

## (A74) 飛艇一般維護(航務)

最近更新日期：無；更新題號：無

原始題號:0015812 題組:0 難易度:易

- (C) 1. 在原理上, 假如攻角和其他因素維持不變並且空速增加一倍, 則在高速下所產生的昇力將會是  
(A)與在低速時相同 (B)與在低速時兩倍昇力 (C)與在低速時四倍昇力

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- (B) 2. 下列敘述何者正確, 與攻角改變有相對的關係?  
(A)降低攻角將會增加翼面下的壓力, 並同時減少阻力 (B)增加攻角將同時增加阻力 (C)增加攻角將會減少翼面下的壓力, 並同時增加阻力

原始題號:0015814 題組:0 難易度:易

- (B) 3. 假如一架飛機的總重是2,000磅且同時做60度角恆定高度轉彎, 此時飛機總重是  
(A)三千磅 (B)四千磅 (C)一萬兩千磅

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- (B) 4. 在協調之轉向中 保持在一個恆定滾轉角與恆定高度協調轉彎時, 空速增加將會  
(A)減低轉彎率而導致減少裝載係數 (B)減低轉彎率而導致裝載係數不變 (C)增加轉彎率而導致裝載係數不變

原始題號:0015816 題組:0 難易度:易

- (A) 5. 為了避開在你要起飛之前降落的大型噴射機之機尾亂流在跑道的那一點你應計劃升空  
(A)超過噴射機著陸之點 (B)在噴射機著陸點或是在這點之前一點點 (C)大約在噴射機著陸點之前的五百呎

原始題號:0015817 題組:0 難易度:易

- (C) 6. 駕駛員以控制 燃油/空氣比  
(A)節流閥 (B)歧管壓力 (C)混合油氣控制

原始題號:0015818 題組:0 難易度:易

- (B) 7. 在什麼燃油/空氣比率下 是最佳的動力混合  
(A)氣缸頭溫度在最低時 (B)在任何節流閥設定中可以到最佳的動力 (C)一個特定的動力可以用最高的歧管壓力或氣門設定取得

原始題號:0015819 題組:0 難易度:易

- (A) 8. 調整燃料/空氣混合控制之基本目的的  
(A)降低燃油流量, 以補償降低之空氣流量 (B)減低在混合中之燃料量以補償增高之空氣密度 (C)增加燃料混合中之燃料量以補償空氣密度及壓力之減低

原始題號:0015820 題組:0 難易度:易

- (C) 9. 利用汽化器之熱可能影響到  
(A)不影響到燃料混合 (B)減少燃料/ 空氣混合 (C)增加燃料/空氣之混合比

原始題號:0015821 題組:0 難易度:易

- ( A ) 10. 在高動力設定下可能發生爆炸如果是  
(A)燃料的混合引起瞬間點火而不是依序平順燃燒 (B)過度濃稠之燃料混合引起爆炸而產生動力 (C)燃料混合因為筒內之積碳溫度太早點火

原始題號:0015822 題組:0 難易度:易

- ( C ) 11. 爆炸可能由什麼引起 ?  
(A)混合太濃 (B)引擎溫度太低 (C)使用比規定之燃料較低等級之燃料

原始題號:0015823 題組:0 難易度:易

- ( B ) 12. 不正常的高引擎油溫度指示可能由什麼引起?  
(A)軸承失靈 (B)滑油面太低 (C)混合比太高下操作

原始題號:0015824 題組:0 難易度:易

- ( B ) 13. 在熱氣球使用丙烷比丁烷更好是因為  
(A)沸點較高 (B)沸點較低 (C)在壓力下丁烷極易爆炸

原始題號:0015825 題組:0 難易度:易

- ( C ) 14. 在設有噴出閥之熱氣球中噴出閥是用於  
(A)爬升而已 (B)僅用於緊急狀況 (C)控制高度

原始題號:0015826 題組:0 難易度:易

- ( B ) 15. 熱氣球可以在飛行中改變方向，是利用  
(A)使用操?通氣管 (B)在不同高度操作 (C)在等大氣壓力梯度上飛行

原始題號:0015827 題組:0 難易度:易

- ( C ) 16. 飛行中油箱外開始結冰 最可能的原因是  
(A)燃料中之水份 (B)燃料管洩漏 (C)揮發而非液体燃料自油箱中被抽出至燃燒器

原始題號:0015828 題組:0 難易度:易

- ( B ) 17. 進行瓦斯氣球的正常降落時必需放出  
(A)空氣 (B)瓦斯 (C)壓載

原始題號:0015829 題組:0 難易度:易

- ( B ) 18. 當熱氣球外殼發生過熱時，需持何種行動為宜？  
(A)開閉主燃燒器 (B)儘快降落 (C)把所有不必要之器材拋出艙外

原始題號:0015830 題組:0 難易度:易

- ( B ) 19. 偵測燃料洩漏之恰當方法為  
(A)目視 (B)氣味及聲音 (C)檢查燃料壓力表

原始題號:0015831 題組:0 難易度:易

- ( A ) 20. 丙烷之重量為何  
(A)每加崙4.2磅 (B)每加崙6.0磅 (C)每加崙7.5磅

原始題號:0015832 題組:0 難易度:易

- ( B ) 21. 為何熱氣球之丙烷燃料中加入甲烷  
(A)作為抑火劑 (B)作為防結冰添加劑 (C)降低溫度

原始題號:0015833 題組:0 難易度:易

( C ) 22. 用在熱氣球之預熱管圈其用途為

- (A)防止燃料管上結冰 (B)加熱箱以便有更有效率之燃料供應 (C)使燃油汽化以使燃燒更有效率

原始題號:0015834 題組:0 難易度:易

( A ) 23. 尼龍繩之特性之一為

- (A)有伸縮性 (B)不致伸縮 (C)易於碎裂

原始題號:0015835 題組:0 難易度:易

( B ) 24. 使用在放氣球時WEIGHT OFF 一詞指的是決定

- (A)氣球之標準重量及平衡 (B)裝載供氣球飛行時之靜態均衡 (C)為降落到一事先選定之高度所需之瓦斯量

原始題號:0015836 題組:0 難易度:中

( C ) 25. 超熱是用於說明一種存在於\_\_\_\_ 之情況

- (A)週遭空氣 至少較氣球外殼中之瓦期高十度以上 (B)當太陽對氣球外殼之表面加熱到至於高於週遭空氣十度以上 (C)相對於氣球外殼中之瓦期及週遭空氣間因太陽而引起之溫差

原始題號:0015837 題組:0 難易度:中

( A ) 26. 如在飛行途中兩部引擎都失效 飛艇

- (A)儘快帶到均衡狀況並且讓氣球自由飛行 (B)平衡鼻端重量以使用飛船之負向動力提升力以使飛船飛到降落地 (C)平衡鼻端重量以使用飛船之正負向動力提升力以控制飛船的下落到降落地之角度及速度

原始題號:0015838 題組:0 難易度:易

( B ) 27. 如在飛行中之飛艇太輕或太重時此種不平衡狀況必需以\_\_\_\_加以克服

- (A)調整空氣 (B)以氣動力學方式 (C)以釋放壓艙方式

原始題號:0015839 題組:0 難易度:中

( C ) 28. 調節閥在最高速度爬升至一高度時通常應保持關閉因為任何被強制壓入之空氣可能

- (A)減低函封中之期之量 (B)減低函封中瓦期之純度 (C)增加應予以排除之空氣量 造成上升時之低速率

原始題號:0015840 題組:0 難易度:易

( B ) 29. 在爬升之時檢查飛艇 瓦斯壓力時(壓力高度) 空氣調邊氣門應

- (A)打開 (B)關閉 (C)後開前閉

原始題號:0015841 題組:0 難易度:中

( A ) 30. 在一飛艇進行正常落地時應進行之必要行動為何?

- (A)用閥調節瓦斯 (B)用閥調節空氣 (C)在後氣球組加氣

原始題號:0015842 題組:0 難易度:中

( A ) 31. 你在駕駛一架在儀器飛行計劃之飛艇而碰到在目視情況下之雙向通訊無線電失靈. 在此種情況下 你應該依據\_\_\_\_持續飛行

- (A)VFR 但在實際許可下儘速降落 (B)VFR 並且繼續向飛行計劃之目的地行進 (C)IFR 並且維持最後之指定路徑及高度到你的飛行計劃之目的地

原始題號:0015812 題組:0 難易度:易

- ( C ) 32. In theory, if the angle of attack and other factors remain constant and the airspeed is double, the lift produced at the higher speed will be  
(A) the same as at the lower speed (B) two times greater than at the lower speed  
(C) four times greater than at the lower speed

原始題號:0015813 題組:0 難易度:易

- ( B ) 33. Which statement is true relative to changing angle of attack?  
(A) A decrease in angle of attack will increase pressure below the wing, and decrease drag (B) An increase in angle of attack will increase drag (C) An increase in angle of attack will decrease pressure below the wing, and increase drag

原始題號:0015814 題組:0 難易度:易

- ( B ) 34. If an aircraft with a gross weight of 2,000 pounds was subjected to a 60° constant-altitude bank, the total load would be  
(A) 3,000 pounds (B) 4,000 pounds (C) 12,000 pounds

原始題號:0015815 題組:0 難易度:易

- ( B ) 35. While maintaining a constant angle of bank and altitude in a coordinated turn, an increase in airspeed will  
(A) decrease the rate of turn resulting in a decreased load factor (B) decrease the rate of turn resulting in no change in load factor (C) increase the rate of turn resulting in no change in load factor

原始題號:0015816 題組:0 難易度:易

- ( A ) 36. To avoid possible wake turbulence from a large jet aircraft that has just landed prior to your takeoff, at which point on the runway should you plan to become airborne?  
(A) Past the point where the jet touched down (B) At the point where the jet touched down, or just prior to this point (C) Approximately 500 feet prior to the point where the jet touched down

原始題號:0015817 題組:0 難易度:易

- ( C ) 37. The pilot controls the air/fuel ratio with the  
(A) throttle (B) manifold pressure (C) mixture control

原始題號:0015818 題組:0 難易度:易

- ( B ) 38. The best power mixture is that fuel/air ratio at which  
(A) cylinder head temperatures are the coolest (B) the most power can be obtained for any given throttle setting (C) a given power can be obtained with the highest manifold pressure or throttle setting

原始題號:0015819 題組:0 難易度:易

- ( A ) 39. The basic purpose of adjusting the fuel/air mixture control at altitude is to  
(A)decrease the fuel flow to compensate for decreased air density (B)decrease the amount of fuel in the mixture to compensate for increased air density  
(C)increase the amount of fuel in the mixture to compensate for the decrease in pressure and density of the air

原始題號:0015820 題組:0 難易度:易

- ( C ) 40. Applying carburetor heat will  
(A)not affect the mixture (B)lean the fuel/air mixture (C)enrich the fuel/air mixture

原始題號:0015821 題組:0 難易度:易

- ( A ) 41. Detonation may occur at high-power settings when  
(A)the fuel mixture ignites instantaneously instead of burning progressively and evenly (B)an excessively rich fuel mixture causes an explosive gain in power  
(C)the fuel mixture is ignited too early by hot carbon deposits in the cylinder

原始題號:0015822 題組:0 難易度:易

- ( C ) 42. Detonation can be caused by  
(A)a "rich" mixture (B)low engine temperatures (C)using a low grade of fuel than recommended

原始題號:0015823 題組:0 難易度:易

- ( B ) 43. An abnormally high engine oil temperature indication may be caused by  
(A)a defective bearing (B)the oil level being too low (C)operating with an excessively rich mixture

原始題號:0015824 題組:0 難易度:易

- ( B ) 44. Propane is preferred over butane for fuel in hot air balloons because  
(A)it has a higher boiling point (B)it has a lower boiling point (C)butane is very explosive under pressure

原始題號:0015825 題組:0 難易度:易

- ( C ) 45. On a balloon equipped with a blast valve, the blast valve is used for  
(A)climbs only (B)emergencies only (C)control of altitude

原始題號:0015826 題組:0 難易度:易

- ( B ) 46. It may be possible to make changes in the direction of flight in a hot air balloon by  
(A)using the maneuvering vent (B)operating at different flight altitudes  
(C)flying a constant atmospheric pressure gradient

原始題號:0015827 題組:0 難易度:易

- ( C ) 47. While in flight, ice begins forming on the outside of the fuel tank in use. This would most likely be caused by  
(A)water in the fuel (B)a leak in the fuel line (C)vaporized fuel instead of liquid fuel being drawn from the tank into the main burner

原始題號:0015828 題組:0 難易度:易

- ( B ) 48. To perform a normal decent in a gas balloon, it is necessary to release  
(A)air (B)gas (C)ballast

原始題號:0015829 題組:0 難易度:易

- ( B ) 49. What action is most apporiate when an envelope overtemperature condition occurs?  
(A)Turn the maun burner OFF (B)Land as soon as practical (C)Throw all unnecessary equipment overboard

原始題號:0015830 題組:0 難易度:易

- ( B ) 50. Which is the proper way to detect a fuel leak ?  
(A)Sight (B)Use of smell and sound (C)Check fuel pressure gauage

原始題號:0015831 題組:0 難易度:易

- ( A ) 51. What is the weight of propane?  
(A)4.2 pounds per gallon (B)6.0 pounds per gallon (C)7.5 pounds per gallon

原始題號:0015832 題組:0 難易度:易

- ( B ) 52. For what reason is methanol added to the propane fuel of hot air balloons?  
(A)As a fire retardant (B)As an anti-icing additive (C)To reduce the temperature

原始題號:0015833 題組:0 難易度:易

- ( C ) 53. The purpose of the preheating coil as used in hot air balloons is to  
(A)prevent ice from forming in the fuel lines (B)warm the fuel tanks for more efficient fuel flow (C)vaporized the fuel for more efficient burner operation

原始題號:0015834 題組:0 難易度:易

- ( A ) 54. One characteristic of nylon rope is that is  
(A)is flexible. (B)does not stretch. (C)splinters easily.

原始題號:0015835 題組:0 難易度:易

- ( B ) 55. The term"to weigh off"as used in ballooning means to determine the  
(A)standard weight and balance of the balloon. (B)static equilibrium of the ballon as loaded for flight. (C)amount of gas required for an ascent to a preselected altitude.

原始題號:0015836 題組:0 難易度:中

- ( C ) 56. Superheat is a term used to describe the condition which exists  
(A)when the surrounding air is atleast 10 degree warmer than the gas in the envelope. (B)when the sun heats the envelope surface to a temperature at least 10 degree greater than the surrounding air. (C)relative to the difference in temperature between the gas in the envelope and the surrounding air caused by the Sun.

原始題號:0015837 題組:0 難易度:中

- ( A ) 57. If both engines fail while en route, an airship should be  
(A)brought to a condition of equilibrium as soon as possible and free-ballooned.  
(B)trimmed nose-heavy to use the airship's negative dynamic lift to fly the airship down to the landing site. (C)trimmen nose-light to use the airship's psoitive dynamic lift to control the angle and rate of descent to the landing site.

原始題號:0015838 題組:0 難易度:易

- ( B ) 58. If an airship in flight is either light or heavy, the unbalanced condition must be overcome  
(A)by valving air. (B)aerodynamically. (C)by releasing ballast.

原始題號:0015839 題組:0 難易度:中

- ( C ) 59. Damper valves should normally be kept closed during a maximum rate climb to altitude because any air forced inot the system would  
(A)decrease the volume of gas within the envelope. (B)decrease the purity of the gas within the envelope. (C)increase the amount of air to be exhausted, resulting in a lower rate of ascent.

原始題號:0015840 題組:0 難易度:易

- ( B ) 60. When checking gas pressure(pressure height)of an airship during a climb, the air damper valves should be  
(A)opened. (B)closed. (C)opened aft and closed forward.

原始題號:0015841 題組:0 難易度:中

- ( A ) 61. Which action is necessary to perform a normal descent in an airship?  
(A)Valve gas. (B)Valve air. (C)Take air into the aft ballonets.

原始題號:0015842 題組:0 難易度:中

- ( A ) 62. You are flying an airship under an IFR flight plan and experience two-way communications radio failure while in VFR conditions. In this situation, you should continue your flight under  
(A)VFR and land as soon as practicable. (B)VFR and proceed to your flight-plan destination. (C)IFR and maintain the last assigned route and altitude to your flight-plan destination.