because the electrical circuit only allows the ramp to go 15° below the horizontal

287. The fuselage steady strut must be used for loads in excess of:

- a. 1000 lbs ☒ b. 1500 c. 2000 d. 1750

288. The MB-1 device has an ultimate strength of:

- a. 1000 Lbs b. 1500 c. 5,000 ☒ d. 10,000

289. The MC-1 device has an ultimate strength of:

- a. 1000 Lbs b. 1500 ☒ c. 5,000 d. 10,000

290. The retrieving winch has a capacity of:

- a. 5000 lbs b. 1000 ☒ c. 1500 d. 2000

291. The GV-2 (Caribou) will transport:

| | <u>Normal</u> <u>Passengers</u> | | <u>Paratroopers</u> | | <u>Litters</u> | <u>Walking</u> <u>Wounded</u> |
|-------------------------------------|------------------------------------|----|---------------------|----|----------------|----------------------------------|
| a. | 32 | or | 28 | or | 14 | 12 |
| b. | 32 | or | 28 | or | 12 | 14 |
| c. | 32 | or | 26 | or | 12 | 14 |
| <input checked="" type="radio"/> d. | 32 | or | 26 | or | 14 | 12 |

292. The maximum weight permitted on the ramp while in operation is:

- a. Same weight as in the stationary position
b. More, because of heavy duty motors
c. Less, because it is lifting its own weight
☒ d. None, because the small actuator motor will lift only the weight of the ramp

293. The performance data is based on a fuel grade of:
 a. 30 b. 90/96 **(c) 100/130** d. 115/145
294. What is the proper power requirement: Auto-lean 725 BHP, Flight level 5,000 MSL
(a) 2000 RPM - 32.0" HG c. 2000 RPM - 41.6" HG
 b. 2000 RPM - 33.7" HG d. 2000 RPM - Full Throttle
295. What will be the average fuel consumption in pounds per hour, both engines: Auto-lean, 725 BHP, Flight level 5,000 MSL.
 a. 568 b. 618 **(c) 720** d. 1116
296. What is the cross wind component using the chart from the - 10? Runway 02, wind 060 at 20 knots, gross weight 26,000 lbs.
 a. 6.75 **(b) 12.75** c. 17.25 d. 19.75
297. What is the cross wind component using the chart from the - 10: Runway 02, wind 350 at 20 knots, gross weight 26,000 lbs.
 a. 17.4 **(b) 9.9** c. 28.3 d. 10.2
298. What will be the average fuel consumption, in lbs per hour both engines; Auto-rich, 900 BHP, Flight level 10,000 MSL
 a. 568 b. 618 c. 642 **(d) 1126**
299. What is the proper power requirement: Auto-lean, 650 BHP, Flight level 10,000 MSL
(a) 2000 RPM - 29.1" HG c. 2000 RPM - 31.1" HG
 b. 2000 RPM - 30.1" HG d. 1900 RPM - Full Throttle
300. What will be the average fuel consumption, in lbs per hour, both engines; Auto - lean, 650 BHP, Flight level 10,000 MSL
 a. 568 **(b) 604** c. 642 d. 1116