

(A21) CPL基本航行學

最近更新日期：110/12/27 ~ 110/12/27；更新題號：

0011470, 0011495, 0011498, 0011519, 0011520, 0011521, 0011528, 0011555, 0011569, 0011582, 0011583, 0011584, 0011587, 0011588, 0011589, 0011598, 0011604, 0011608, 0011633, 0011634, 0011641, 0011648

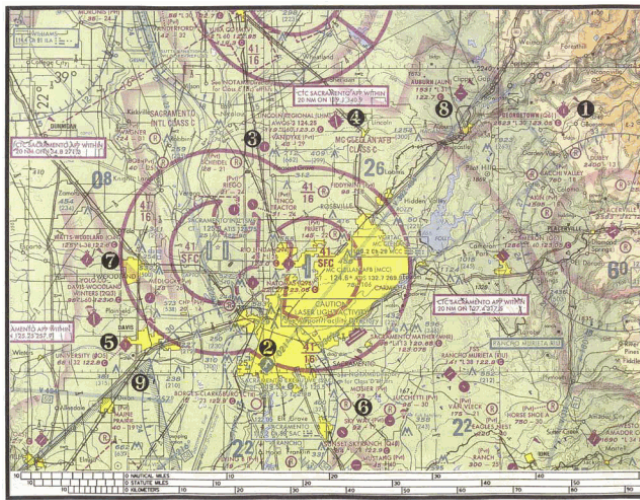
原始題號:0011430 題組:0 難易度:易

- (C) 1. 在目視飛行圖上，測量真航線(true course)時，是以最接近航線之中間點的子午線來測量，原因是
(A)等磁差線上每一點之值都不同 (B)? 等磁差線上每一點與緯線之夾角都不同 (C)航線上每一點與經線之夾角都不同

原始題號:0011431 題組:1 難易度:易 (R20130125)

- (C) 2. (請參考 Fig1，第6點) Mosier 機場是(如圖A21_Fig1)
(A)被限制為只供自用飛行員與休閒飛行員使用之機場 (B)限航區中的軍用機場 (C)非公眾使用的機場

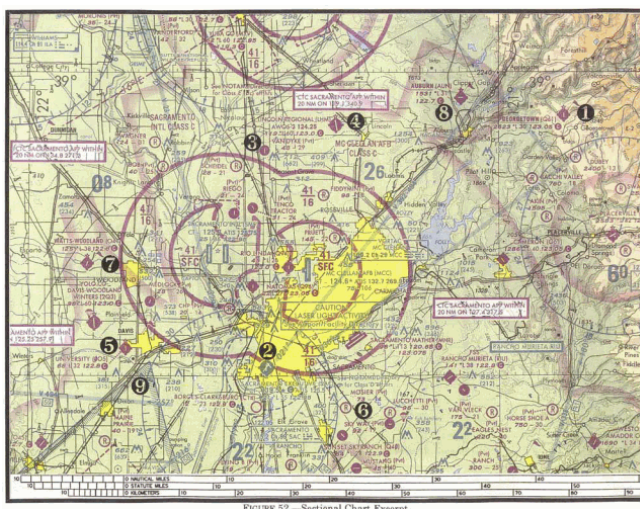
題目圖：



原始題號:0011433 題組:3 難易度:易 (R20130125)

- (C) 3. (請參考 Fig1，第7點) 在Woodland 鎮上空之 E 類空域，其底部高是在：(如圖A21_Fig1)
(A)該鎮部份區域之地表以上700英尺開始，自此以上沒有其他更高的底部 (B)該鎮部份區域之地表以上1200英尺開始，自此以上沒有其他更高的底部 (C)700英尺(地平面上)和 1200英尺(地平面上)

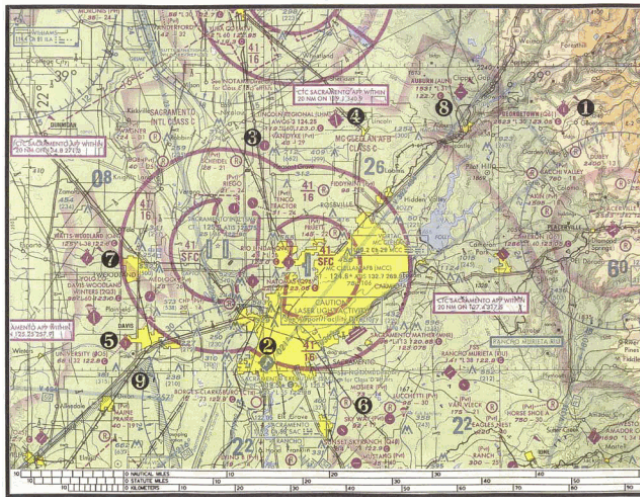
題目圖：



原始題號:0011434 題組:4 難易度:易 (R20130125)

- (B) 4.(請參考 Fig1, 第8點) 在Auburn 鎮上空之 E 類空域, 其底部高是在:(如圖 A21_Fig1)
(A)1200英呎(平均海平面) (B)700英呎(地平面上) (C)1200英呎(地平面上)

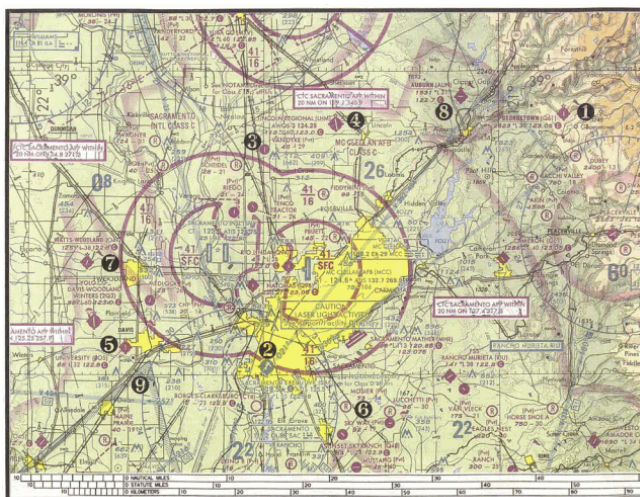
題目圖:



原始題號:0011435 題組:5 難易度:易 (R20130125)

- (B) 5.(請參考 Fig1, 第1點) 在Georgetown 機場 (Q61)上空之 E 類空域, 其底部高是在:(如圖A21_Fig1)
(A)地表 (B)3823英呎(平均海平面) (C)700英呎(地平面上)

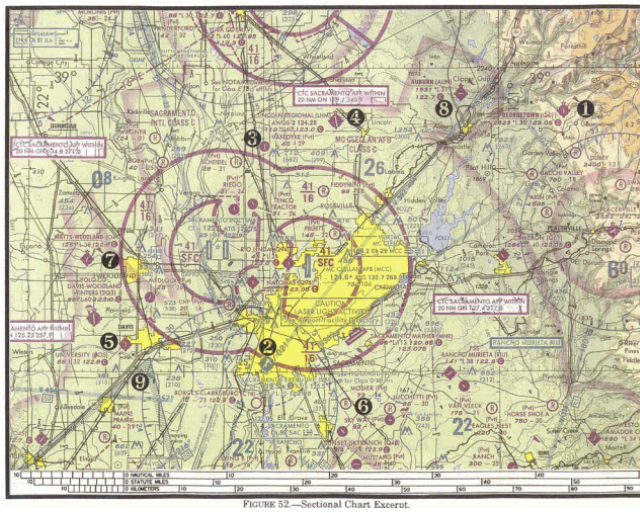
題目圖:



原始題號:0011436 題組:6 難易度:易 (R20130125)

- (B) 6.(請參考 Fig1, 第5點) 在University 機場 (005)上空之 E 類空域, 其底部是在:(如圖A21_Fig1)
(A)地表 (B)700英呎(地平面上) (C)1200英呎(地平面上)

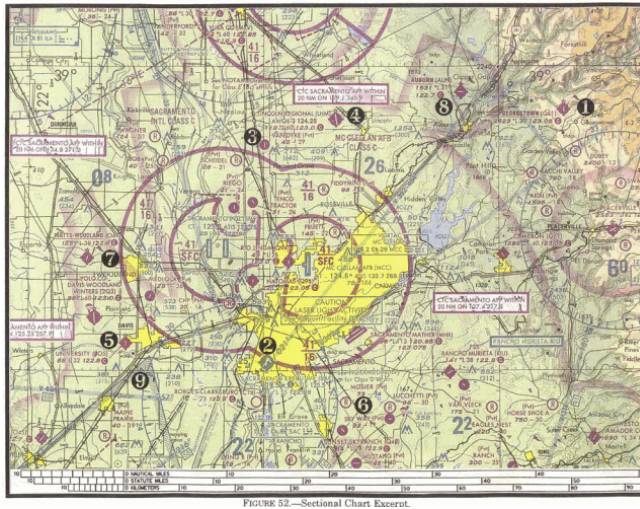
題目圖：



原始題號:0011437 題組:7 難易度:易 (R20130125)

- (C) 7.(請參考 Fig1, 第4點) 在Lincoln Regional 機場 (LHM) 10海哩內有一最高之障礙物 (裝有高強度燈的), 其高度離地表為 ?(如圖A21_Fig1)
(A)1,254 英呎 (B)662 英呎 (C)299 英呎

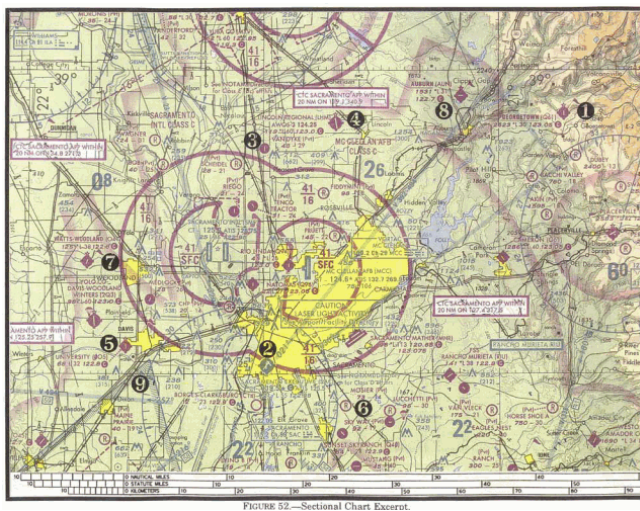
題目圖：



原始題號:0011438 題組:8 難易度:易 (R20130125)

- (B) 8.(請參考 Fig1, 第4點) 在Lincoln Regional 機場 (LHM) 東南東方 8海里之障礙物所在之地形高過該機場多高 ?(如圖A21_Fig1)
(A)376 英呎 (B)835 英呎 (C)1135 英呎

題目圖：



原始題號:0011439 題組:1 難易度:易 (R20130125)

(B) 9. (請參考 Fig2 , 前封面內部 , 第1點) 細的黑色陰影線最有可能是 : (如圖 A21_Fig2)

(A)到場航路 (B)軍用訓練航路 (C)州界線

題目圖 :

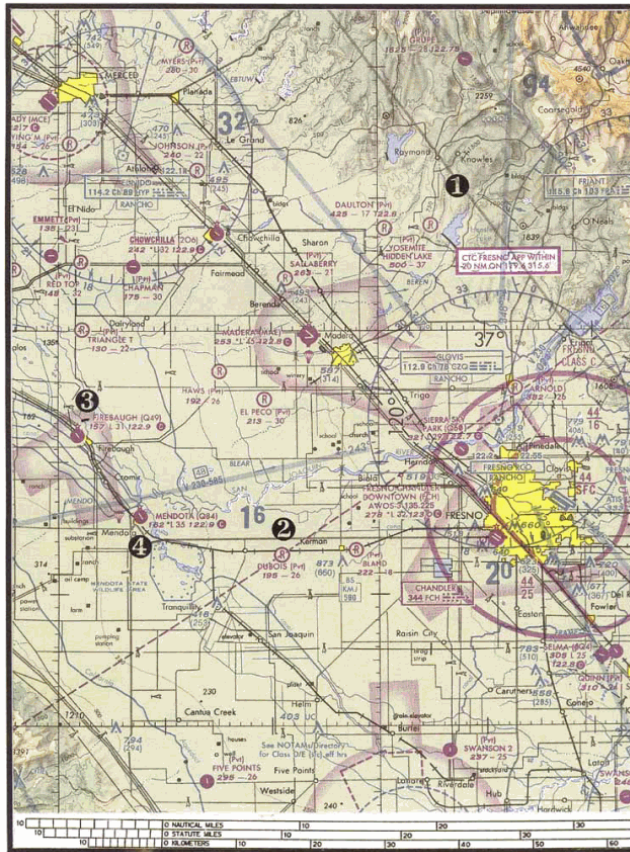


FIGURE 53.—Sectional Chart Excerpt.

原始題號:0011440 題組:2 難易度:易 (R20130125)

(B) 10. (請參考 Fig2 , 底封面內部 , 第2點) 16表示(如圖A21_Fig2)

(A)天線頂部的高度為離地面1600 呎 (B)該地圖方塊中最高海拔數字 (C)該地圖方塊中最低安全扇形高度

題目圖 :

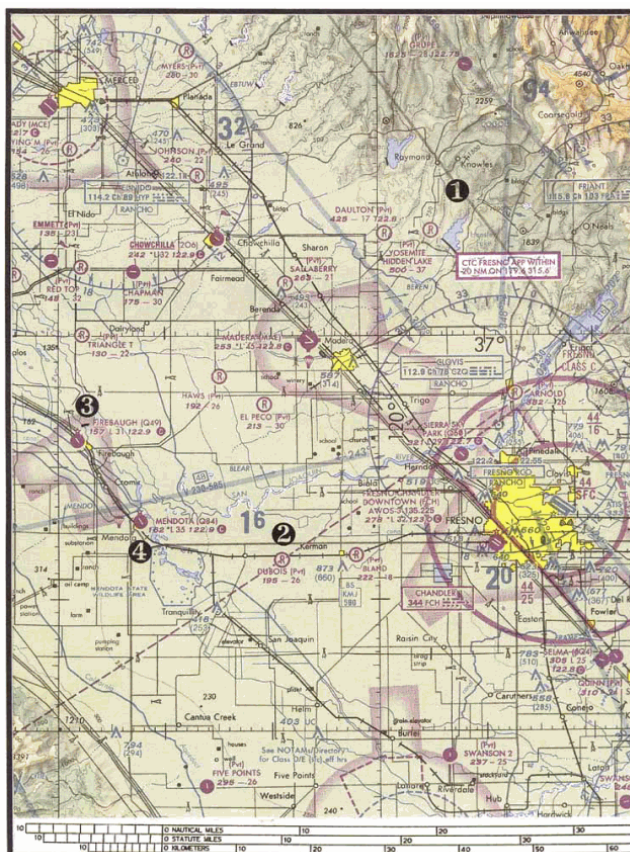


FIGURE 53.—Sectional Chart Excerpt.

原始題號:0011441 題組:1 難易度:易 (R20130125)

- (A) 11.(請參考 Fig3, 底封面外部, 第6點) 在Metropolitan Oakland International (OAK) 機場的C類空域中, 自地表往上延伸之區塊, 其頂部的高度為(如圖A21_Fig3)
(A)2100 英呎 (平均海平面) 與 3000英呎 (平均海平面) (B)8000 英呎 (平均海平面) (C)2100 英呎 (地平面上)

題目圖:



原始題號:0011442 題組:2 難易度:易 (R20130125)

- (B) 12.(請參考 Fig3, 底封面外部, 第1點). 那一規定的最低高度可躲開Livermore (LVK) 機場之D類空域?(如圖A21_Fig3)
(A)2,503 英呎 (平均海平面) (B)2,901 英呎 (平均海平面) (C)3,297 英呎 (平均海平面)



FIGURE 54.—Sectional Chart Excerpt.

原始題號:0011443 題組:0 難易度:易

- (A) 13. 飛機巡航高度 6500 英尺，其耗油率為 每小時 95 磅，地速 173 節，若飛行距離為 450 海里，需要油量多少？
(A) 248 英磅 (B) 265 英磅 (C) 284 英磅

原始題號:0011444 題組:0 難易度:易

- (A) 14. 飛機其耗油率為 每小時 80 英磅，地速 180 節，若飛行距離為 460 海里，需要油量多少？
(A) 205 英磅 (B) 212 英磅 (C) 460 英磅

原始題號:0011445 題組:0 難易度:易

- (C) 15. 飛機巡航高度 8500 英尺，其耗油率為 每小時 12.5 加侖，地速 145 節，若飛行距離為 435 海里，需要油量多少？
(A) 27 加侖 (B) 34 加侖 (C) 38 加侖

原始題號:0011446 題組:0 難易度:易

- (C) 16. 飛機巡航高度 6000 英尺，其耗油率為 每小時 9.5 加侖，地速 135 節，若飛行距離為 490 海里，需要油量多少？
(A) 27 加侖 (B) 30 加侖 (C) 35 加侖

原始題號:0011447 題組:0 難易度:易

- (A) 17. 飛機巡航高度 7500 英尺，其耗油率為 每小時 14.8 加侖，地速 167 節，若飛行距離為 560 海里，需要油量多少？
(A) 50 加侖 (B) 53 加侖 (C) 57 加侖

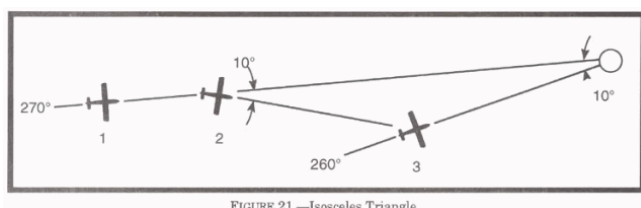
原始題號:0011448 題組:0 難易度:易

- (A) 18. 飛機耗油率為 每小時 14.7 加侖，地速 157 節，若飛行距離為 612 海里，需要油量多少？
(A) 58 加侖 (B) 60 加侖 (C) 64 加侖

原始題號:0011449 題組:1 難易度:易 (R20130125)

- (A) 19. (請參考Fig 4)若飛機由位置2 飛到位置3, 需飛行時間為13分鐘, 預估到達站台之飛行時間為?(如圖A21_Fig4)
(A)13分鐘 (B)17分鐘 (C)26分鐘

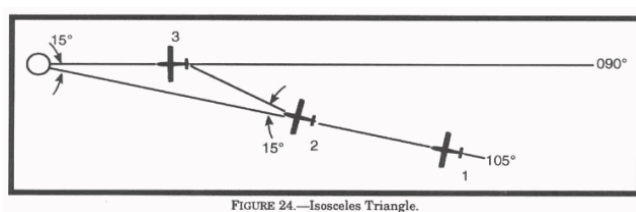
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原始題號:0011450 題組:1 難易度:易 (R20130125)

- (A) 20. (請參考Fig 5)若飛機由位置2 飛到位置3, 需飛行時間為15分鐘, 預估到達站台之飛行時間為?(如圖A21_Fig5)
(A)15分鐘 (B)30分鐘 (C)60分鐘

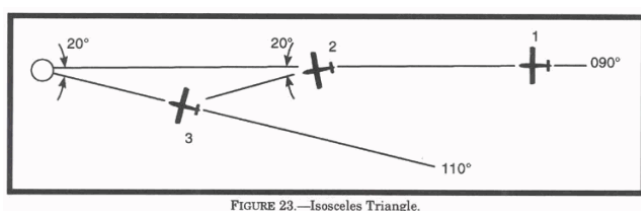
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原始題號:0011451 題組:1 難易度:易 (R20130125)

- (B) 21. (請參考Fig 6)若飛機由位置2 飛到位置3, 需飛行時間為13分鐘, 預估到達站台之飛行時間為?(如圖A21_Fig6)
(A)7.8 分鐘 (B)13 分鐘 (C)26 分鐘

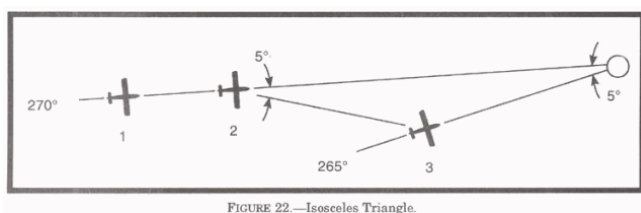
題目圖:



原始題號:0011452 題組:1 難易度:易 (R20130125)

- (A) 22. (請參考Fig 7)若飛機由位置2 飛到位置3, 需飛行時間為8分鐘, 預估到達站台之飛行時間為?(如圖A21_Fig7)
(A)8 分鐘 (B)16 分鐘 (C)48 分鐘

題目圖:



原始題號:0011453 題組:0 難易度:易

- (B) 23. 以電台 040 幅向(radial), 飛向電台, 飛行員 選擇055幅向(radial), 左轉 15 度 記錄時間, 當維持固定航向後, 飛行員紀錄偏航指示針移至中間 的時間為15分鐘, 基於以上資料, 估計到達電台之時間為?
(A)8 分鐘 (B)15分鐘 (C)30 分鐘

原始題號:0011454 題組:0 難易度:易

- (A) 24. 以電台 090 幅向(radial)飛向電台, 飛行員把OBS旋鈕向左旋轉10度, 飛機航向 右轉 10 度, 記錄時間, 當維持固定航向後, 飛行員紀錄偏航指示針(CDI)移至中間 的時間為8分鐘, 基於以上資料, 估計到達電台之時間為?
(A)8 分鐘 (B)16 分鐘 (C)24 分鐘

原始題號:0011455 題組:0 難易度:易

- (B) 25. 以電台 315 幅向(radial), 飛向電台, 飛行員 選擇320幅向(radial), 左轉 5 度, 記錄時間, 當維持固定航向後, 飛行員紀錄偏航指示針(CDI)移至中間 的時間為 12分鐘, 基於以上資料, 估計到達電台之時間為?
(A)10 分鐘 (B)12 分鐘 (C)24 分鐘

原始題號:0011456 題組:0 難易度:易

- (A) 26. 以電台 190 幅向(radial), 飛向電台, 飛行員 選擇195幅向(radial), 左轉 5 度, 記錄時間, 當維持固定航向後, 飛行員紀錄偏航指示針(CDI)移至中間 的時間為 10分鐘, 基於以上資料, 估計到達電台之時間為?
(A)10 分鐘. (B)15 分鐘. (C)20 分鐘.

原始題號:0011457 題組:0 難易度:易

- (A) 27. 磁航向 270 度, 真空速120節, 於12:37 經過VOR電台360幅向(radial), 於12:44 經過350幅向(radial). 估計到達電台之時間與距離為?
(A)42 分鐘和 84 哩 (B)42 分鐘和 91 哩 (C)44 分鐘和 96 哩.

原始題號:0011458 題組:0 難易度:易

- (C) 28. ADF相對方位(relative bearing)由265度變為260度需兩分鐘, 若地速145節, 到達電台之距離為?
(A)26 NM. (B)37 NM (C)58 NM.

原始題號:0011459 題組:0 難易度:易

- (B) 29. ADF顯示電台於翼尖方向, 其方位於兩分鐘之內有10度之改變, 若真空速160節, 到達電台之距離為?
(A)15 NM. (B)32 NM. (C)36 NM.

原始題號:0011460 題組:0 難易度:易

- (C) 30. 真空速115節, ADF相對方位由090度變為095度需1.5分鐘, 估計到達電台之距離為?
(A)12.5 哩 (B)24.5 哩 (C)34.5 哩

原始題號:0011461 題組:0 難易度:易

- (C) 31. 已知: 電台(於翼尖方向)方位之改變: 5 度, 方位改變需時: 5 分鐘, 真空速: 115節, 電台之距離為:
(A)36 哩 (B)57.5 哩 (C)115 哩

原始題號:0011462 題組:0 難易度:易

- (A) 32. ADF 調整頻道接收NDB電台訊號，顯示相對方位由095度變為100度需1.5分鐘，估計到達電台之時間為？
(A)18 分鐘 (B)24 分鐘 (C)30 分鐘

原始題號:0011463 題組:0 難易度:易

- (A) 33. 當飛機保持固定航向時，相對方位由原來的10度變為雙倍需時5分鐘，若真空速為105節，估計到達電台之時間與距離為？
(A)5 分鐘和 8.7哩 (B)10 分鐘和 17哩 (C)15 分鐘和 31.2 哩

原始題號:0011464 題組:0 難易度:易

- (A) 34. 已知：，於翼尖方向之電台的方位改變：15度，方位改變需時：6分鐘，耗油率：8.6加侖/小時，估計到達電台之所需之油量為：
(A)3.44 加侖 (B)6.88 加侖 (C)17.84 加侖

原始題號:0011465 題組:0 難易度:易

- (A) 35. 已知：於翼尖方向之電台的方位改變：15度，方位改變需時：7.5分鐘，真空速：85節，耗油率：9.6加侖/小時，估計到達電台之所需之時間，距離和油量為：
(A)30 分鐘；42.5 哩；4.80 加侖 (B)32 分鐘；48 哩；5.58 加侖 (C)48 分鐘；48 哩；4.58 加侖

原始題號:0011466 題組:0 難易度:易

- (B) 36. 當飛機保持固定航向時，相對方位(relative bearing)由原來的15度變為雙倍需時6分鐘，估計到達電台之時間為？
(A)3 minutes. (B)6 minutes. (C)12 minutes.

原始題號:0011467 題組:0 難易度:易

- (A) 37. 當飛機保持固定航向時，ADF指針由相對方位(relative bearing)045度變為090度需時5分鐘，估計到達電台之時間為？
(A)5 分鐘 (B)10 分鐘 (C)15 分鐘

原始題號:0011468 題組:0 難易度:易

- (A) 38. 當飛機以135節巡航並維持固定航向時，ADF指針由相對方位(relative bearing)315度變為270度需時7分鐘，估計到達電台之時間與距離為？
(A)7 分鐘和 16 哩 (B)14 分鐘和 28 哩 (C)19 分鐘和 38哩

原始題號:0011469 題組:0 難易度:易

- (C) 39. ADF 調整頻道接收NDB電台訊號，顯示相對方位(relative bearing)由270度變為265度需2.5分鐘，估計到達電台之時間為？
(A)9 分鐘 (B)18 分鐘 (C)30 分鐘

原始題號:0011470 題組:0 難易度:易 (R20181115)

- (C) 40. ADF 調整頻道接收NDB電台訊號，顯示相對方位(relative bearing)由085度變為090度需2分鐘，估計到達電台之時間為？
(A)15 分鐘 (B)18 分鐘 (C)24 分鐘

原始題號:0011471 題組:0 難易度:易

- (B) 41. 若相對方位(relative bearing)在2.5分鐘之內由090度變為100度，估計到達電台之時間為？
(A)12 分鐘 (B)15分鐘 (C)18 分鐘

原始題號:0011472 題組:0 難易度:易

- (B) 42. 調整ADF頻道接收NDB電台訊號，電台相對方位(relative bearing)由090度變為100度需2.5分鐘，若真空速為90節，估計到達電台之距離和時間為？
(A)15 哩和 22.5分鐘 (B)22.5 哩 和 15分鐘 (C)32哩 和 18分鐘

原始題號:0011473 題組:0 難易度:易

- (A) 43. 已知：電台於翼尖方向，其方位改變:10 度,方位改變需時： 4 分鐘,耗油率： 11 加侖 / 小時,估計到達電台之所需之油量為：
(A)4.4加侖 (B)8.4加侖 (C)12加侖

原始題號:0011474 題組:0 難易度:易

- (B) 44. 已知：電台於翼尖方向,其方位改變 :5 度,方位改變需時： 6 分鐘,耗油率 :12 加侖 / 小時,估計到達電台之所需之油量為：
(A)8.2 加侖 (B)14.4 加侖 (C)18.7 加侖

原始題號:0011475 題組:0 難易度:易

- (A) 45. 已知：真航線 :105 度,真航向： 085 度,真空速： 95 節,地速： 87 節,求風向與風速為何？
(A)020度和32節 (B)030度和38節 (C)200度和32節

原始題號:0011476 題組:0 難易度:易

- (B) 46. 已知：真航線： 345 度,真航向： 355 度,真空速： 85 節,地速： 95 節,求風向與風速為何？
(A)095度和19節 (B)113度和19節 (C)238度和18節

原始題號:0011477 題組:0 難易度:易

- (C) 47. 你已飛行52哩,偏離航線6哩,航程尚餘118哩,若要直接飛向目的地,航向要修正幾度？
(A)3 度 (B)6 度 (C)10 度

原始題號:0011478 題組:0 難易度:易

- (C) 48. 已知:偏離航線之距離： 9 海里,已飛行之距離:95 哩,尚餘之航程:125哩,若要直接航向目的地,航向修正角度為：
(A)4度 (B)6度 (C)10度

原始題號:0011479 題組:0 難易度:易

- (B) 49. 飛機離場時之條件狀況如下：機場海拔高度： 1000 英呎，巡航高度： 9500 英呎，爬升率： 500 英呎 / 分鐘，平均真空速： 135 節，真航線： 215 度，平均風速： 290 度 / 20 節，磁差： 3° W，羅差： -2°，平均耗油率13加侖/小時，求爬升時所需的大約時間，羅航向，距離，耗油量
(A)14 分鐘， 234 度， 26 海里， 3.9 加侖 (B)17 分鐘， 224 度， 36 海里， 3.7 加侖。
(C)17 分鐘， 242 度， 31 海里， 3.5 加侖

原始題號:0011480 題組:0 難易度:易

- (B) 50. 飛機離場時之條件狀況如下：機場海拔高度 1500 英呎，巡航高度 9500 英呎，爬升率 500 英呎 / 分鐘，平均真空速160 節，真航線 145 度，平均風速 080 度 / 15 節，磁差 5° E，羅差 -3° ，平均耗油率14加侖/小時，求爬升時所需的大約時間，羅航向，距離，耗油量
(A)14分鐘，128 度，35 海里，3.2 加侖 (B)16分鐘，132 度，41 海里，3.7 加侖 (C)16分鐘，128 度，32 海里，3.8 加侖

原始題號:0011481 題組:0 難易度:易

- (C) 51. 已知:風向 / 風速 175 度 / 20 節，距離 135 哩，真航線 075 度，平均真空速80 節，耗油率105磅/小時。求航程所需之時間與耗油
(A)1 小時 28 分 和 73.2 磅 (B)1 小時 38 分 和 158 磅 (C)1 小時 40 分 和 175 磅

原始題號:0011482 題組:0 難易度:易

- (C) 52. 飛機以下列條件下降到機場：巡航高度 7500 英呎，機場海拔高度 1300 英呎，下降到 800 英呎（離地表），下降率 300 英呎 / 分鐘，平均真空速 120 節，真航線 165 度，平均風向風速 240度20 節，磁差 4° E，羅差 -2° ，平均耗油率9.6加侖/小時，求下降時所需的大約時間，羅航向，距離，耗油量。
(A)16 分鐘，168度，30 哩，2.9 加侖 (B)18 分鐘，164度，34 哩，3.2 加侖 (C)18 分鐘，168度，34哩，2.9 加侖

原始題號:0011483 題組:0 難易度:易

- (C) 53. 飛機以下列條件下降到機場：巡航高度 10500 英呎，機場海拔高度 1700 英呎，下降到 1000 英呎（離地表），下降率 600 英呎 / 分鐘，平均真空速135 節，真航線 263度，平均風向風速 330度30 節，磁差 7° E，羅差 $+3^{\circ}$ ，平均耗油率11.5 加侖/小時
(A)9分鐘，274度，26哩，2.8加侖 (B)13分鐘，274度，28哩，2.5 加侖 (C)13分鐘，271度，26哩，2.5加侖

原始題號:0011484 題組:1 難易度:易 (R20130125)

- (C) 54. (請參考Fig8) 飛行員通常於降落後，讓飛機完全離開跑道後，才呼叫地面管制，這時是當飛機在圖上何位置:(如圖A21_Fig8)
(A)通過圖上方紅色符號時 (B)中間符號，折線的那一邊 (C)中間符號，實線的那一邊

題目圖：

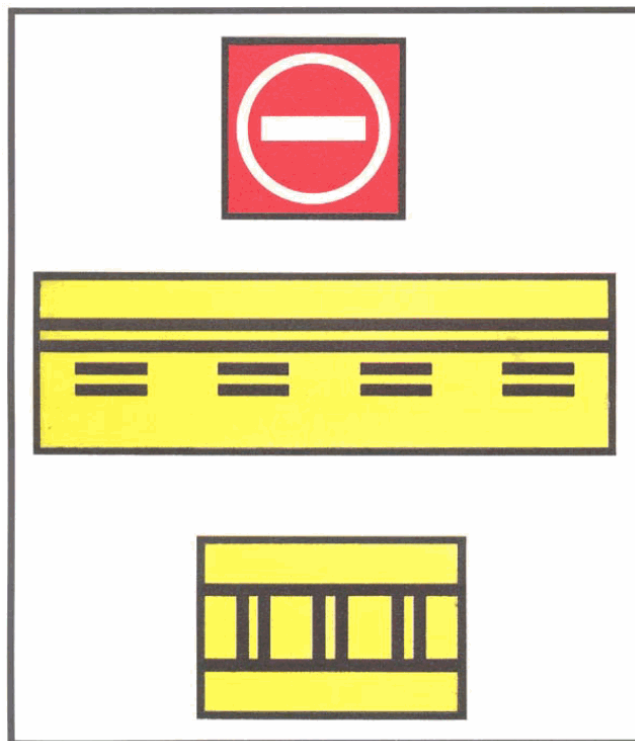


FIGURE 51.—Airport Signs.

原始題號:0011485 題組:2 難易度:易 (R20130125)

- (B) 55.(請參考Fig8) 圖上方紅色符號最有可能於那裡看到 :(如圖A21_Fig8)
(A)當離開跑道時 , 在呼叫地面管制前 (B)在跑道或滑行道交會處 , 當行車道可能會被誤認為滑行道 (C)接近儀器降落跑道的進場端

題目圖：

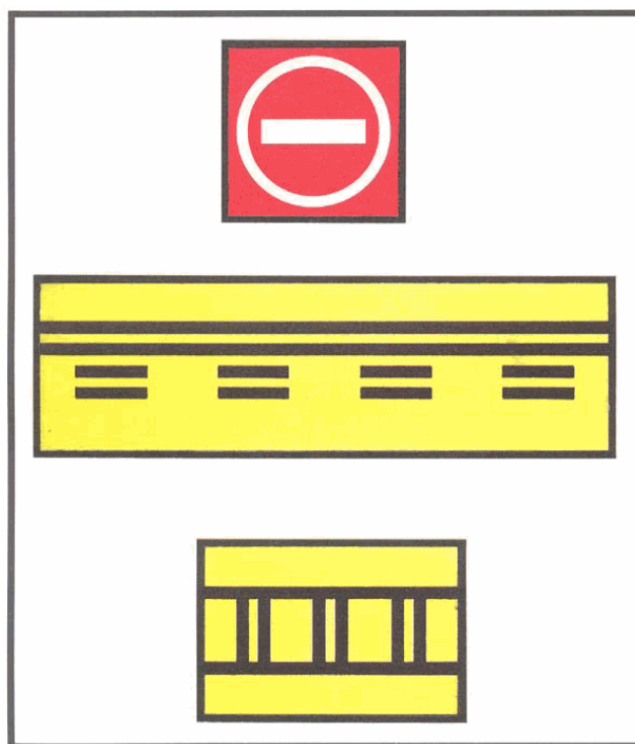


FIGURE 51.—Airport Signs.

原始題號:0011486 題組:3 難易度:易 (R20130125)

- (C) 56.(請參考Fig8) 正當你離開正在使用的跑道時 , 你很有可能被要求離開儀器降落關鍵區域 , 這時是當你經過那一個符號 ?(如圖A21_Fig8)
(A)上方紅色符號 (B)中間黃色符號 (C)下方黃色符號

題目圖：

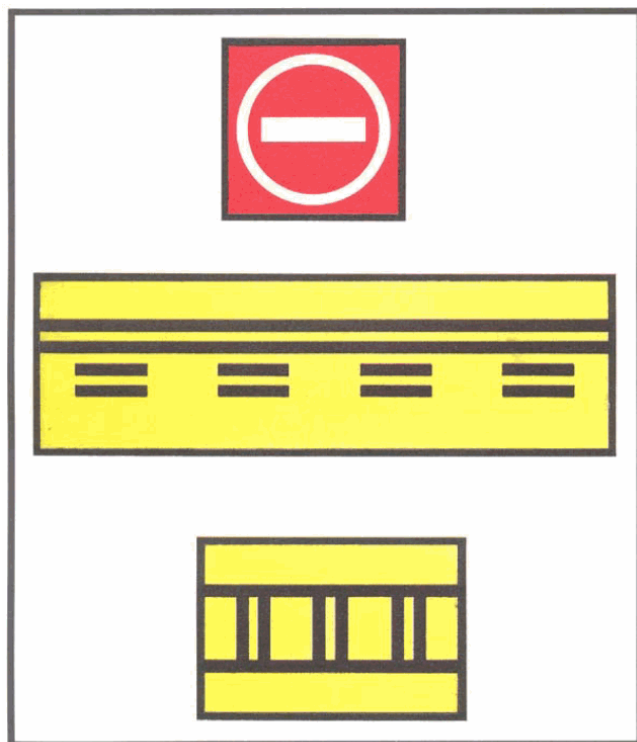


FIGURE 51.—Airport Signs.

原始題號:0011487 題組:4 難易度:易 (R20130125)

- (A) 57.(請參考Fig8) 當你在滑行前往正在使用的跑道時，你有可能被要求停在儀器降落關鍵區域(ILS critical area)之外，在那一個符號之前？(如圖A21_Fig8)
- (A)下方黃色符號 (B)上方紅色符號 (C)中間黃色符號

題目圖：

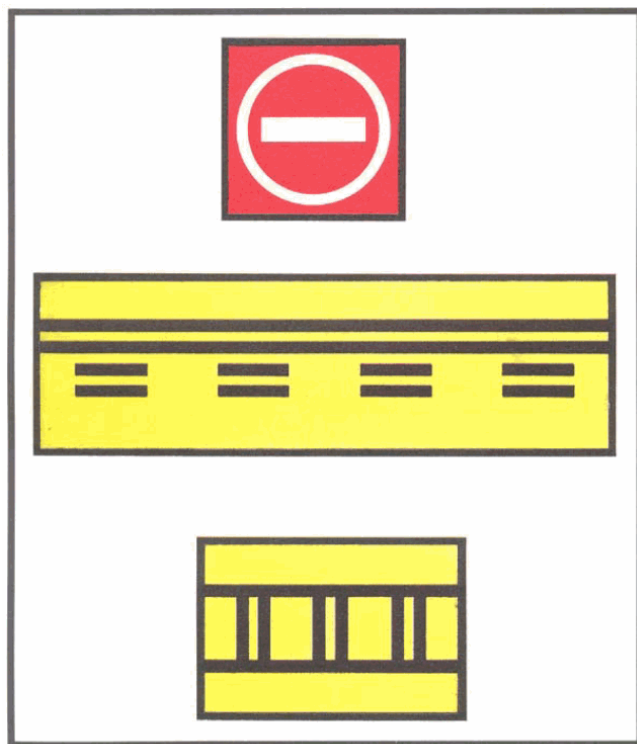


FIGURE 51.—Airport Signs.

原始題號:0011488 題組:5 難易度:易 (R20130125)

- (A) 58.(請參考Fig8)那一符號與防止飛機闖入跑道沒有直接關聯(如圖A21_Fig8)
- (A)上方紅色符號 (B)中間黃色符號 (C)下方黃色符號

題目圖：

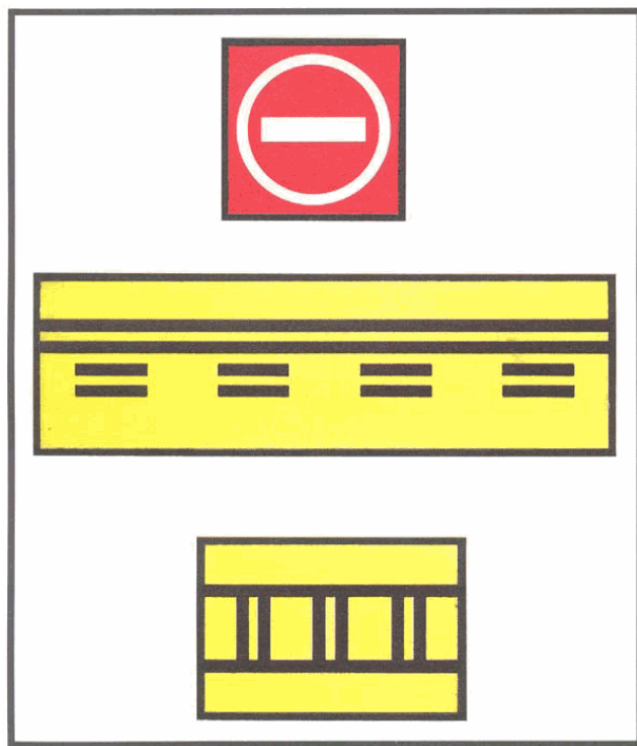


FIGURE 51.—Airport Signs.

原始題號:0011489 題組:0 難易度:易

- (B) 59. 當你在目視飛行規則下接近VOR時，必須：
- (A)作90度左轉與右轉，以掃瞄看有沒有其他飛機 (B)保持警戒以躲避從VOR其他方向來的飛機 (C)在所飛的VOR幅向中，當通過VOR時，從右方通過，讓在同一幅向但從反方向來的飛機有通過的空間

原始題號:0011490 題組:0 難易度:中

- (C) 60. 若進場程序包括了程序轉彎時，從第一次通過最初進場定位點(IAF) 上空，直到程序轉彎結束為止，其最大速度限制為：
- (A)180 節 指示空速. (B)200 節 真空速. (C)200 節 指示空速.

原始題號:0011491 題組:0 難易度:中

- (B) 61. 在美國，當在航路以外飛行時，於指定為山區的地區，要保持與障礙物隔離高度為2000呎，在非山區，其隔離為1000呎，這個隔離的高度名稱叫做
- (A)最低向量高度(MVA) (B)航路外障礙物隔離高度 (OROCA) (C)最低安全 / 扇形區域高度(MSA)

原始題號:0011492 題組:0 難易度:中

- (C) 62. 那一種導航系統是慣性導航系統 (INS)？是一種提供位置資訊的導航電腦，
- (A)其資訊來自羅盤，空速，與所輸入的風與磁差資料 (B)其資訊來自於類似雷達之感應器，此感應器是測量地速與偏流角 (C)藉由獨立運作(不靠地面助航設備)的陀螺儀和加速器提供訊號

原始題號:0011493 題組:0 難易度:中

- (A) 63. 在什麼位置，DME指示器所顯示距 VORTAC的距離與地面上實際距離會有最大的誤差？
- (A)高高度下接近VORTAC (B)低高度下接近VORTAC (C)低高度下遠離VORTAC

原始題號:0011494 題組:0 難易度:中

- (B) 64. 當直接在VORTAC之上方12,000呎時 , 飛行員應看見DME的指示為?
 (A)0 DME里 (B)2 DME 里. (C)2.3 DME 里.

原始題號:0011495 題組:1 難易度:中 (R20211227)

- (B) 65.(請參考Fig9) 那一個RMI 圖指出飛機以磁方向235度飛離電台?(風055度20節)(如圖A21_Fig9)
 (A)2 (B)3 (C)4

題目圖：

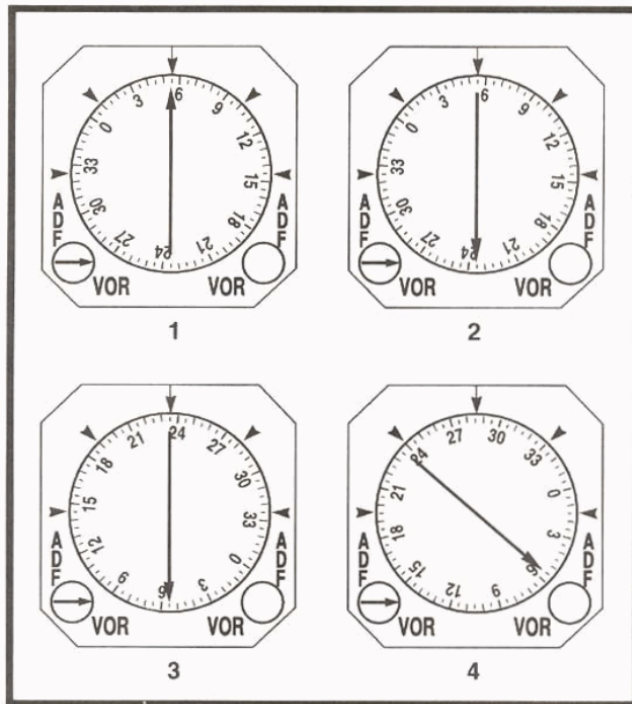


FIGURE 125.—RMI Illustrations.

原始題號:0011496 題組:2 難易度:中 (R20130125)

- (B) 66.(請參考Fig9) 如4號圖所示 , 往電台的磁方向為何 ?(如圖A21_Fig9)
 (A)285 度. (B)055 度. (C)235 度.

題目圖：

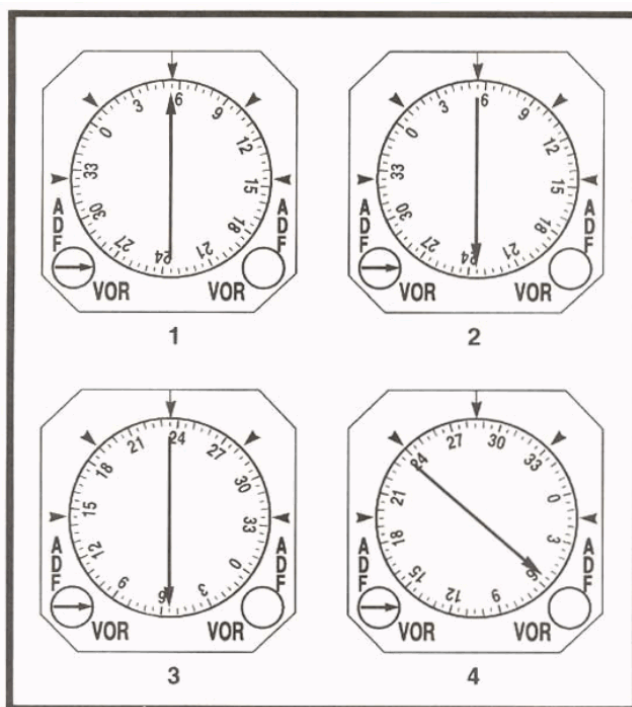


FIGURE 125.—RMI Illustrations.

原始題號:0011497 題組:3 難易度:中 (R20130125)

- (A) 67. (請參考Fig9) 那一個RMI 圖指出飛機在電台的西南方, 並飛向電台?(如圖A21_Fig9)
(A)1 (B)2 (C)3

題目圖：

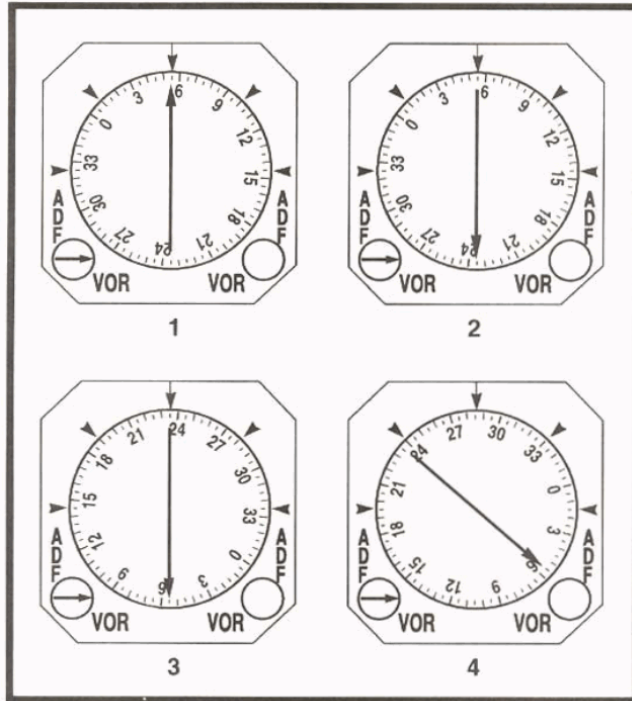


FIGURE 125.—RMI Illustrations.

原始題號:0011498 題組:4 難易度:中 (R20211227)

- (B) 68. (請參考Fig9) 那一個RMI 圖指出飛機在電台的055度幅向(radial), 並飛離電台?(如圖A21_Fig9)
(A)1 (B)2 (C)3

題目圖：

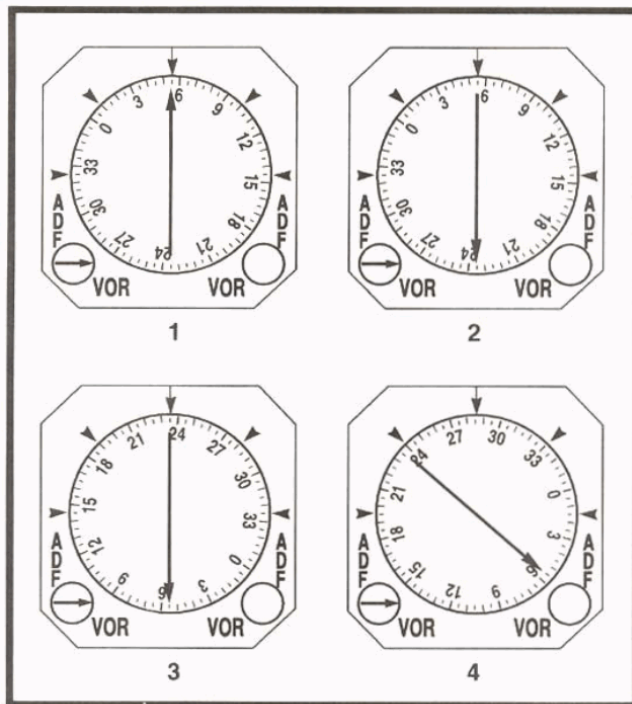


FIGURE 125.—RMI Illustrations.

原始題號:0011499 題組:1 難易度:中 (R20130125)

- (A) 69. (請參考Fig10) 在No.1 NAV所選擇的幅向(radial)上, 飛機左右偏離了多少海里?(如圖A21_Fig10)
(A)5.0 NM (B)7.5 NM (C)10.0 NM

題目圖：

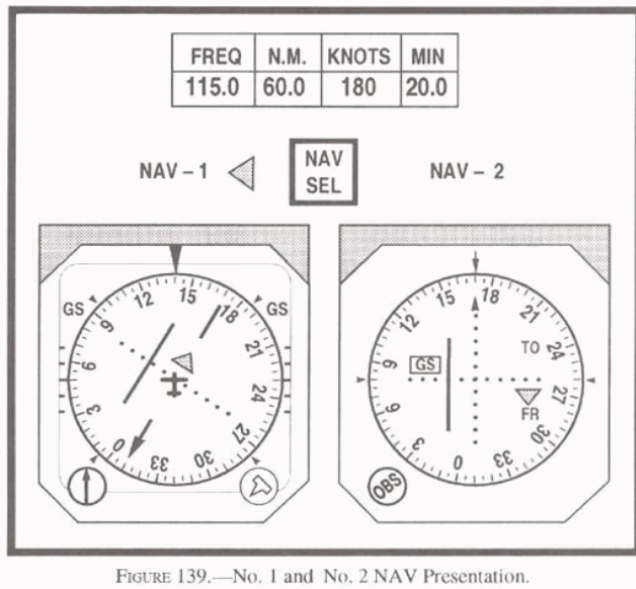


FIGURE 139.—No. 1 and No. 2 NAV Presentation.

原始題號:0011500 題組:2 難易度:中 (R20130125)

- (C) 70.(請參考Fig10) No.1 NAV指示飛機在那一個幅向(radial) ?(如圖A21_Fig10)
(A)R-175. (B)R-165. (C)R-345.

題目圖：

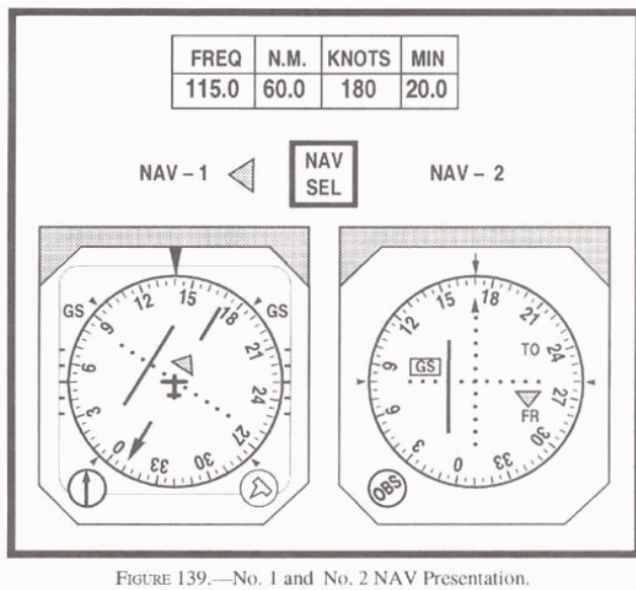
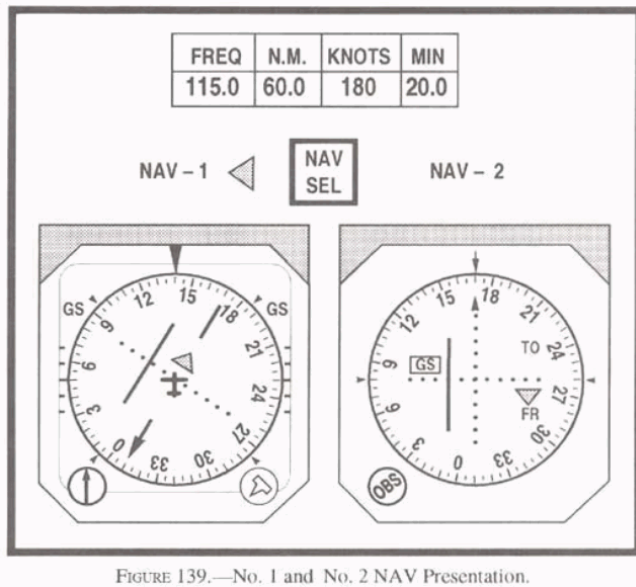


FIGURE 139.—No. 1 and No. 2 NAV Presentation.

原始題號:0011501 題組:3 難易度:中 (R20130125)

- (B) 71.(請參考Fig10) 在No.1 NAV 中那一個OBS選擇可使CDI歸回中央位置 , 和改變TO / FROM 指示器到TO ?(如圖A21_Fig10)
(A)175 (B)165 (C)345

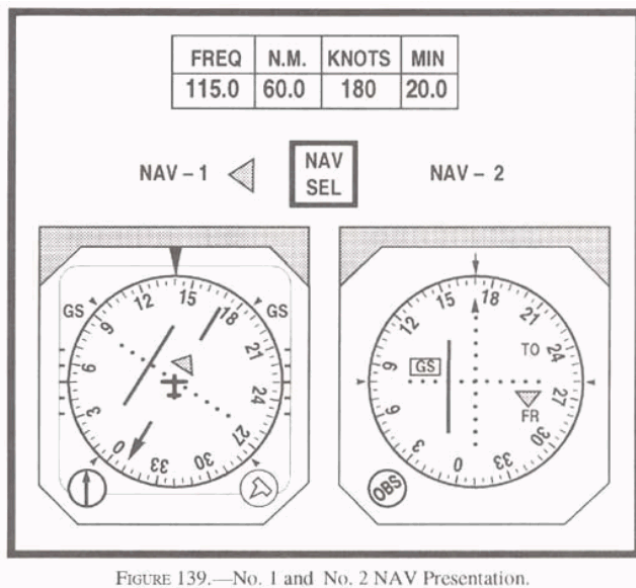
題目圖：



原始題號:0011502 題組:4 難易度:中 (R20130125)

- (C) 72. (請參考Fig10) 在No. 2 NAV所選擇的幅向(radial)上，飛機左右偏離了多少度？(如圖A21_Fig10)
 (A)1 度 (B)2 度 (C)4 度

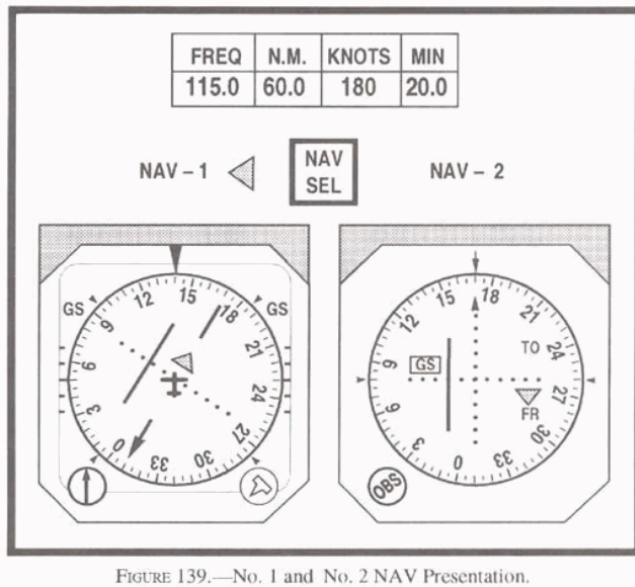
題目圖：



原始題號:0011503 題組:5 難易度:中 (R20130125)

- (A) 73. (請參考Fig10) 在No. 2 NAV 中那一個OBS選擇可使CDI歸回中央位置？(如圖A21_Fig10)
 (A)174 (B)166 (C)335

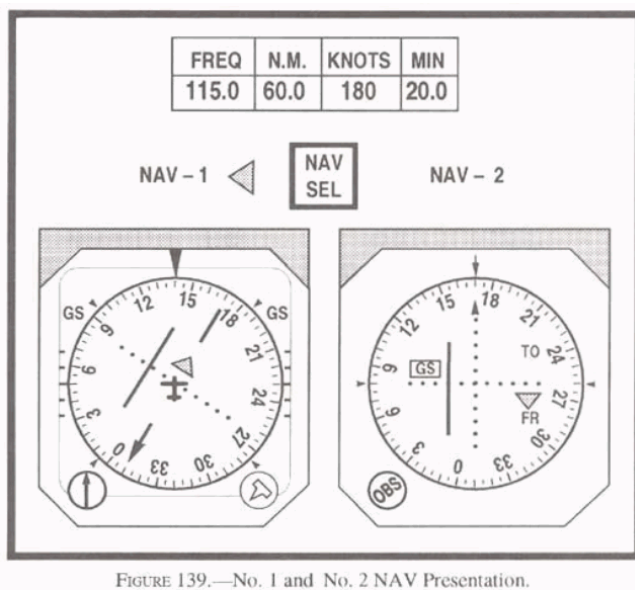
題目圖：



原始題號:0011504 題組:6 難易度:中 (R20130125)

- (C) 74. (請參考Fig10) 在No. 2 NAV 中那一個OBS選擇可使CDI歸回中央位置，和改變TO / FROM 指示器到TO ?(如圖A21_Fig10)
- (A)166 (B)346 (C)354

題目圖：



原始題號:0011505 題組:1 難易度:中 (R20130125)

- (A) 75. (請參考Fig12) 你接收到航管的指示： "...HOLD EAST OF THE ABC VORTAC ON THE ZERO NINER ZERO RADIAL, LEFT TURNS..." 那一種程序是被建議為進入待命航線的方法 ?(如圖A21_Fig12)
- (A)只有平行進入法 (B)只有直接進入法 (C)只有淚點進入法

題目圖：

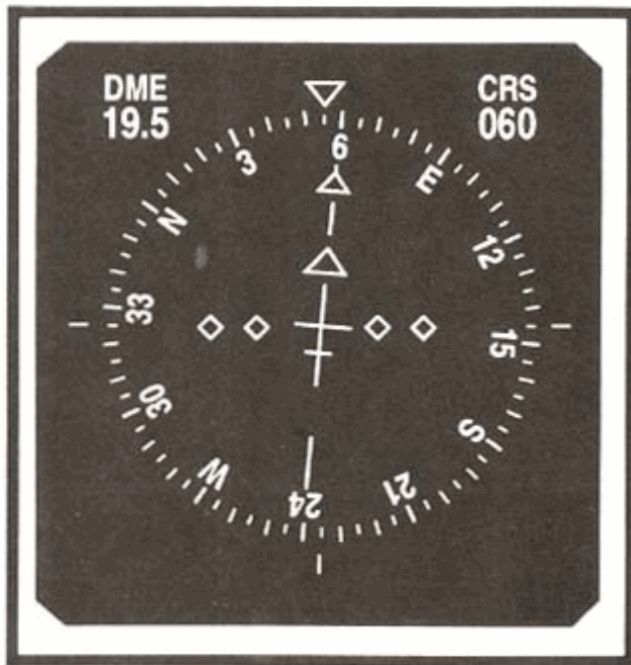


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011506 題組:2 難易度:中 (R20130125)

- (B) 76. (請參考Fig12) 你接收到航管的指示: "...CLEARED TO THE ABC VORTAC. HOLD SOUTH ON THE ONE EIGHT ZERO RADIAL.." 那一種程序是被建議為進入待命航線的方法?(如圖A21_Fig12)
- (A)只有淚點進入法 (B)只有直接進入法 (C)只有平行進入法

題目圖：

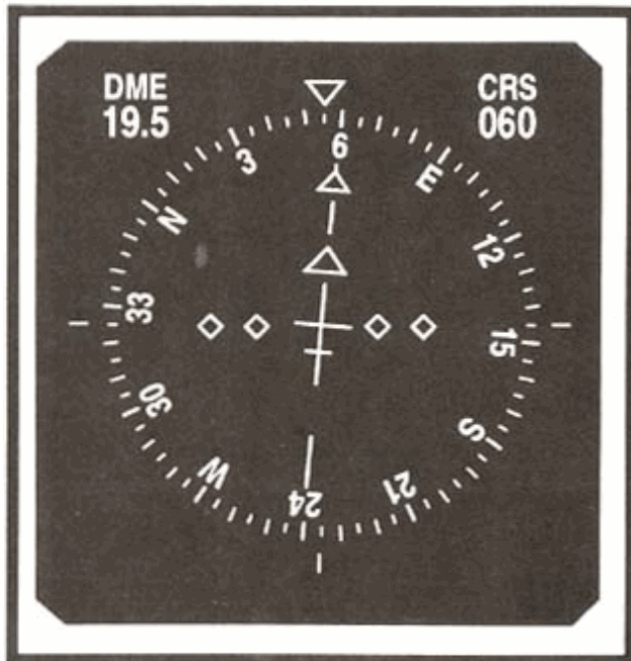


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011507 題組:3 難易度:中 (R20130125)

- (C) 77. (請參考Fig12) 你接收到航管的指示: "...CLEARED TO THE XYZ VORTAC. HOLD NORTH ON THE THREE SIX ZERO RADIAL, LEFT TURNS..." 那一種程序是被建議為進入待命航線的方法?(如圖A21_Fig12)
- (A)只有平行進入法 (B)只有直接進入法 (C)只有淚點進入法

題目圖：

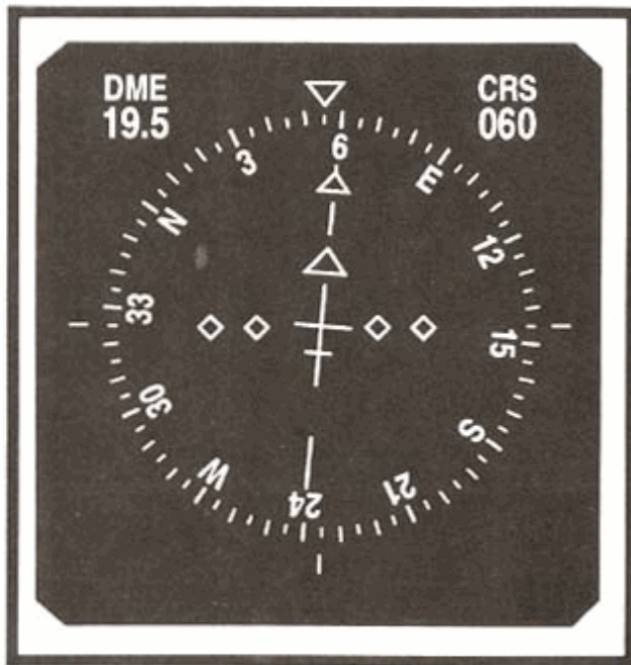


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011508 題組:4 難易度:中 (R20130125)

- (B) 78. (請參考Fig12) 你接收到航管的指示 : "...CLEARED TO THE ABC VORTAC. HOLD WEST ON THE TWO SEVEN ZERO RADIAL..." . 那一種程序是被建議為進入待命航線的方法 ?(如圖A21_Fig12)
- (A)只有平行進入法 (B)只有直接進入法 (C)只有淚點進入法

題目圖：

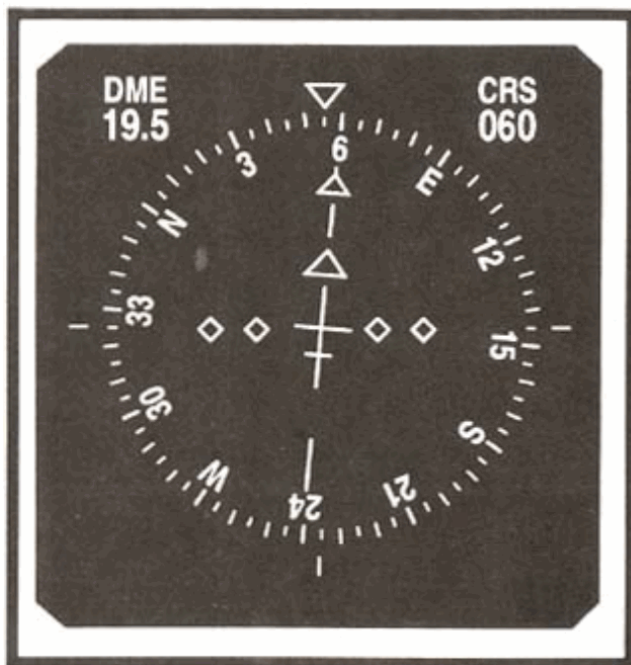


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011509 題組:1 難易度:中 (R20130125)

- (C) 79. (請參考Fig13) 飛行員接收到航管的指示 : "...CLEARED TO THE ABC VORTAC. HOLD WEST ON THE TWO SEVEN ZERO RADIAL..." . 那一種程序是被建議為進入待命航線的方法 ?(如圖A21_Fig13)
- (A)平行和淚點進入法 (B)只有平行進入法 (C)只有直接進入法

題目圖：

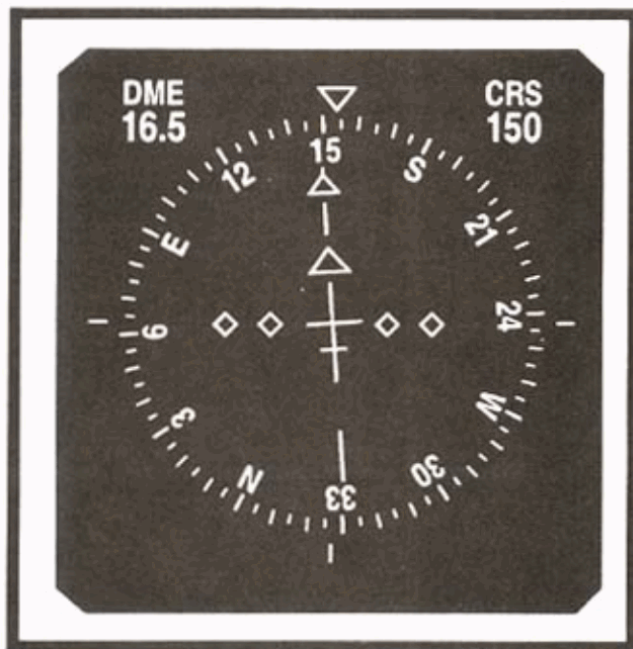


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011510 題組:2 難易度:中 (R20130125)

- (C) 80. (請參考Fig13) 飛行員接收到航管的指示: "...CLEARED TO THE XYZ VORTAC. HOLD NORTH ON THE THREE SIX ZERO RADIAL, LEFT TURNS..." 那一種程序是被建議為進入待命航線的方法?(如圖A21_Fig13)
- (A)只有淚點進入法 (B)只有平行進入法 (C)直接進入法

題目圖：

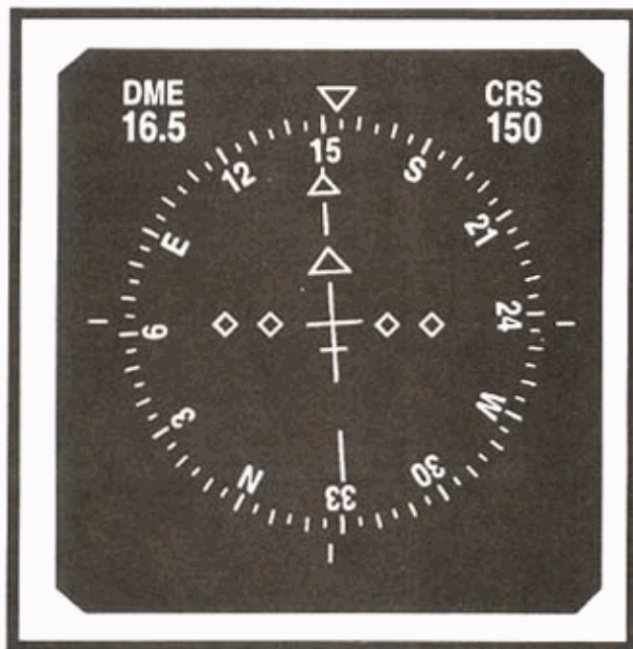


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011511 題組:3 難易度:中 (R20130125)

- (A) 81. (請參考Fig13) 飛行員接收到航管的指示: "...CLEARED TO THE ABC VORTAC. HOLD SOUTH ON THE ONE EIGHT ZERO RADIAL..." 那一種程序是被建議為進入待命航線的方法?(如圖A21_Fig13)
- (A)只有淚點進入法 (B)只有平行進入法 (C)只有直接進入法

題目圖：

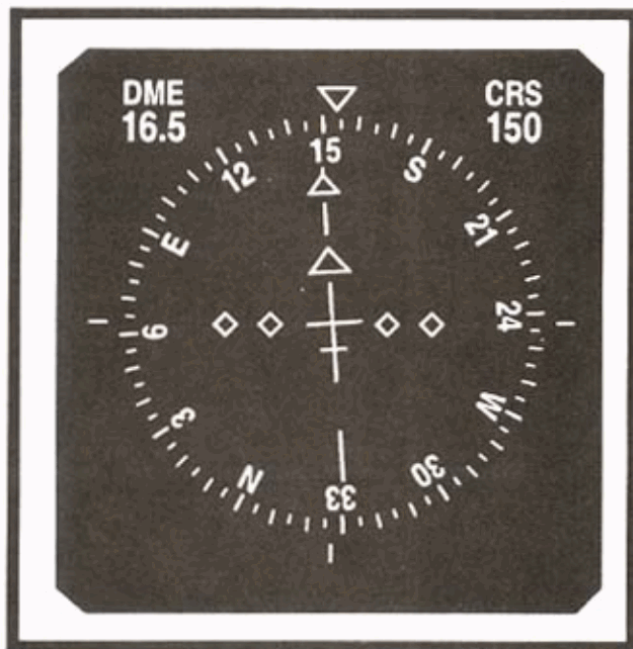


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011512 題組:0 難易度:中

- (A) 82. 在待命航線(holding)中螺旋槳飛機最大速度限制是
(A)265 節. (B)230 節. (C)156 節.

原始題號:0011513 題組:0 難易度:中

- (C) 83. 在民航與軍方共用的機場上空 7000呎到14000呎之高度中， 民用噴射渦輪引擎飛機最大待命速度限制是
(A)200 節. (B)265 節. (C)230 節.

原始題號:0011514 題組:0 難易度:中

- (A) 84. 除非在亂流或結冰的情況下需要更高速度， 而航管也得到知會， 否則在民用機場上空 15000呎之平均海平面高度中， 民用噴射渦輪引擎飛機最大待命速度(Maximum holding speed)限制是？
(A)265 節. (B)230 節. (C)250 節.

原始題號:0011515 題組:0 難易度:中

- (C) 85. 民用飛機在民航與軍方共用的機場上空 14000呎待命， 應預期使用的待命速度(holding speed)是？
(A)250 節. (B)260 節. (C)230 節.

原始題號:0011516 題組:0 難易度:中

- (A) 86. 當使用飛行方向指示系統時， 在待命航線(holding pattern)中轉彎， 飛行員應保持那一種轉彎率或左右傾斜角(bank angle)？
(A)3度每秒 或 25度 左右傾斜角， 兩者中之較小者. (B)3度 每秒 或 30度 左右傾斜角， 兩者中之較小者. (C)1-1/2度 每秒 或 25度 左右傾斜角， 兩者之中較小者.

原始題號:0011517 題組:0 難易度:中

- (B) 87. 當在14000呎以上進入待命航線(holding pattern)時， 第一次向外航線不應超過
(A)1 分鐘. (B)1-1/2 分鐘. (C)1-1/2 分鐘 或 10 海里， 兩者中之較小者.

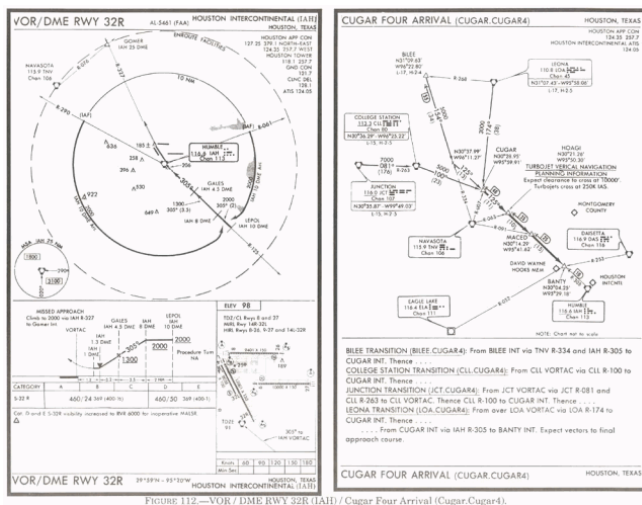
原始題號:0011518 題組:0 難易度:中

- (C) 88. 當在NDB上待命時，在何處開始第二段飛離航段(second leg outbound)的計時？
 (A)等待點在飛機的側面或當飛機完成轉向至outbound航向機翼平飛時，兩者先發生為主 (B)在通過電台後，以標準轉彎率完成了 1 分鐘的轉彎時 (C)等待點在飛機的側面

原始題號:0011519 題組:1 難易度:中 (R20180206)

- (A) 89.(請參考 Fig. 14) 在 Cugar Four 標準儀器到場結束於那裡?(如圖A21_Fig14)
 (A)在 BANTY INT。 (B)在 IAH VORTAC。 (C)當被許可降落時。

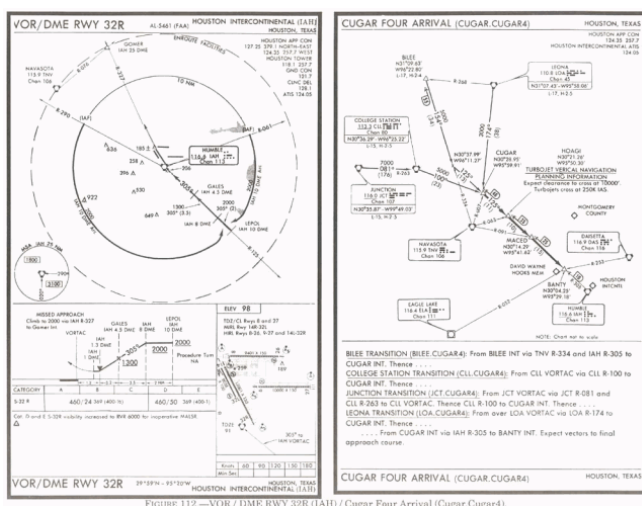
題目圖：



原始題號:0011520 題組:2 難易度:中 (R20180206)

- (C) 90.(請參考 Fig. 14) 如果在 Cugar Four 到場，飛機轉向至 IAH 的 305 幅向(radial)後失去通信，飛行員該如何處置?(如圖A21_Fig14)
 (A)直飛至IAH VORTAC，然後沿IAH R-125出境做程序轉彎後進場 (B)從BANTY INT 沿IAH R-290 飛至最初進場定位點，然後沿IAH 10 海里弧圈，準備最後進場 (C)直飛至IAH VORTAC，然後沿IAH 10 海里弧圈至任一最初進場定位點，準備最後進場

題目圖：



原始題號:0011521 題組:3 難易度:中 (R20180206)

- (C) 91.(請參考 Fig. 14) 當飛在 IAH 10 海里弧圈上遭遇左側風，則相對於機翼尖端 90 度位置，為維持在10海里弧圈上，方位指針應指向何處?(如圖A21_Fig14)
 (A)指向左側機翼尖端點。 (B)在左側機翼尖端點之後。 (C)在左側機翼尖端點之前。

題目圖：

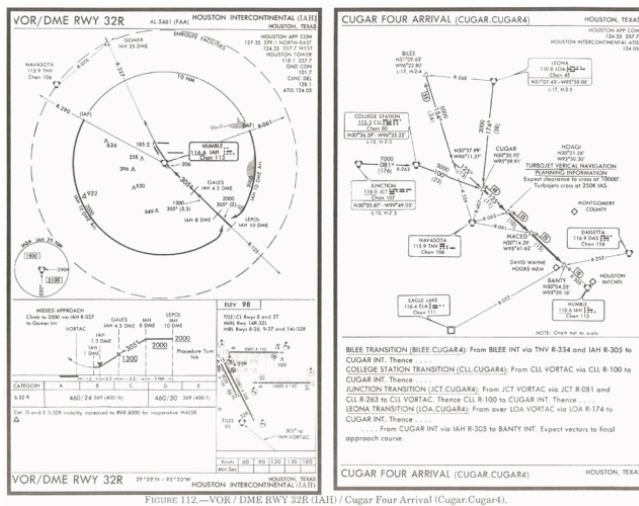


FIGURE 112.—VOR/DME RWY 32R (IAH) / Cugar Four Arrival (Cugar-Cugar4).

原始題號:0011522 題組:0 難易度:中

(C) 92. ILS提供何種功能？

(A)方位，距離及垂直角 (B)方位，範圍及垂直角 (C)導引，範圍及目視訊息

原始題號:0011523 題組:0 難易度:中

(B) 93. ILS 的左右定位台(localizer)·發射器的頻率範圍為何？

(A)108.10 to 118.10 MHz. (B)108.10 to 111.95 MHz. (C)108.10 to 117.95 MHz.

原始題號:0011524 題組:0 難易度:中

(C) 94. ILS中那一部份由左右定位台(localizer)識別碼之前兩碼來識別？

(A)內信標台 (B)中羅盤定位台 (C)外羅盤定位台

原始題號:0011525 題組:0 難易度:中

(A) 95. 若有安裝的話，在通過ILS反向信標台(back course marker)時會接收到何種聽覺及目視指示？

(A)連串兩短響組合及白色信標台燈 (B)連續每秒一長音及白色信標台燈 (C)一連串兩長音組合及白色信標台燈

原始題號:0011526 題組:0 難易度:中

(A) 96. 通過ILS內信標台(inner marker)之聽覺及目視指示為何？

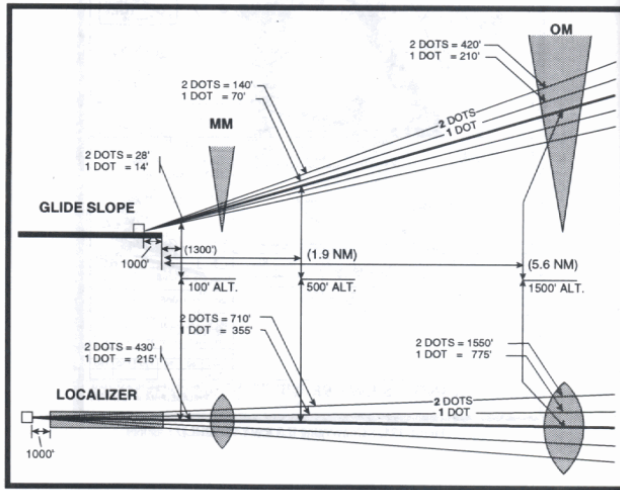
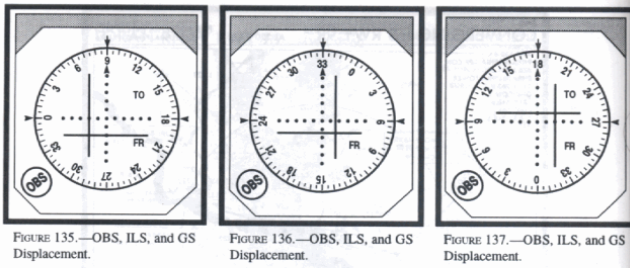
(A)每秒連續6短音 (B)每秒連續2長音 (C)每秒兩次長短音交替

原始題號:0011527 題組:1 難易度:中 (R20130125)

(B) 97. (根據Fig15表135及138) 在1.9海里處，其左右定位台(localizer)的偏移以及下滑道(glide slope)的偏移為何？(如圖A21_Fig15)

(A)左右定位台中心線左側710呎及下滑道之下140呎 (B)左右定位台中心線右側710呎及下滑道之上140呎 (C)左右定位台中心線右側430呎及下滑道之上28呎

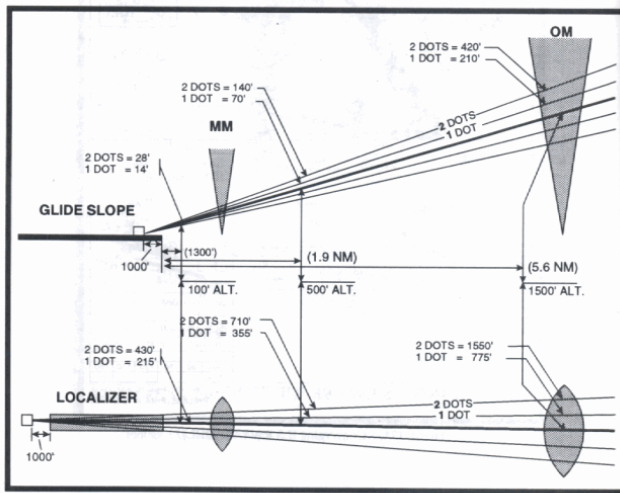
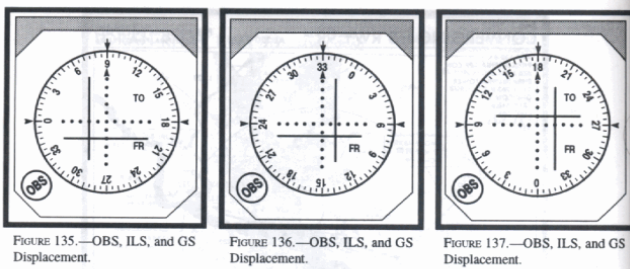
題目圖：



原始題號:0011528 題組:1 難易度:中 (R20180206)

- (C) 98. (根據 Fig. 15 中的圖136及138) 距跑道1300呎處其左右定位台(localizer)的偏移以及下滑道(glide slope)的偏移為何?(如圖A21_Fig15)
- (A) 下滑道之下21呎及跑道中心線右側約320呎。(B) 下滑道之上28呎及跑道中心線右側約250呎。(C) 下滑道之上21呎及跑道中心線左側約320呎。

題目圖：



原始題號:0011529 題組:0 難易度:中

- (B) 99. 何時航路偏移指示(CDI)可視為最大偏移?
- (A) 當CDI指針從最左側移至最右側或反之亦然 (B) 當CDI指針從中間偏移至最左或最右側 (C) 當CDI指針從最左側一半處移至最右側一半處或反之亦然

原始題號:0011530 題組:0 難易度:中

- (B) 100. 在第一類ILS進場甚麼設備可取代失效的中信標台 (middle marker) ?
(A). ASR及PAR (B)中信標台對直線進場並無影響 (C)羅盤定位台 , PAR 及 ASR

原始題號:0011531 題組:0 難易度:中

- (A) 101. 當ILS同時進場(simultaneous ILS approaches)執行時 , 應即時告知進場管制下列何項信息 ?
(A)飛機上任何失效的接收器 (B)想要做ILS同時進場 (C)希望雷達監控以提供側向區隔

原始題號:0011532 題組:0 難易度:中

- (C) 102. 當許可進行公佈的side-step進場時 , 飛行員應在何處開始執行 ?
(A)在公佈的DH (B)在公佈的MDA或環繞進場 (C)在跑道環境看到後儘快執行

原始題號:0011533 題組:0 難易度:中

- (B) 103. 當對特定進場及降落在平行跑道被許可執行公布的sidestep maneuver進場時 , 飛行員應在何時執行 ?
(A)在所公布的環繞進場最低高度時 (B)在跑道或跑道環境看到後儘快執行 (C)在左右定位台MDA及當看到跑道時

原始題號:0011534 題組:0 難易度:中

- (B) 104. 第二類(Category II) ILS最低標準為何 ?
(A)DH 50 呎及 RVR 1,200 呎. (B)DH 1 00 呎及 RVR 1,200 呎. (C)DH 150 呎及 RVR 1,500 呎.

原始題號:0011535 題組:0 難易度:中

- (C) 105. 第三A類(Category IIIA) ILS最低標準為何 ?
(A)DH 50 呎及RVR 1,200 呎. (B)RVR 1,000 呎. (C)RVR 700 呎.

原始題號:0011536 題組:0 難易度:中

- (C) 106. 除了左右定位台(localizer), 下滑道(glideslope), 信標台(marker beacons), 進場燈及HIRL 外 , 對於第二類ILS儀器進場下降至決定高度(DH)小於150呎(離地面)時還需要甚麼有效的地面設施 ?
(A)RCLS 及 REIL. (B)雷達 及 RVR. (C)TDZL, RCLS, 及RVR.

原始題號:0011537 題組:0 難易度:中

- (C) 107. 對第二類進場除了左右定位台(localizer), 下滑道(glideslope), 信標台(marker beacon)及進場燈外 , 那些其他地面設備是必要的 ?
(A)雷達及RVR (B)RCLS及REIL (C)HIRL, TDZL , RCLS及RVR

原始題號:0011538 題組:0 難易度:中

- (A) 108. 在飛行計劃上飛機藉GPS來航行被視為
(A)有RNAV配備 (B)有星象追蹤器配備 (C)有FMS/EFIS配備

原始題號:0011539 題組:0 難易度:中

- (C) 109. 對LUKACHUKAI (GPS RWY 25) ARIZONA 而言 , 天氣預報需要備降機場 , 此備降機場必須要有核可的儀器進場程序 , 在飛機預定到達時間要能操作及使用 , 除了是甚麼儀器進場之外 ?
(A)GPS或VOR (B)ILS或GPS (C)GPS或Loran C

原始題號:0011540 題組:0 難易度:中

- (A) 110. 在進行GPS進場時，撤消自動選取靈敏度(automatically selected sensitivity)會造成：
- (A)取消進場狀態指示 (B)必須在進場時飛點對點，以遵守法定進場程序 (C)如果是手飛則完全沒影響

原始題號:0011541 題組:0 難易度:中

- (C) 111. 在儀器飛航規則下授權作任何GPS操作必須：
- (A)所有設備須符合TSO C-115A 得到許可 (B)飛行員必須審視天氣，飛機手冊及特定接收器的操作 (C)建立若失去RAIM能力時的操作程序

原始題號:0011542 題組:0 難易度:中

- (B) 112. 在美國境外，GPS儀器進場操作必須由誰來授權？
- (A)由FAA許可的飛機飛行手冊 或飛行手冊補充文件 (B)由主權國家或政府單位 (C)僅可由FAA官員

原始題號:0011543 題組:0 難易度:中

- (C) 113. 當設定GPS進場時若接收器自主完整性監視 (RAIM)失效的話，飛行員必須
- (A)繼續飛至誤失進場點並等待直至重新接收到衛星訊號 (B)飛至許可的最初進場定位點並等待直至重新接收到衛星訊號 (C)選擇另一型進場使用另一型導航設施

原始題號:0011544 題組:0 難易度:中

- (B) 114. 在GPS誤失進場(Missed approach)，飛行員必須採取行動將接收器排序於
- (A)通過MAWP時 (B)在MAWP之後 (C)恰在MAWP之前

原始題號:0011545 題組:0 難易度:中

- (C) 115. 若執行公佈的GPS離場，
- (A)資料庫會提供所有跑道所有轉換及離場程序 (B)而若RAIM有效的話，飛行員就不需要手動介入 (C)GPS接收器必須設定成終端區航路偏移指示靈敏度

原始題號:0011546 題組:1 難易度:易 (R20130125)

- (C) 116. (參閱Fig11)哪一架飛機的位置與HSI "D" 所呈現的位置有關聯?(如圖A21_Fig11)
- (A)4 (B)15 (C)17

題目圖：

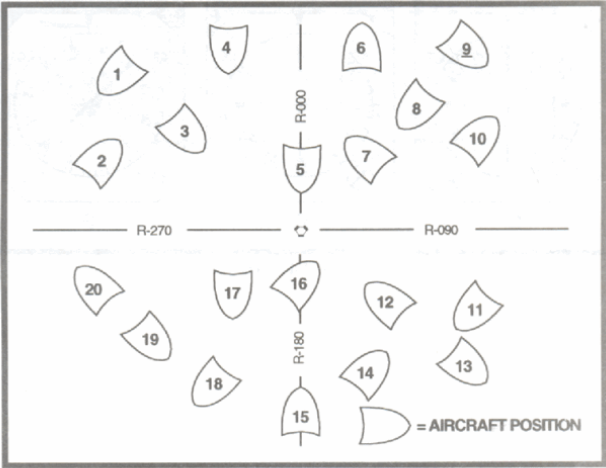


FIGURE 142.—Aircraft Position.

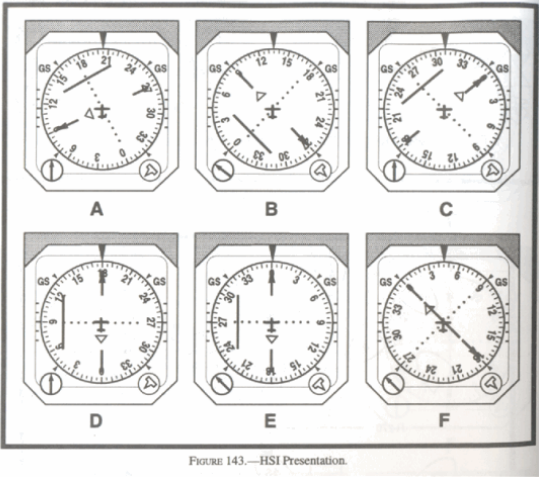


FIGURE 143.—HSI Presentation.

- 原始題號:0011547 題組:2 難易度:易 (R20130125)
- (B) 117.(參閱Fig11)哪一架飛機的位置與HSI "E" 所呈現的位置有關聯?(如圖A21_Fig11)
- (A)5 (B)6 (C)15

題目圖：

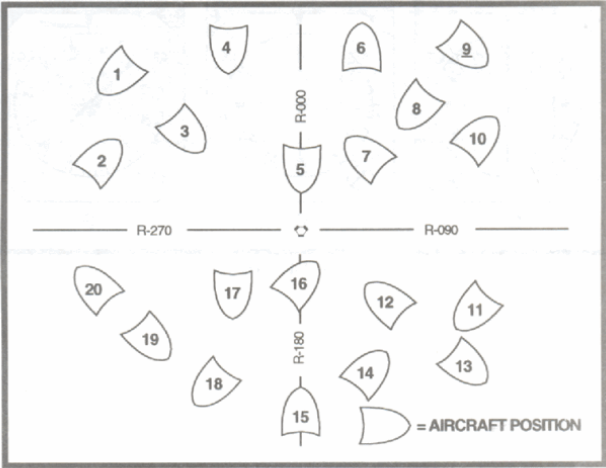


FIGURE 142.—Aircraft Position.

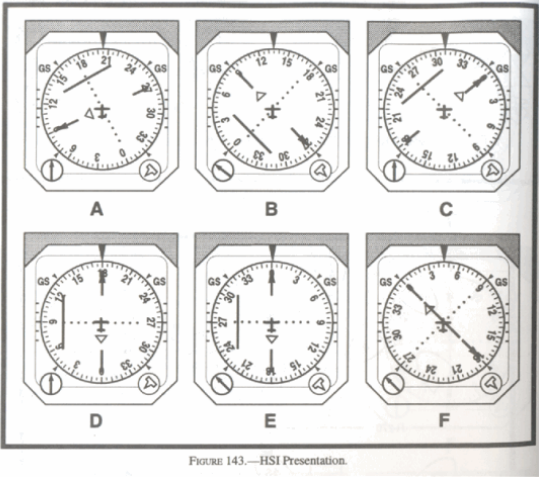


FIGURE 143.—HSI Presentation.

- 原始題號:0011548 題組:3 難易度:易 (R20130125)
- (C) 118.(參閱Fig11)哪一架飛機的位置與HSI "F" 所呈現的位置有關聯?(如圖A21_Fig11)
- (A)10 (B)14 (C)16

題目圖：

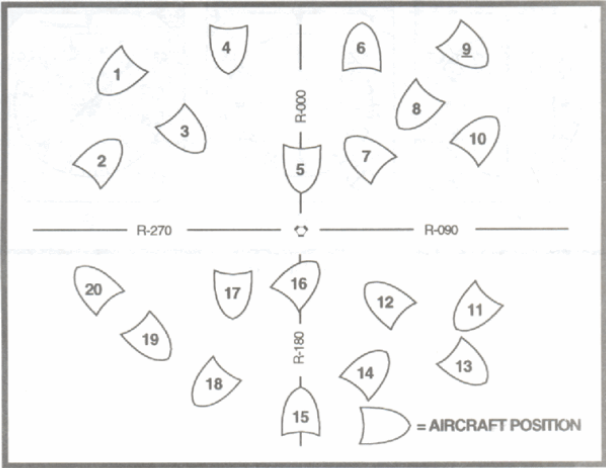


FIGURE 142.—Aircraft Position.

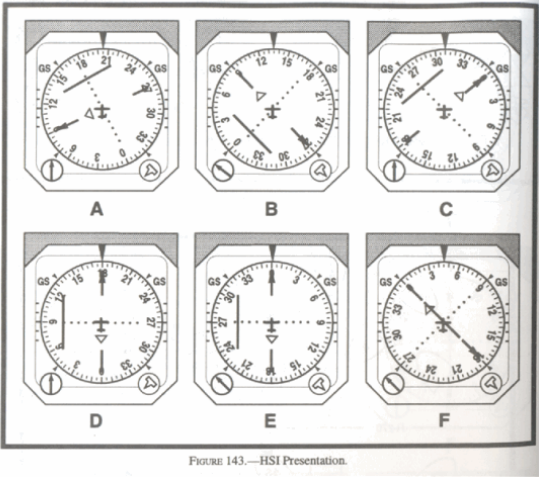


FIGURE 143.—HSI Presentation.

- 原始題號:0011549 題組:4 難易度:易 (R20130125)
- (A) 119.(參閱Fig11)哪一架飛機的位置與HSI "A" 所呈現的位置有關聯?(如圖A21_Fig11)
- (A)1 (B)8 (C)11

題目圖：

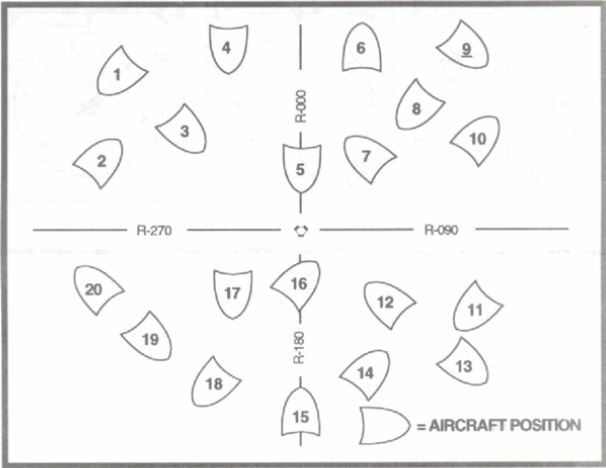


FIGURE 142.—Aircraft Position.

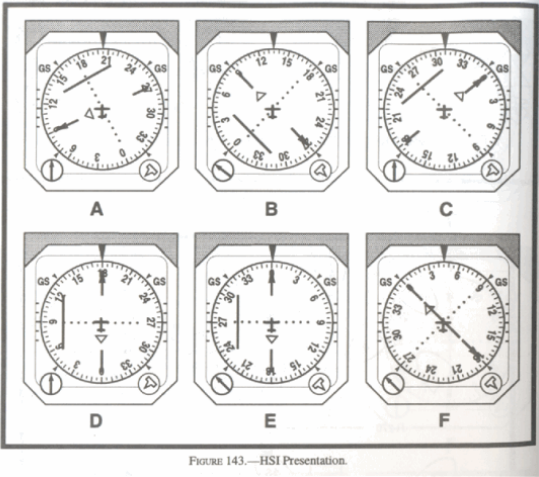


FIGURE 143.—HSI Presentation.

原始題號:0011550 題組:5 難易度:易 (R20130125)

(C) 120.(參閱Fig11)哪一架飛機的位置與HSI "B" 所呈現的位置有關聯?(如圖A21_Fig11)
(A)9 (B)13 (C)19

題目圖：

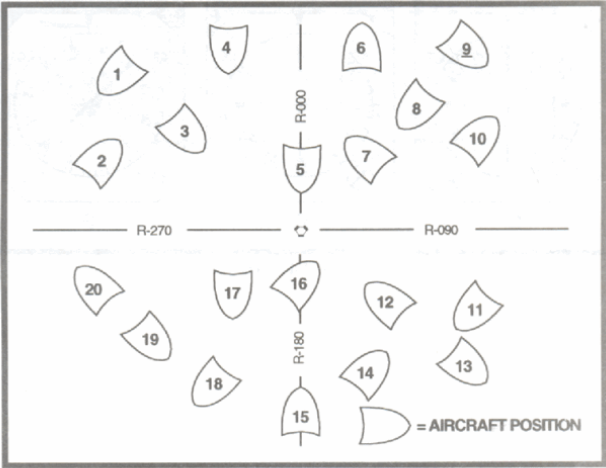


FIGURE 142.—Aircraft Position.

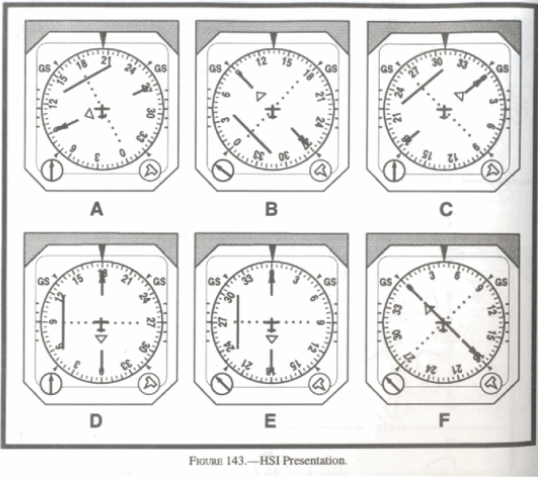


FIGURE 143.—HSI Presentation.

- 原始題號:0011551 題組:6 難易度:易 (R20130125)
- (C) 121.(參閱Fig11)哪一架飛機的位置與HSI "C" 所呈現的位置有關聯?(如圖A21_Fig11)
- (A)6 (B)7 (C)12

The diagram shows a 20-position aircraft parking apron layout. The layout is circular, divided into two halves by a horizontal line. The top half is labeled 'R-000' and the bottom half 'R-180'. The positions are numbered 1 through 20. Positions 1-10 are in the top half, and 11-20 are in the bottom half. The layout is symmetrical about the vertical axis. A legend indicates that the shape of the aircraft symbol represents its position.

Figure 143 displays six HSI (Heading Scale Indicator) presentation diagrams, labeled A through F, arranged in a 2x3 grid. Each diagram is a circular instrument with a heading scale (0 to 360 degrees) and a heading pointer. The diagrams illustrate different combinations of heading, speed, and altitude indicators.

- Diagram A:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.
- Diagram B:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.
- Diagram C:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.
- Diagram D:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.
- Diagram E:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.
- Diagram F:** Shows heading (0-360 degrees), speed (0-60 knots), and altitude (0-6000 feet). The heading pointer is at 090 degrees. The speed indicator is at 30 knots. The altitude indicator is at 3000 feet.

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(B) 128. 如果保持標準速率轉彎, 做一圈360度的轉彎要多久時間?

(A)1分鐘. (B)2分鐘. (C)3分鐘.

原始題號:0011559 題組:0 難易度:易

(A) 129. 翼端幅向改變...15度 幅向改變之時間差...6分鐘 油耗率...8.6gal/hr 飛至電台所需油量為何?

(A)3.44加崙. (B)6.88加崙. (C)17.84加崙.

原始題號:0011560 題組:0 難易度:易

(C) 130. ADF之相對方位從265度轉至260度需時2分鐘, 若地速為145哩, 到電台之距離是

(A)26哩. (B)37哩. (C)58哩.

原始題號:0011561 題組:0 難易度:易

(B) 131. 保持固定航向, 相對方位於6分鐘內變化15度, 請問到電台所需之時間

(A)3分鐘. (B)6分鐘. (C)12分鐘.

原始題號:0011562 題組:0 難易度:易

(A) 132. 保持固定航向, ADF指針在5分鐘內自045度增加至090度, 請問到電台所需之時間.

(A)5分鐘. (B)10分鐘. (C)15分鐘.

原始題號:0011563 題組:0 難易度:易

(A) 133. 以135哩的速度固定航向巡航, ADF的指針在7分鐘內自315度減少至270度, 請問到電台需時多少?距離多遠?

(A)7分鐘與16哩. (B)14分鐘與28哩. (C)19分鐘與38哩.

原始題號:0011564 題組:0 難易度:易

(C) 134. 真空速的最佳解釋為校正空速修正

(A)安裝與儀器誤差. (B)非標準氣溫. (C)高度與非標準氣溫.

原始題號:0011565 題組:0 難易度:易

(B) 135. 當執行VOR接收器航路敏感度測試時, OBS需轉動多少度方可使CDI從中心線向兩側最外一點移動?

(A)18到20度. (B)10到12度. (C)5到10度.

原始題號:0011566 題組:0 難易度:易

(B) 136. 關於磁羅盤偏差, 哪一個敘述是正確的?磁偏差

(A)隨零磁差線偏移而變動 (B)發生於同一飛機但不同航向. (C)發生於同一地區內之所有飛機.

原始題號:0011567 題組:0 難易度:易

(A) 137. 校正空速的最佳解釋為指示空速修正

(A)安裝與儀器誤差. (B)儀器誤差. (C)非標準氣溫.

原始題號:0011568 題組:0 難易度:易

(A) 138. 海平面標準大氣壓與溫度為何?

(A)攝氏15度與29.92釐米汞柱. (B)華氏59度與29.92厘米汞柱. (C)攝氏15度與29.92豪巴.

原始題號:0011569 題組:0 難易度:易 (R20170926)

- (A) 139. 翼端幅向改變...10度 幅向改變之時間差...4分鐘 油耗率...11gal/hr 飛至
電台所需油量為何?
(A)4.4加崙. (B)8.4加崙. (C)12.7加崙.

原始題號:0011570 題組:0 難易度:易

- (C) 140. 當滑行遭遇45度強尾風時,應如何使用副翼?
(A)保持水平. (B)向風邊副翼朝上. (C)向風邊副翼朝下.

原始題號:0011571 題組:0 難易度:易

- (B) 141. 在起飛時要測量壓力高度,高度表撥定值要設在?
(A)當時之高度表撥定值. (B)29.92厘米汞柱之高度表撥定值. (C)以場高為準,讀取高度表之撥定值.

原始題號:0011572 題組:0 難易度:易

- (A) 142. 當使用FAA提供之地面測試信號來檢查VOR接收器,最大的誤差為正/負多少?
(A)4度 (B)6度 (C)8度

原始題號:0011573 題組:0 難易度:易

- (A) 143. 關於在側風情況下使用ADF導向目標,何者為真?目標導向
(A)至電台其飛行軌跡為一曲線. (B)不論是朝向電台或是飛離電台,在側風情況下都需要實際經驗. (C)至電台,ADF需備有自動或手動可旋轉之方位角.

原始題號:0011574 題組:0 難易度:易

- (B) 144. 在側風情況下使用ADF攔截所需之幅向,何者為真?
(A)當飛離電台,航向需轉至遠離ADF指針. (B)當飛離電台時,以適當的攔截軌跡來修正側風所造成之偏離,ADF針尾將會偏向向風面. (C)當飛向電台時,以適當的攔截軌跡來修正側風所造成之偏離,ADF針頭將會偏向向風面.

原始題號:0011575 題組:1 難易度:易 (R20130125)

- (C) 145. (參閱Fig16.)飛機之位置如第一號儀表顯示;當飛機轉向磁航向090度時,相對幅向為何?(如圖A21_Fig16)
(A)150度. (B)190度. (C)250度.

題目圖：

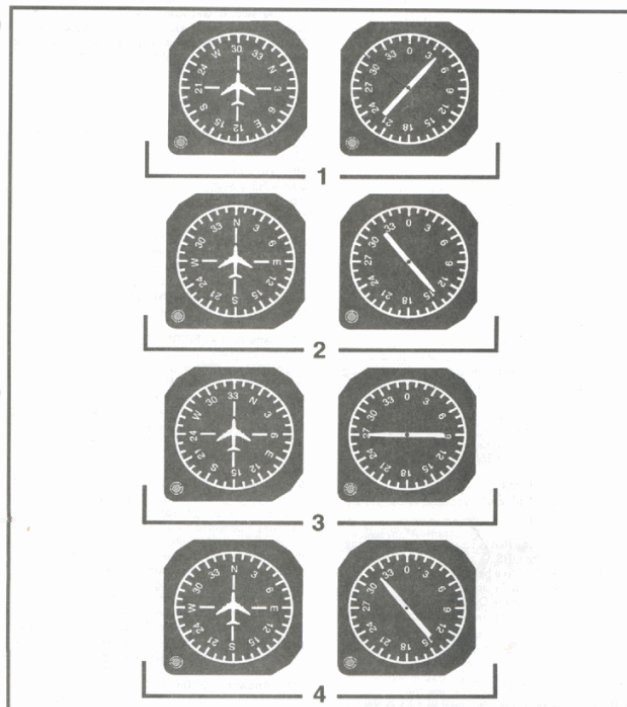


FIGURE 16.—Magnetic Compass/ADF

原始題號:0011576 題組:2 難易度:易 (R20130125)

(C) 146. (參閱Fig16.)飛機之位置如第一號儀表顯示;欲以30度夾角攔截330度磁幅向到電台,飛機該如何轉?(如圖A21_Fig16)

(A)左轉航向270度。(B)右轉航向330度。(C)右轉航向360度。

題目圖：

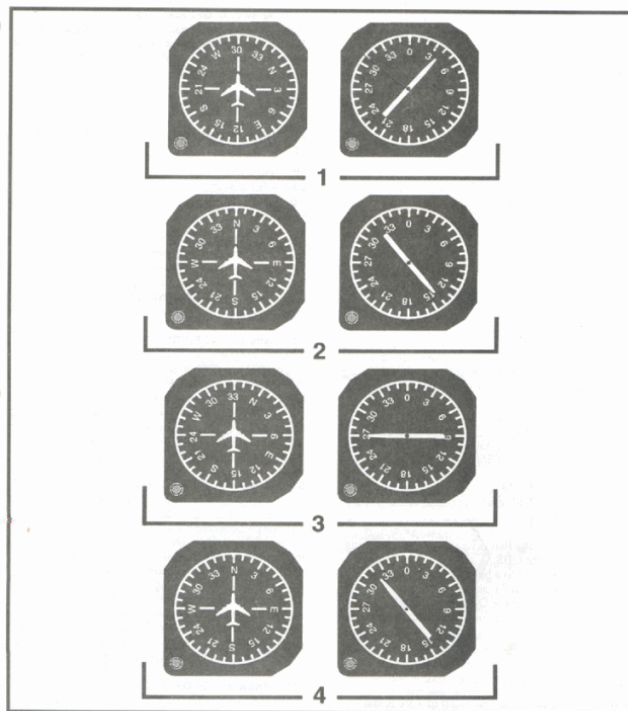


FIGURE 16.—Magnetic Compass/ADF

原始題號:0011577 題組:3 難易度:易 (R20130125)

(C) 147. (參閱Fig16.)若飛機繼續保持三號儀表之航向,當飛機以030度磁幅向飛離電台,其相對幅向為何?(如圖A21_Fig16)

(A)030度. (B)060度. (C)240度.

題目圖：

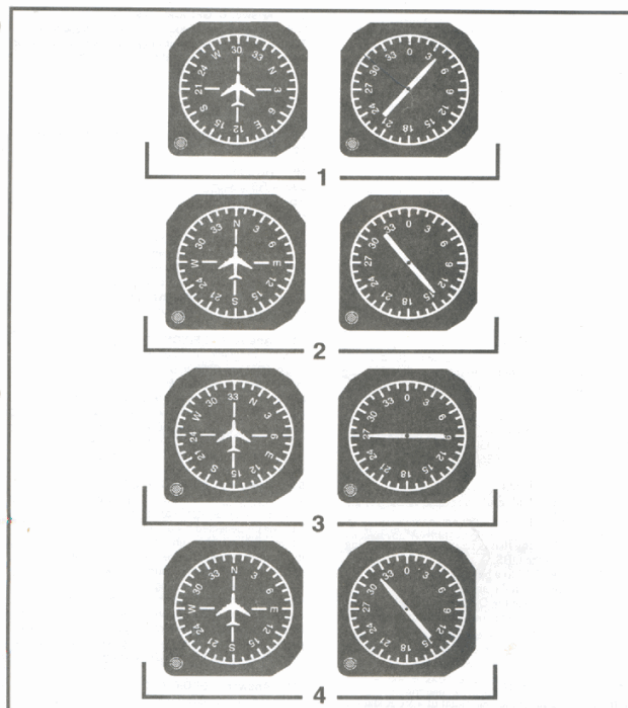


FIGURE 16.—Magnetic Compass/ADE

原始題號:0011578 題組:0 難易度:易

(B) 148. 上坡跑道對起飛性能有何影響?

(A)增加起飛速度. (B)拉長起飛距離. (C)減少起飛距離.

原始題號:0011579 題組:1 難易度:易 (R20130125)

- (B) 149. (參閱Fig 32)機場壓力高度...4,000呎 場溫...攝氏12度 巡航空層壓力高度...
9,000呎 巡航空層溫度...攝氏零下4度 爬升至巡航高度所需之距離為何?(如圖
A21_FIG32)
(A)6哩. (B)8.5哩. (C)11哩.

題目圖：

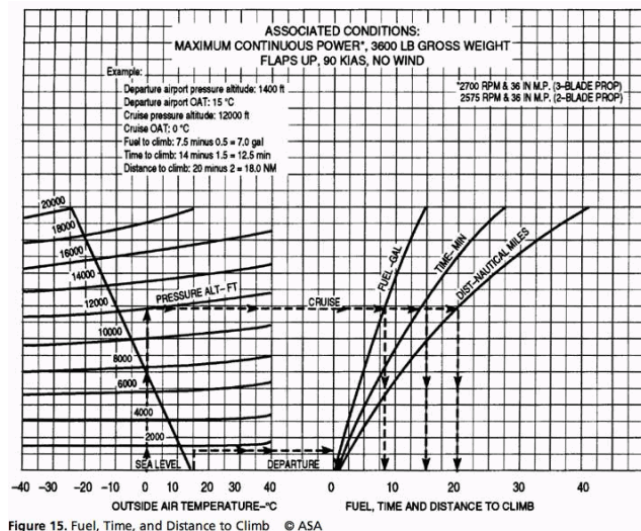


Figure 15. Fuel, Time, and Distance to Climb © ASA

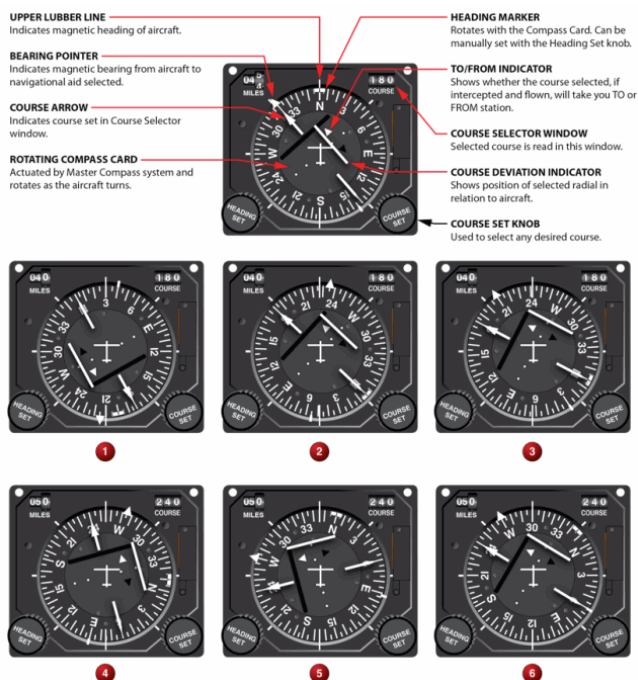
原始題號:0011580 題組:0 難易度:易

- (C) 150. 當輕型, 高單翼飛機滑行遭遇45度強尾風時, 應如何使用副翼?
(A)全時保持水平. (B)副翼朝向來風面. (C)與風向相反操作.

原始題號:0011581 題組:1 難易度:易 (R20130125)

- (A) 151. (參閱Fig17)若飛機維持現有航向, 哪一個圖表顯示飛機將以60度繳攔截060幅向接進電
台?(如圖A21_Fig17)
(A)6 (B)4 (C)5

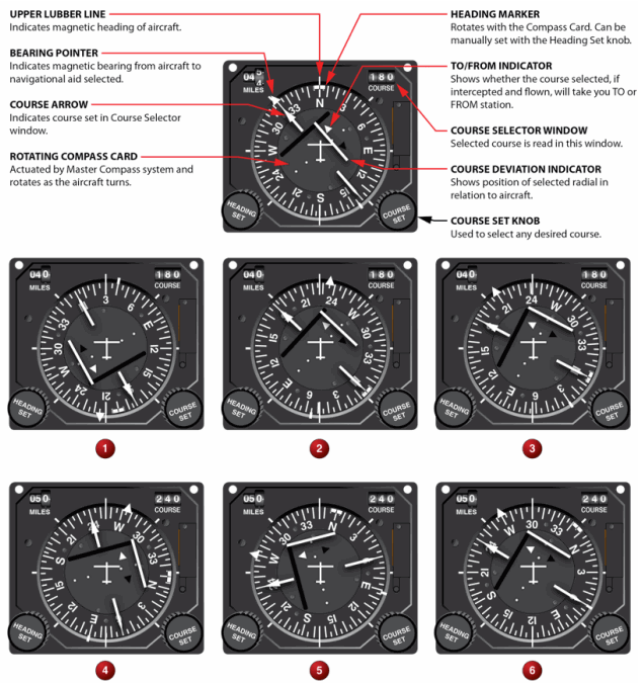
題目圖：



原始題號:0011582 題組:2 難易度:易 (R20211227)

- (A) 152. (參閱Fig17.)依據圖表2, 如果飛機保持現有航向, 哪一個答案是正確的?飛機將(如圖
A21_Fig17)
(A)以45度角穿越180幅向飛離電台. (B)以45度角攔截225度幅向. (C)以45度角攔截360
度幅向.

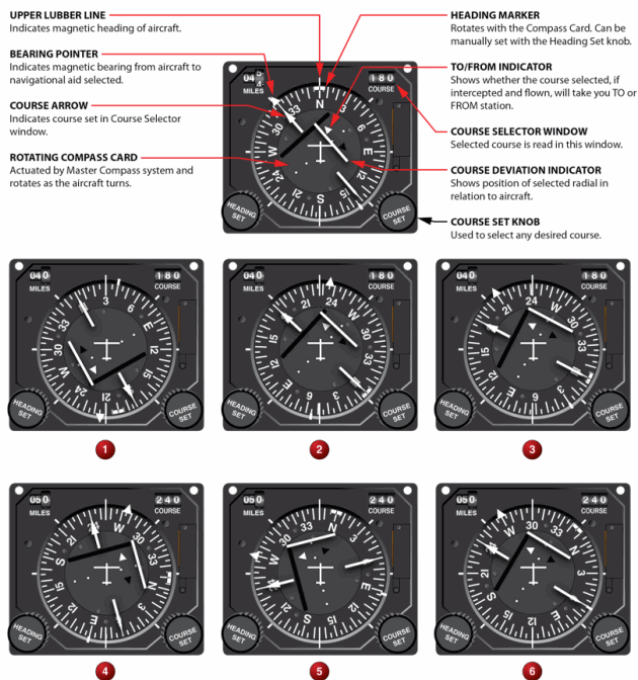
題目圖：



原始題號:0011583 題組:3 難易度:易 (R20180206)

- (B) 153.(參閱 Fig. 17)哪一個圖表顯示飛機保持現有航向，以75度角攔截060幅向飛離電台?(如圖A21_Fig17)
(A)4 (B)5 (C)6

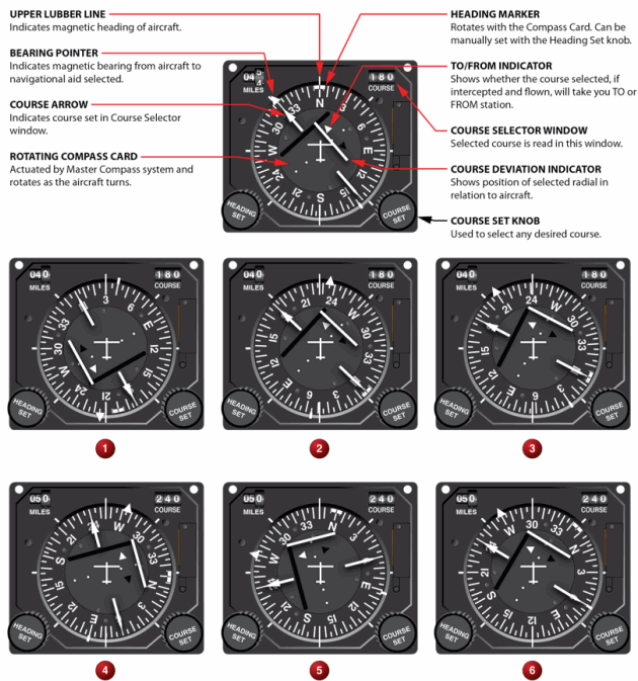
題目圖：



原始題號:0011584 題組:4 難易度:易 (R20180206)

- (A) 154.(參閱 Fig. 17) 哪一圖表顯示飛機需左轉150度後才能以60度角攔截360幅向飛向電台?(如圖A21_Fig17)
(A)1 (B)2 (C)3

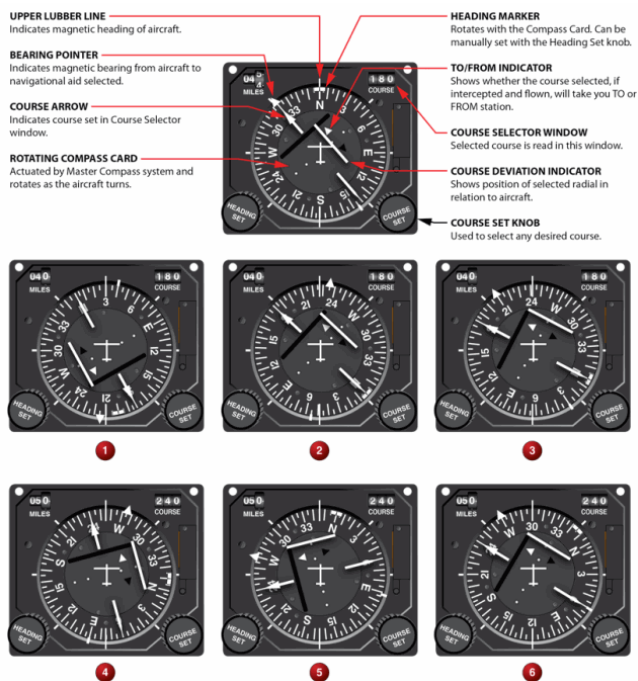
題目圖：



原始題號:0011585 題組:5 難易度:易 (R20130125)

- (C) 155. (參閱Fig17.) 依據圖表4, 如果飛機保持現有航向, 哪一個答案是正確的? 飛機將(如圖A21_Fig17)
- (A) 以15度角穿越060幅向. (B) 以30度角攔截240度幅向. (C) 以75度角攔截180度幅向.

題目圖：



原始題號:0011586 題組:1 難易度:易 (R20130125)

- (B) 156. (參閱Fig18.) 要以30度角攔截240度磁方位, 飛機需(如圖A21_FIG18)
- (A) 左轉065. (B) 左轉125. (C) 右轉270.

題目圖：

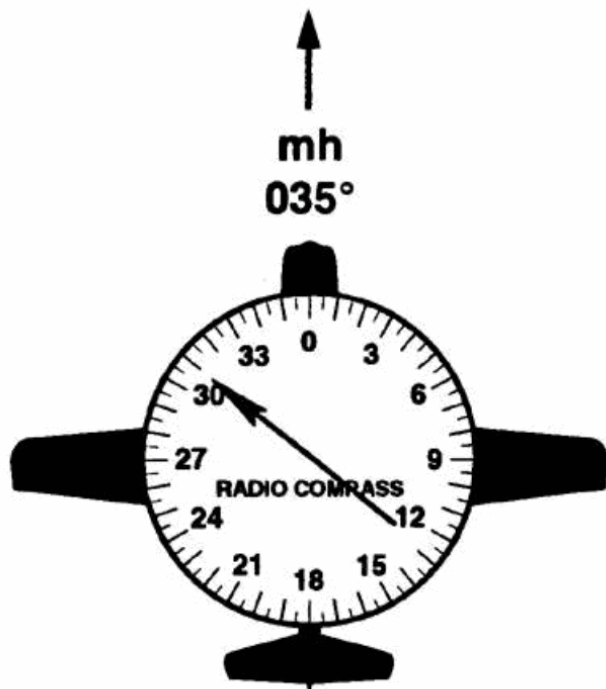


Figure 18. Magnetic Heading/Radio Compass © ASA

原始題號:0011587 題組:2 難易度:易 (R20131218)

- (B) 157.(參閱Fig18)若飛機持續保持圖上所示之航向,飛機將以35度角攔截哪一個磁方位飛離電台?(如圖A21_FIG18)
(A)035度 (B)070度 (C)215度

題目圖：

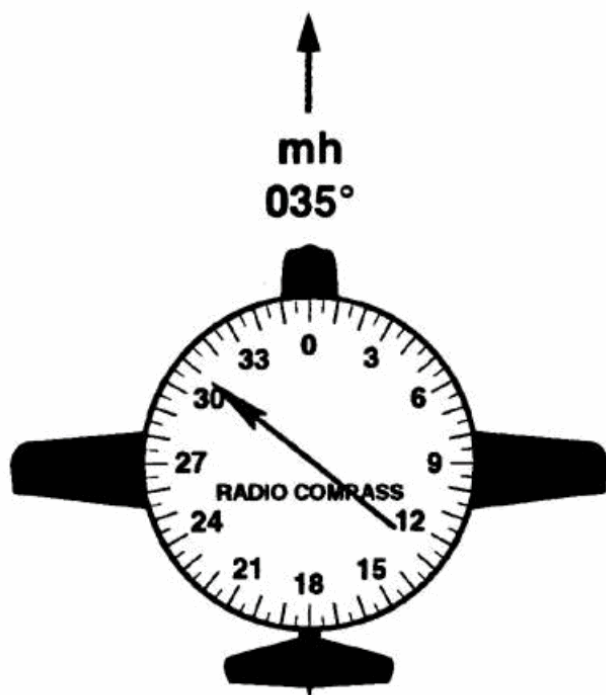


Figure 18. Magnetic Heading/Radio Compass © ASA

原始題號:0011588 題組:1 難易度:易 (R20211227)

- (C) 158.(參閱Fig19)若飛機持續保持圖上所示之航向,飛機將以35度角攔截哪一個磁方位飛離電台?(如圖A21_FIG19)
(A)090度 (B)270度 (C)305度

題目圖：

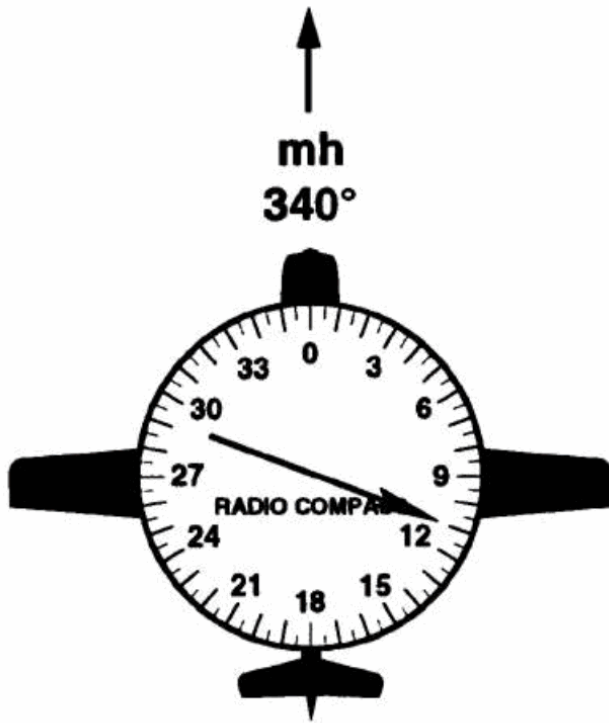


Figure 19. Magnetic Heading/Radio Compass © ASA

原始題號:0011589 題組:2 難易度:易 (R20211227)

- (C) 159. (參閱Fig19)若飛機持續保持圖上所示之航向,飛機將以30度角攔截哪一個磁方位飛離電台?(如圖A21_FIG19)
(A)090度 (B)270度 (C)310度

題目圖：

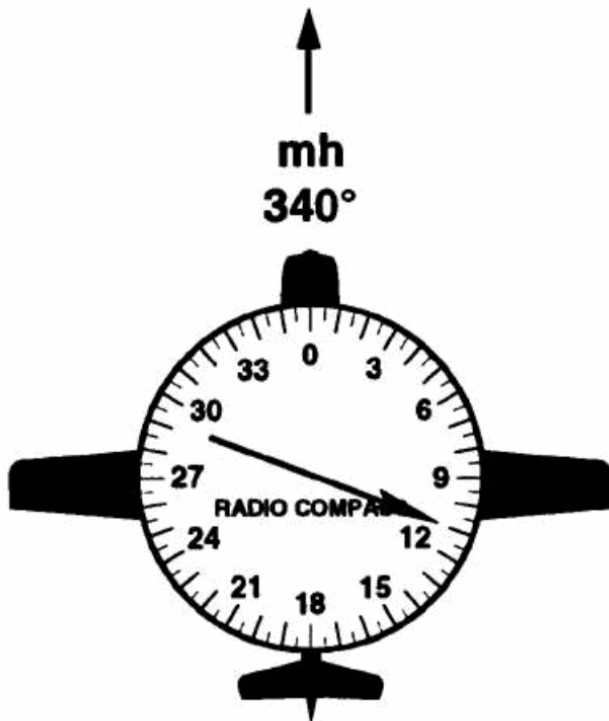


Figure 19. Magnetic Heading/Radio Compass © ASA

原始題號:0011590 題組:1 難易度:易 (R20130125)

- (A) 160. (參閱Fig. 32)機場壓力高度2,000呎,場溫攝氏20°C,巡航壓力高度10,000呎,巡航空層溫度攝氏0°C 爬升至巡航高度所需之油量,時間,與距離為何?(如圖A21_FIG32)
(A)5加崙,9分鐘,13哩. (B)6加崙,11分鐘,16哩. (C)7加崙,12分鐘,18哩.

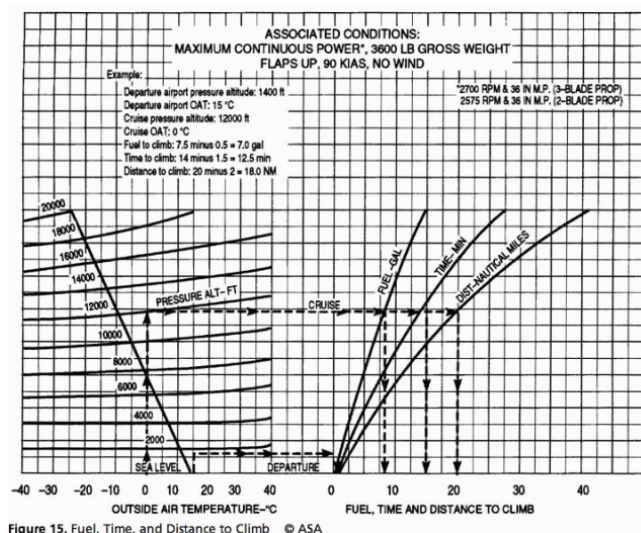


Figure 15. Fuel, Time, and Distance to Climb © ASA

原始題號:0011591 題組:0 難易度:易

- (B) 161. 當飛機位於機場VOR之指定檢查點時, 飛行員應如何做VOR接收器之檢查?
 (A)將OBS轉至180 +4度間, CDI應顯示於中心, 並離開電台. (B)將OBS調至指定幅向, CDI應維持於中心線不超過左右4度的離開電台. (C)將飛機朝向VOR並將OBS轉向000度, CDI應保持中心, 左右不超過4度, 朝向電台.

原始題號:0011592 題組:0 難易度:易

- (A) 162. 以190度幅向向電台飛去, 飛行員選擇195度的幅向, 左轉5度計時. 當維持固定航向, 飛行員得知CDI至正中需時10分鐘. 由此得知, 預計抵達電台時間為何?
 (A)10分鐘. (B)15分鐘. (C)20分鐘.

原始題號:0011593 題組:0 難易度:易

- (B) 163. 以315度幅向向電台飛去, 飛行員選擇320度的幅向, 左轉5度計時. 當維持固定航向, 飛行員得知CDI至正中需時12分鐘. 由此得知, 預計抵達電台時間為何?
 (A)10分鐘. (B)12分鐘. (C)24分鐘.

原始題號:0011594 題組:0 難易度:易

- (A) 164. 以090度幅向向電台飛去, 飛行員選擇左010度OBS, 右轉10度計時. 當維持固定航向, 飛行員得知CDI至正中需時8分鐘. 由此得知, 預計抵達電台時間為何?
 (A)8分鐘. (B)16分鐘. (C)24分鐘.

原始題號:0011595 題組:0 難易度:易

- (B) 165. 以040度幅向向電台非去, 飛行員選擇055度的幅向, 左轉15度計時. 當維持固定航向, 飛行員得知CDI至正中需時15分鐘. 由此得知, 預計抵達電台時間為何?
 (A)8分鐘. (B)15分鐘. (C)30分鐘.

原始題號:0011596 題組:0 難易度:易

- (A) 166. 飛機保持磁航向270度, 真空速為120哩. 穿過VOR之360幅向是1237, 穿過350幅向是1244; 到電台之時間, 距離為何?
 (A)42分鐘, 84哩. (B)42分鐘, 91哩. (C)44分鐘, 96哩.

原始題號:0011597 題組:0 難易度:易

- (C) 167. 哪一部出版品中有"NORTH ATLANTIC MINIMUM NAVIGATION PERFORMANCE SPECIFICATIONS AIRSPACE?"作業說明?
 (A)FAR PART 121. (B)ICAO ANNEX 1, CHAPTER 2. (C)FAR PART 91

原始題號:0011598 題組:0 難易度:易 (R20180206)

- (B) 168. 在作LORAN進場時，接收器會有多少時間的瞬間失去訊號？
(A)將發生5秒鐘來預警飛行員。(B)將發生10秒鐘來預警飛行員。(C)將發生15秒鐘來預警飛行員。

原始題號:0011599 題組:0 難易度:易

- (A) 169. 飛行員如何得知LORAN-C接收器可以操作儀器飛行？
(A)參閱飛機飛行手冊補充章節。(B)機上有一狀態卡標示"LORAN-C可於儀器飛行時航路,終端與進場使用"。(C)登記於機體時間記錄本上;LORAN-C接收器每30天需做一次檢查。

原始題號:0011600 題組:0 難易度:易

- (C) 170. LORAN-C的導航基礎是建立於哪一種電台所產生同時到達的不同脈波？
(A)一群作業於108-115頻率之電台。(B)兩個作用於90-110頻率之電台。(C)一串作用於90-110頻率之電台。

原始題號:0011601 題組:0 難易度:易

- (A) 171. 在海拔較高之機場，儀器空速將
(A)不會有改變，但地速會比較快。(B)會比較快，但地速不會改變。(C)會增加，因為空氣比較稀薄。

原始題號:0011602 題組:0 難易度:易

- (A) 172. 保持固定航向，相對方位15度在5分鐘內增加兩倍，如果真空速為105哩，求到電台之時間與距離。
(A)5分鐘與8.7哩。(B)10分鐘與17哩。(C)15分鐘與31.2哩。

原始題號:0011603 題組:0 難易度:易

- (B) 173. 當在執行空中VOR接收器測試時CDI指針保持正中，全方位選擇器與飛離/飛向電台指示應得到
(A)所選擇的幅向4度以內。(B)所選擇的幅向6度以內。(C)若VOR是朝向南面,0度飛向電台。

原始題號:0011604 題組:0 難易度:易 (R20180206)

- (B) 174. ADF顯示翼端方位改變10度需時2分鐘，今真空速160哩/時，請問到電台距離為何？
(A)15哩。(B)32哩。(C)36哩。

原始題號:0011605 題組:0 難易度:易

- (B) 175. 飛機距離VOR電台60哩，此時CDI指示有1/5的偏離，請問此時飛機離航道的中心現有多遠？
(A)6哩。(B)2哩。(C)1哩。

原始題號:0011606 題組:0 難易度:易

- (C) 176. 就轉彎協調儀與轉彎指示儀，兩者在操作上有何差異？轉彎協調儀
(A)永遠為電子驅動；轉彎指示儀為真空驅動。(B)只顯示轉彎角度，轉彎指示儀顯示轉彎之速率。(C)指示滾轉率與轉彎率；轉彎指示儀顯示轉彎率與協調性。

原始題號:0011607 題組:0 難易度:易

- (A) 177. 當飛機上已配備一套真空驅動之迴轉儀，再加裝依電子式轉彎協調儀，其轉彎協調儀之優勢為何？
(A)只是一備用系統。(B)可靠度比真空驅動來的高。(C)穩定性比真空驅動要好。

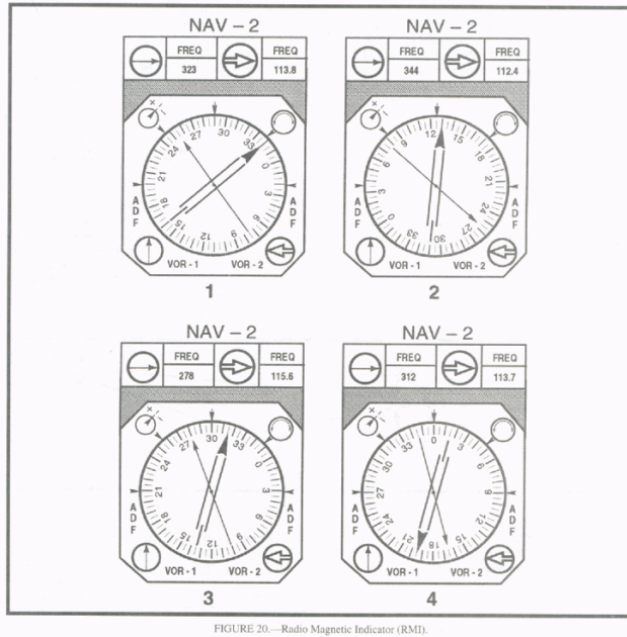
原始題號:0011608 題組:0 難易度:易 (R20170815)

- (A) 178. 要攔截215度幅向飛離電台, 建議將OBS調整至
(A)215度, 並將航向朝向CDI指針. (B)215度, 並將航向遠離CDI指針. (C)035度, 並將航向朝向CDI指針.

原始題號:0011609 題組:1 難易度:易 (R20130125)

- (B) 179.(參閱Fig20) 哪一個儀器圖顯示飛機在左轉90度後, 攔截到幅向180?(如圖A21_Fig20)
(A)2 (B)3 (C)4

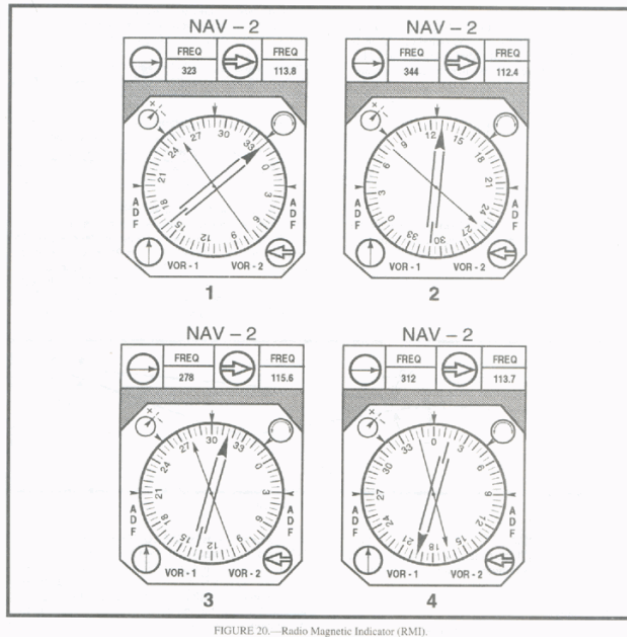
題目圖：



原始題號:0011610 題組:2 難易度:易 (R20130125)

- (A) 180.(參閱Fig20.) 哪一些圖表顯示飛機漸漸遠離電台?(如圖A21_Fig20)
(A)4 (B)1 & 4 (C)2 & 3

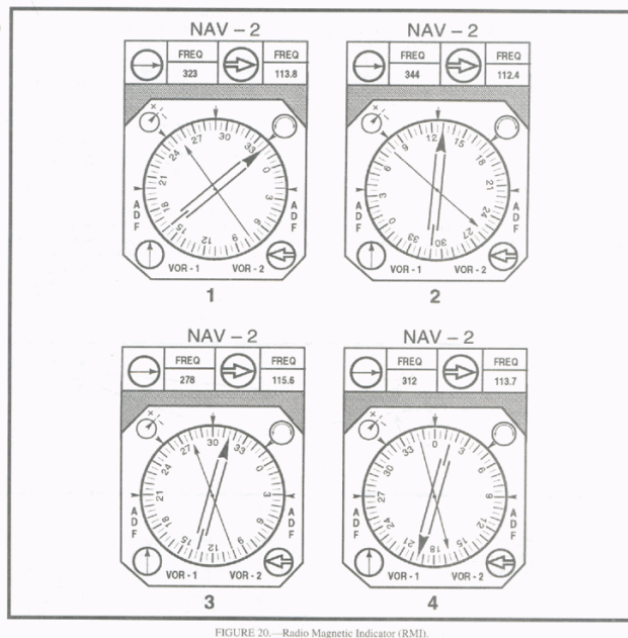
題目圖：



原始題號:0011611 題組:3 難易度:易 (R20130125)

- (B) 181.(參閱Fig20) 哪一個儀器圖顯示飛機在VORTAC的西北方?(如圖A21_Fig20)
(A)1 (B)2 (C)3

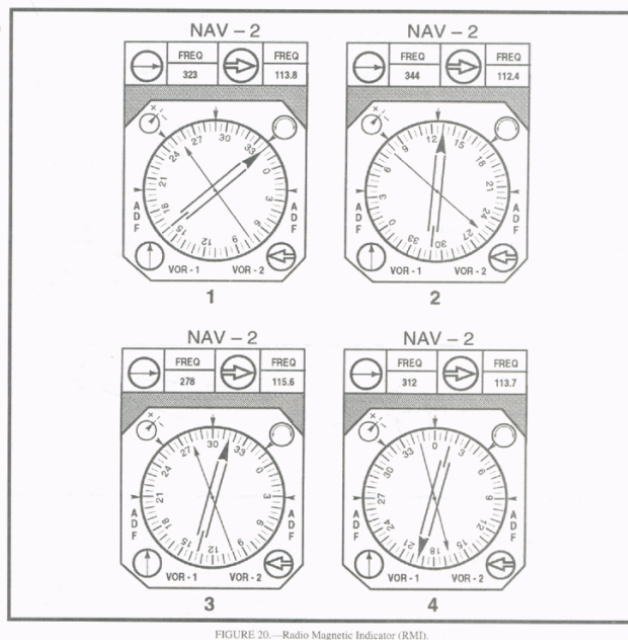
題目圖：



原始題號:0011612 題組:4 難易度:易 (R20130125)

- (C) 182.(參閱Fig20) 哪一個儀器圖顯示飛機在轉180度後,以30度角攔截到幅向150?(如圖A21_Fig20)
(A)2 (B)3 (C)4

題目圖：



原始題號:0011613 題組:5 難易度:易 (R20130125)

- (A) 183.(參閱Fig20) 運用儀表三,飛機左轉180度再直飛,將會攔截到哪一個幅向?(如圖A21_Fig20)
(A)幅向135. (B)幅向270. (C)幅向360.

題目圖：

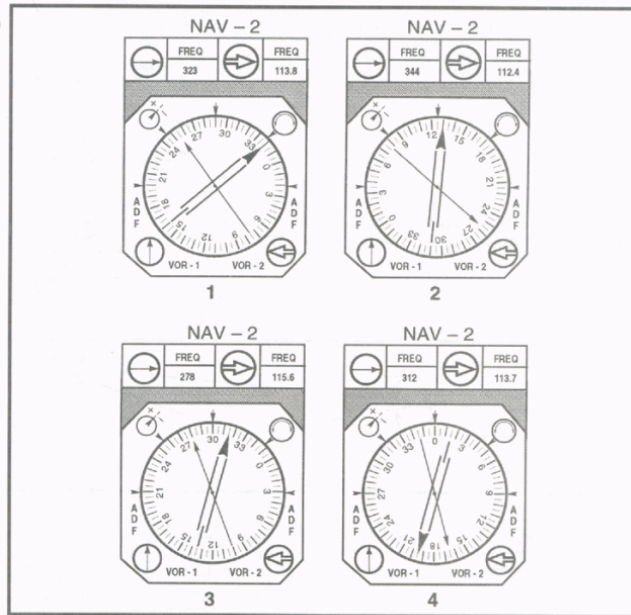


FIGURE 20.—Radio Magnetic Indicator (RMI).

原始題號:0011614 題組:0 難易度:易

- (C) 184. 要攔截180度幅向飛離電台,建議將OBS調整至
(A)360度,並將航向朝向CDI指針. (B)180度,並將航向遠離CDI指針. (C)180度,並將航向朝向CDI指針.

原始題號:0011615 題組:0 難易度:易

- (A) 185. 哪一種情況會造成VOR接收器反向感應?
(A)飛行的航向與OBS所選擇的方位相反. (B)設定OBS與飛機所在方位成90度角. (C)當飛機過電台後,OBS自飛向電台調整至飛離電台產生錯誤.

原始題號:0011616 題組:0 難易度:易

- (B) 186. 壓力高度:12000呎,溫度:華氏50度,求密度高度為何?
(A)11900呎. (B)14130呎. (C)18150呎.

原始題號:0011618 題組:0 難易度:易

- (B) 187. 壓力高度:5000呎,溫度:攝氏30度,求密度高度為何?
(A)7200呎. (B)7800呎. (C)9000呎.

原始題號:0011619 題組:0 難易度:易

- (B) 188. 壓力高度:6000呎 溫度...華氏30度 求密度高度為何?
(A)5000呎. (B)5500呎. (C)9000呎.

原始題號:0011620 題組:0 難易度:易

- (A) 189. 機翼之升力最佳解釋為何?
(A)作用力與相對風成垂直. (B)不同之壓力垂直於翼弦上. (C)因空氣流經機翼上方弧形之流線曲面造成減壓,垂直升力因而產生於機翼下方較平坦之弧面.

原始題號:0011621 題組:0 難易度:易

- (B) 190. 磁航向350度,ADF指針顯示相對幅向為240度,此時飛向電台之磁幅向為?
(A)050度. (B)230度. (C)295度.

原始題號:0011622 題組:0 難易度:易

- (B) 191. 當飛機保持磁航向265度時,ADF顯示相對幅向為065度,表示飛機正經過?
(A)065度磁幅向飛離電台. (B)150度磁幅向飛離電台. (C)330度磁幅向飛離電台.

原始題號:0011623 題組:0 難易度:易

- (C) 192. 磁航向315度, ADF指針顯示相對幅向為140度, 此時飛離電台之磁幅向為?
(A)095度. (B)175度. (C)275度.

原始題號:0011624 題組:0 難易度:易

- (C) 193. 當使用VOR測試設備測試VOR接收器時, CDI指針須保持正中間OBS必須顯示飛機是在
(A)090幅向. (B)180幅向. (C)360幅向.

原始題號:0011625 題組:0 難易度:易

- (B) 194. 壓力高度:7000呎, 溫度:攝氏15度, 求密度高度為何?
(A)5000呎. (B)8500呎. (C)9500呎.

原始題號:0011626 題組:0 難易度:易

- (C) 195. ADF之相對方位從090度轉至095度需時1.5分鐘, 若真空速為115哩, 到電台之距離是
(A)12.5哩. (B)24.5哩. (C)34.5哩.

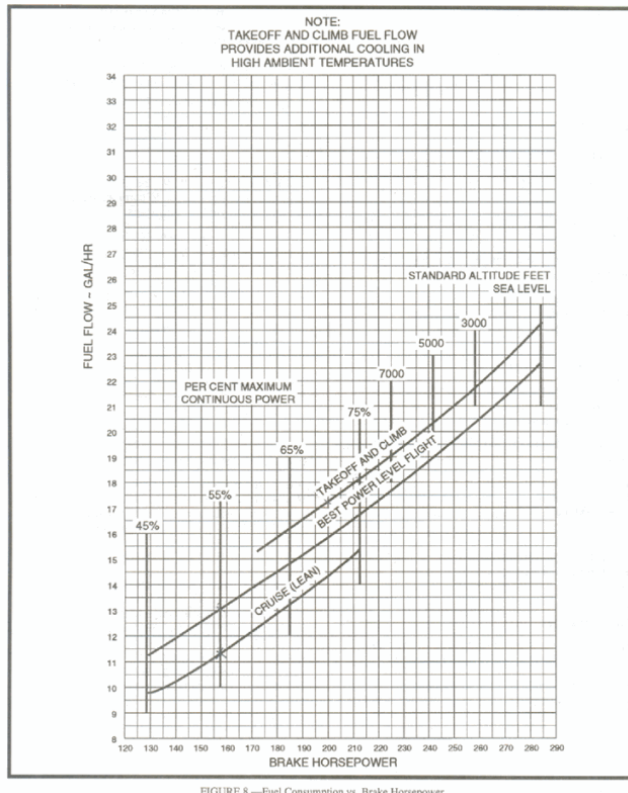
原始題號:0011627 題組:0 難易度:易

- (C) 196. 將ADF轉向電台, 若磁航向為040度, 相對幅向是290度, 飛向電台之磁幅向為何?
(A)150度. (B)285度. (C)330度.

原始題號:0011628 題組:1 難易度:易 (R20130125)

- (B) 197. (參閱Fig25)以百分之70之馬力設定起飛至爬升共耗10分鐘, 試計算耗油量?(如圖A21_Fig25)
(A)2.66加崙 (B)2.88加崙 (C)3.2加崙

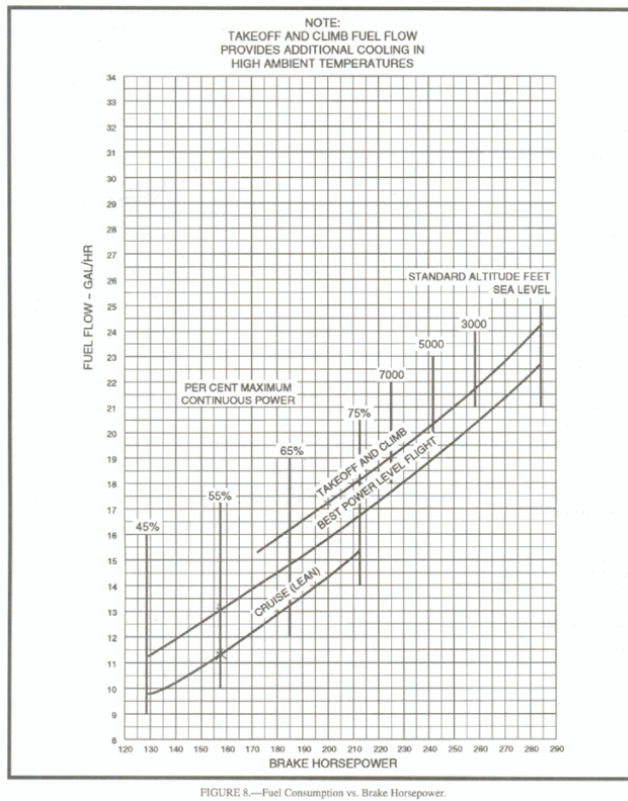
題目圖:



原始題號:0011629 題組:2 難易度:易 (R20130125)

- (C) 198. (參閱Fig25)以百分之75之馬力設定起爬升7分鐘, 試計算耗油量?(如圖A21_Fig25)
(A)1.82加崙 (B)1.97加崙 (C)2.15加崙

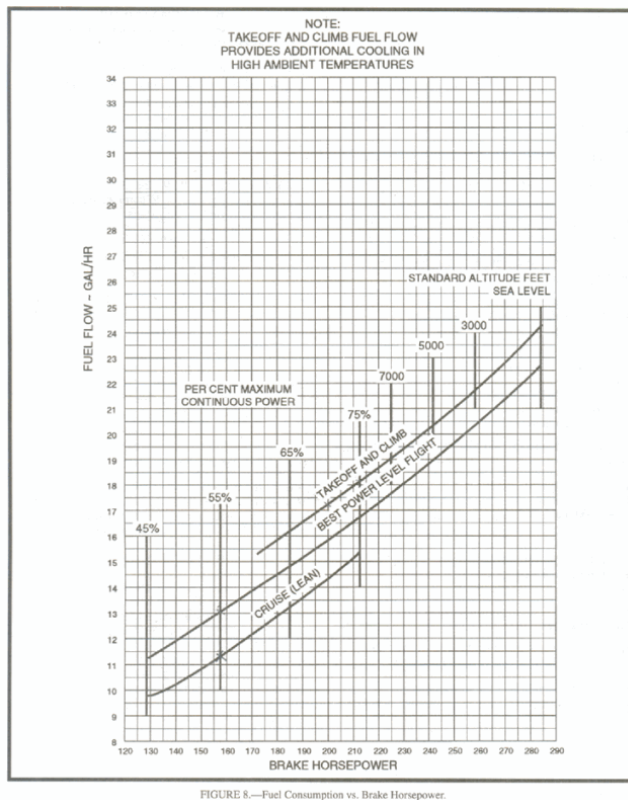
題目圖：



原始題號:0011630 題組:3 難易度:易 (R20130125)

- (B) 199.(參閱Fig25) 油量...65加侖 最佳平飛馬力設定...55% 需保留白晝目視法定需求
由輛之情況下,可飛多久?(如圖A21_Fig25)
(A)4小時17分. (B)4小時30分. (C)5小時4分.

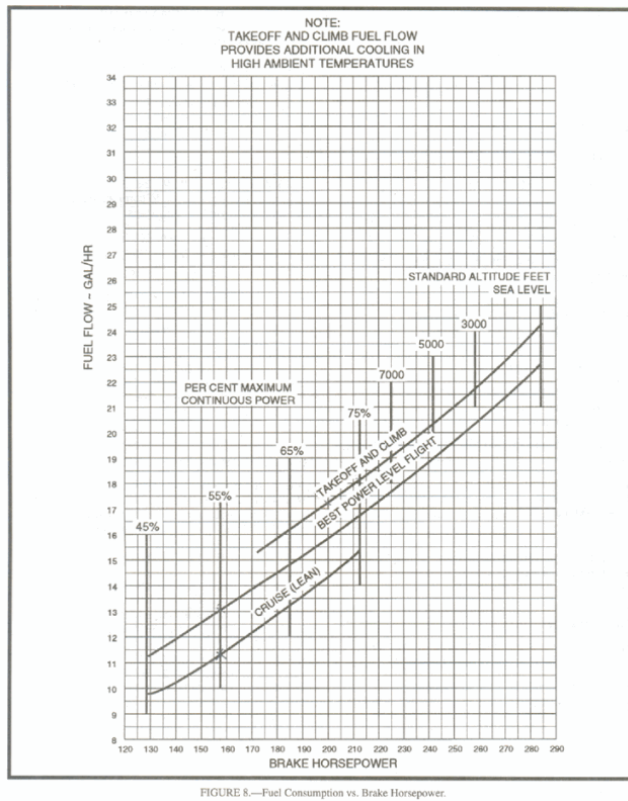
題目圖：



原始題號:0011631 題組:4 難易度:易 (R20130125)

- (B) 200.(參閱Fig25) 油量...47加侖 巡航馬力設定...55% 需保留夜間目視法定需求由輛
之情況下,可飛多久?(如圖A21_Fig25)
(A)3小時8分. (B)3小時22分. (C)3小時43分.

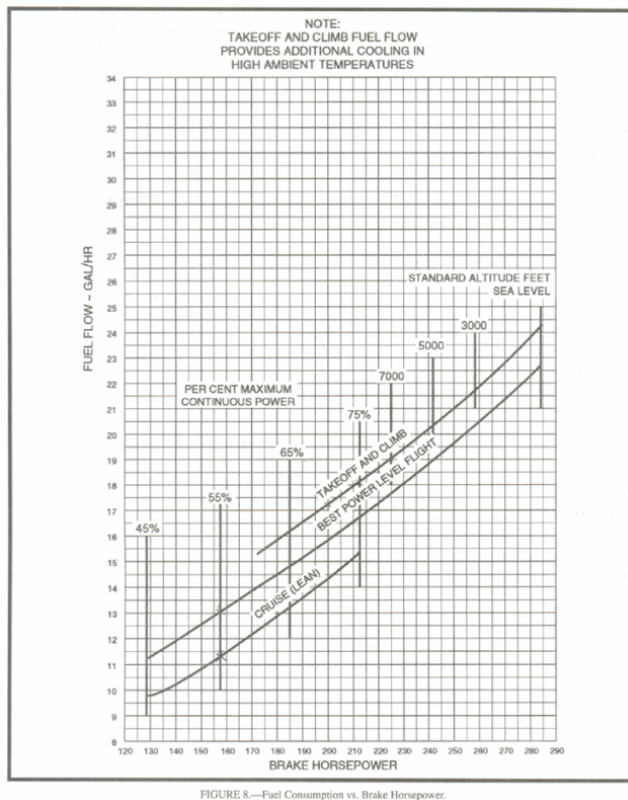
題目圖：



原始題號:0011632 題組:5 難易度:易 (R20130125)

- (A) 201.(參閱Fig25)以百分隻55的巡航馬力,38加崙的油量在符合夜間目視飛行要求之保留油量情況下,可飛多少時間?(如圖A21_Fig25)
(A)2小時34分. (B)2小時49分. (C)3小時18分.

題目圖：



原始題號:0011633 題組:1 難易度:易 (R20180207)

- (C) 202.(參閱Fig. 33)用最大爬升率自引擎啟動爬升至10,000呎之壓力高度所消耗之油量為何
飛機重...3,800磅 機場壓力高度...4,000呎 場溫...攝氏30度。(如圖A21_Fig33)
(A)28磅。 (B)35磅。 (C)40磅。

題目圖：

MAXIMUM RATE OF CLIMB

CONDITIONS:
 Flaps Up
 Gear Up
 2700 RPM
 Full Throttle
 Mixture Set at Placard Fuel Flow
 Cowl Flaps Open
 Standard Temperature

MIXTURE SETTING	
PRESS ALT	PPH
S.L.	138
4000	126
8000	114
12,000	102

NOTES:
 1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
 2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
 3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	97	860	0	0	0
	2000	95	760	2	6	4
	4000	94	660	5	12	9
	6000	93	565	9	18	14
	8000	91	465	13	26	21
	10,000	90	365	18	35	29
	12,000	89	265	24	47	41
3500	S.L.	95	990	0	0	0
	2000	94	885	2	5	3
	4000	93	780	5	10	7
	6000	91	675	7	16	12
	8000	90	570	11	22	17
	10,000	89	465	15	29	24
	12,000	87	360	20	38	32
3200	S.L.	94	1135	0	0	0
	2000	92	1020	2	4	3
	4000	91	910	4	9	6
	6000	90	800	6	14	10
	8000	88	685	9	19	14
	10,000	87	575	12	25	20
	12,000	86	465	16	32	26

FIGURE 10.—Fuel, Time, and Distance to Climb.

原始題號:0011634 題組:2 難易度:易 (R20180207)

- (C) 203. (參閱 Fig. 33) 用最大爬升率自引擎啟動爬升至6,000呎之壓力高度所消耗之油量為何
 飛機重...3,200磅 機場壓力高度...2,000呎 場溫...攝氏27度。(如圖A21_Fig33)
 (A)10磅。 (B)14磅。 (C)24磅。

題目圖：

MAXIMUM RATE OF CLIMB

CONDITIONS:

Flaps Up
Gear Up
2700 RPM
Full Throttle
Mixture Set at Placard Fuel Flow
Cowl Flaps Open
Standard Temperature

MIXTURE SETTING

PRESS ALT PPH

S.L.	138
4000	126
8000	114
12,000	102

NOTES:

1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	97	860	0	0	0
	2000	95	760	2	6	4
	4000	94	660	5	12	9
	6000	93	565	9	18	14
	8000	91	465	13	26	21
	10,000	90	365	18	35	29
	12,000	89	265	24	47	41
3500	S.L.	95	990	0	0	0
	2000	94	885	2	5	3
	4000	93	780	5	10	7
	6000	91	675	7	16	12
	8000	90	570	11	22	17
	10,000	89	465	15	29	24
	12,000	87	360	20	38	32
3200	S.L.	94	1135	0	0	0
	2000	92	1020	2	4	3
	4000	91	910	4	9	6
	6000	90	800	6	14	10
	8000	88	685	9	19	14
	10,000	87	575	12	25	20
	12,000	86	465	16	32	26

FIGURE 10.—Fuel, Time, and Distance to Climb.

原始題號:0011635 題組:3 難易度:易 (R20130125)

- (C) 204. (參閱Fig26)用一般爬升率自引擎啟動爬升至12,000呎之壓力高度所消耗之油量為何?
飛機重...3,800磅 機場壓力高度...4,000呎 場溫...攝氏26度.(如圖A21_FIG26)
(A)46磅. (B)51磅. (C)58磅.

題目圖：

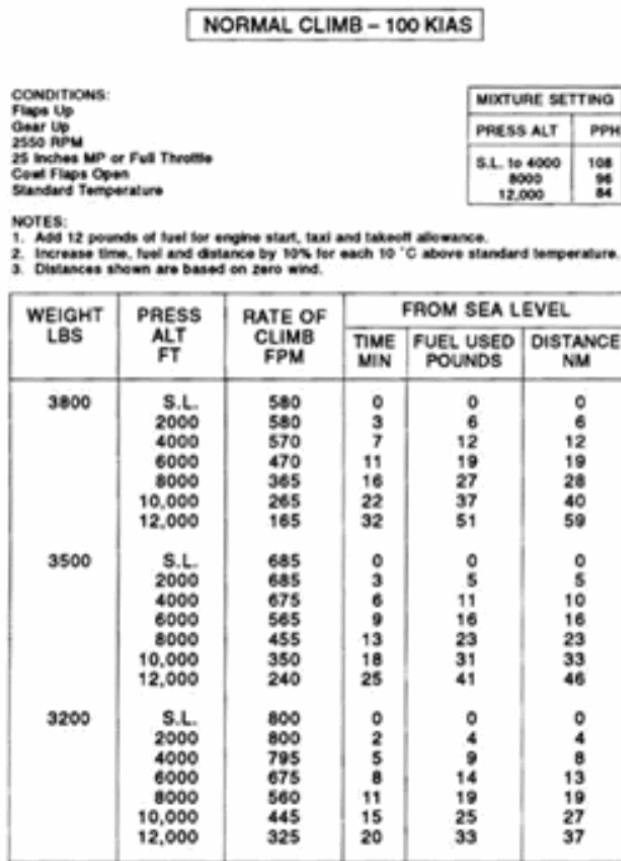


Figure 9. Fuel, Time, and Distance to Climb

原始題號:0011636 題組:4 難易度:易 (R20130125)

- (C) 205. (參閱Fig26)用一般爬升率自引擎啟動爬升至10,000呎之壓力高度所消耗之油量為何?
飛機重...3,500磅 機場壓力高度...4,000呎 場溫...攝氏21度.(如圖A21_FIG26)
(A)23磅. (B)31磅. (C)35磅.

題目圖：

NORMAL CLIMB - 100 KIAS

CONDITIONS:
 Flaps Up
 Gear Up
 2500 RPM
 25 Inches MP or Full Throttle
 Cool Flaps Open
 Standard Temperature

NOTES:
 1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
 2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
 3. Distances shown are based on zero wind.

MIXTURE SETTING

PRESS ALT	PPH
S.L. to 4000	108
8000	96
12,000	84

WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	580	0	0	0
	2000	580	3	6	6
	4000	570	7	12	12
	6000	470	11	19	19
	8000	365	16	27	28
	10,000	265	22	37	40
	12,000	165	32	51	59
3500	S.L.	685	0	0	0
	2000	685	3	5	5
	4000	675	6	11	10
	6000	565	9	16	16
	8000	455	13	23	23
	10,000	350	18	31	33
	12,000	240	25	41	46
3200	S.L.	800	0	0	0
	2000	800	2	4	4
	4000	795	5	9	8
	6000	675	8	14	13
	8000	560	11	19	19
	10,000	445	15	25	27
	12,000	325	20	33	37

Figure 9. Fuel, Time, and Distance to Climb

原始題號:0011637 題組:1 難易度:易 (R20130125)

- (C) 206. (參閱Fig27)當馬力設定是百分之64, 引擎轉速2500轉, 試計算48加崙之餘油飛行與7,500呎之高空時, 可飛多遠?(如圖A21_Fig27)
- (A)635哩. (B)645哩. (C)810哩.

題目圖：

NOTE: Maximum cruise is normally limited to 75% power.								
			38 GAL (NO RESERVE)				48 GAL (NO RESERVE)	
ALT.	RPM	% BHP	TAS MPH	GAL/HOUR	ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2500	2700	86	134	9.7	3.9	525	4.9	660
	2600	79	129	8.6	4.4	570	5.6	720
	2500	72	123	7.8	4.9	600	6.2	760
	2400	65	117	7.2	5.3	620	6.7	780
	2300	58	111	6.7	5.7	630	7.2	795
	2200	52	103	6.3	6.1	625	7.7	790
5000	2700	82	134	9.0	4.2	565	5.3	710
	2600	75	128	8.1	4.7	600	5.9	760
	2500	68	122	7.4	5.1	625	6.4	790
	2400	61	116	6.9	5.5	635	6.9	805
	2300	55	108	6.5	5.9	635	7.4	805
	2200	49	100	6.0	6.3	630	7.9	795
7500	2700	78	133	8.4	4.5	600	5.7	755
	2600	71	127	7.7	4.9	625	6.2	790
	2500	64	121	7.1	5.3	645	6.7	810
	2400	58	113	6.7	5.7	645	7.2	820
	2300	52	105	6.2	6.1	640	7.7	810
10,000	2650	70	129	7.6	5.0	640	6.3	810
	2600	67	125	7.3	5.2	650	6.5	820
	2500	61	118	6.9	5.5	655	7.0	830
	2400	55	110	6.4	5.9	650	7.5	825
	2300	49	100	6.0	6.3	635	8.0	800

FIGURE 11.—Cruise and Range Performance.

原始題號:0011638 題組:2 難易度:易 (R20130125)

- (B) 207. (參閱Fig27)當馬力設定是百分之52, 試計算48加崙之餘油飛行與7,500呎之高空時, 可飛多久?(如圖A21_Fig27)
- (A)6.1小時 (B)7.7小時 (C)8.0小時

題目圖：

NOTE: Maximum cruise is normally limited to 75% power.									
ALT.	RPM	% BHP	TAS MPH	GAL/ HOUR	38 GAL (NO RESERVE)		48 GAL (NO RESERVE)		
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	
2500	2700	86	134	9.7	3.9	525	4.9	660	
	2600	79	129	8.6	4.4	570	5.6	720	
	2500	72	123	7.8	4.9	600	6.2	760	
	2400	65	117	7.2	5.3	620	6.7	780	
	2300	58	111	6.7	5.7	630	7.2	795	
	2200	52	103	6.3	6.1	625	7.7	790	
5000	2700	82	134	9.0	4.2	565	5.3	710	
	2600	75	128	8.1	4.7	600	5.9	760	
	2500	68	122	7.4	5.1	625	6.4	790	
	2400	61	116	6.9	5.5	635	6.9	805	
	2300	55	108	6.5	5.9	635	7.4	805	
	2200	49	100	6.0	6.3	630	7.9	795	
7500	2700	78	133	8.4	4.5	600	5.7	755	
	2600	71	127	7.7	4.9	625	6.2	790	
	2500	64	121	7.1	5.3	645	6.7	810	
	2400	58	113	6.7	5.7	645	7.2	820	
	2300	52	105	6.2	6.1	640	7.7	810	
10,000	2650	70	129	7.6	5.0	640	6.3	810	
	2600	67	125	7.3	5.2	650	6.5	820	
	2500	61	118	6.9	5.5	655	7.0	830	
	2400	55	110	6.4	5.9	650	7.5	825	
	2300	49	100	6.0	6.3	635	8.0	800	

FIGURE 11.—Cruise and Range Performance.

原始題號:0011639 題組:3 難易度:易 (R20130125)

- (C) 208.(參閱Fig27)當馬力設定是百分之52, 試計算飛行與7,500呎之高空時之真空速與每小時之油耗.(如圖A21_Fig27)
- (A)103哩/每小時, 7.7加崙/每小時. (B)105哩/每小時, 6.1加崙/每小時. (C)105哩/每小時, 6.2加崙/每小時.

題目圖：

NOTE: Maximum cruise is normally limited to 75% power.									
ALT.	RPM	% BHP	TAS MPH	GAL/ HOUR	38 GAL (NO RESERVE)		48 GAL (NO RESERVE)		
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES	
2500	2700	86	134	9.7	3.9	525	4.9	660	
	2600	79	129	8.6	4.4	570	5.6	720	
	2500	72	123	7.8	4.9	600	6.2	760	
	2400	65	117	7.2	5.3	620	6.7	780	
	2300	58	111	6.7	5.7	630	7.2	795	
	2200	52	103	6.3	6.1	625	7.7	790	
5000	2700	82	134	9.0	4.2	565	5.3	710	
	2600	75	128	8.1	4.7	600	5.9	760	
	2500	68	122	7.4	5.1	625	6.4	790	
	2400	61	116	6.9	5.5	635	6.9	805	
	2300	55	108	6.5	5.9	635	7.4	805	
	2200	49	100	6.0	6.3	630	7.9	795	
7500	2700	78	133	8.4	4.5	600	5.7	755	
	2600	71	127	7.7	4.9	625	6.2	790	
	2500	64	121	7.1	5.3	645	6.7	810	
	2400	58	113	6.7	5.7	645	7.2	820	
	2300	52	105	6.2	6.1	640	7.7	810	
10,000	2650	70	129	7.6	5.0	640	6.3	810	
	2600	67	125	7.3	5.2	650	6.5	820	
	2500	61	118	6.9	5.5	655	7.0	830	
	2400	55	110	6.4	5.9	650	7.5	825	
	2300	49	100	6.0	6.3	635	8.0	800	

FIGURE 11.—Cruise and Range Performance.

原始題號:0011640 題組:1 難易度:易 (R20130125)

- (C) 209.(參閱Fig30)以正常馬力爬升, 試算出爬升至壓力高度8,000呎所需之時間?飛機重量...3,400磅 機場壓力高度...4,000呎 溫度...攝氏14度(如圖A21_Fig30)
- (A)4.8分鐘 (B)5分鐘 (C)5.5分鐘

題目圖：

NORMAL CLIMB - 110 KIAS					
CONDITIONS: Flaps Up Gear Up 2500 RPM 30 Inches Hg 120 PPH Fuel Flow Cowl Flaps Open Standard Temperature					
NOTES: 1. Add 18 pounds of fuel for engine start, taxi and takeoff allowance. 2. Increase time, fuel and distance by 10% for each 7 °C above standard temperature. 3. Distances shown are based on zero wind.					
WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	605	0	0	0
	4000	570	7	14	13
	8000	530	14	28	27
	12,000	485	22	44	43
	16,000	430	31	62	63
	20,000	365	41	82	87
3700	S.L.	700	0	0	0
	4000	665	6	12	11
	8000	625	12	24	23
	12,000	580	19	37	37
	16,000	525	26	52	53
	20,000	460	34	68	72
3400	S.L.	810	0	0	0
	4000	775	5	10	9
	8000	735	10	21	20
	12,000	690	16	32	31
	16,000	635	22	44	45
	20,000	565	29	57	61

FIGURE 14.—Fuel, Time, and Distance to Climb.

原始題號:0011641 題組:2 難易度:易 (R20181115)

- (B) 210. (參閱Fig28) 壓力高度...18,000呎 溫度...攝氏零下1度 馬力設定...2200 RPM, 20吋MP 可用餘油344磅 根據上述之數據，試計算在合乎晝間目視天氣的情況下可飛多久?(如圖A21_Fig28)
 (A)4小時50分。 (B)5小時20分。 (C)5小時59分。

題目圖：

PRESSURE ALTITUDE 18,000 FEET										
CONDITIONS: 4000 Pounds Recommended Lean Mixture Cowl Flaps Closed					NOTE For best fuel economy at 70% power or less, operate at 6 PPH less than shown in this chart or at peak EGT.					
RPM	MP	20 °C BELOW STANDARD TEMP -41 °C			STANDARD TEMPERATURE -21 °C			20 °C ABOVE STANDARD TEMP -1 °C		
		% BHP	KTAS	PPH	% BHP	KTAS	PPH	% BHP	KTAS	PPH
2500	30	---	---	---	81	188	106	76	185	100
	28	80	184	105	76	182	99	71	178	93
	26	75	178	99	71	176	93	67	172	88
	24	70	171	91	66	168	86	62	164	81
	22	63	162	84	60	159	79	56	155	75
2400	30	81	185	107	77	183	101	72	180	94
	28	76	179	100	72	177	94	67	173	88
	26	71	172	93	67	170	88	63	166	83
	24	66	165	87	62	163	82	58	159	77
	22	61	158	80	57	155	76	54	150	72
2300	30	79	182	103	74	180	97	70	176	91
	28	74	176	97	70	174	91	65	170	86
	26	69	170	91	65	167	86	61	163	81
	24	64	162	84	60	159	79	56	155	75
	22	58	154	77	55	150	73	51	145	65
2200	26	66	166	87	62	163	82	58	159	77
	24	61	158	80	57	154	76	54	150	72
	22	55	148	73	51	144	69	48	138	66
	20	49	136	66	46	131	63	43	124	59

FIGURE 12.—Cruise Performance.

原始題號:0011642 題組:3 難易度:易 (R20130125)

- (B) 211. (參閱Fig28) 壓力高度...18,000呎 溫度...攝氏零下21度 馬力設定...2400 RPM, 28吋mp 可用餘油425磅 根據上述之數據，試計算在合乎晝間目視天氣的情況下可飛多久?(如圖A21_Fig28)
 (A)3小時46分。 (B)4小時1分。 (C)4小時31分。

題目圖：

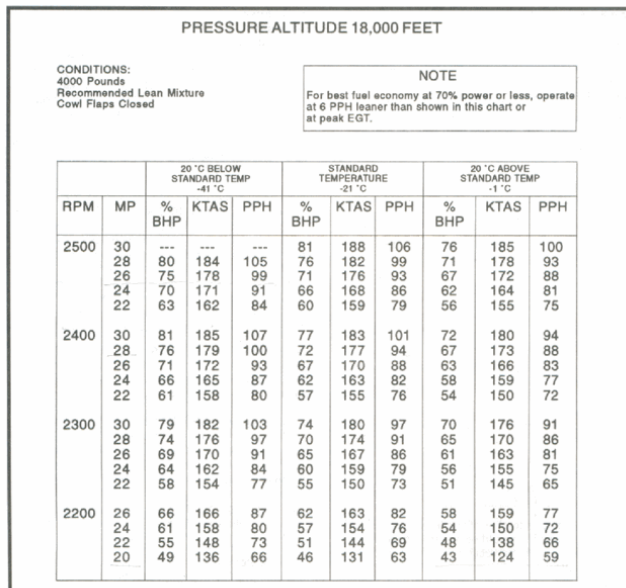


FIGURE 12.—Cruise Performance.

原始題號:0011643 題組:4 難易度:易 (R20130125)

- (A) 212.(參閱Fig28) 壓力高度…18,000呎 溫度…攝氏零下41度 馬力設定…2500
RPM, 26吋mp 可用餘油318磅 根據上述之數據, 試計算在合乎夜間目視天氣的
情況下可飛多久?(如圖A21_Fig28)
(A)2小時27分. (B)3小時12分. (C)3小時42分.

題目圖：

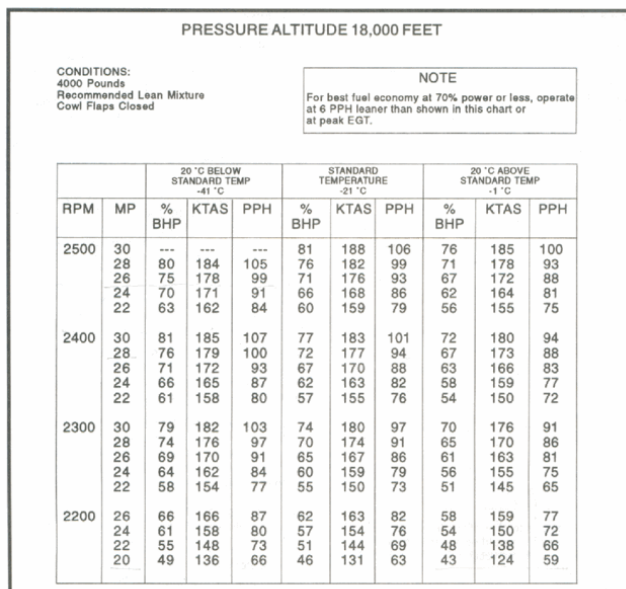


FIGURE 12.—Cruise Performance.

原始題號:0011644 題組:1 難易度:易 (R20130125)

- (B) 213.(參閱Fig29)以最大馬力爬升, 試算出爬升至壓力高度8,000呎所需之時間?飛機重
量…4,000磅 機場壓力高度…2,000呎 溫度…攝氏32度(如圖A21_Fig29)
(A)7分鐘 (B)8.4分鐘 (C)11.2分鐘

題目圖：

MAXIMUM RATE OF CLIMB						
CONDITIONS: Flaps Up Gear Up 2600 RPM Cowl Flaps Open Standard Temperature				PRESS ALT	MP	PPH
				S.L. TO 17,000	35	162
				18,000	34	156
				20,000	32	144
				22,000	30	132
				24,000	28	120
NOTES: 1. Add 16 pounds of fuel for engine start, taxi and takeoff allowance. 2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature. 3. Distances shown are based on zero wind.						
WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	100	930	0	0	0
	4000	100	890	4	12	7
	8000	100	845	9	24	16
	12,000	100	790	14	38	25
	16,000	100	720	19	52	36
	20,000	99	515	26	69	50
	24,000	97	270	37	92	74
3700	S.L.	99	1060	0	0	0
	4000	99	1020	4	10	6
	8000	99	975	8	21	13
	12,000	99	915	12	33	21
	16,000	99	845	17	45	30
	20,000	97	630	22	59	42
	24,000	95	370	30	77	60
3400	S.L.	97	1205	0	0	0
	4000	97	1165	3	9	5
	8000	97	1120	7	19	12
	12,000	97	1060	11	29	18
	16,000	97	985	15	39	26
	20,000	96	760	19	51	36
	24,000	94	485	26	65	50

FIGURE 13.—Fuel, Time, and Distance to Climb.

原始題號:0011645 題組:2 難易度:易 (R20130125)

- (A) 214.(參閱Fig29)以最大馬力爬升,試算自引擎啟動至爬升至壓力高度16,000呎所耗之油量?
 飛機重量...3,400磅 機場壓力高度...6,000呎 溫度...攝氏10度(如圖A21_Fig29)
 (A)43磅 (B)45磅 (C)49磅

題目圖：

MAXIMUM RATE OF CLIMB						
CONDITIONS: Flaps Up Gear Up 2600 RPM Cowl Flaps Open Standard Temperature				PRESS ALT	MP	PPH
				S.L. TO 17,000	35	162
				18,000	34	156
				20,000	32	144
				22,000	30	132
				24,000	28	120
NOTES: 1. Add 16 pounds of fuel for engine start, taxi and takeoff allowance. 2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature. 3. Distances shown are based on zero wind.						
WEIGHT LBS	PRESS ALT FT	CLIMB SPEED KIAS	RATE OF CLIMB FPM	FROM SEA LEVEL		
				TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	100	930	0	0	0
	4000	100	890	4	12	7
	8000	100	845	9	24	16
	12,000	100	790	14	38	25
	16,000	100	720	19	52	36
	20,000	99	515	26	69	50
	24,000	97	270	37	92	74
3700	S.L.	99	1060	0	0	0
	4000	99	1020	4	10	6
	8000	99	975	8	21	13
	12,000	99	915	12	33	21
	16,000	99	845	17	45	30
	20,000	97	630	22	59	42
	24,000	95	370	30	77	60
3400	S.L.	97	1205	0	0	0
	4000	97	1165	3	9	5
	8000	97	1120	7	19	12
	12,000	97	1060	11	29	18
	16,000	97	985	15	39	26
	20,000	96	760	19	51	36
	24,000	94	485	26	65	50

FIGURE 13.—Fuel, Time, and Distance to Climb.

原始題號:0011646 題組:1 難易度:易 (R20130125)

- (C) 215.(參閱Fig30)以正常馬力爬升,試算自引擎啟動至爬升至壓力高度12,000呎所耗之油量?
 飛機重量...3,700磅 機場壓力高度...4,000呎 溫度...攝氏21度(如圖A21_Fig30)
 (A)30磅 (B)37磅 (C)46磅

題目圖：

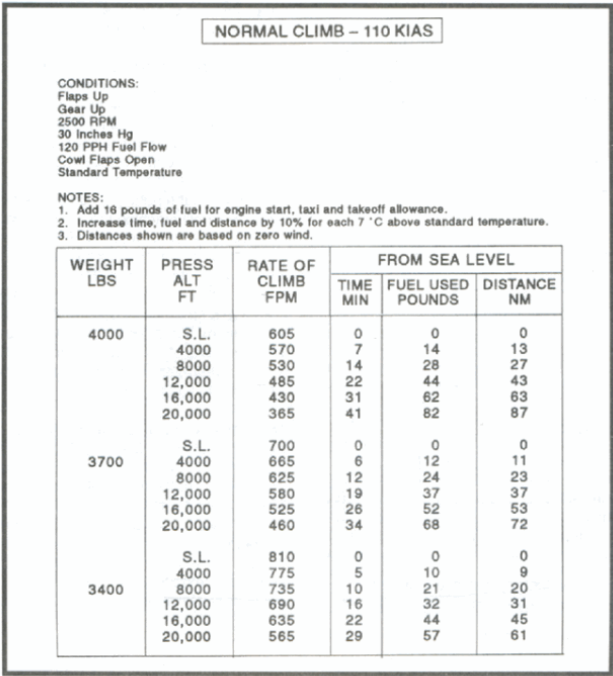


FIGURE 14.—Fuel, Time, and Distance to Climb.

原始題號:0011647 題組:1 難易度:易 (R20130125)

- (C) 216.(參閱Fig31)塔台播報地面風向010,風速18哩,使用08跑道落地,側風為何?(如圖A21_Fig31)
(A)7哩 (B)15哩 (C)17哩

題目圖：

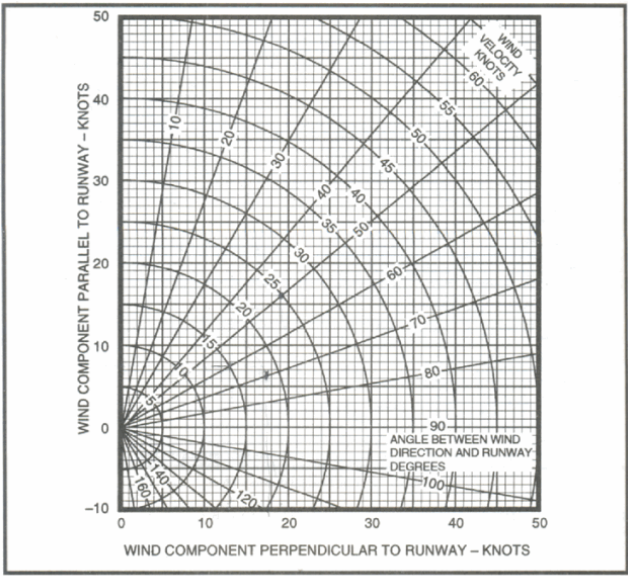


FIGURE 31.—Wind Component Chart.

原始題號:0011648 題組:2 難易度:易 (R20180207)

- (A) 217.(參閱Fig. 31)使用30跑道落地。若Vso為60節(哩/時),請問會超過飛機0.2Vso側風限制的地面風為何?(如圖A21_Fig31)
(A)260度的20節。(B)275度的25節。(C)315度的35節。

題目圖：

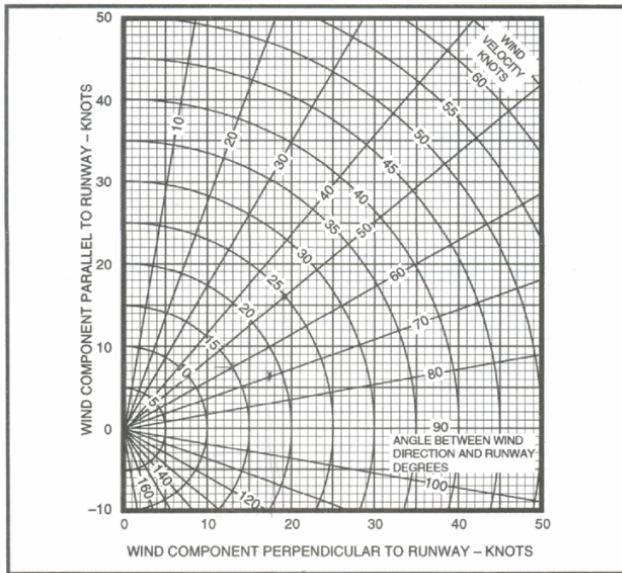


FIGURE 31.—Wind Component Chart.

原始題號:0011649 題組:3 難易度:易 (R20130125)

- (A) 218. (參閱Fig31)13跑道起飛,風向190,風速15哩,請問頂頭風風速為何?(如圖A21_Fig31)
(A)7哩 (B)13哩 (C)15哩

題目圖：

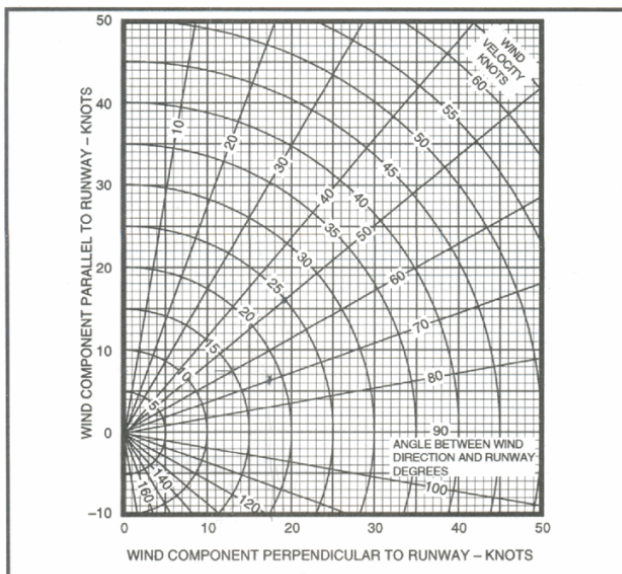


FIGURE 31.—Wind Component Chart.

原始題號:0011650 題組:4 難易度:易 (R20130125)

- (A) 219. (參閱Fig31)地面風向180,風速25哩,當使用13跑道落地時,側風為何?(如圖A21_Fig31)
(A)19哩 (B)21哩 (C)23哩

題目圖：

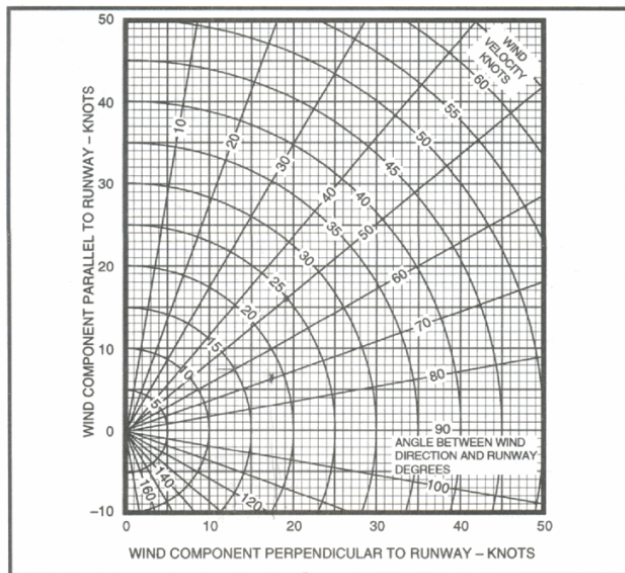


FIGURE 31.—Wind Component Chart.

原始題號:0011651 題組:0 難易度:易

- (C) 220. 翼端方位改變...5度 方位改變所需時間...5分鐘 真空速...115哩 到電台之距離為
(A)36哩. (B)57.5哩. (C)115哩.

原始題號:0011652 題組:0 難易度:易

- (A) 221. 翼端幅向改變15度，幅向改變之時間差7.5分鐘，真空速85哩，油耗率9.6, gal/hr；飛至電台所需時間，距離與油量為何？
(A)30分鐘，42.5哩，4.80加崙. (B)32分鐘，48哩，5.58加崙. (C)48分鐘，48哩，4.58加崙.

(A21) CPL基本航行學

最近更新日期：110/12/27 ~ 110/12/27；更新題號：

0011470, 0011495, 0011498, 0011519, 0011520, 0011521, 0011528, 0011555, 0011569, 0011582, 0011583, 0011584, 0011587, 0011588, 0011589, 0011598, 0011604, 0011608, 0011633, 0011634, 0011641, 0011648

原始題號:0011430 題組:0 難易度:易

- (C) 1. True course measurements on a Sectional Aeronautical Chart should be made at a meridian near the midpoint of the course because the
- (A) values of isogonic lines change from point to point. (B) angles formed by isogonic lines and lines of latitude vary from point to point. (C) angles formed by lines of longitude and the course line vary from point to point

原始題號:0011431 題組:1 難易度:易 (R20130125)

- (C) 2. (Refer to figure 1, point 6, on the inside front cover.) Mosier Airport is(如圖A21_Fig1)
- (A) an airport restricted to use by private and recreational pilots. (B) a restricted military stage field within restricted airspace. (C) a nonpublic use airport.

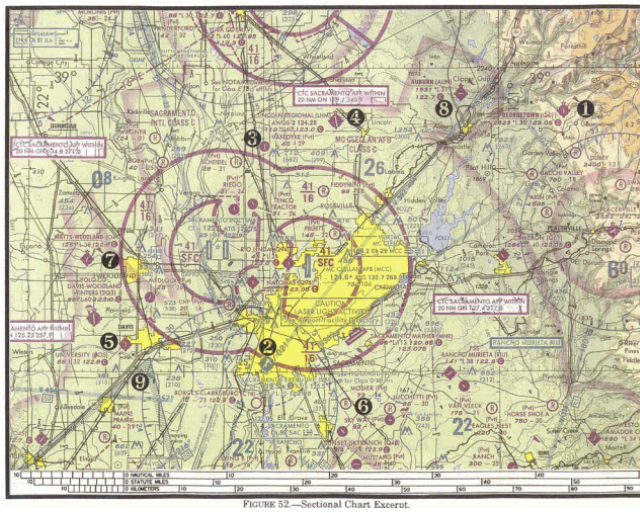
題目圖：



原始題號:0011433 題組:3 難易度:易 (R20130125)

- (C) 3. (Refer to figure 1, point 7, on the inside front cover.) The floor of Class E airspace over the town of Woodland is(如圖A21_Fig1)
- (A) 700 feet AGL over part of the town and no floor over the remainder. (B) 1,200 feet AGL over part of the town and no floor over the remainder. (C) both 700 feet and 1,200 feet AGL.

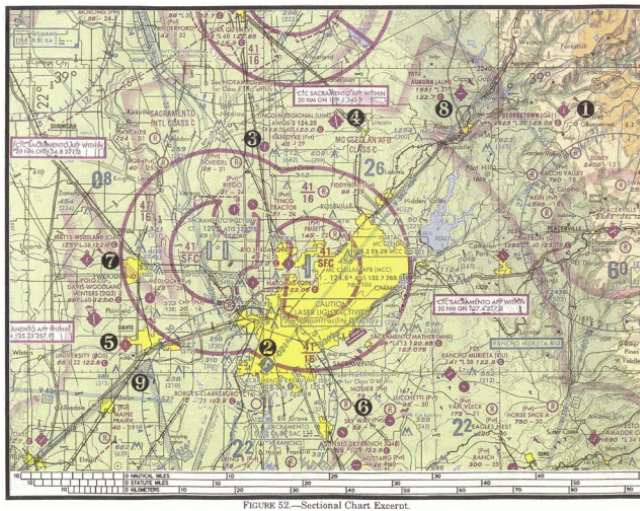
題目圖：



原始題號:0011434 題組:4 難易度:易 (R20130125)

- (B) 4. (Refer to figure 1, point 8, on the inside front cover.) The floor of the Class E airspace over the town of Auburn is (如圖A21_Fig1)
- (A) 1,200 feet MSL. (B) 700 feet AGL (C) 1,200 feet AGL

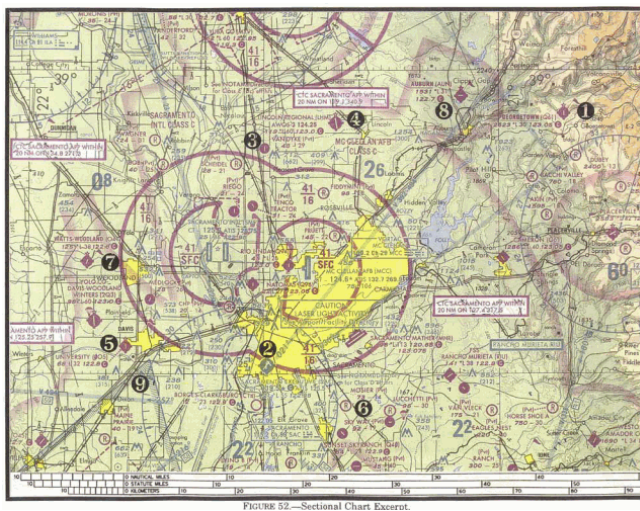
題目圖：



原始題號:0011435 題組:5 難易度:易 (R20130125)

- (B) 5. (Refer to figure 1, point 1, on the inside front cover.) The floor of the Class E airspace above Georgetown Airport (Q61) is at (如圖A21_Fig1)
- (A) the surface. (B) 3,823 feet MSL (C) 700 feet AGL

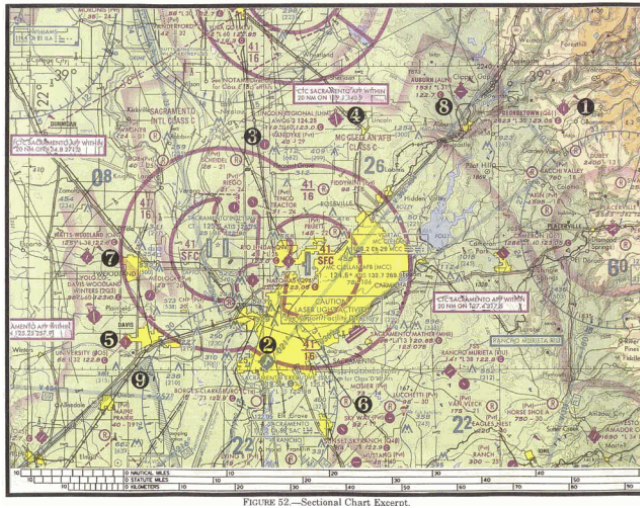
題目圖：



原始題號:0011436 題組:6 難易度:易 (R20130125)

- (B) 6. (Refer to figure 1, point 5, on the inside front cover.) The floor of the Class E airspace over University Airport (005) is(如圖A21_Fig1)
(A)the surface. (B)700 feet AGL (C)1,200 feet AGL

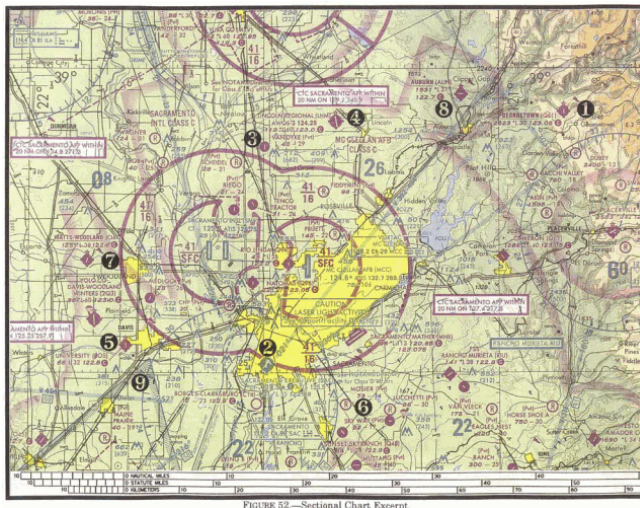
題目圖：



原始題號:0011437 題組:7 難易度:易 (R20130125)

- (C) 7. (Refer to figure 1, point 4, on the inside front cover.) The highest obstruction with high intensity lighting within 10 NM of Lincoln Regional Airport (LHM) is how high above the ground?(如圖A21_Fig1)
(A)1,254 feet. (B)662 feet. (C)299 feet.

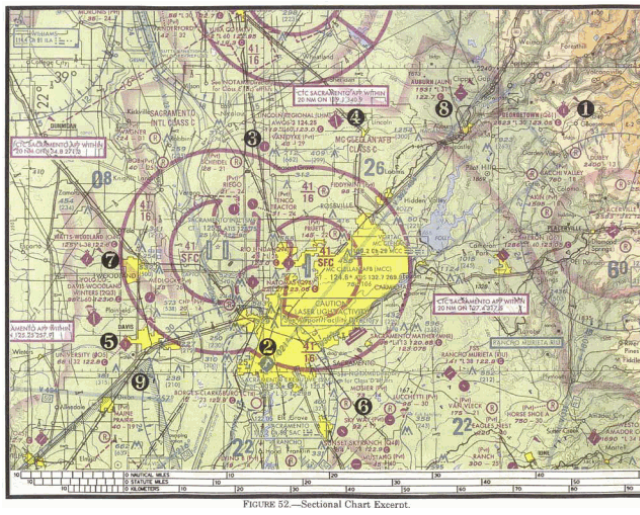
題目圖：



原始題號:0011438 題組:8 難易度:易 (R20130125)

- (B) 8. (Refer to figure 1, point 4, on the inside front cover.) The terrain at the obstruction approximately 8 NM east southeast of the Lincoln Airport is approximately how much higher than the airport elevation?(如圖A21_Fig1)
(A)376 feet. (B)835 feet. (C)1,135 feet.

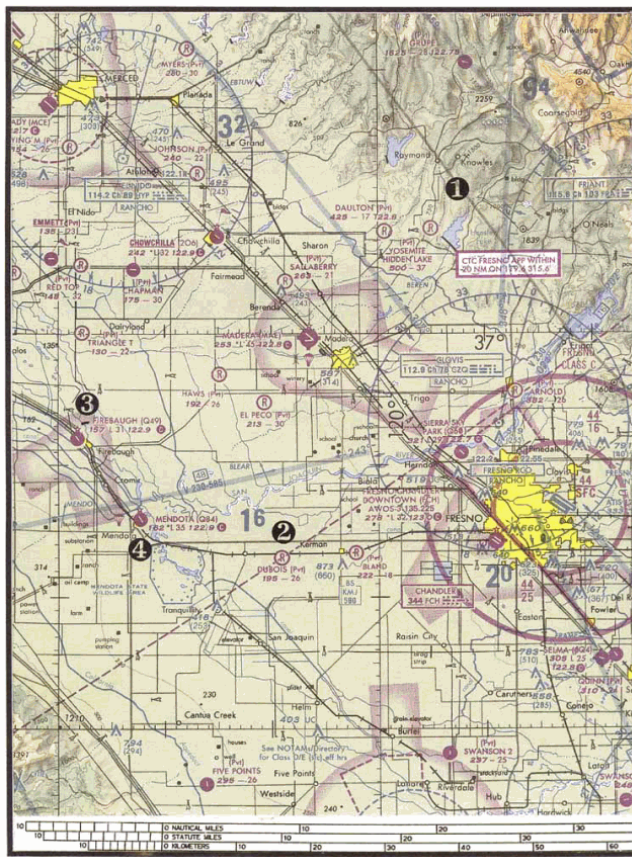
題目圖：



原始題號:0011439 題組:1 難易度:易 (R20130125)

- (B) 9. (Refer to figure 2, point 1, on the inside back cover.) this thin black shaded line is most likely(如圖A21_Fig2)
(A)an arrival route. (B)a military training route. (C)a state boundary line.

題目圖：



原始題號:0011440 題組:2 難易度:易 (R20130125)

- (B) 10. (Refer to figure 2, point 2, on the inside back cover.) The 16 indicates(如圖A21_Fig2)
(A)an antenna top at 1,600 feet AGL. (B)the maximum elevation figure for that quadrangle. (C)the minimum safe sector altitude for that quadrangle.

題目圖：

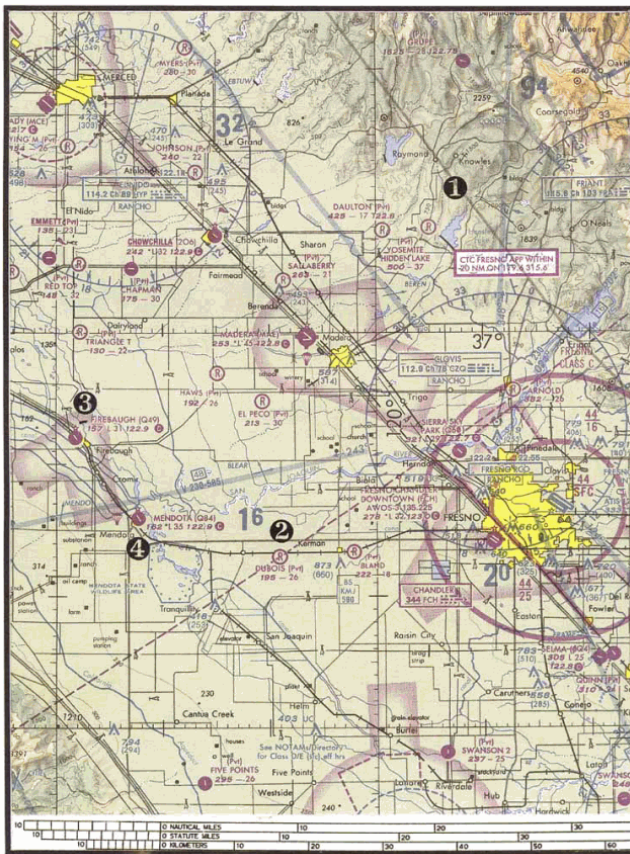


FIGURE 53.—Sectional Chart Excerpt.

原始題號:0011441 題組:1 難易度:易 (R20130125)

- (A) 11. (Refer to figure 3, point 6, on the outside back cover.) The Class C airspace at Metropolitan Oakland International (OAK) which extends from the surface upward has a ceiling of (如圖A21_Fig3)
- (A) both 2,100 feet and 3,000 feet MSL. (B) 8,000 feet MSL. (C) 2,100 feet AGL.

題目圖：



FIGURE 54.—Sectional Chart Excerpt.

原始題號:0011442 題組:2 難易度:易 (R20130125)

- (B) 12. (Refer to figure 3, point 1, on the outside back cover.) What minimum altitude is required to avoid the Livermore Airport (LVK) Class D airspace?(如圖A21_Fig3)
(A)2,503 feet MSL. (B)2,901 feet MSL. (C)3,297 feet MSL.

題目圖：



FIGURE 54.—Sectional Chart Excerpt.

原始題號:0011443 題組:0 難易度:易

- (A) 13. If an airplane is consuming 95 pounds of fuel per hour at a cruising altitude of 6,500 feet and the groundspeed is 173 knots, how much fuel is required to travel 450 NM?
(A)248 pounds. (B)265 pounds. (C)284 pounds.

原始題號:0011444 題組:0 難易度:易

- (A) 14. If fuel consumption is 80 pounds per hour and groundspeed is 180 knots, how much fuel is required for an airplane to travel 460 NM?
(A)205 pounds. (B)212 pounds. (C)460 pounds.

原始題號:0011445 題組:0 難易度:易

- (C) 15. If an airplane is consuming 12.5 gallons of fuel per hour at a cruising altitude of 8,500 feet and the groundspeed is 145 knots, how much fuel is required to travel 435 NM?
(A)27 gallons. (B)34 gallons. (C)38 gallons.

原始題號:0011446 題組:0 難易度:易

- (C) 16. If an airplane is consuming 9.5 gallons of fuel per hour at a cruising altitude of 6,000 feet and the groundspeed is 135 knots, how much fuel is required to travel 490 NM?
(A)27 gallons. (B)30 gallons. (C)35 gallons.

原始題號:0011447 題組:0 難易度:易

- (A) 17. If an airplane is consuming 14.8 gallons of fuel per hour at a cruising altitude of 7,500 feet and the groundspeed is 167 knots, how much fuel is required to travel 560 NM?

(A)50 gallons. (B)53 gallons. (C)57 gallons.

原始題號:0011448 題組:0 難易度:易

- (A) 18. If fuel consumption is 14.7 gallons per hour and groundspeed is 157 knots, how much fuel is required for an airplane to travel 612 NM?

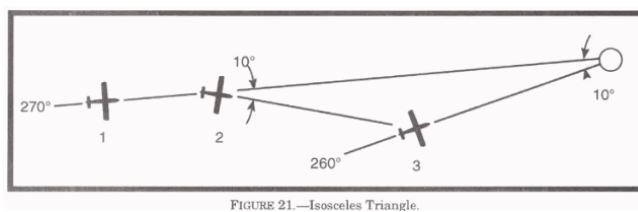
(A)58 gallons. (B)60 gallons. (C)64 gallons.

原始題號:0011449 題組:1 難易度:易 (R20130125)

- (A) 19. (Refer to figure 4 below.) If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time to the station?(如圖A21_Fig4)

(A)13 minutes. (B)17 minutes. (C)26 minutes.

題目圖：

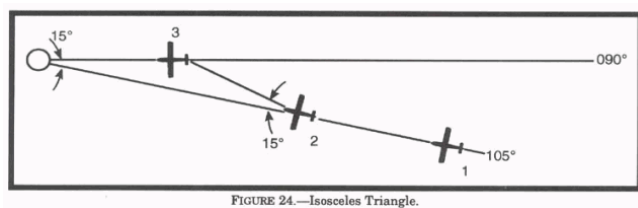


原始題號:0011450 題組:1 難易度:易 (R20130125)

- (A) 20. (Refer to figure 5.) If the time flown between aircraft positions 2 and 3 is 15 minutes, what is the estimated time to the station?(如圖A21_Fig5)

(A)15 minutes. (B)30 minutes. (C)60 minutes.

題目圖：

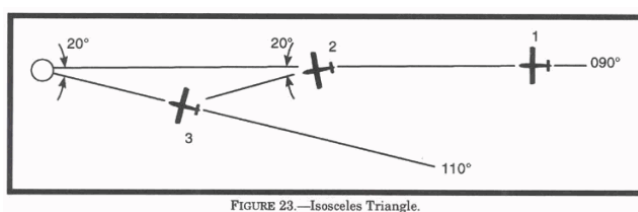


原始題號:0011451 題組:1 難易度:易 (R20130125)

- (B) 21. (Refer to figure 6 below.) If the time flown between aircraft positions 2 and 3 is 13 minutes, what is the estimated time to the station?(如圖A21_Fig6)

(A)7.8 minutes. (B)13 minutes. (C)26 minutes.

題目圖：



原始題號:0011452 題組:1 難易度:易 (R20130125)

- (A) 22. (Refer to figure 7 below.) If the time flown between aircraft positions 2 and 3 is 8 minutes, what is the estimated time to the station? (如圖A21_Fig7)
 (A) 8 minutes. (B) 16 minutes. (C) 48 minutes.

題目圖：

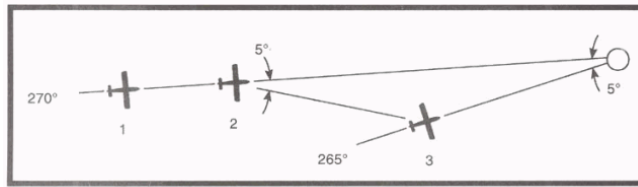


FIGURE 22.—Isosceles Triangle.

原始題號:0011453 題組:0 難易度:易

- (B) 23. Inbound on the 040 radial, a pilot selects the 055 radial, turns 15 degree to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 15 minutes. Based on this information, the ETE to the station is
 (A) 8 minutes. (B) 15 minutes. (C) 30 minutes.

原始題號:0011454 題組:0 難易度:易

- (A) 24. Inbound on the 090 radial, a pilot rotates the OBS 010 degree to the left, turns 010 degree to the right, and notes the time. While maintaining a constant heading, the pilot determines that the elapsed time for the CDI to center is 8 minutes. Based on this information, the ETE to the station is
 (A) 8 minutes. (B) 16 minutes. (C) 24 minutes.

原始題號:0011455 題組:0 難易度:易

- (B) 25. Inbound on the 315 radial, a pilot selects the 320 radial, turns 5 degree to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 12 minutes. The ETE to the station is
 (A) 10 minutes (B) 12 minutes (C) 24 minutes.

原始題號:0011456 題組:0 難易度:易

- (A) 26. Inbound on the 190 radial, a pilot selects the 195 radial, turns 5 degree to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 10 minutes. The ETE to the station is
 (A) 10 minutes. (B) 15 minutes. (C) 20 minutes.

原始題號:0011457 題組:0 難易度:易

- (A) 27. While maintaining a magnetic heading of 270 degree and a true airspeed of 120 knots, the 360 radial of a VOR is crossed at 1237 and the 350 radial is crossed at 1244. The approximate time and distance to this station are
 (A) 42 minutes and 84 NM. (B) 42 minutes and 91 NM. (C) 44 minutes and 96 NM.

原始題號:0011458 題組:0 難易度:易

- (C) 28. The relative bearing on an ADF changes from 265 degree to 260 degree in 2 minutes of elapsed time. If the groundspeed is 145 knots, the distance to that station would be
(A)26 NM. (B)37 NM. (C)58 NM.

原始題號:0011459 題組:0 難易度:易

- (B) 29. The ADF indicates a wingtip bearing change of 10 degree in 2 minutes of elapsed time, and the TAS is 160 knots. What is the distance to the station?
(A)15 NM. (B)32 NM. (C)36 NM.

原始題號:0011460 題組:0 難易度:易

- (C) 30. With a TAS of 115 knots, the relative bearing on an ADF changes from 090 degree to 095 degree in 1.5 minutes of elapsed time. The distance to the station would be
(A)12.5 NM. (B)24.5 NM. (C)34.5 NM.

原始題號:0011461 題組:0 難易度:易

- (C) 31. GIVEN: Wingtip bearing change : 5 degree Time elapsed between
bearing change : 5 min True airspeed : 115 kts The
distance to the station is
(A)36 NM. (B)57.5 NM. (C)115 NM.

原始題號:0011462 題組:0 難易度:易

- (A) 32. The ADF is tuned to a non-directional radio beacon and the relative bearing changes from 095 degree to 1 00 degree in 1.5 minutes of elapsed time. The time en route to that station would be
(A)18 minutes. (B)24 minutes. (C)30 minutes.

原始題號:0011463 題組:0 難易度:易

- (A) 33. While maintaining a constant heading, a relative bearing of 100 doubles in 5 minutes. If the true airspeed is 105 knots, the time and distance to the station being used is approximately
(A)5 minutes and 8.7 miles. (B)10 minutes and 17 miles. (C)15 minutes and 31.2 miles.

原始題號:0011464 題組:0 難易度:易

- (A) 34. GIVEN: Wingtip bearing change : 15 degree , Elapsed time between
bearing change : 6 min Rate of fuel consumption : 8.6 gal/hr
Calculate the approximate fuel required to fly to the station.
(A)3.44 gallons. (B)6.88 gallons. (C)17.84 gallons.

原始題號:0011465 題組:0 難易度:易

- (A) 35. GIVEN: Wingtip bearing change : 15 degree , Elapsed time between bearing change : 7.5 min , True airspeed : 85 kts , Rate of fuel consumption : 9.6 gal/hr The time, distance, and fuel required to fly to the station is
(A)30 minutes; 42.5 miles; 4.80 gallons. (B)32 minutes; 48 miles; 5.58 gallons.
(C)48 minutes; 48 miles; 4.58 gallons.

原始題號:0011466 題組:0 難易度:易

- (B) 36. While maintaining a constant heading, a relative bearing of 15 degree doubles in 6 minutes. The time to the station being used is
(A)3 minutes. (B)6 minutes. (C)12 minutes.

原始題號:0011467 題組:0 難易度:易

- (A) 37. While maintaining a constant heading, the ADF needle increases from a relative bearing of 0450 to 0900 in 5 minutes. The time to the station being used is
(A)5 minutes. (B)10 minutes. (C)15 minutes.

原始題號:0011468 題組:0 難易度:易

- (A) 38. While cruising at 135 knots and on a constant heading, the ADF needle decreases from a relative bearing of 315 degree to 270 degree in 7 minutes. The approximate time and distance to the station being used is
(A)7 minutes and 16 miles. (B)14 minutes and 28 miles. (C)19 minutes and 38 miles.

原始題號:0011469 題組:0 難易度:易

- (C) 39. The ADF is tuned to nondirectional radio beacon and the relative bearing change from 270 degree to 265 degree in 2.5 minutes of elapsed time. The time enroute to that beacon would be
(A)9 minutes. (B)18 minutes. (C)30 minutes.

原始題號:0011470 題組:0 難易度:易 (R20181115)

- (C) 40. An ADF is tuned to a NDB and the relative bearing change from 085 to 090 in 2 minutes of elapsed time. The time en route to the station would be
(A)15 minutes. (B)18 minutes. (C)24 minutes.

原始題號:0011471 題組:0 難易度:易

- (B) 41. If the relative bearing change from 090 degree to 100 degree in 2.5 minutes of elapsed time. The time en route to the station would be
(A)12 minutes. (B)15 minutes. (C)18 minutes.

原始題號:0011472 題組:0 難易度:易

- (B) 42. The ADF is tuned to a non-directional radio beacon and the relative bearing changes from 090 degree to 100 degree in 2.5 minutes of elapsed time. If the true airspeed is 90 knots, the distance and time en route to that radio beacon would be
(A)15 miles and 22.5 minutes (B)22.5 miles and 15 minutes (C)32 miles and 18 minutes

原始題號:0011473 題組:0 難易度:易

- (A) 43. GIVEN: Wingtip bearing change : 10 degree , Elapsed time between bearing change : 4 min , Rate of fuel consumption : 11 gal/hr .
Calculate the fuel required to fly to the station.
(A)4.4 gallons. (B)8.4 gallons. (C)12 gallons.

原始題號:0011474 題組:0 難易度:易

- (B) 44. GIVEN: Wingtip bearing change : 5 degree , Elapsed time between bearing change : 6 min , Rate of fuel consumption : 12 gal/hr , The fuel required to fly to the station is
(A)8.2 gallons. (B)14.4 gallons. (C)18.7 gallons.

原始題號:0011475 題組:0 難易度:易

- (A) 45. GIVEN: True course : 105 degree , True heading : 085 degree , True airspeed : 95 kts , Groundspeed : 87 kts. Determine the wind direction and speed.
(A)020 degree and 32 knots. (B)030 degree and 38 knots. (C)200 degree and 32 knots.

原始題號:0011476 題組:0 難易度:易

- (B) 46. GIVEN: True course : 345 degree , True heading : 355 degree , True airspeed : 85 kts , Groundspeed : 95 kts . Determine the wind direction and speed.
(A)095 degree and 19 knots. (B)113 degree and 19 knots. (C)238 degree and 18 knots.

原始題號:0011477 題組:0 難易度:易

- (C) 47. You have flown 52 miles, are 6 miles off course, and have 118 miles yet to fly. To converge on your destination, the total correction angle would be
(A)3 degree. (B)6 degree. (C)10 degree

原始題號:0011478 題組:0 難易度:易

- (C) 48. GIVEN: Distance off course : 9 mile , Distance flown : 95 mile , Distance to fly : 125 mile. To converge at the destination, the total correction angle would be
(A)4 degree (B)6 degree (C)10 degree

原始題號:0011479 題組:0 難易度:易

- (B) 49. An airplane departs an airport under the following conditions: Airport elevation 1,000 ft, Cruise altitude 9,500 ft , Rate of climb 500 ft/min , Average true airspeed 135 kts , True course 215 degree , Average wind velocity 290 at 20 kts, Variation 3°W, Deviation -2°, Average fuel consumption 13 gal/hr. Determine the approximate time, compass heading, distance, and fuel consumed during the climb.
(A)14 minutes, 234 degree , 26 NM, 3.9 gallons. (B)17 minutes, 224 degree , 36 NM, 3.7 gallons. (C)17 minutes, 242 degree , 31 NM, 3.5 gallons.

原始題號:0011480 題組:0 難易度:易

- (B) 50. An airplane departs an airport under the following conditions: Airport elevation 1,500 ft , Cruising altitude 9,500 ft , Rate of climb 500 ft/min, Average true airspeed 160 kts , True course 145° , Average wind velocity 080° at 15 kts , Variation 5°E , Deviation -3° , Average fuel consumption 14 gal/hr. Determine the approximate time, compass heading, distance, and fuel consumed during the climb.
(A)14 minutes, 128 degree , 35 NM, 3.2 gallons. (B)16 minutes, 132 degree , 41 NM, 3.7 gallons. (C)16 minutes, 128 degree , 32 NM, 3.8 gallons.

原始題號:0011481 題組:0 難易度:易

- (C) 51. GIVEN : Wind 175 degree at 20 kts , Distance 135 NM , True course 075 degree , True airspeed 80 kts , Fuel consumption 105 lb/hr . Determine the time en route and fuel consumption.
(A)1 hour 28 minutes and 73.2 pounds. (B)1 hour 38 minutes and 158 pounds. (C)1 hour 40 minutes and 175 pounds.

原始題號:0011482 題組:0 難易度:易

- (C) 52. An airplane descends to an airport under the following conditions: Cruising altitude 7,500 ft , Airport elevation 1,300 ft , Descends to 800 ft AGL Rate of descent 300 ft/min , Average true airspeed 120 kts , True course 165 degree, Average wind velocity 240° at 20 kts, Variation 4°E , Deviation -2° , Average fuel consumption 9.6 gal/hr Determine the approximate time, compass heading, distance, and fuel consumed during the descent.
(A)16 minutes, 1680, 30 NM, 2.9 gallons. (B)18 minutes, 1640, 34 NM, 3.2 gallons. (C)18 minutes, 1680, 34 NM, 2.9 gallons.

原始題號:0011483 題組:0 難易度:易

- (C) 53. An airplane descends to an airport under the following conditions: Cruising altitude 10,500 ft , Airport elevation 1,700 ft , Descends to 1,000 ft AGL , Rate of descent 600 ft/min , Average true airspeed 135 kts , True course 263 degree , Average wind velocity 330° at 30 kts , Variation 7 degree E , Deviation $+3^{\circ}$ degree , Average fuel consumption 11.5 gal/hr . Determine the approximate time, compass heading, distance, and fuel consumed during the descent.
(A)9 minutes, 274 degree, 26 NM, 2.8 gallons. (B)13 minutes, 274 degree , 28 NM, 2.5 gallons. (C)13 minutes, 271 degree, 26 NM, 2.5 gallons.

原始題號:0011484 題組:1 難易度:易 (R20130125)

- (C) 54. (Refer to figure 8.) The pilot generally calls ground control after landing when the aircraft is completely clear of the runway. this is when the aircraft(如圖A21_Fig8)
 (A).passes the red symbol shown at the top of the figure. (B).is on the dashed-line side of the middle symbol. (C).is past the solid-line side of the middle symbol.

題目圖：

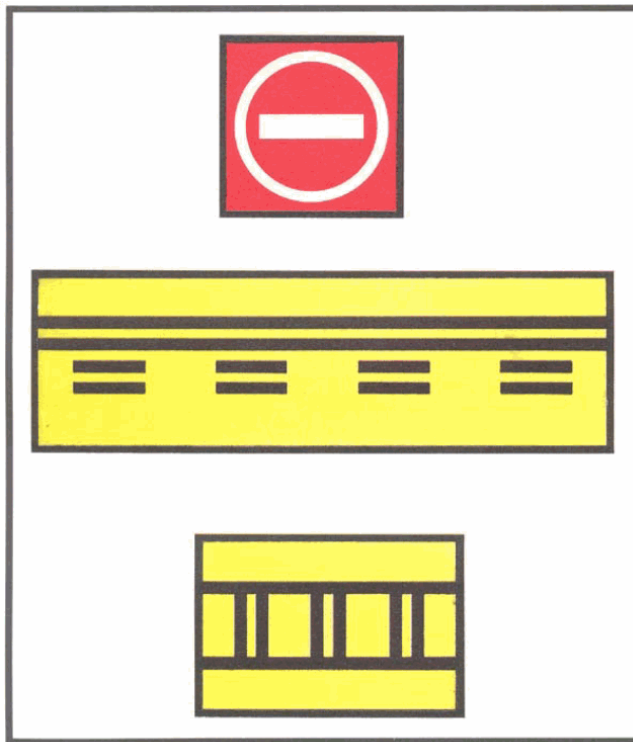


FIGURE 51.—Airport Signs.

原始題號:0011485 題組:2 難易度:易 (R20130125)

- (B) 55. (Refer to figure 8.) The red symbol at the top would most likely be found(如圖A21_Fig8)
 (A).upon exiting all runways prior to calling ground control. (B).at an intersection where a roadway may be mistaken as a taxiway. (C).near the approach end of ILS runways.

題目圖：

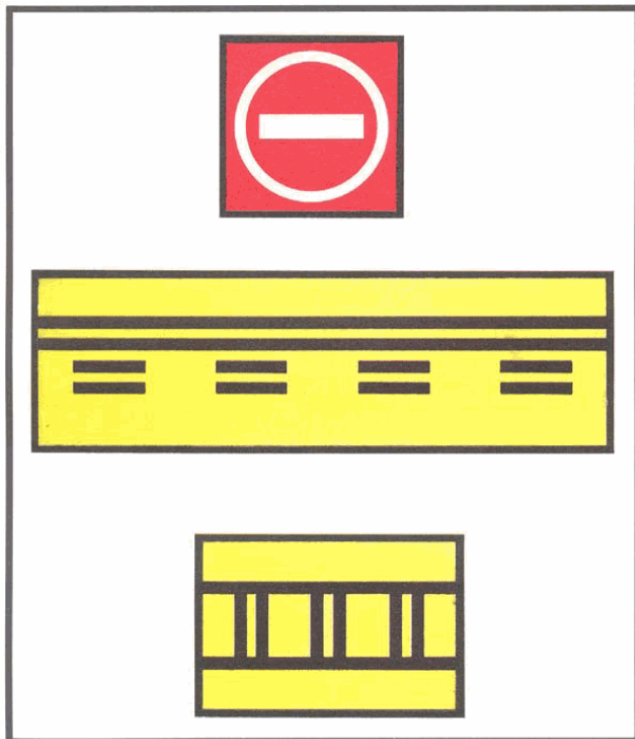


FIGURE 51.—Airport Signs.

原始題號:0011486 題組:3 難易度:易 (R20130125)

- (C) 56. (Refer to figure 8.) While clearing an active runway you are most likely clear of the ILS critical area when you pass which symbol?(如圖A21_Fig8)
(A)Top red. (B)Middle yellow. (C)Bottom yellow.

題目圖：

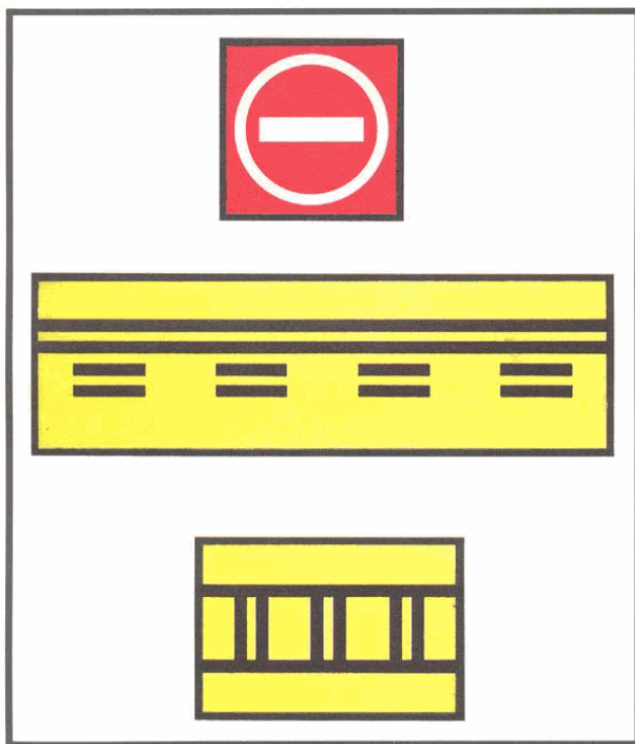


FIGURE 51.—Airport Signs.

原始題號:0011487 題組:4 難易度:易 (R20130125)

- (A) 57. (Refer to figure 8.) When taxiing up to an active runway, you are likely to be clear of the ILS critical area when short of which symbol?(如圖A21_Fig8)
(A)Bottom yellow. (B)Top red. (C)Middle yellow.

題目圖：

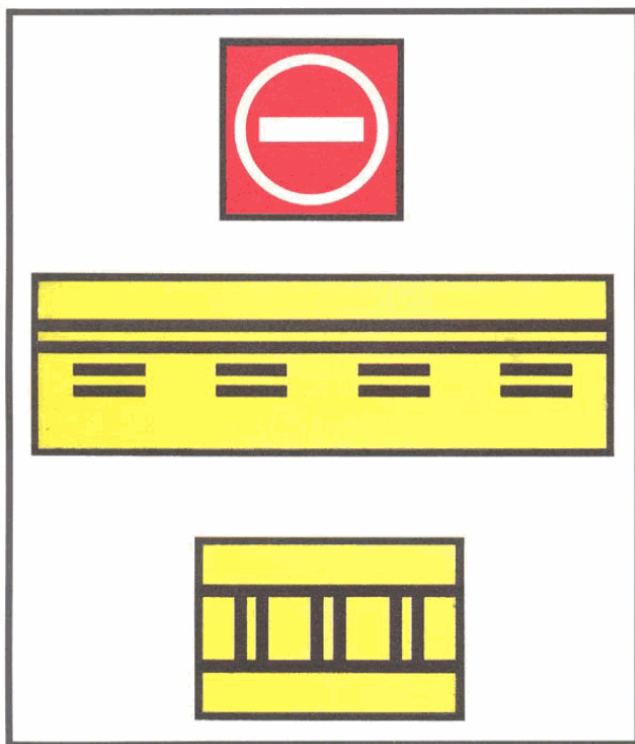


FIGURE 51.—Airport Signs.

原始題號:0011488 題組:5 難易度:易 (R20130125)

- (A) 58.(Refer to figure 8.) Which symbol does not directly address runway incursion with other aircraft?(如圖A21_Fig8)
(A)Top red. (B)Middle yellow. (C)Bottom yellow.

題目圖：

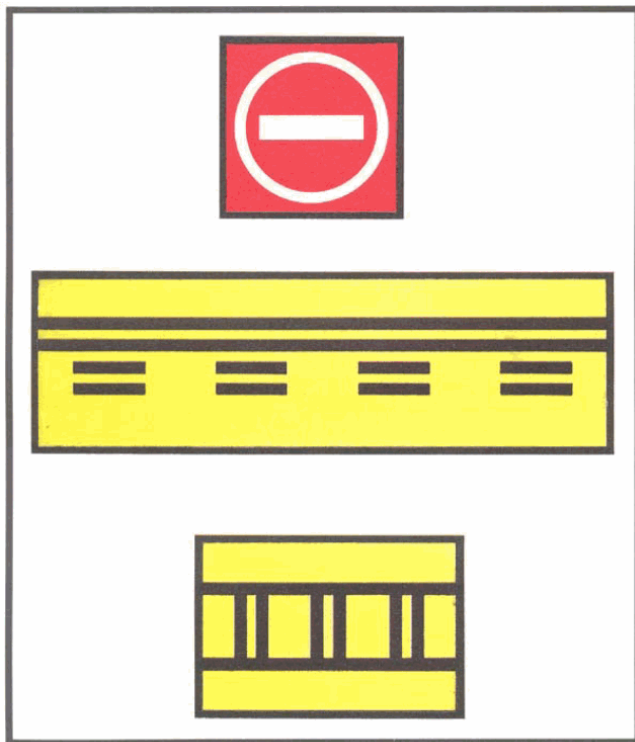


FIGURE 51.—Airport Signs.

原始題號:0011489 題組:0 難易度:易

- (B) 59. When in the vicinity of a VOR which is being used for navigation on VFR flight, it is important to
(A)make 90 degree left and right turns to scan for other traffic. (B)exercise sustained vigilance to avoid aircraft that may be converging on the VOR from other directions. (C)pass the VOR on the right side of the radial to allow room for aircraft flying in the opposite direction on the same radial.

原始題號:0011490 題組:0 難易度:中

- (C) 60. When the approach procedure involves a procedure turn the maximum speed that should be observed from first overheading the course reversal IAF through the procedure turn is
(A)180 knots IAS. (B)200 knots TAS. (C)200 knots IAS.

原始題號:0011491 題組:0 難易度:中

- (B) 61. An off-route altitude which provides obstruction clearance of 1,000 feet in nonmountainous terrain areas and 2,000 feet in designated mountainous areas within the United States is called
(A)Minimum Vectoring Altitude (MVA). (B)OROCA. (C)Minimum Safe/Sector Altitude (MSA).

原始題號:0011492 題組:0 難易度:中

- (C) 62. What type navigation system is Inertial Navigation System (INS)? A navigation computer which provides position
(A)from information by compass, airspeed, and an input of wind and variation data. (B)from radar-type sensors that measure ground speed and drift angles. (C)by signals from self-contained gyros and accelerometers.

原始題號:0011493 題組:0 難易度:中

- (A) 63. Where does the DME indicator have the greatest error between the ground distance and displayed distance to the VORTAC?
(A)High altitudes close to the VORTAC. (B)Low altitudes close to the VORTAC. (C)Low altitudes far from the VORTAC.

原始題號:0011494 題組:0 難易度:中

- (B) 64. What DME indications should a pilot observe when directly over a VORTAC site at 12,000 feet?
(A)0 DME miles. (B)2 DME miles. (C)2.3 DME miles.

原始題號:0011495 題組:1 難易度:中 (R20211227)

- (B) 65. (Refer to figure 9.) Which RMI illustration indicates the aircraft to be flying outbound on the magnetic bearing of 235 degree FROM the station? (Wind 055 degree at 20 knots.)(如圖A21_Fig9)
(A)2 (B)3 (C)4

題目圖：

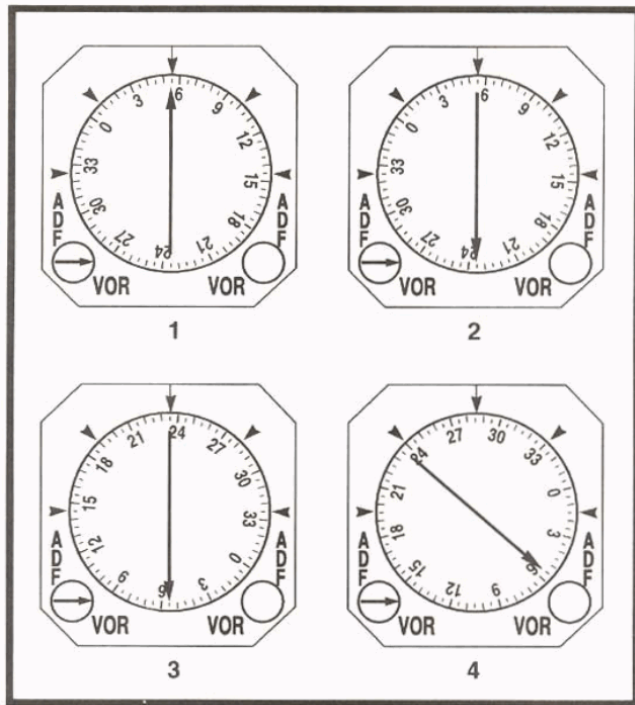


FIGURE 125.—RMI Illustrations.

原始題號:0011496 題組:2 難易度:中 (R20130125)

- (B) 66.(Refer to figure 9.) What is the magnetic bearing TO the station as indicated by illustration 4?(如圖A21_Fig9)
(A)285 degree. (B)055 degree. (C)235 degree.

題目圖：

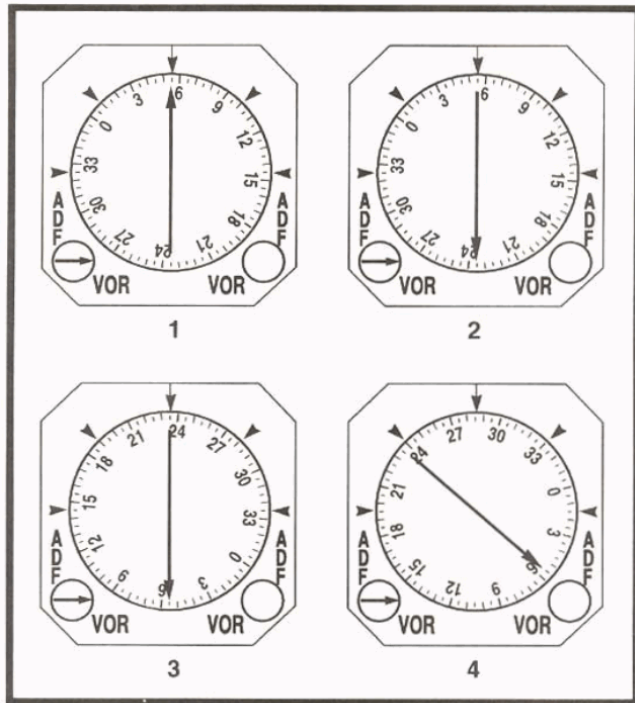


FIGURE 125.—RMI Illustrations.

原始題號:0011497 題組:3 難易度:中 (R20130125)

- (A) 67.(Refer to figure 9.) Which RMI Illustration indicates the aircraft is southwest of the station and proceeding TO the station?(如圖A21_Fig9)
(A)1 (B)2 (C)3

題目圖：

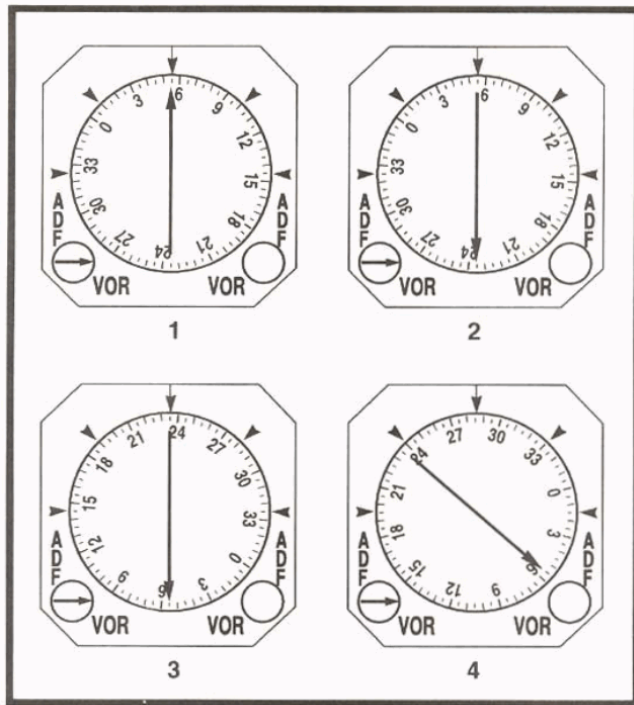


FIGURE 125.—RMI Illustrations.

原始題號:0011498 題組:4 難易度:中 (R20211227)

- (B) 68. (Refer to figure 9.) Which RMI illustration indicates the aircraft is located on the 055 degree radial of the station and heading away from the station? (如圖A21_Fig9)
(A)1 (B)2 (C)3

題目圖：

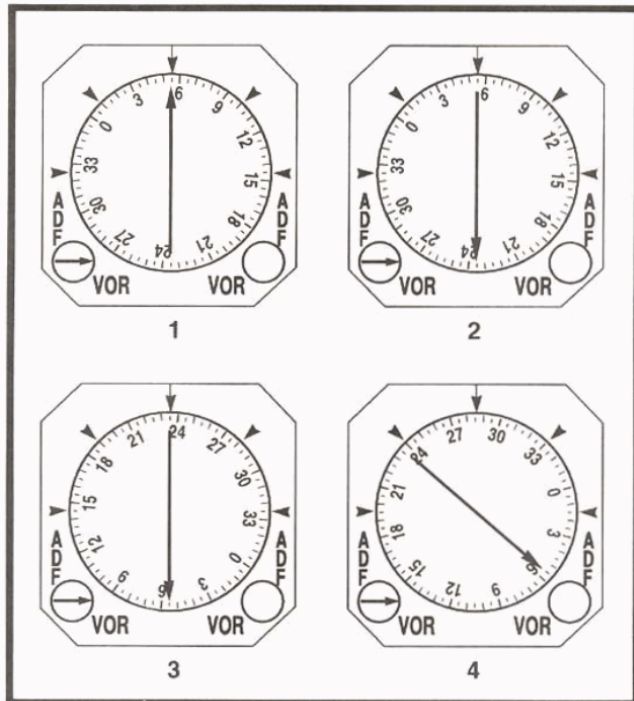
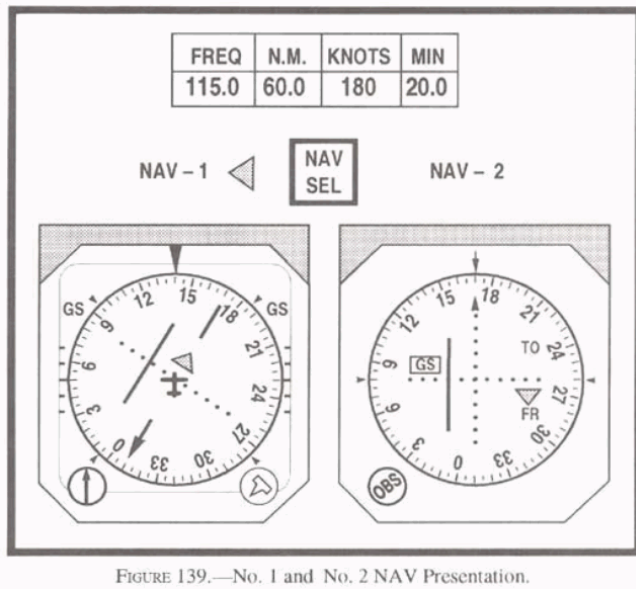


FIGURE 125.—RMI Illustrations.

原始題號:0011499 題組:1 難易度:中 (R20130125)

- (A) 69. (Refer to figure 10 below.) What is the lateral displacement of the aircraft in nautical miles from the radial selected on the No. 1 NAV ? (如圖A21_Fig10)
(A)5.0 NM. (B)7.5 NM. (C)10.0 NM.

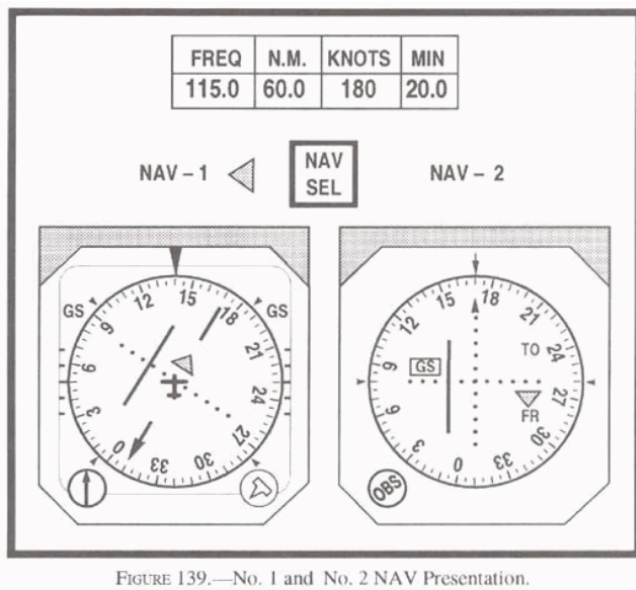
題目圖：



原始題號:0011500 題組:2 難易度:中 (R20130125)

- (C) 70.(Refer to figure 10 below.) On which radial is the aircraft as indicated by the No. 1 NAV?(如圖A21_Fig10)
 (A)R-175. (B)R-165. (C)R-345.

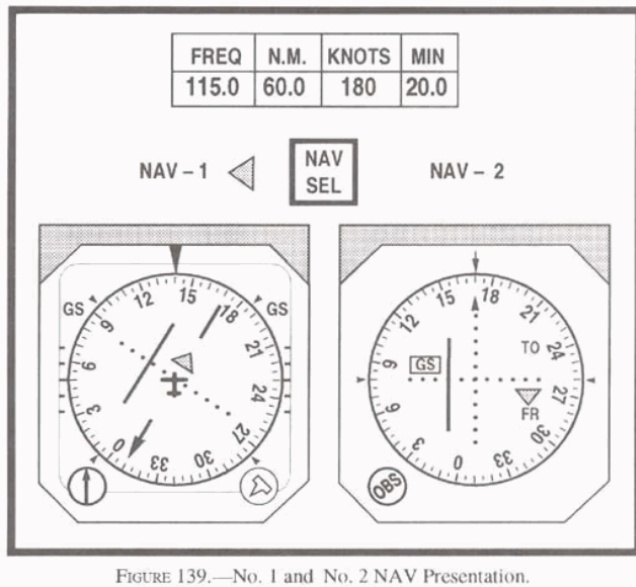
題目圖：



原始題號:0011501 題組:3 難易度:中 (R20130125)

- (B) 71.(Refer to figure 10.) Which OBS selection on the No. 1 NAV would center the CDI and change the ambiguity indication to a TO?(如圖A21_Fig10)
 (A)175 (B)165 (C)345

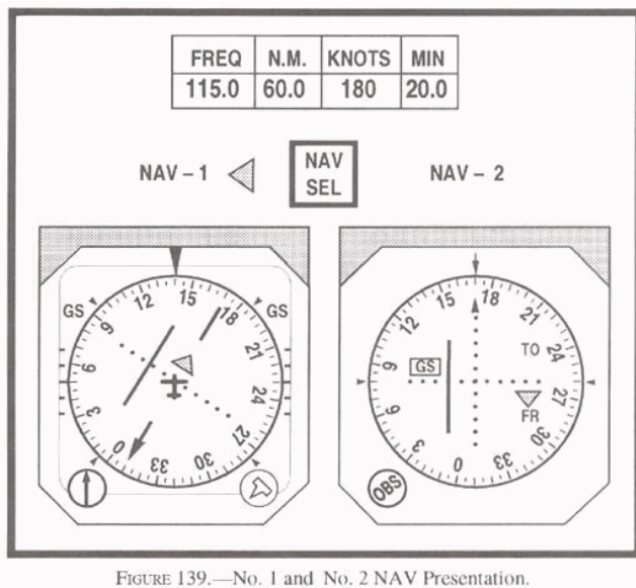
題目圖：



原始題號:0011502 題組:4 難易度:中 (R20130125)

- (C) 72.(Refer to figure 10.) What is the lateral displacement in degrees from the desired radial on the No. 2 NAV?(如圖A21_Fig10)
 (A)1 degree (B)2 degree (C)4 degree

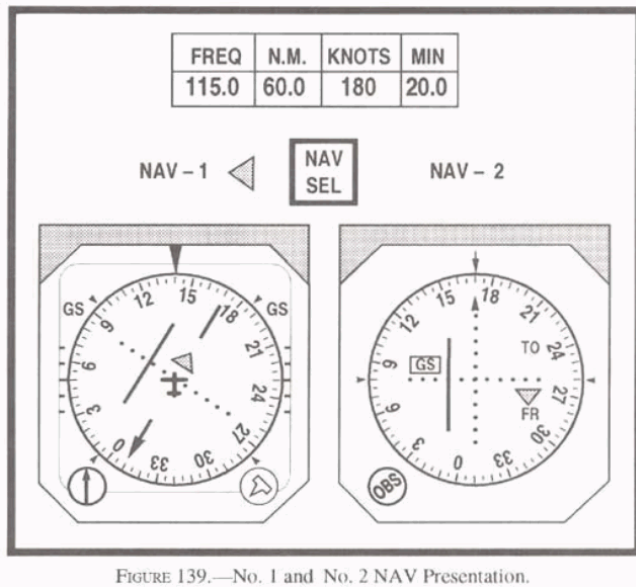
題目圖：



原始題號:0011503 題組:5 難易度:中 (R20130125)

- (A) 73.(Refer to figure 10.) Which OBS selection on the No. 2 NAV would center the CDI?(如圖A21_Fig10)
 (A)174 (B)166 (C)335

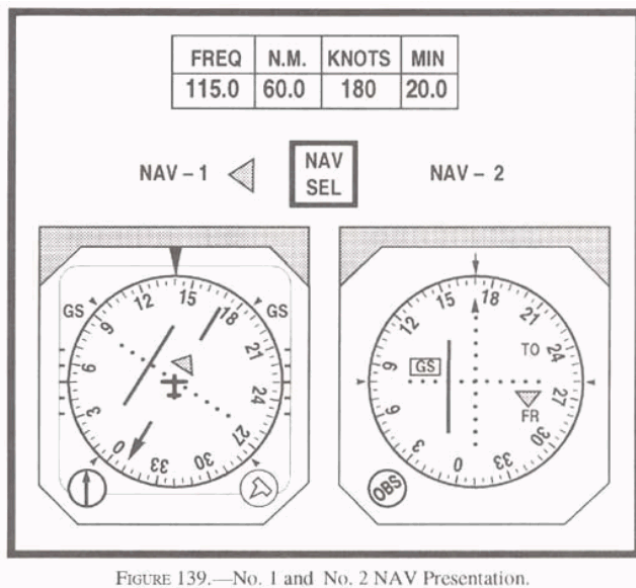
題目圖：



原始題號:0011504 題組:6 難易度:中 (R20130125)

- (C) 74.(Refer to figure 10.) Which OBS selection on the No. 2 NAV would center the CDI and change the ambiguity indication to a TO?(如圖A21_Fig10)
 (A)166 (B)346 (C)354

題目圖：



原始題號:0011505 題組:1 難易度:中 (R20130125)

- (A) 75.(Refer to figure 12 below.) You receive this ATC clearance: "...HOLD EAST OF THE ABC VORTAC ON THE ZERO NINER ZERO RADIAL, LEFT TURNS..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig12)
 (A)Parallel only. (B)Direct only. (C)Teardrop only.

題目圖：

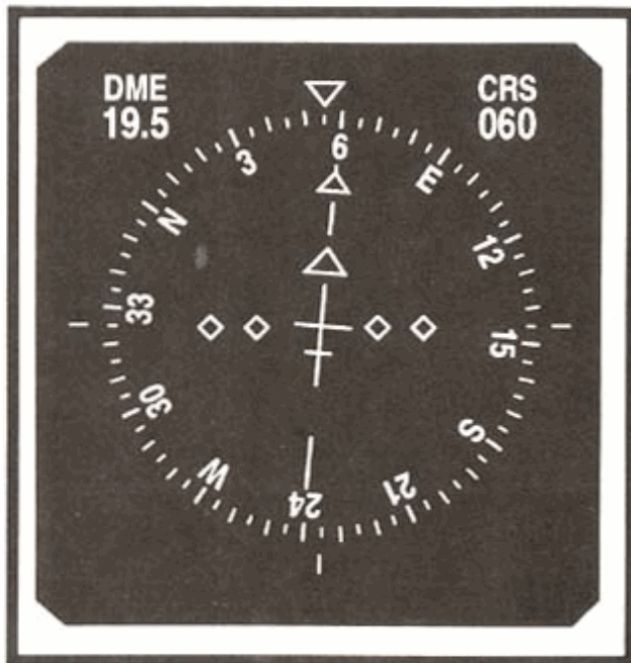


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011506 題組:2 難易度:中 (R20130125)

- (B) 76. (Refer to figure 12 above.) You receive this ATC clearance: "...CLEARED TO THE ABC VORTAC. HOLD SOUTH ON THE ONE EIGHT ZERO RADIAL..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig12)
 (A) Teardrop only. (B) Direct only. (C) Parallel only.

題目圖：

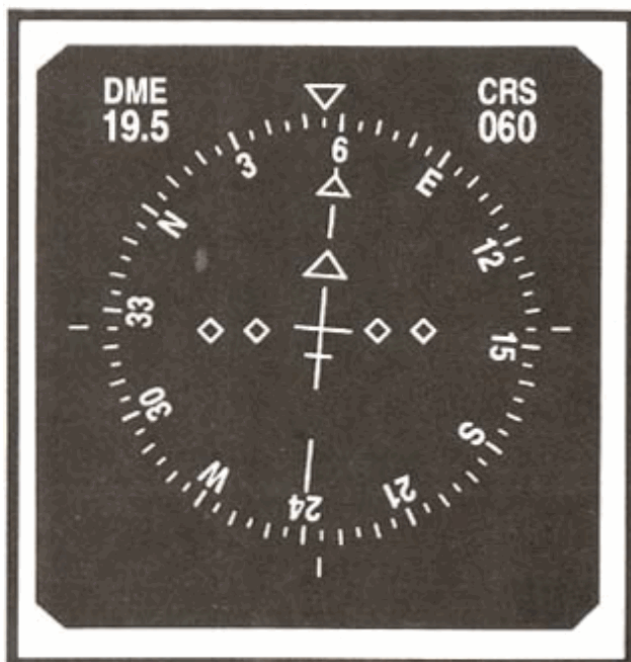


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011507 題組:3 難易度:中 (R20130125)

- (C) 77. (Refer to figure 12.) You receive this ATC clearance: "...CLEARED TO THE XYZ VORTAC. HOLD NORTH ON THE THREE SIX ZERO RADIAL, LEFT TURNS..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig12)
 (A) Parallel only. (B) Direct only. (C) Teardrop only.

題目圖：

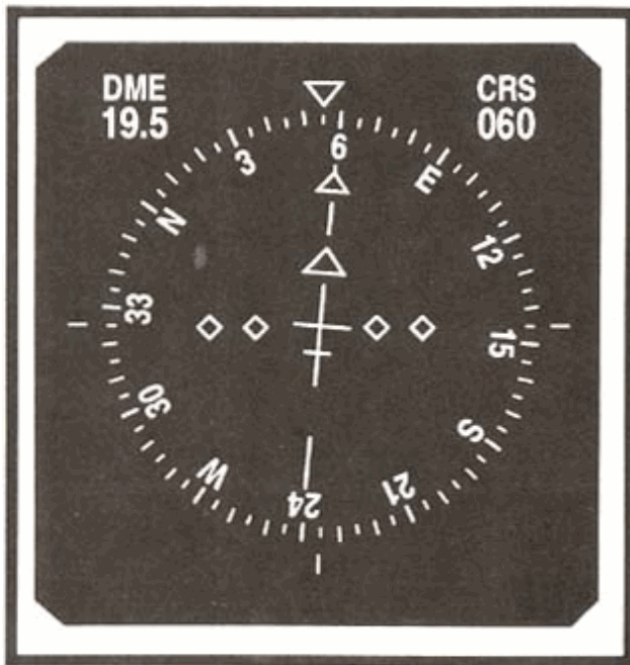


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011508 題組:4 難易度:中 (R20130125)

- (B) 78. (Refer to figure 12.) You receive this ATC clearance: "...CLEARED TO THE ABC VORTAC. HOLD WEST ON THE TWO SEVEN ZERO RADIAL..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig12)
- (A) Parallel only. (B) Direct only. (C) Teardrop only.

題目圖：

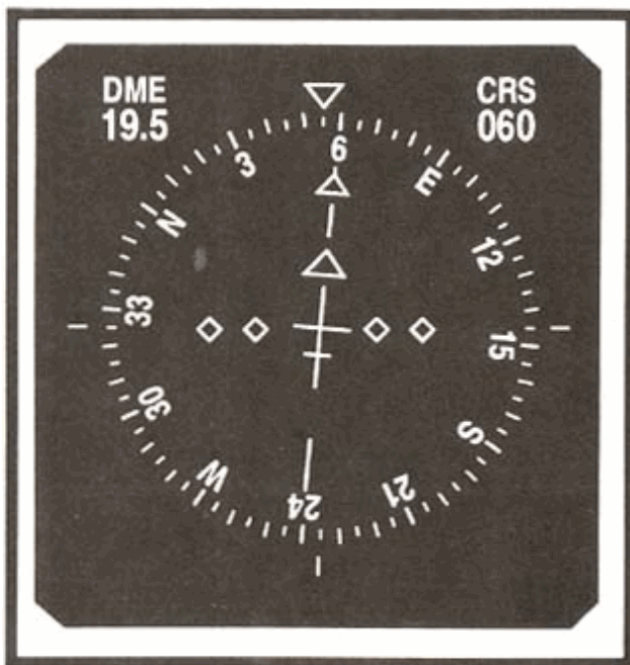


FIGURE 123.—Aircraft Course and DME Indicator.

原始題號:0011509 題組:1 難易度:中 (R20130125)

- (C) 79. (Refer to figure 13 below.) A pilot receives this ATC clearance: "...CLEARED TO THE ABC VORTAC. HOLD WEST ON THE TWO SEVEN ZERO RADIAL..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig13)
- (A) Parallel or teardrop. (B) Parallel only. (C) Direct only.

題目圖：

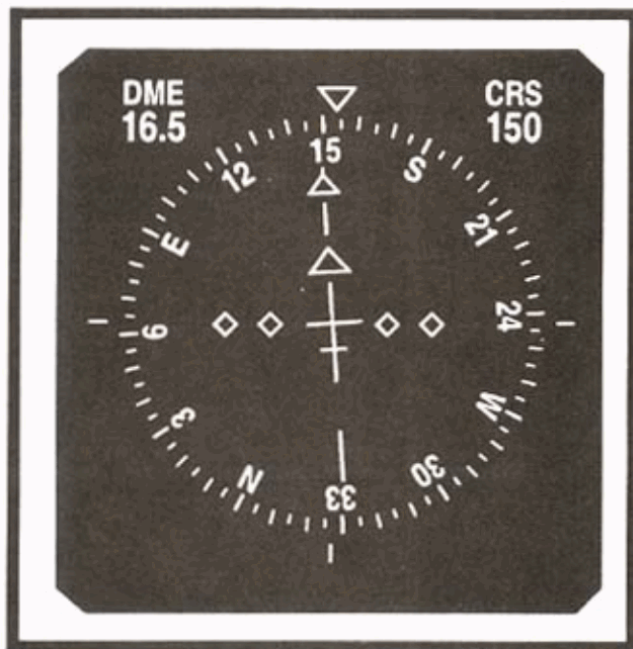


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011510 題組:2 難易度:中 (R20130125)

- (C) 80. (Refer to figure 13.) A pilot receives this ATC clearance: "...CLEARED TO THE XYZ VORTAC. HOLD NORTH ON THE THREE SIX ZERO RADIAL, LEFT TURNS..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig13)
(A) Teardrop only. (B) Parallel only. (C) Direct.

題目圖：

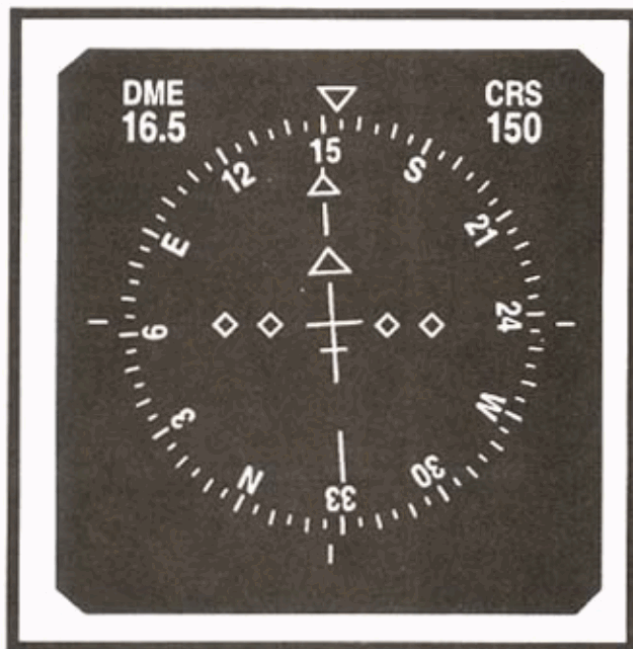


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011511 題組:3 難易度:中 (R20130125)

- (A) 81. (Refer to figure 13.) A pilot receives this ATC clearance: "...CLEARED TO THE ABC VORTAC. HOLD SOUTH ON THE ONE EIGHT ZERO RADIAL..." What is the recommended procedure to enter the holding pattern?(如圖A21_Fig13)
(A) Teardrop only. (B) Parallel only. (C) Direct only.

題目圖：

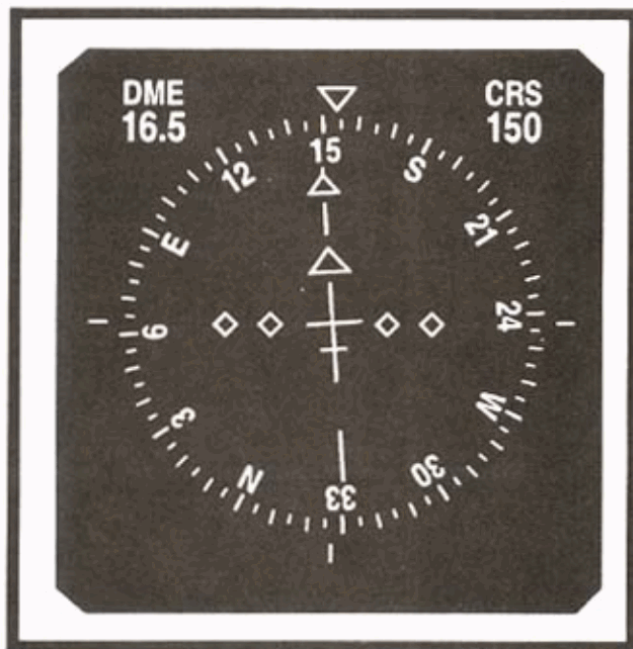


FIGURE 124.—Aircraft Course and DME Indicator.

原始題號:0011512 題組:0 難易度:中

- (A) 82. The maximum speed a propeller-driven airplane may hold at is
(A) 265 knots. (B) 230 knots. (C) 156 knots.

原始題號:0011513 題組:0 難易度:中

- (C) 83. Maximum holding speed for a civil turbojet aircraft at a joint use airport (civil/Navy) between 7,000 and 14,000 feet is
(A) 200 knots. (B) 265 knots. (C) 230 knots.

原始題號:0011514 題組:0 難易度:中

- (A) 84. What is the maximum holding speed for a civil turbojet holding at a civil airport at 15,000 ft MSL, unless a higher speed is required due to turbulence or icing, and ATC is notified?
(A) 265 knots. (B) 230 knots. (C) 250 knots.

原始題號:0011515 題組:0 難易度:中

- (C) 85. Civil aircraft holding at an altitude of 14,000 feet at a military or joint civil/military use airports should expect to operate at which holding pattern airspeed?
(A) 250 knots. (B) 260 knots. (C) 230 knots.

原始題號:0011516 題組:0 難易度:中

- (A) 86. When using a flight director system, what rate of turn or bank angle should a pilot observe during turns in a holding pattern?
(A) 3 degree per second or 25 degree bank, whichever is less. (B) 3 degree per second or 30 degree bank, whichever is less. (C) 1-1/2 degree per second or 25 degree bank, whichever is less.

原始題號:0011517 題組:0 難易度:中

- (B) 87. When entering a holding pattern above 14,000 feet, the initial outbound leg should not exceed
(A) 1 minute. (B) 1-1/2 minutes. (C) 1-1/2 minutes or 10 NM, whichever is less.

原始題號:0011518 題組:0 難易度:中

- (C) 88. When holding at an NDB, at what point should the begin for the second leg outbound?
(A) Abeam the holding fix or when the wings are level after completing the turn to the outbound heading, whichever occurs first. (B) At the end of a 1 -minute standard rate turn after station passage. (C) when Abeam the holding fix.

原始題號:0011519 題組:1 難易度:中 (R20180206)

- (A) 89. (Refer to Fig. 14) The Cugar Four Arrival ends (如圖 A21_Fig14)
(A) At BANTY INT. (B) At IAH VORTAC. (C) When cleared to land.

題目圖：

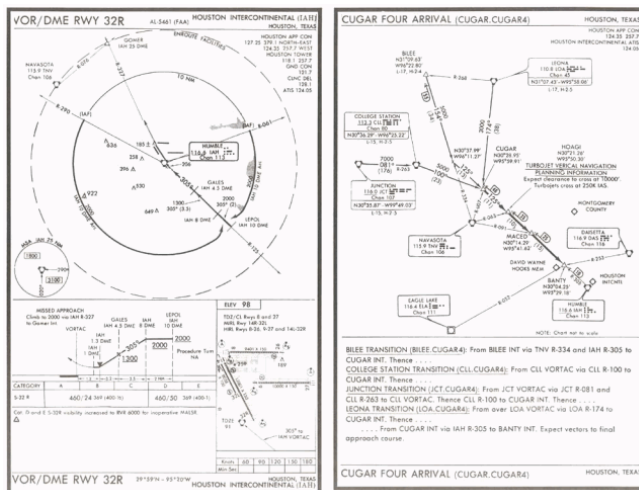
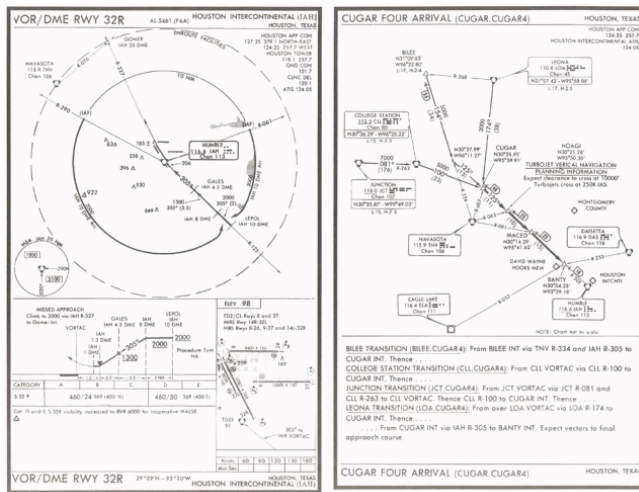


FIGURE 132.—VOR/DME RWY 32R (IAH) / Cugar Four Arrival (Cugar-Cugar4).

原始題號:0011520 題組:2 難易度:中 (R20180206)

- (C) 90. (Refer to Fig. 14) What action should the pilot take if communications were lost during the Cugar Four Arrival, after turning on the 305 radial of IAH? (如圖 A21_Fig14)
(A) Proceed direct to IAH VORTAC, then outbound on the IAH R-125 for a procedure turn for final approach. (B) From BANTY INT, proceed to the IAF on the IAH R-290, then continue on the IAH 10 DME Arc to final approach. (C) Proceed direct to IAH VORTAC, then to either IAF on the IAH 10 DME Arc to final approach.

題目圖：



- (A) 95. If installed, what aural and visual indications should be observed over the ILS back course marker?
 (A) A series of two dot combinations and a white marker beacon light.
 (B) Continuous dashes at the rate of one per second and a white marker beacon light.
 (C) A series of two dash combinations and a white marker beacon light.

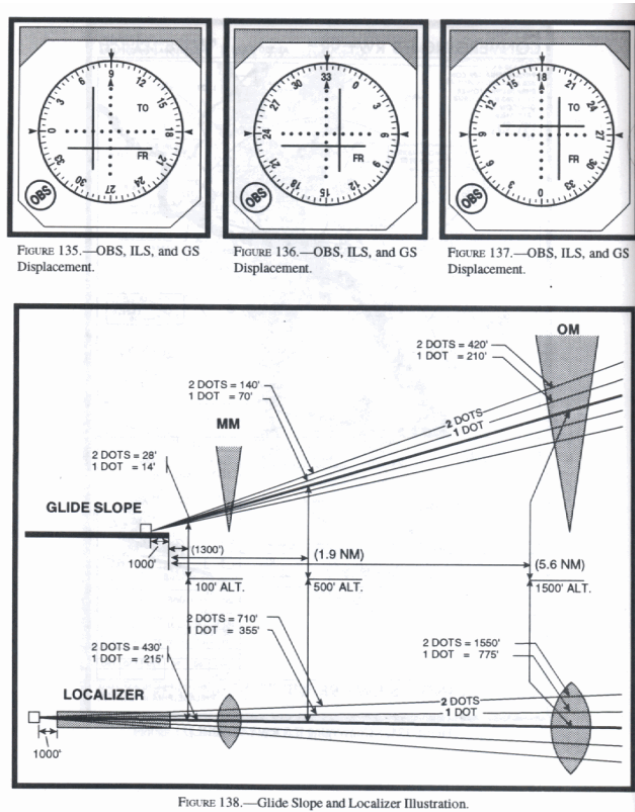
原始題號:0011526 題組:0 難易度:中

- (A) 96. What aural and visual indications should be observed over an ILS inner marker?
 (A) Continuous dots at the rate of six per second. (B) Continuous dashes at the rate of two per second. (C) Alternate dots and dashes at the rate of two per second.

原始題號:0011527 題組:1 難易度:中 (R20130125)

- (B) 97. (Refer to table 135 and 138 on figure 15.) Which displacement from the localizer and glide slope at the 1.9 NM point is indicated? (如圖A21_Fig15)
 (A) 710 feet to the left of the localizer centerline and 140 feet below the glide slope. (B) 710 feet to the right of the localizer centerline and 140 feet above the glide slope. (C) 430 feet to the right of the localizer centerline and 28 feet above the glide slope.

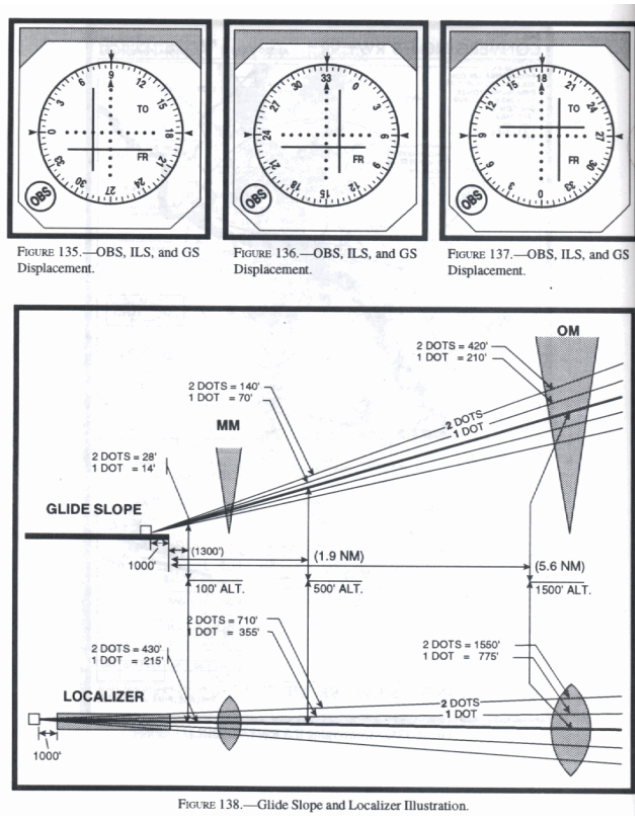
題目圖：



原始題號:0011528 題組:1 難易度:中 (R20180206)

- (C) 98. (Refer to figure 136 and 138 on Fig. 15) Which displacement from the localizer centerline and glide slope at the 1,300-foot point from the runway is indicated? (如圖A21_Fig15)
- (A) 21 feet below the glide slope and approximately 320 feet to the right of the runway centerline. (B) 28 feet above the glide slope and approximately 250 feet to the left of the runway centerline. (C) 21 feet above the glide slope and approximately 320 feet to the left of the runway centerline.

題目圖：



原始題號:0011529 題組:0 難易度:中

- (B) 99. When is the course deviation indicator (CDI) considered to have a full-scale deflection?
- (A) When the CDI deflects from full-scale left to full-scale right, or vice versa. (B) When the CDI deflects from the center of the scale to full-scale left or right. (C) When the CDI deflects from half-scale left to halfscale right, or vice versa.

原始題號:0011530 題組:0 難易度:中

- (B) 100. What facilities may be substituted for an inoperative middle marker during a Category I ILS approach?
- (A). ASR and PAR. (B). The middle marker has no effect on straight-in minimums. (C). Compass locator, PAR, and ASR.

原始題號:0011531 題組:0 難易度:中

- (A) 101. When simultaneous ILS approaches are in progress, which of the following should approach control be advised of immediately?
- (A). Any inoperative or malfunctioning aircraft receivers. (B). If a simultaneous ILS approach is desired. (C). if radar monitoring is desired to confirm lateral separation.

原始題號:0011532 題組:0 難易度:中

- (C) 102. When cleared to execute a published side-step maneuver, at what point is the pilot expected to commence this maneuver?
(A). At the published DH. (B). At the MDA published or a circling approach. (C). As soon as possible after the runway environment is in sight.

原始題號:0011533 題組:0 難易度:中

- (B) 103. When cleared to execute a published sidestep maneuver for a specific approach and landing on the parallel runway, at what point is the pilot expected to commence this maneuver?
(A). At the published minimum altitude for a circling approach. (B). As soon as possible after the runway or runway environment is in sight. (C). At the ImWizer MDA minimums and when the runway is in sight.

原始題號:0011534 題組:0 難易度:中

- (B) 104. The lowest ILS Category II minimums are
(A). DH 50 feet and RVR 1,200 feet. (B). DH 100 feet and RVR 1,200 feet. (C). DH 150 feet and RVR 1,500 feet.

原始題號:0011535 題組:0 難易度:中

- (C) 105. What is the lowest Category IIIA minimum?
(A). DH 50 feet and RVR 1,200 feet. (B). RVR 1,000 feet. (C). RVR 700 feet,

原始題號:0011536 題組:0 難易度:中

- (C) 106. In addition to the localizer, glide slope, marker beacons, approach lighting, and HIRL, which ground components are required to be operative for a Category II instrument approach to a DH below 150 feet AGL?
(A) RCLS and REIL. (B) Radar and RVR. (C) TDZL, RCLS, and RVR.

原始題號:0011537 題組:0 難易度:中

- (C) 107. Which ground components are required to be operative for a Category II approach in addition to LOC, glide slope, marker beacons, and approach lights?
(A). Radar and RVR. (B). RCLS and REIL. (C). HIRL, TDZL, RCLS, and RVR.

原始題號:0011538 題組:0 難易度:中

- (A) 108. Aircraft navigating by GPS are considered, on the flight plan, to be
(A). RNAV equipped (B). Astrotracker equipped (C). FMS / EFIS equipped

原始題號:0011539 題組:0 難易度:中

- (C) 109. The weather forecast requires an alternate for LUKACHUKAI (GPS RWY 25) ARIZONA. The alternate airport must have an approved instrument approach procedure, which is anticipated to be operational and available at the estimated time of arrival, other than
(A). GPS or VOR. (B). ILS or GPS. (C). GPS or Loran C.

原始題號:0011540 題組:0 難易度:中

- (A) 110. Overriding an automatically selected sensitivity during a GPS approach will
(A).cancel the approach mode annunciation. (B).require flying point-to-point on the approach to comply with the published approach procedure. (C).have no effect if the approach is flown manually.

原始題號:0011541 題組:0 難易度:中

- (C) 111. Authorization to conduct any GPS operation under IFR requires that
(A). the equipment be approved in accordance with TSO C-115a. (B). the pilot must review appropriate weather, aircraft flight manual (AFM), and operation of the particular receiver. (C).procedures must be established for use in the event that the loss of RAIM capability is predicted to occur.

原始題號:0011542 題組:0 難易度:中

- (B) 112. GPS instrument approach operations, outside the United States, must be authorized by
(A)the FAA-approved aircraft flight manual (AFM) or flight manual supplement.
(B)a sovereign country or governmental unit. (C)the FAA Administrator only.

原始題號:0011543 題組:0 難易度:中

- (C) 113. If Receiver Autonomous Integrity Monitoring (RAIM) is not available when setting up for GPS approach, the pilot should
(A).continue to the MAP and hold until the satellites are recaptured.
(B).proceed as cleared to the IAF and hold until satellite reception is satisfactory. (C).select another type of approach using another type of navigation aid.

原始題號:0011544 題組:0 難易度:中

- (B) 114. A GPS missed approach requires that the pilot take action to sequence the receiver
(A).over the MAWP. (B).after the MAWP. (C).just prior to the MAWP.

原始題號:0011545 題組:0 難易度:中

- (C) 115. If flying a published GPS departure,
(A)the data base will contain all of the transition or departures From all runways. (B)and if RAIM is available, manual intervention by the pilot should not be required. (C)the GPS receiver must be set to terminal course deviation indicator sensitivity.

原始題號:0011546 題組:1 難易度:易 (R20130125)

- (C) 116. (Refer to Figure 11 .) To which aircraft position does HSI presentation "D" correspond?(如圖A21_Fig11)
(A)4 (B)15 (C)17

題目圖：

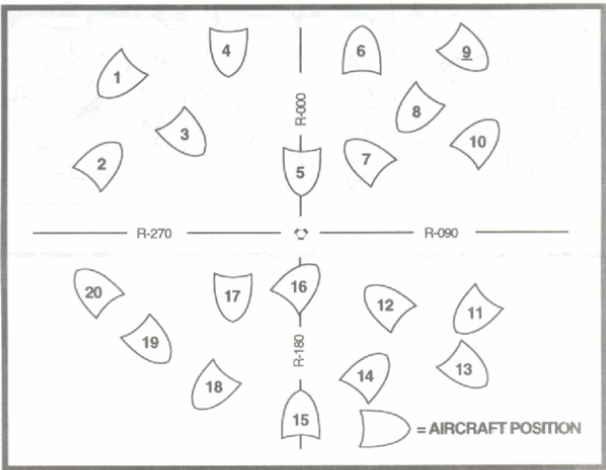


FIGURE 142.—Aircraft Position.

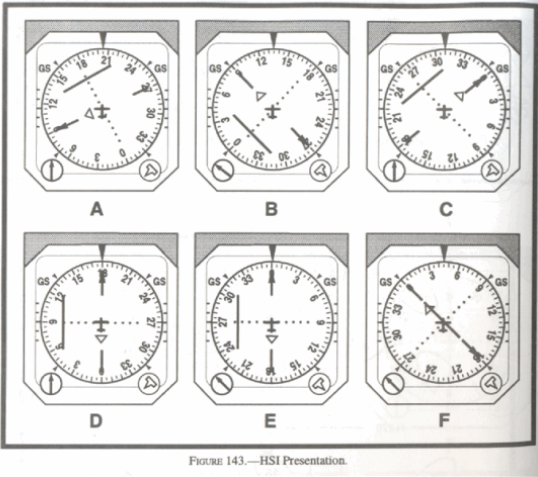


FIGURE 143.—HSI Presentation.

- 原始題號:0011547 題組:2 難易度:易 (R20130125)
- (B) 117.(Refer to Figure 11 .)To which aircraft position does HSI presentation "E" correspond?(如圖A21_Fig11)
- (A)5 (B)6 (C)15

題目圖：

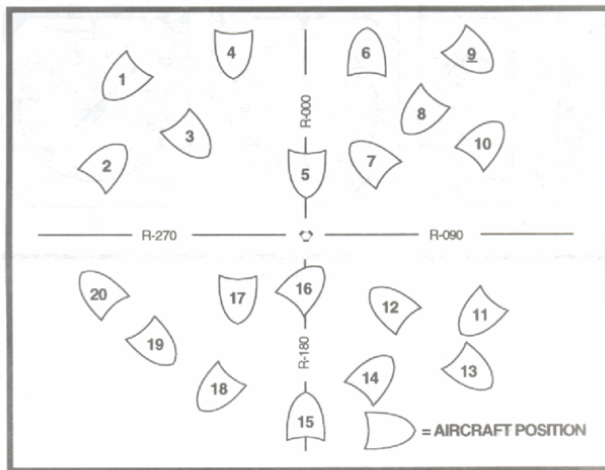


FIGURE 142.—Aircraft Position.

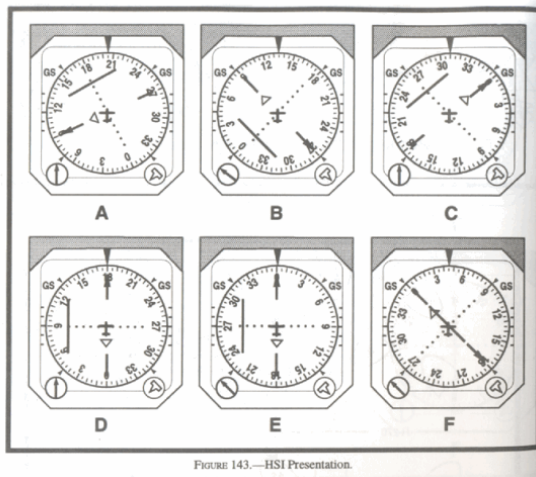


FIGURE 143.—HSI Presentation.

原始題號:0011548 題組:3 難易度:易 (R20130125)

- (C) 118.(Refer to Figure 11 .)To which aircraft position does HSI presentation "F" correspond?(如圖A21_Fig11)
(A)10 (B)14 (C)16

題目圖：

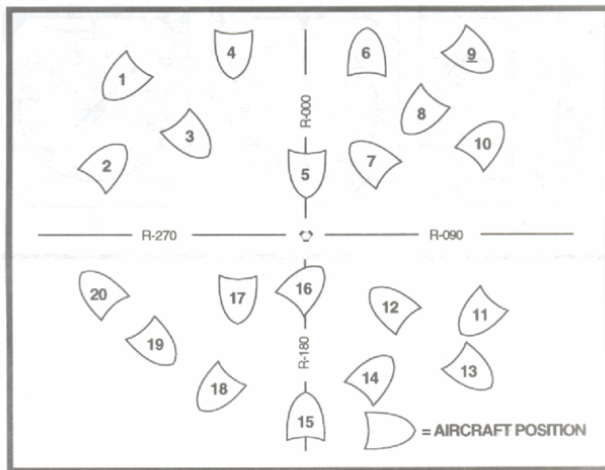


FIGURE 142.—Aircraft Position.

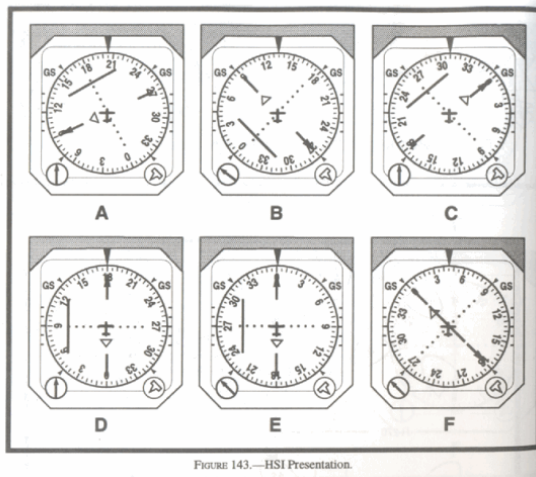


FIGURE 143.—HSI Presentation.

原始題號:0011549 題組:4 難易度:易 (R20130125)

- (A) 119.(Refer to Figure 11 .)To which aircraft position does HSI presentation "A" correspond?(如圖A21_Fig11)
(A)1 (B)8 (C)11

題目圖：

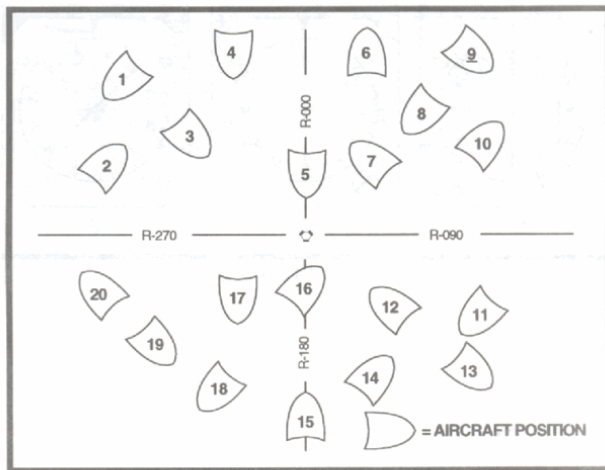


FIGURE 142.—Aircraft Position.

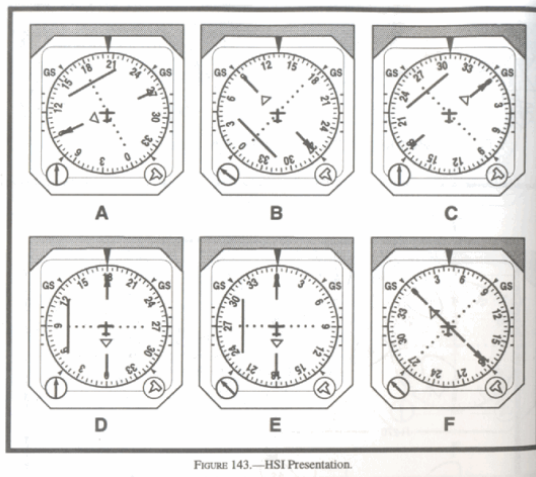


FIGURE 143.—HSI Presentation.

原始題號:0011550 題組:5 難易度:易 (R20130125)

- (C) 120.(Refer to Figure 11 .)To which aircraft position does HSI presentation "B" correspond?(如圖A21_Fig11)
(A)9 (B)13 (C)19

題目圖：

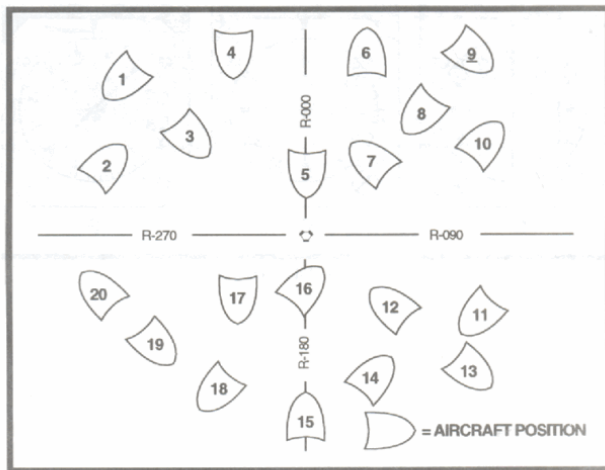


FIGURE 142.—Aircraft Position.

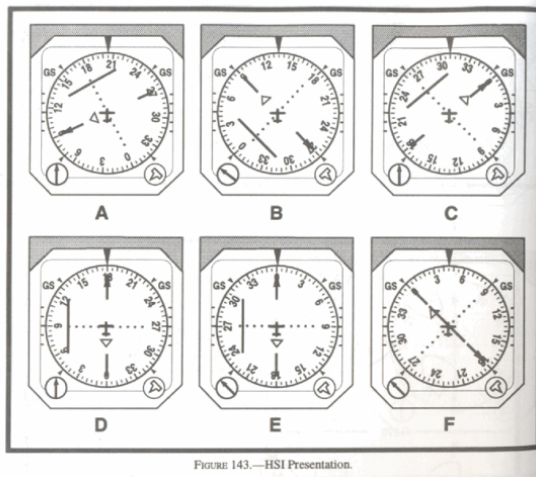


FIGURE 143.—HSI Presentation.

原始題號:0011551 題組:6 難易度:易 (R20130125)

- (C) 121.(Refer to Figure 11 .)To which aircraft position does HSI presentation "C" correspond?(如圖A21_Fig11)
(A)6 (B)7 (C)12

題目圖：

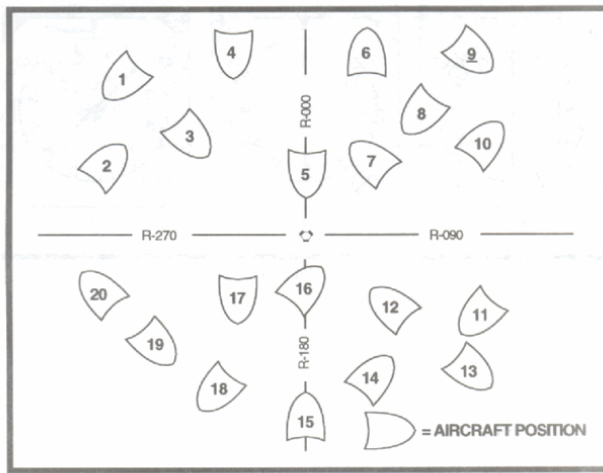


FIGURE 142.—Aircraft Position.

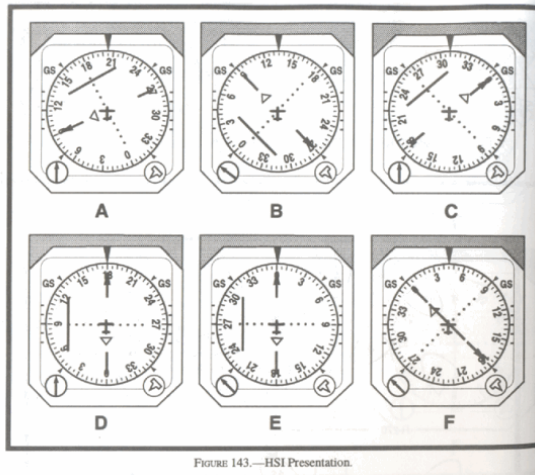


FIGURE 143.—HSI Presentation.

原始題號:0011552 題組:0 難易度:易

- (A) 122. The ADF is tuned to a nondirectional radiobeacon and the relative bearing change from 095 to 100 in 1.5 minutes of elapsed time. The time en route to that station would be
(A)18min. (B)24min (C)30min.

原始題號:0011553 題組:0 難易度:易

- (C) 123. The ADF is tuned to a nondirectional radiobeacon and the relative bearing change from 270 to 265 in 2.5 minutes of elapsed time. The time en route to that beacon would be
(A)9min. (B)18min (C)30min.

原始題號:0011554 題組:0 難易度:易

- (C) 124. The ADF is tuned to a nondirectional radiobeacon and the relative bearing change from 085 to 090 in 2 minutes of elapsed time. The time en route to that station would be
(A)15min. (B)18min. (C)24min.

原始題號:0011555 題組:0 難易度:易 (R20170926)

- (B) 125. If the relative bearing changes from 090 to 100 in 2.5 minutes of elapsed time, the time en route to the station would be
(A)12min. (B)15min. (C)18min.

原始題號:0011556 題組:0 難易度:易

- (B) 126. The ADF is tuned to a nondirectional radiobeacon and the relative bearing change from 090 to 100 in 2.5 minutes of elapsed time. If the true airspeed is 90 knots, the distance and time en route to that radiobeacon would be
(A) 15 miles and 22.5 minutes. (B) 22.5 miles and 15 minutes. (C) 32 miles and 18 minutes.

原始題號:0011557 題組:0 難易度:易

- (B) 127. Wingtip bearing change..... 5 Time elapsed between bearing change..... 6min Rate of fuel consumption..... 12gal/hr The fuel required to fly to the station is
(A) 8.2 gallons. (B) 14.4 gallons. (C) 18.7 gallons.

原始題號:0011558 題組:0 難易度:易

- (B) 128. If a standard rate of turn is maintained, how long would it take to turn 360?
(A) 1 min (B) 2 mins (C) 3mins

原始題號:0011559 題組:0 難易度:易

- (A) 129. Wingtip bearing change..... 15 Time elapsed between bearing change..... 6min Rate of fuel consumption..... 8.6gal/hr The fuel required to fly to the station is
(A) 3.44 gallons. (B) 6.88 gallons. (C) 17.84 gallons.

原始題號:0011560 題組:0 難易度:易

- (C) 130. The relative bearing on ADF changes from 265 to 260 in 2 minutes of elapsed time. If the groundspeed is 145 knots, the distance to that station would be
(A) 26NM (B) 37NM (C) 58NM

原始題號:0011561 題組:0 難易度:易

- (B) 131. While maintaining a constant heading, a relative bearing of 15 doubles in 6 minutes. The time to the station being used is
(A) 3 minutes. (B) 6 minutes. (C) 12 minutes.

原始題號:0011562 題組:0 難易度:易

- (A) 132. While maintaining a constant heading, the ADF needle increases from a relative bearing of 045 to 090 in 5 minutes. The time to the station being used is
(A) 5 minutes. (B) 10 minutes. (C) 15 minutes.

原始題號:0011563 題組:0 難易度:易

- (A) 133. While cruising at 135 knots and on constant heading, the ADF needle decreases from a relative bearing of 315 to 270 in 7 minutes. The approximate time and distance to the station being used is
(A) 7 minutes and 16 miles. (B) 14 minutes and 28 miles. (C) 19 minutes and 38 miles.

原始題號:0011564 題組:0 難易度:易

- (C) 134. True airspeed is best described as calibrated airspeed corrected for
(A) installation and instrument error. (B) non-standard temperature. (C) altitude
and non-standard temperature.

原始題號:0011565 題組:0 難易度:易

- (B) 135. When checking the course sensitivity of vor receiver, how many degrees should the OBS be rotated to move the CDI from the center to the last dot on either side?
(A) 18 to 20. (B) 10 to 12. (C) 5 to 10.

原始題號:0011566 題組:0 難易度:易

- (B) 136. Which statement is true about magnetic deviation of a compass ? Deviation
(A) varies over time as the agonic line shifts. (B) varise for different headings
of the same aircraft. (C) is the same aircraft for all in the same locality.

原始題號:0011567 題組:0 難易度:易

- (A) 137. Calibrated airspeed is best described as indicated airspeed corrected for (A) installation and instrument error. (B) instrument error. (C) non-standard temperture.

原始題號:0011568 題組:0 難易度:易

- (A) 138. What are the standard temperature and pressure values for sea level?
(A) 15 c and 29.92" Hg. (B) 59 F and 1013.2" Hg. (C) 15 C and 29.92 Mb.

原始題號:0011569 題組:0 難易度:易 (R20170926)

- (A) 139. Wingtip bearing change.....10 Time elapsed between
bearing change.....4min Rate of fuel
consumption.....11gal/hr The fuel required to fly
to the station is
(A)4.4 gallons. (B)8.4 gallons. (C)12 gallons.

原始題號:0011570 題組:0 難易度:易

- (C) 140. When taxiing during strong quartering tailwinds, which aileron positions should be used?
(A) neutral. (B) Aileron up on the side from which the wind is blowing. (C) Aileron down on the side from which the wind is blowing.

原始題號:0011571 題組:0 難易度:易

- (B) 141. To determine pressure altitude prior takeoff, the altimeter should be set to (A) the current altimeter setting. (B) 29.92" Hg and the altimeter indication noted. (C) the field elevation and pressure reading in the altimeter setting window noted.

原始題號:0011572 題組:0 難易度:易

- (A) 142. What is maximum tolerance(+ or -) allowed for an operational VOR equipment check when using an FAA-approved ground test signal?
(A)4°. (B)6°. (C)8°.

原始題號:0011573 題組:0 難易度:易

- (A) 143. Which is true about homing when using ADF during crosswind conditions? Homing
(A)to a radio station results in a curved path that leads to the station. (B)is a practical navigation method for flying both to and from a radio station. (C)to a radio station requires that the ADF have an automatically or manually rotatable azimuth.

原始題號:0011574 題組:0 難易度:易

- (B) 144. Which is true regarding tracking on a desired bearing when using ADF during crosswind conditions?
(A)To track outbound, heading corrections should be made away from ADF pointer.
(B)When on the desired track outbound with the proper drift correction established, the ADF pointer will be deflected to windward side of the tail position. (C)When on the desired track inbound with proper drift correction established, the ADF pointer will be deflected to the windward side of the nose position.

原始題號:0011575 題組:1 難易度:易 (R20130125)

- (C) 145. (Refer to figure 16 on page 2-9) at the position indicated by instrument group 1, what would be the relative bearing if the aircraft were turned to a magnetic heading of 090?(如圖A21_Fig16)
(A)150°. (B)190°. (C)250°.

題目圖：

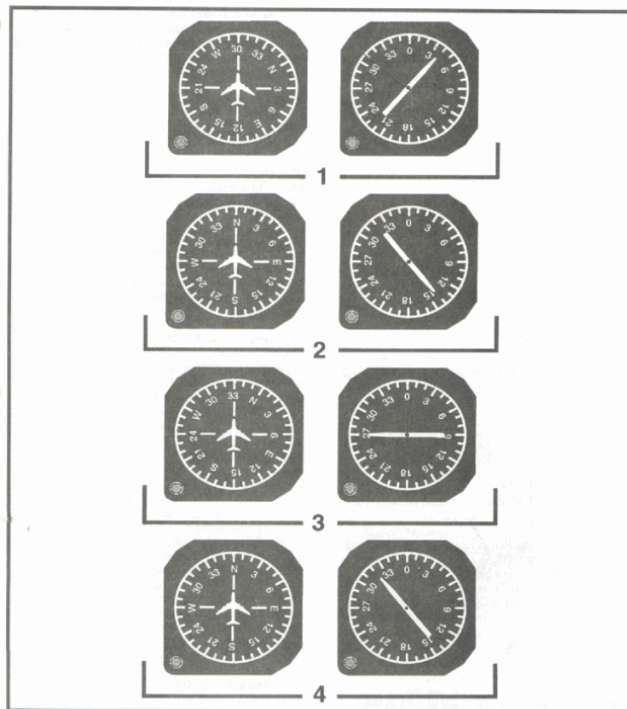


FIGURE 16.—Magnetic Compass/ADF

原始題號:0011576 題組:2 難易度:易 (R20130125)

- (C) 146. (Refer to figure 16 on page 2-9) at the position indicated by instrument group 1, to intercept the 330 magnetic bearing to the NDB at a 30 angle, the aircraft should be turned? (如圖A21_Fig16)
 (A) left to heading of 270 (B) right to heading 330 (C) right to heading 360

題目圖：

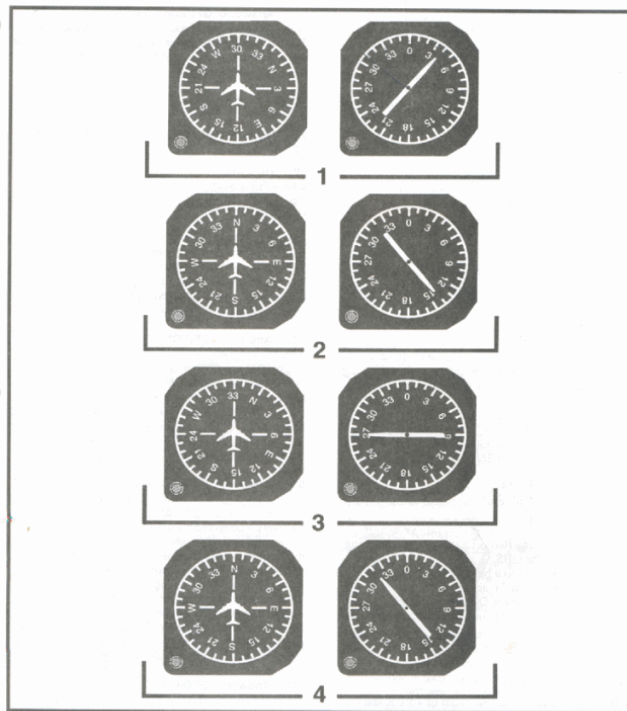


FIGURE 16.—Magnetic Compass/ADF

原始題號:0011577 題組:3 難易度:易 (R20130125)

- (C) 147. (Refer to figure 16) If the aircraft continues its present heading as shown in instrument group 3, what will be the relative bearing when the aircraft reaches the magnetic bearing of 030 FROM the NDB? (如圖A21_Fig16)
 (A) 030° (B) 060° (C) 240°

題目圖：

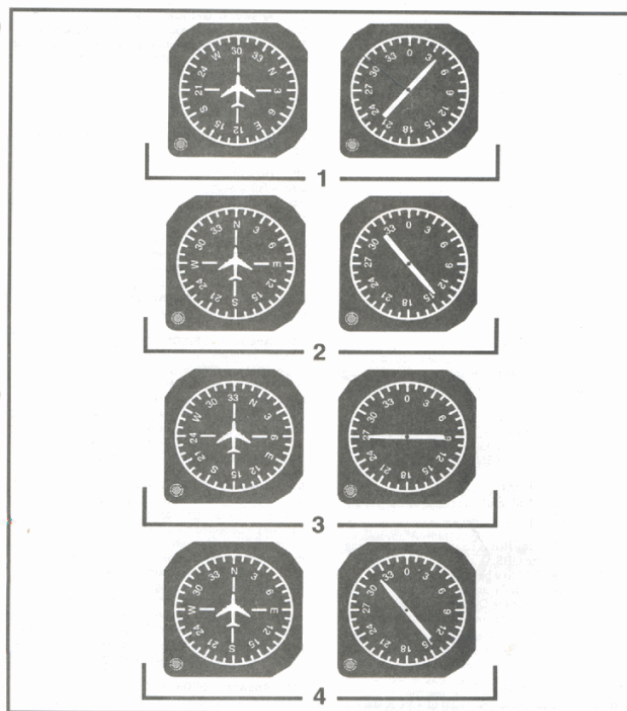


FIGURE 16.—Magnetic Compass/ADF

原始題號:0011578 題組:0 難易度:易

- (B) 148. What effect does an uphill runway slope have on takeoff performance ?
 (A)Increases takeoff speed. (B)Increases takeoff distance. (C)Decreases takeoff distance.

原始題號:0011579 題組:1 難易度:易 (R20130125)

- (B) 149. (Refer to figure 32) airport pressure altitude...4,000ft airport temperature...12C cruise pressure altitude...9,000ft cruise temperature...-4C What will be the distance required to climb to cruise altitude under given conditions?(如圖A21_FIG32)
 (A)6 miles. (B)8.5 miles. (C)11 miles.

題目圖：

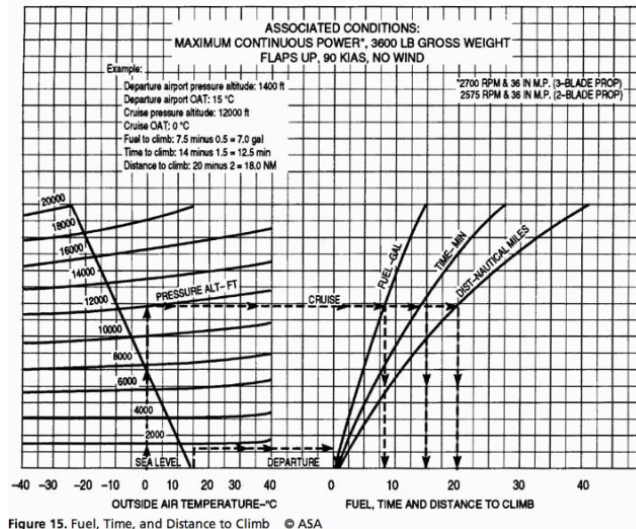


Figure 15. Fuel, Time, and Distance to Climb © ASA

原始題號:0011580 題組:0 難易度:易

- (C) 150. While taxiing a light, high-wing airplane during strong quartering tailwinds, the aileron control should be positioned
 (A)neutral at all times. (B)toward the direction from which the wind is blowing.
 (C)opposite the direction from which the wind is blowing.

原始題號:0011581 題組:1 難易度:易 (R20130125)

- (A) 151. (Refer to figure 17.) which illustration indicates the airplane will intercept the 060 radial at a 60 angle inbound, if the present heading is maintained?(如圖A21_Fig17)
 (A)6 (B)4 (C)5

題目圖：



原始題號:0011582 題組:2 難易度:易 (R20211227)

- (A) 152. (Refer to figure 17.) which statement is true regarding illustration 2, if the present heading is maintained? The airplane will (如圖A21_Fig17)
 (A) cross the 180 radial at 45 angle outbound. (B) intercept 225 radial at a 45 angle. (C) intercept 360 radial at a 45 angle.

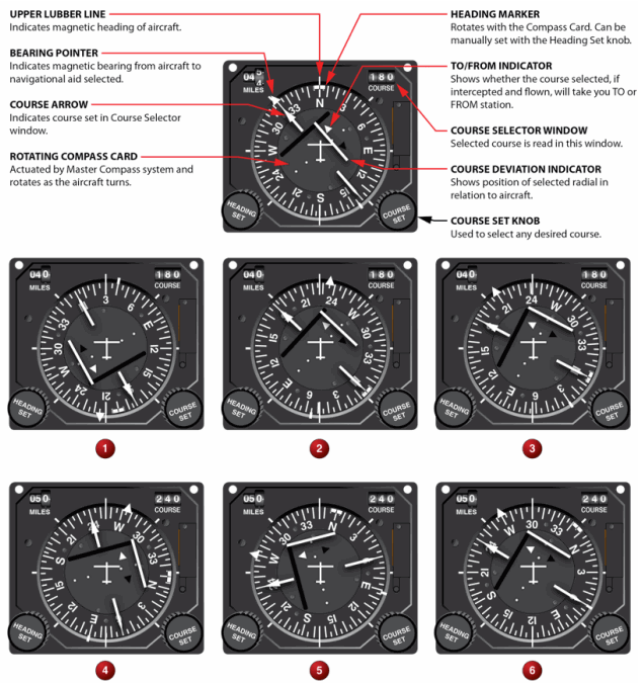
題目圖：



原始題號:0011583 題組:3 難易度:易 (R20180206)

- (B) 153. (Refer to Fig. 17) Which illustration indicates the airplane will intercept the 060 radial at a 75 angle outbound, if the present heading is maintained?(如圖A21_Fig17)
 (A)4 (B)5 (C)6

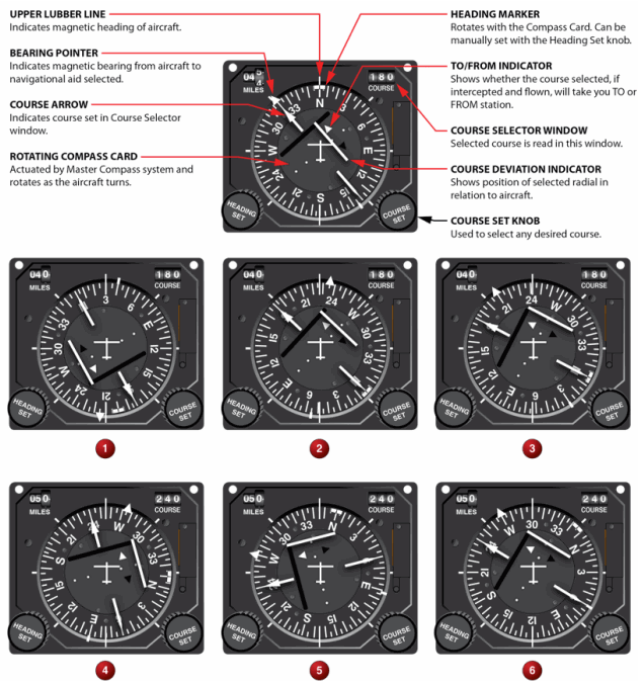
題目圖：



原始題號:0011584 題組:4 難易度:易 (R20180206)

- (A) 154. (Refer to Fig. 17) Which illustration indicates the airplane should be turned 150 left to intercept the 360 radial at a 60 angle inbound? (如圖A21_Fig17)
(A)1 (B)2 (C)3

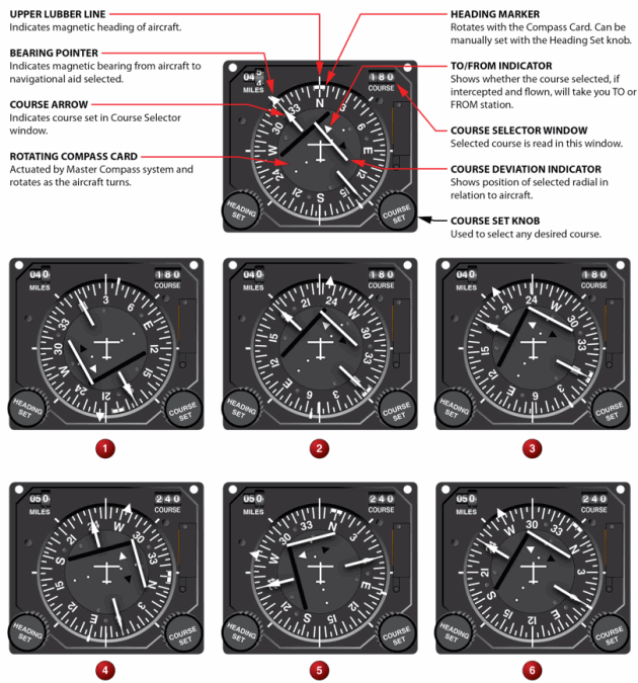
題目圖：



原始題號:0011585 題組:5 難易度:易 (R20130125)

- (C) 155. (Refer to figure 17.) Which is true regarding illustration 4 if the present heading is maintained? The airplane will (如圖A21_Fig17)
(A) cross the 060 radial at a 15 angle. (B) intercept the 240 radial at a 30 angle.
(C) cross the 180 radial at a 75 angle.

題目圖：



原始題號:0011586 題組:1 難易度:易 (R20130125)

- (B) 156.(Refer to figure 18.) To intercept a magnetic bearing of 240 from at a 30 angle(while outbound), the airplane should be turned(如圖A21_FIG18)
- (A)left 065. (B)left 125 (C)right 270

題目圖：

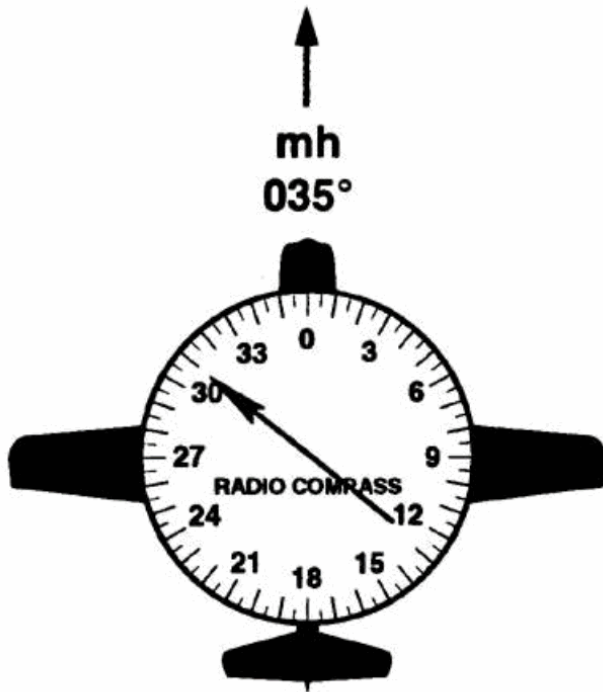


Figure 18. Magnetic Heading/Radio Compass © ASA

原始題號:0011587 題組:2 難易度:易 (R20131218)

- (B) 157.(Refer to figure 18.) If the airplane continues to fly on the heading as shown, what magnetic bearing from the station would be intercepted at 35 angle outbound?(如圖A21_FIG18)
- (A)035° (B)070° (C)215°

題目圖：

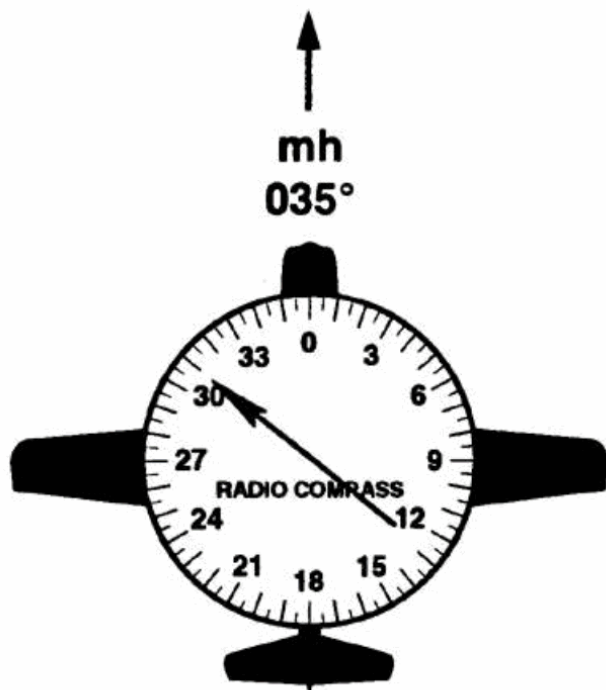


Figure 18. Magnetic Heading/Radio Compass © ASA

原始題號:0011588 題組:1 難易度:易 (R20211227)

- (C) 158. (Refer to figure 19.) If the airplane continues to fly on magnetic heading as illustrated, what magnetic bearing FROM the station would be intercepted at a 35 angle? (如圖A21_FIG19)
- (A) 090°. (B) 270°. (C) 305°.

題目圖：

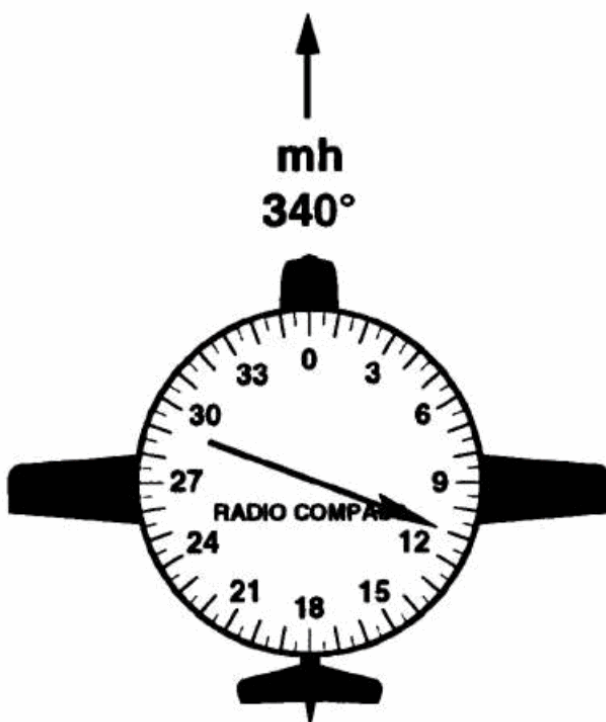


Figure 19. Magnetic Heading/Radio Compass © ASA

原始題號:0011589 題組:2 難易度:易 (R20211227)

- (C) 159. (Refer to figure 19.) If the airplane continues to fly on magnetic heading as illustrated, what magnetic bearing FROM the station would be intercepted at a 30 angle? (如圖A21_FIG19)
- (A) 090°. (B) 270°. (C) 310°.

題目圖：

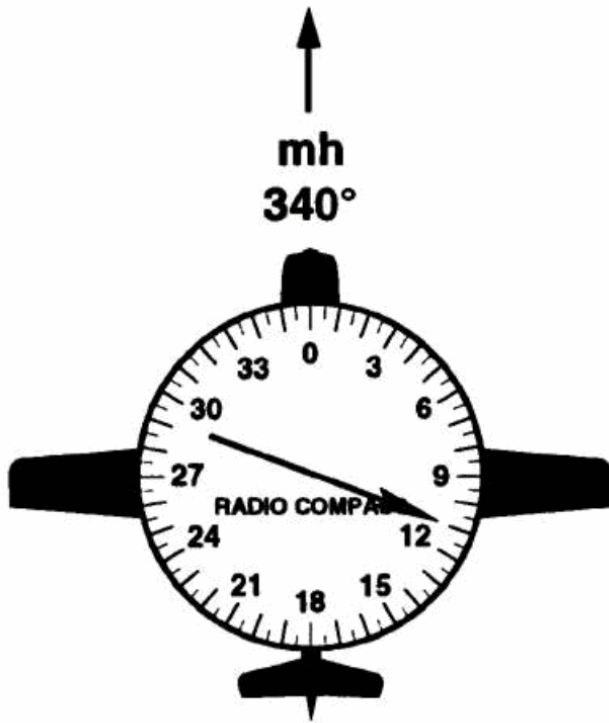


Figure 19. Magnetic Heading/Radio Compass © ASA

原始題號:0011590 題組:1 難易度:易 (R20130125)

- (A) 160. (Refer to figure 32) airport pressure altitude...2,000ft airport temperature...20C cruise pressure altitude...10,000ft cruise temperature...0C What will be the fuel, time, and distance required to climb to cruise altitude under given conditions?(如圖A21_FIG32)
- (A)5 gallons, 9 minutes, 13NM. (B)6 gallons, 11 minutes, 16NM. (C)7 gallons, 12 minutes, 18NM.

題目圖：

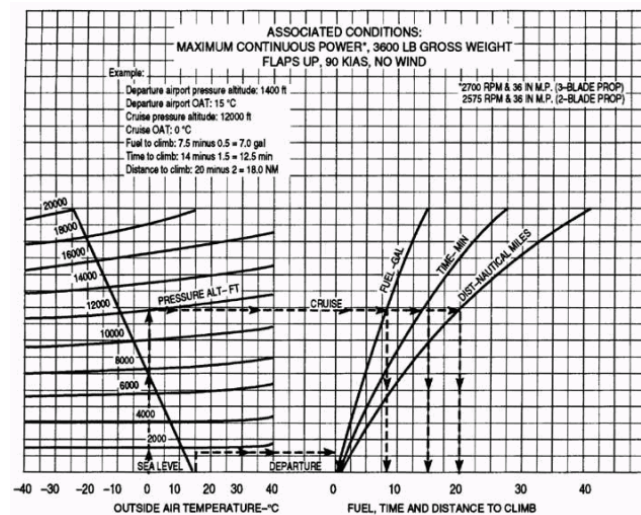


Figure 15. Fuel, Time, and Distance to Climb © ASA

原始題號:0011591 題組:0 難易度:易

- (B) 161. How should the pilot make a VOR receiver check when the aircraft is located on the designated check-point on the airport surface?
(A) Set the OBS on 180 plus or minus 4; the CDI should center with From indication.
(B) Set OBS on the designated radial. The CDI must center within plus or minus 4 of that radial with a FROM indication. (C) With the aircraft headed directly toward the VOR and OBS set 000, the CDI should center within plus or minus 4 of that radial with a to indication.

原始題號:0011592 題組:0 難易度:易

- (A) 162. Inbound on the 190 radial, a pilot selects the 195 radial, turns 5 to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 10 min. based on this information, the ETE to the station is
(A) 10 minutes. (B) 15 minutes. (C) 20 minutes.

原始題號:0011593 題組:0 難易度:易

- (B) 163. Inbound on the 315 radial, a pilot selects the 320 radial, turns 5 to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 12 min. based on this information, the ETE to the station is
(A) 10 minutes. (B) 12 minutes. (C) 24 minutes.

原始題號:0011594 題組:0 難易度:易

- (A) 164. Inbound on the 090 radial, a pilot rotates the OBS 010 to the left, turns 010 to the right, and notes the time. While maintaining a constant heading, the pilot determines that the elapsed time for the CDI to center is 8 minutes. Based on this information, the ETE to the station is
(A) 8 minutes. (B) 16 minutes. (C) 24 minutes.

原始題號:0011595 題組:0 難易度:易

- (B) 165. Inbound on the 040 radial, a pilot selects the 055 radial, turns 15 to the left, and notes the time. While maintaining a constant heading, the pilot notes the time for the CDI to center is 15 min. based on this information, the ETE to the station is
(A) 8 minutes. (B) 15 minutes. (C) 30 minutes.

原始題號:0011596 題組:0 難易度:易

- (A) 166. While maintaining a magnetic heading of 270 and a true airspeed is 120 knots, the 360 radial of VOR is crossed at 1237 and the 350 radial is crossed at 1244. The approximate time and distance to this station are
(A) 42 minutes and 84NM. (B) 42 minutes and 91NM. (C) 44 minutes and 96NM.

原始題號:0011597 題組:0 難易度:易

- (C) 167. Which publication includes information on operations in the NORTH ATLANTIC MINIMUM NAVIGATION PERFORMANCE SPECIFICATIONS AIRSPACE?
(A) FAR PART 121. (B) ICAO ANNEX 1, CHAPTER 2. (C) FAR PART 91

原始題號:0011598 題組:0 難易度:易 (R20180206)

- (B) 168. During LORAN approach the receiver must detect a lost signal blink within:
(A) 5 seconds of the occurrence and warn the pilot of the event. (B) 10 seconds of the occurrence and warn the pilot of the event. (C) 15 seconds of the occurrence and warn the pilot of the event.

原始題號:0011599 題組:0 難易度:易

- (A) 169. How may a pilot determine if a LORAN-C receiver is authorized for IFR operations?
(A) consult the AIRPLANE FIGHT MANUAL SUPPLEMENT. (B) a placard stating, "LORAN-C APPROVED FOR IFR EN ROUTE, TERMINAL AND APPROACH SEGMENTS". (C) an airframe logbook entry that the LORAN-C receiver has been checked within the previous 30 calendar days.

原始題號:0011600 題組:0 難易度:易

- (C) 170. LORAN-C is based upon measurements of the difference in time arrival of pulses generated by what type of radio station?
(A) a group of stations operating on the 108-115 MHz frequency band. (B) two stations operating on the 90-110 MHz frequency band. (C) a chain of stations operating on the 90-110 kHz frequency band.

原始題號:0011601 題組:0 難易度:易

- (A) 171. At higher elevation airports the pilot should know that indicated airspeed
(A) will be unchanged, but groundspeed will be faster. (B) will be higher, but groundspeed will be unchanged. (C) should be increased to compensate for thinner air.

原始題號:0011602 題組:0 難易度:易

- (A) 172. While maintaining a constant heading, a relative bearing of 15 degrees doubles in 5 minutes. If the true airspeed is 105 knots, the time and distance to the station being used is approximately
(A) 5 minutes and 8.7 miles. (B) 10 minutes and 17 miles. (C) 15 minutes and 31.2 miles.

原始題號:0011603 題組:0 難易度:易

- (B) 173. When the CDI needle is centered during an airborne VOR check, the omnibearing selector and the TO/FROM indicator should read
(A) within 4 degrees of the selected radial. (B) within 6 degrees of the selected radial. (C) 0 TO, only if you are due south of the VOR.

原始題號:0011604 題組:0 難易度:易 (R20180206)

- (B) 174. The ADF indicates a wingtip bearing change of 10 degrees in 2 minutes of elapsed time, and the TAS is 160 knots. What is the distance to the station?
(A) 15 NM. (B) 32 NM. (C) 36 NM.

原始題號:0011605 題組:0 難易度:易

- (B) 175. An aircraft 60 miles from VOR station has a CDI indication of one fifth deflection this represents a course centerline deviation of approximately
(A)6 miles. (B)2 miles. (C)1 miles.

原始題號:0011606 題組:0 難易度:易

- (C) 176. What is an operational difference between the turn coordinator and the turn-and-slip indicator? The turn coordinator
(A)is always electric; the turn-and slip indicator is always vacuum-driven.
(B)indicates bank angle only; the turn-and slip indicator indicates rate of turn and coordination. (C)indicates roll rate, rate of turn, and coordination; the turn-and-slip indicator indicates rate of turn and coordination.

原始題號:0011607 題組:0 難易度:易

- (A) 177. What is an advantage of an electric turn coordinator if the airplane has a vacuum system for other gyroscopic instruments?
(A)It is a backup in case of vacuum system failure (B)It is more reliable than vacuum-driven indicators. (C)It will not tumble as will vacuum-driven turn indicators.

原始題號:0011608 題組:0 難易度:易 (R20170815)

- (A) 178. To track outbound on the 215 radial of a VOR station, the recommended procedure is to set the OBS to
(A)215 and make heading corrections toward the CDI needle. (B)215 and make heading corrections away from the CDI needle. (C)035 and make heading corrections toward the CDI needle.

原始題號:0011609 題組:1 難易度:易 (R20130125)

- (B) 179. (Refer to figure 20.) Which instrument shows the aircraft in a position where a straight course after a 90 left turn would result in intercepting the 180 radial?(如圖A21_Fig20)
(A)2 (B)3 (C)4

題目圖：

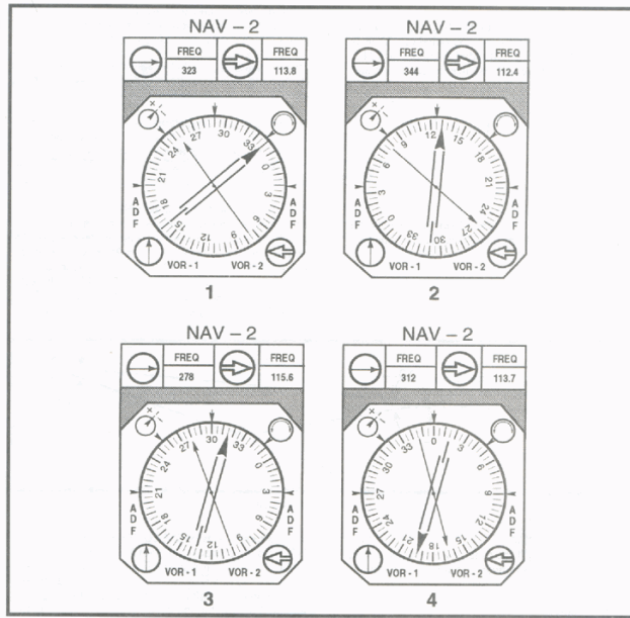


FIGURE 20.—Radio Magnetic Indicator (RMI).

原始題號:0011610 題組:2 難易度:易 (R20130125)

- (A) 180.(Refer to figure 20.) Which instrument(s) show(s) the aircraft is getting further from the selected VORTAC?(如圖A21_Fig20)
(A)4 (B)1 & 4 (C)2 & 3

題目圖：

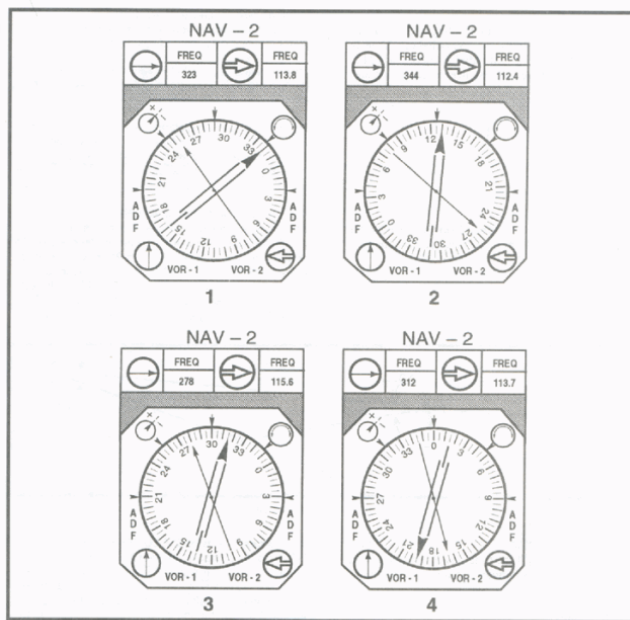


FIGURE 20.—Radio Magnetic Indicator (RMI).

原始題號:0011611 題組:3 難易度:易 (R20130125)

- (B) 181.(Refer to figure 20.) Which instrument shows the aircraft to be northwest of the VORTAC?(如圖A21_Fig20)
(A)1 (B)2 (C)3

題目圖：

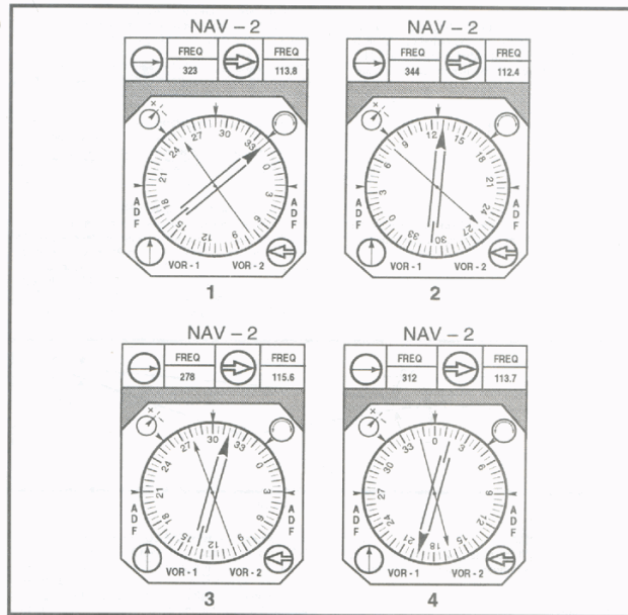


FIGURE 20.—Radio Magnetic Indicator (RMI).

原始題號:0011612 題組:4 難易度:易 (R20130125)

- (C) 182. (Refer to figure 20.) Which instrument shows the aircraft in a position where a 180 turn would result in the aircraft intercepting the 150 radial at a 30 angle? (如圖A21_Fig20)
 (A)2 (B)3 (C)4

題目圖：

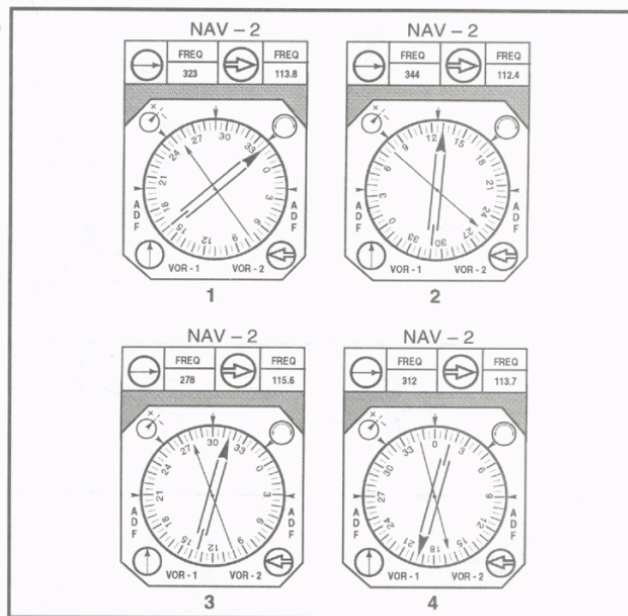
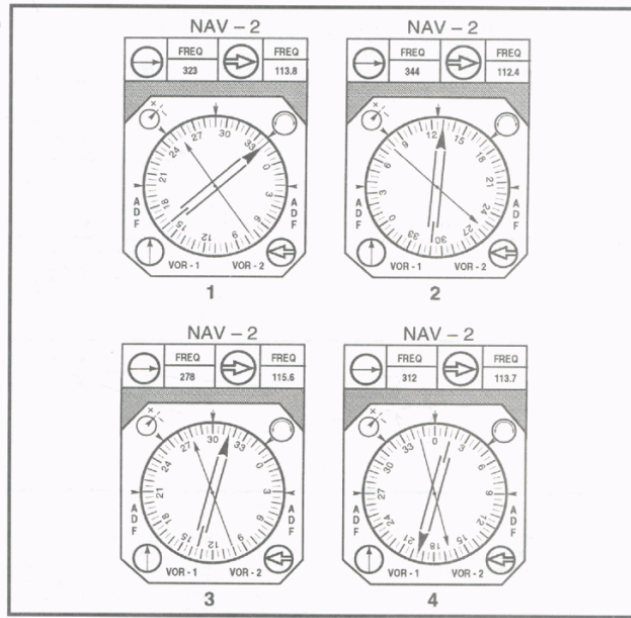


FIGURE 20.—Radio Magnetic Indicator (RMI).

原始題號:0011613 題組:5 難易度:易 (R20130125)

- (A) 183. (Refer to figure 20.) Using instrument group 3. if an aircraft makes a 180 turn on the left and continues straight ahead, it will intercept which radial? (如圖A21_Fig20)
 (A)135 radial. (B)270 radial. (C)360 radial.

題目圖：



原始題號:0011614 題組:0 難易度:易

- (C) 184. TO track outbound on the 180 radial of a VOR station, the recommended procedure is to set the OBS to
 (A)360 and make heading corrections toward the CDI needle. (B)180 and make heading corrections away from the CDI needle. (C)180 and make heading corrections toward the CDI needle.

原始題號:0011615 題組:0 難易度:易

- (A) 185. Which situation would result in reverse sensing of a VOR receiver?
 (A) Flying a heading that is reciprocal to the bearing selected on the OBS.
 (B) setting the OBS to a bearing that is 90 from the bearing on which the aircraft is located. (C) Failing to change the OBS from the selected inbound course to outbound course after passing the station.

原始題號:0011616 題組:0 難易度:易

- (B) 186. Pressure altitude...12000ft True air temperature...+50 F From the conditions given, the approximate density altitude is
 (A)11,900 feet. (B)14,130 feet. (C)18,150 feet.

原始題號:0011618 題組:0 難易度:易

- (B) 187. Pressure altitude...5000ft True air temperature...+30 C From the conditions given, the approximate density altitude is
 (A)7200 feet (B)7800 feet. (C)9000 feet

原始題號:0011619 題組:0 難易度:易

- (B) 188. Pressure altitude...6000ft True air temperature...+30 F From the conditions given, the approximate density altitude is
 (A)5000 feet. (B)5500 feet. (C)9000 feet.

原始題號:0011620 題組:0 難易度:易

- (A) 189. Lift on a wing is most properly defined as the
(A)force acting perpendicular to the relative wind. (B)differential pressure acting perpendicular to the chord of the wing. (C)reduced pressure reesulting from a laminar flow over the upper camber of an airfoil, which acts perpendicular to the mean camber.

原始題號:0011621 題組:0 難易度:易

- (B) 190. The magnetic heading is 350 and the relative bearing to a radiobeacon is 240. what would be the magnetic bearing TO that radiobeacon?
(A)050 °. (B)230 °. (C)295 °.

原始題號:0011622 題組:0 難易度:易

- (B) 191. An aircraft is maintaining a magnetic heading of 265 and the ADF shows a relative bearing of 065, this indicates that aircraft is crossing the
(A)065 magnetic bearing FROM the radio beacon. (B)150 magnetic bearing FROM the radio beacon. (C)330 magnetic bearing FROM the radio beacon.

原始題號:0011623 題組:0 難易度:易

- (C) 192. The magnetic heading is 315 and the ADF shows a relative bearing of 140 .The magnetic bearing FROM the radiobeacon would be
(A)095 °. (B)175 °. (C)275 °.

原始題號:0011624 題組:0 難易度:易

- (C) 193. When using VOT to make a VOR receiver check, the CDI should be centerd and the OBS should indicate that the aircraft is on the
(A)090 radial. (B)180 radial. (C)360 radial.

原始題號:0011625 題組:0 難易度:易

- (B) 194. Pressure altitude...7000ft True air temperature....+15 C From the conditions given, the approximate density altitude is
(A)5000 feet. (B)8500 feet. (C)9500 feet.

原始題號:0011626 題組:0 難易度:易

- (C) 195. With a TAS of 115 knots, the relative bearing on an ADF changes from 090 to 095 in 1.5 minutes of elapsed time. The distance to the station would be
(A)12.5 NM (B)24.5NM (C)34.5NM

原始題號:0011627 題組:0 難易度:易

- (C) 196. The ADF is tuned to radiobeacon. If the magnetic heading is 040 and the relative bearing is 290, the magnetic bearing TO that radiobeacon would be
(A)150 °. (B)285 °. (C)330 °.

原始題號:0011628 題組:1 難易度:易 (R20130125)

- (B) 197. (Refer to figure 25.) Determine the amount of fuel consumed during takeoff and climb at 70 percent power for 10 minutes. (如圖A21_Fig25)
(A)2.66 gallons. (B)2.88 gallons. (C)3.2 gallons.

題目圖：

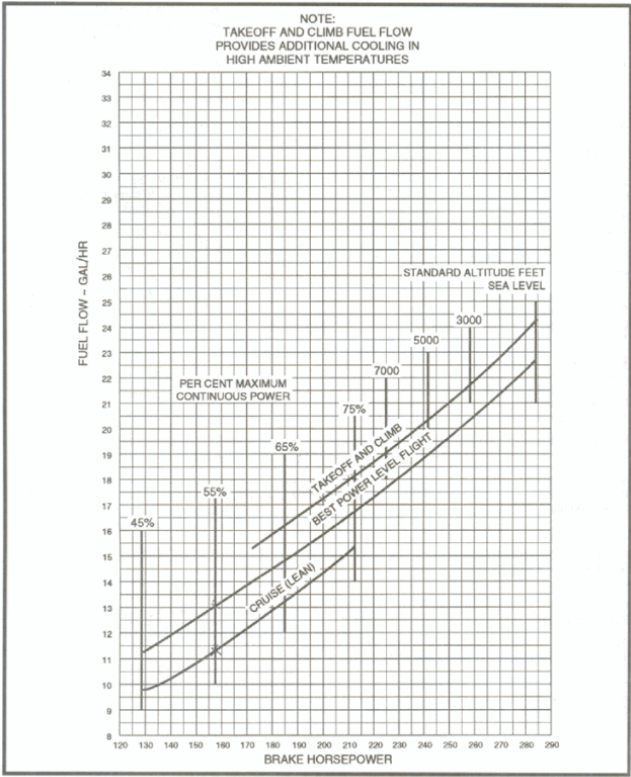


FIGURE 8.—Fuel Consumption vs. Brake Horsepower.

原始題號:0011629 題組:2 難易度:易 (R20130125)

- (C) 198.(Refer to figure25.) Approximately how much fuel would be consumed when climbing at 75 percent power for 7 minutes ?(如圖A21_Fig25)
- (A)1.82 gallons. (B)1.97 gallons. (C)2.15 gallons

題目圖：

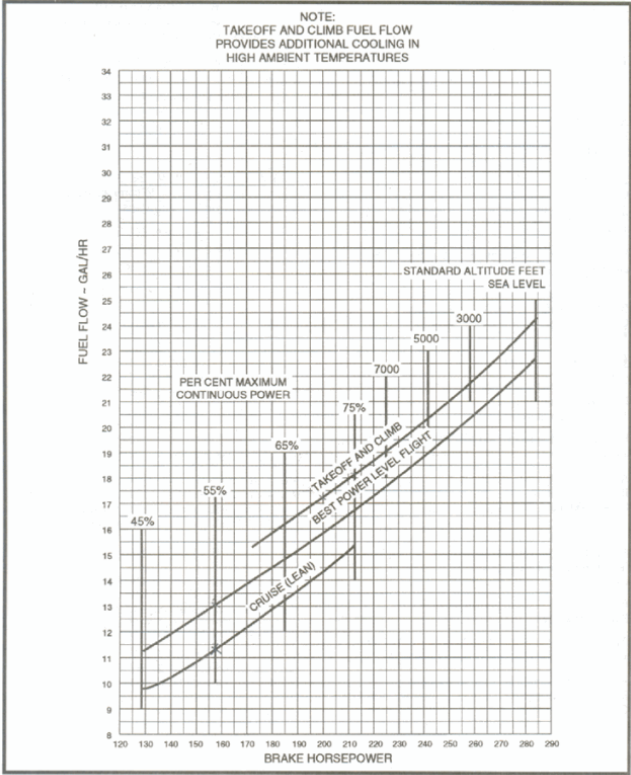


FIGURE 8.—Fuel Consumption vs. Brake Horsepower.

原始題號:0011630 題組:3 難易度:易 (R20130125)

- (B) 199. Refer to figure 25.) Fuel quantity....65 gal best power-level
 flight 55 percent Approximately how much flight time would be
 available with a day VFR fuel reserve remaining(如圖A21_Fig25)
 (A)4 hours 17 minutes. (B)4 hours 30 minutes. (C)5 hours 4 minutes.

題目圖：

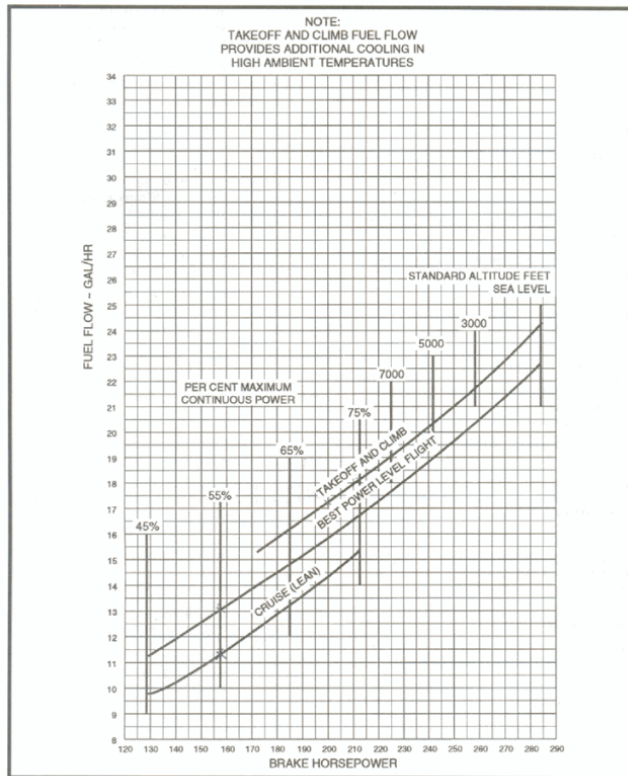


FIGURE 8.—Fuel Consumption vs. Brake Horsepower.

原始題號:0011631 題組:4 難易度:易 (R20130125)

- (B) 200. Refer to figure 25.) Fuel quantity....47 gal power-cruise(lean)
 55 percent Approximately how much flight time would be available with
 a night VFR fuel reserve remaining(如圖A21_Fig25)
 (A)3 hours 8 minutes. (B)3 hours 22 minutes. (C)3 hours 43 minutes.

題目圖：

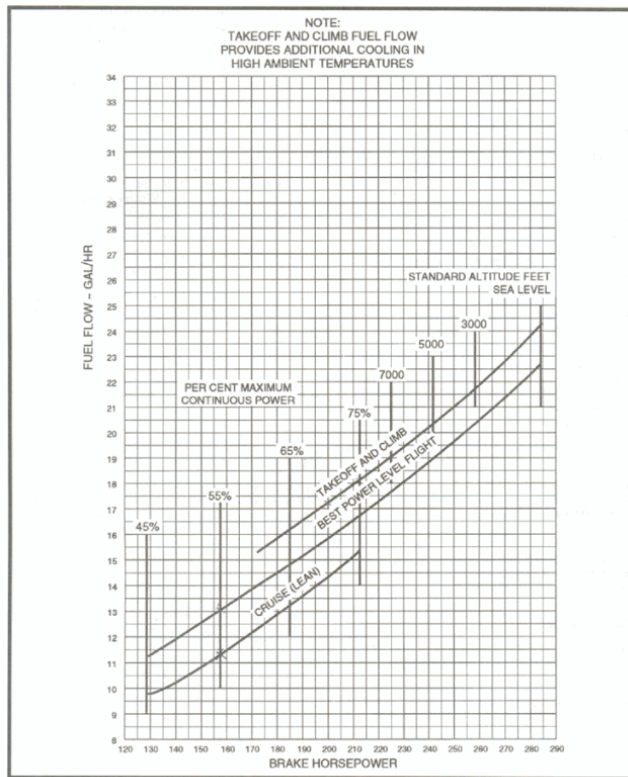


FIGURE 8.—Fuel Consumption vs. Brake Horsepower.

原始題號:0011632 題組:5 難易度:易 (R20130125)

- (A) 201. (Refer to figure 8.) With 38 gallons of fuel aboard at cruise power (55 percent), how much flight time is available with night VFR fuel reserve still remaining. (如圖A21_Fig25)
- (A) 2 hours 34 minutes. (B) 2 hours 49 minutes. (C) 3 hours 18 minutes.

題目圖：

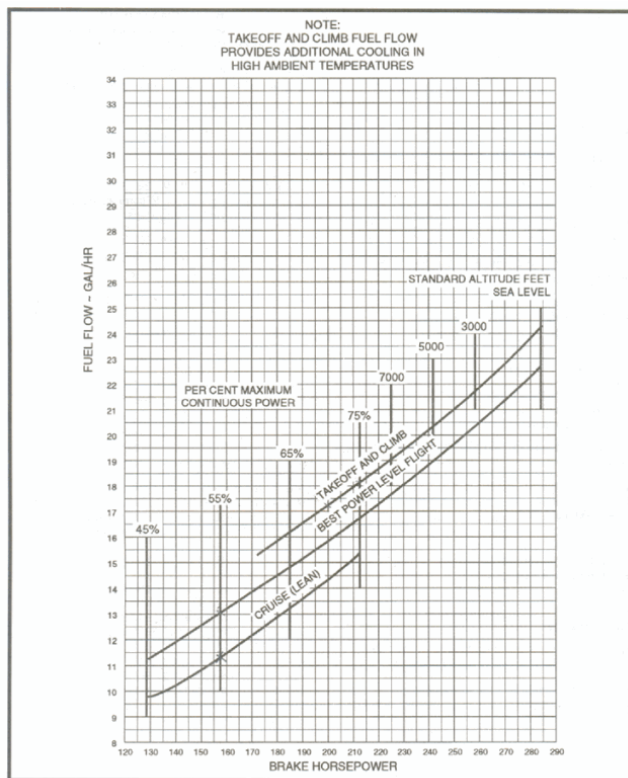


FIGURE 8.—Fuel Consumption vs. Brake Horsepower.

原始題號:0011633 題組:1 難易度:易 (R20180207)

- (C) 202. (Refer to Fig. 33) Using a maximum rate of climb, how much fuel would be used from engine start to 10,000 feet pressure altitude? Aircraft weight.... 3,800 lb Airport pressure altitude.... 4,000 ft Temperature.... 30C(如圖A21_Fig33)
- (A)28 pounds. (B)35 pounds. (C)40 pounds.

題目圖：

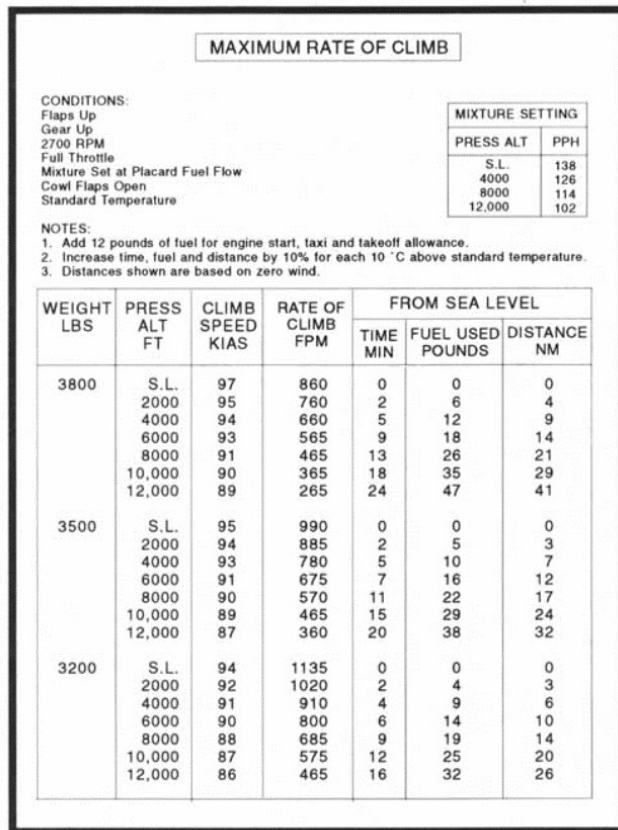


FIGURE 10.—Fuel, Time, and Distance to Climb.

原始題號:0011634 題組:2 難易度:易 (R20180207)

- (C) 203. (Refer to Fig. 33) Using a maximum rate of climb, how much fuel would be used from engine start to 6,000 feet pressure altitude? Aircraft weight.... 3,200 lb Airport pressure altitude.... 2,000 ft Temperature.... 27C(如圖A21_Fig33)
- (A)10 pounds. (B)14 pounds. (C)24 pounds.

題目圖：

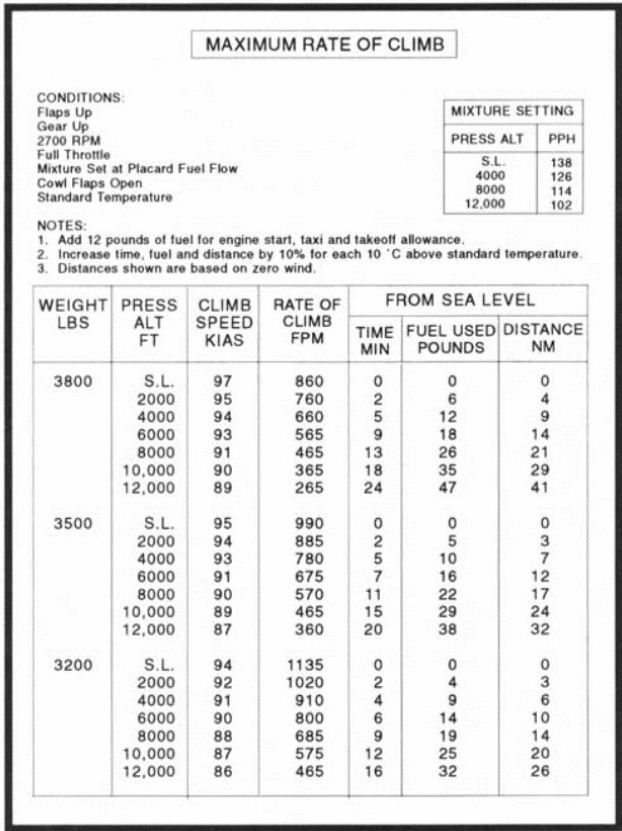


FIGURE 10.—Fuel, Time, and Distance to Climb.

原始題號:0011635 題組:3 難易度:易 (R20130125)

- (C) 204.(Refer to figure 26.) Using a normal climb, how much fuel would be used from engine start to 12,000 feet pressure altitude? Aircraft weight....3,800 lb Airport pressure altitude....4,000 ft Temperature....26C(如圖A21_FIG26)
- (A)46 pounds. (B)51 pounds. (C)58 pounds.

題目圖：

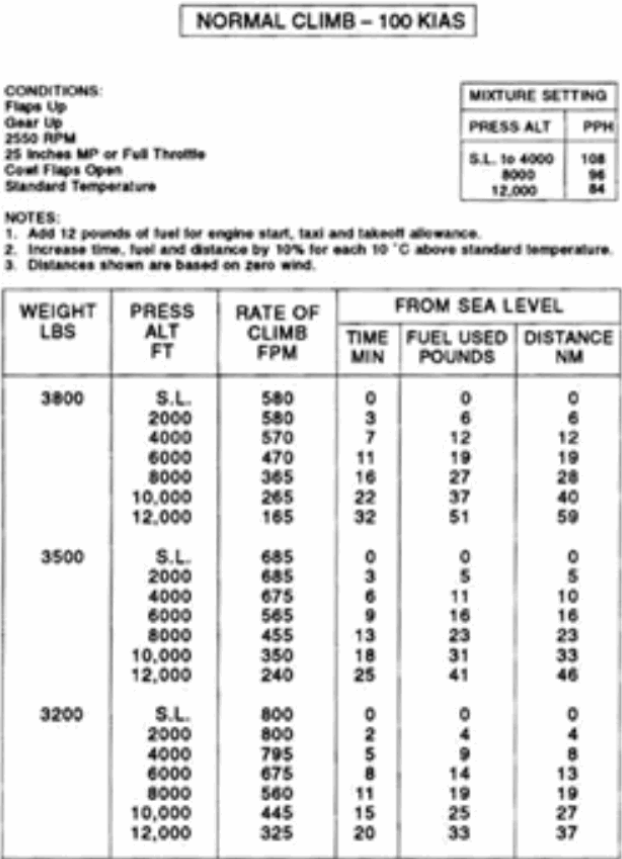


Figure 9. Fuel, Time, and Distance to Climb

原始題號:0011636 題組:4 難易度:易 (R20130125)

- (C) 205. (Refer to figure 26.) Using a normal climb, how much fuel would be used from engine start to 10,000 feet pressure altitude? Aircraft weight...3,500 lb Airport pressure altitude...4,000 ft Temperature....21C(如圖A21_FIG26)
(A)23 pounds. (B)31 pounds. (C)35 pounds.

題目圖：

NORMAL CLIMB - 100 KIAS

CONDITIONS:
 Flaps Up
 Gear Up
 2500 RPM
 25 Inches MP or Full Throttle
 Cool Flaps Open
 Standard Temperature

MIXTURE SETTING

PRESS ALT	PPH
S.L. to 4000	108
8000	96
12,000	84

NOTES:
 1. Add 12 pounds of fuel for engine start, taxi and takeoff allowance.
 2. Increase time, fuel and distance by 10% for each 10 °C above standard temperature.
 3. Distances shown are based on zero wind.

WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
3800	S.L.	580	0	0	0
	2000	580	3	6	6
	4000	570	7	12	12
	6000	470	11	19	19
	8000	365	16	27	28
	10,000	265	22	37	40
	12,000	165	32	51	59
3500	S.L.	685	0	0	0
	2000	685	3	5	5
	4000	675	6	11	10
	6000	565	9	16	16
	8000	455	13	23	23
	10,000	350	18	31	33
	12,000	240	25	41	46
3200	S.L.	800	0	0	0
	2000	800	2	4	4
	4000	795	5	9	8
	6000	675	8	14	13
	8000	560	11	19	19
	10,000	445	15	25	27
	12,000	325	20	33	37

Figure 9. Fuel, Time, and Distance to Climb

原始題號:0011637 題組:1 難易度:易 (R20130125)

- (C) 206. (Refer to figure 27.) If the cruise altitude is 7,500 feet, using 64 percent power at 2,500 RPM, what would be the range with 48 gallons of usable fuel?(如圖A21_Fig27)
(A)635 miles. (B)645 miles. (C)810 miles.

題目圖：

Gross Weight- 2300 Lbs.
Standard Conditions
Zero Wind Lean Mixture

NOTE: Maximum cruise is normally limited to 75% power.

ALT.	RPM	% BHP	TAS MPH	GAL/HOUR	38 GAL (NO RESERVE)		48 GAL (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2500	2700	86	134	9.7	3.9	525	4.9	660
	2600	79	129	8.6	4.4	570	5.6	720
	2500	72	123	7.8	4.9	600	6.2	760
	2400	65	117	7.2	5.3	620	6.7	780
	2300	58	111	6.7	5.7	630	7.2	795
	2200	52	103	6.3	6.1	625	7.7	790
5000	2700	82	134	9.0	4.2	565	5.3	710
	2600	75	128	8.1	4.7	600	5.9	760
	2500	68	122	7.4	5.1	625	6.4	790
	2400	61	116	6.9	5.5	635	6.9	805
	2300	55	108	6.5	5.9	635	7.4	805
	2200	49	100	6.0	6.3	630	7.9	795
7500	2700	78	133	8.4	4.5	600	5.7	755
	2600	71	127	7.7	4.9	625	6.2	790
	2500	64	121	7.1	5.3	645	6.7	810
	2400	58	113	6.7	5.7	645	7.2	820
	2300	52	105	6.2	6.1	640	7.7	810
10,000	2650	70	129	7.6	5.0	640	6.3	810
	2600	67	125	7.3	5.2	650	6.5	820
	2500	61	118	6.9	5.5	655	7.0	830
	2400	55	110	6.4	5.9	650	7.5	825
	2300	49	100	6.0	6.3	635	8.0	800

FIGURE 11.—Cruise and Range Performance.

原始題號:0011638 題組:2 難易度:易 (R20130125)

- (B) 207. (Refer to figure 27.) What would be the endurance at an altitude of 7,500 feet, using 52 percent power?(NOTE: with 48 gallons fuel-no reserve)(如圖A21_Fig27)
(A)6.1 hours. (B)7.7 hours. (C)8.0 hours.

題目圖：

Gross Weight: 2300 Lbs.
Standard Conditions
Zero Wind Lean Mixture

NOTE: Maximum cruise is normally limited to 75% power.

ALT.	RPM	% BHP	TAS MPH	GAL/ HOUR	38 GAL (NO RESERVE)		48 GAL (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2500	2700	86	134	9.7	3.9	525	4.9	660
	2600	79	129	8.6	4.4	570	5.6	720
	2500	72	123	7.8	4.9	600	6.2	760
	2400	65	117	7.2	5.3	620	6.7	780
	2300	58	111	6.7	5.7	630	7.2	795
	2200	52	103	6.3	6.1	625	7.7	790
5000	2700	82	134	9.0	4.2	565	5.3	710
	2600	75	128	8.1	4.7	600	5.9	760
	2500	68	122	7.4	5.1	625	6.4	790
	2400	61	116	6.9	5.5	635	6.9	805
	2300	55	108	6.5	5.9	635	7.4	805
	2200	49	100	6.0	6.3	630	7.9	795
7500	2700	78	133	8.4	4.5	600	5.7	755
	2600	71	127	7.7	4.9	625	6.2	790
	2500	64	121	7.1	5.3	645	6.7	810
	2400	58	113	6.7	5.7	645	7.2	820
	2300	52	105	6.2	6.1	640	7.7	810
10,000	2650	70	129	7.6	5.0	640	6.3	810
	2600	67	125	7.3	5.2	650	6.5	820
	2500	61	118	6.9	5.5	655	7.0	830
	2400	55	110	6.4	5.9	650	7.5	825
	2300	49	100	6.0	6.3	635	8.0	800

FIGURE 11 —Cruise and Range Performance

FIGURE 11.—Cruise and Range Performance.

原始題號:0011639 題組:3 難易度:易 (R20130125)

- (C) 208. (Refer to figure 27.) What would be the approximate true airspeed and fuel consumption per hour at an altitude of 7,500 feet, using 52 percent power?(如圖A21_Fig27)
(A)103 MPH TAS, 7.7 GPH. (B)105 MPH TAS, 6.1 GPH. (C)105 MPH TAS, 6.2 GPH.

題目圖：

Gross Weight- 2300 Lbs.
Standard Conditions
Zero Wind Lean Mixture

NOTE: Maximum cruise is normally limited to 75% power.

ALT.	RPM	% BHP	TAS MPH	GAL/ HOUR	38 GAL (NO RESERVE)		48 GAL (NO RESERVE)	
					ENDR. HOURS	RANGE MILES	ENDR. HOURS	RANGE MILES
2500	2700	86	134	9.7	3.9	525	4.9	660
	2600	79	129	8.6	4.4	570	5.6	720
	2500	72	123	7.8	4.9	600	6.2	760
	2400	65	117	7.2	5.3	620	6.7	780
	2300	58	111	6.7	5.7	630	7.2	795
	2200	52	103	6.3	6.1	625	7.7	790
5000	2700	82	134	9.0	4.2	565	5.3	710
	2600	75	128	8.1	4.7	600	5.9	760
	2500	68	122	7.4	5.1	625	6.4	790
	2400	61	116	6.9	5.5	635	6.9	805
	2300	55	108	6.5	5.9	635	7.4	805
	2200	49	100	6.0	6.3	630	7.9	795
7500	2700	78	133	8.4	4.5	600	5.7	755
	2600	71	127	7.7	4.9	625	6.2	790
	2500	64	121	7.1	5.3	645	6.7	810
	2400	58	113	6.7	5.7	645	7.2	820
	2300	52	105	6.2	6.1	640	7.7	810
10,000	2650	70	129	7.6	5.0	640	6.3	810
	2600	67	125	7.3	5.2	650	6.5	820
	2500	61	118	6.9	5.5	655	7.0	830
	2400	55	110	6.4	5.9	650	7.5	825
	2300	49	100	6.0	6.3	635	8.0	800

FIGURE 11. Cruise and Range Performance

FIGURE 11.—Cruise and Range Performance.

原始題號:0011640 題組:1 難易度:易 (R20130125)

- (C) 209. (Refer to figure 30.) Using a normal climb, how much time would be required to climb to a 8,000 feet pressure altitude? Aircraft weight...3,400 lb
Airport pressure altitude...4,000 ft
Temperature....14C(如圖A21_Fig30)
(A)4.8 minutes. (B)5 minutes. (C)5.5 minutes.

題目圖：

NORMAL CLIMB - 110 KIAS					
CONDITIONS: Flaps Up Gear Up 2500 RPM 30 Inches Hg 120 PPH Fuel Flow Cowl Flaps Open Standard Temperature					
NOTES: 1. Add 18 pounds of fuel for engine start, taxi and takeoff allowance. 2. Increase time, fuel and distance by 10% for each 7 °C above standard temperature. 3. Distances shown are based on zero wind.					
WEIGHT LBS	PRESS ALT FT	RATE OF CLIMB FPM	FROM SEA LEVEL		
			TIME MIN	FUEL USED POUNDS	DISTANCE NM
4000	S.L.	605	0	0	0
	4000	570	7	14	13
	8000	530	14	28	27
	12,000	485	22	44	43
	16,000	430	31	62	63
	20,000	365	41	82	87
3700	S.L.	700	0	0	0
	4000	665	6	12	11
	8000	625	12	24	23
	12,000	580	19	37	37
	16,000	525	26	52	53
	20,000	460	34	68	72
3400	S.L.	810	0	0	0
	4000	775	5	10	9
	8000	735	10	21	20
	12,000	690	16	32	31
	16,000	635	22	44	45
	20,000	565	29	57	61

FIGURE 14.—Fuel, Time, and Distance to Climb.

原始題號:0011641 題組:2 難易度:易 (R20181115)

- (B) 210. (Refer to Fig. 28) pressure altitude: 18,000 ft; Temperature: -1 deg. C; Power: 2200 RPM--20"MP; Recommended lean mixture usable fuel: 344 lb; What is the approximate flight time available under the given condition (Allow for VFR day fuel reserve)?(如圖A21_Fig28)
- (A)4 hours 50 minutes. (B)5 hours 20 minutes. (C)5 hours 59 minutes.

題目圖：

PRESSURE ALTITUDE 18,000 FEET										
CONDITIONS: 4000 Pounds Recommended Lean Mixture Cowl Flaps Closed						NOTE For best fuel economy at 70% power or less, operate at 6 PPH leaner than shown in this chart or at peak EGT.				
RPM	MP	20 °C BELOW STANDARD TEMP -41 °C			STANDARD TEMPERATURE -21 °C			20 °C ABOVE STANDARD TEMP -1 °C		
		% BHP	KTAS	PPH	% BHP	KTAS	PPH	% BHP	KTAS	PPH
2500	30	---	---	---	81	188	106	76	185	100
	28	80	184	105	76	182	99	71	178	93
	26	75	178	99	71	176	93	67	172	88
	24	70	171	91	66	168	86	62	164	81
	22	63	162	84	60	159	79	56	155	75
2400	30	81	185	107	77	183	101	72	180	94
	28	76	179	100	72	177	94	67	173	88
	26	71	172	93	67	170	88	63	166	83
	24	66	165	87	62	163	82	58	159	77
	22	61	158	80	57	155	76	54	150	72
2300	30	79	182	103	74	180	97	70	176	91
	28	74	176	97	70	174	91	65	170	86
	26	69	170	91	65	167	86	61	163	81
	24	64	162	84	60	159	79	56	155	75
	22	58	154	77	55	150	73	51	145	65
2200	26	66	166	87	62	163	82	58	159	77
	24	61	158	80	57	154	76	54	150	72
	22	55	148	73	51	144	69	48	138	66
	20	49	136	66	46	131	63	43	124	59

FIGURE 12.—Cruise Performance.

原始題號:0011642 題組:3 難易度:易 (R20130125)

- (B) 211. (Refer to figure 28.) pressure altitude: 18,000 ft ; Temperature: -21C ;Power: 2400 RPM--28"MP; Recommended lean mixture usable fuel: 425 lb ; what is the approximate flight time available under the given condition (Allow for VFR day fuel reserve)(如圖A21_Fig28)
- (A)3 hours 46 minutes. (B)4 hours 1 minutes. (C)4 hours 31 minutes.

題目圖：

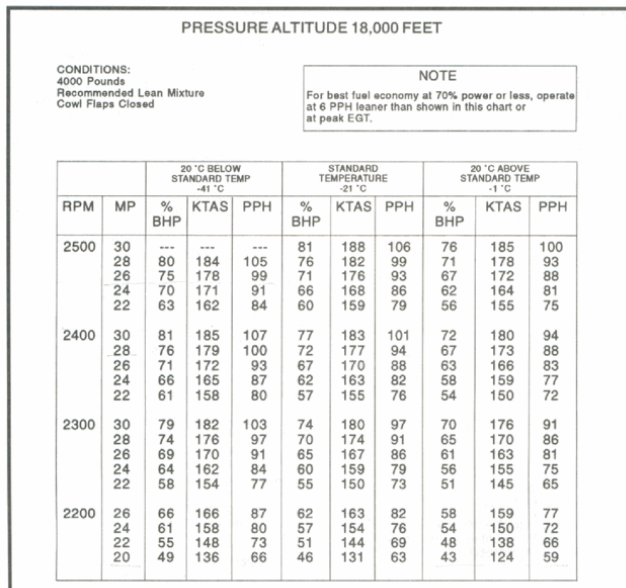


FIGURE 12.—Cruise Performance.

原始題號:0011643 題組:4 難易度:易 (R20130125)

- (A) 212.(Refer to figure 28.) pressure altitude:18,000 ft ; Temperature: -41C; Power: 2500 RPM--26"MP; Recommended lean mixture usable fuel: 318 lb; what is the approximate flight time available under the given condition(Allow for VFR night fuel reserve)(如圖A21_Fig28)
- (A)2 hours 27 minutes. (B)3 hours 12 minutes. (C)3 hours 42 minutes.

題目圖：

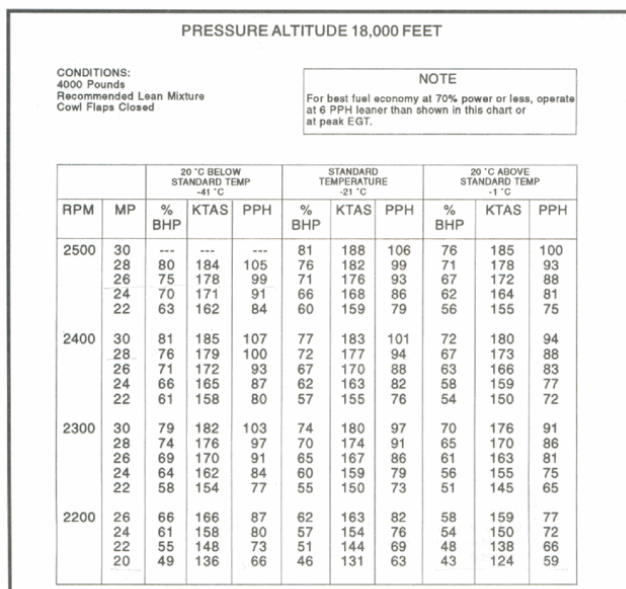


FIGURE 12.—Cruise Performance.

原始題號:0011644 題組:1 難易度:易 (R20130125)

- (B) 213.(Refer to figure 29.) Using a maximum rate of climb, how much time would be required to climb to a 8,000 feet pressure altitude? Aircraft weight....4,000 lb Airport pressure altitude....2,000 ft Temperature....32C(如圖A21_Fig29)
- (A)7 minutes. (B)8.4 minutes. (C)11.2 minutes.

題目圖：

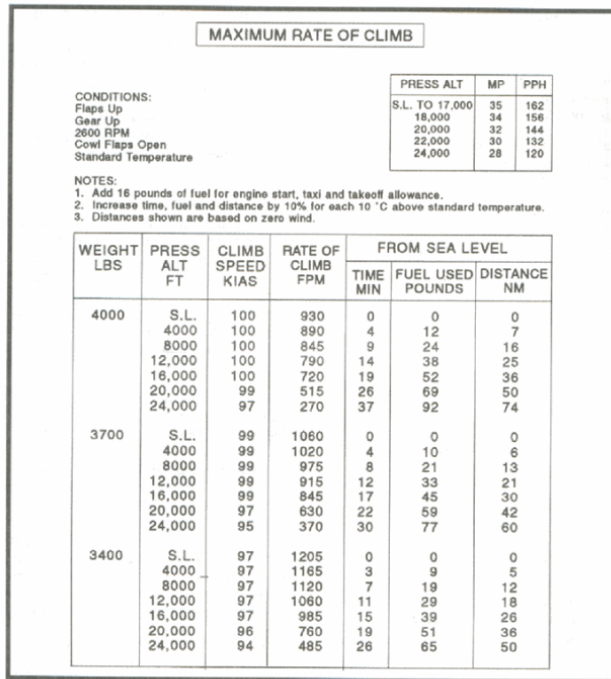


FIGURE 13.—Fuel, Time, and Distance to Climb.

原始題號:0011645 題組:2 難易度:易 (R20130125)

- (A) 214. (Refer to figure 29.) Using a maximum rate of climb, how much fuel would be used from engine start to 16,000 feet pressure altitude? Aircraft weight.... 3,400 lb Airport pressure altitude.... 6,000 ft Temperature.... 10C(如圖A21_Fig29)
- (A)43 pounds. (B)45 pounds. (C)49 pounds.

題目圖：

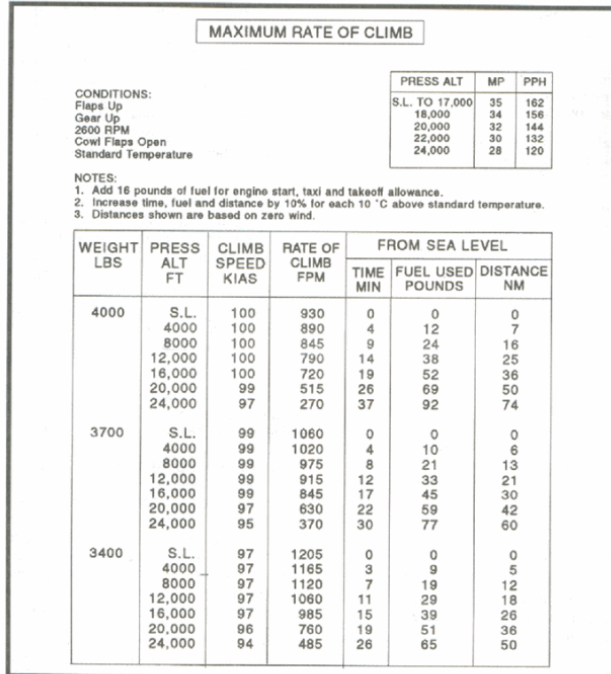


FIGURE 13.—Fuel, Time, and Distance to Climb.

原始題號:0011646 題組:1 難易度:易 (R20130125)

- (C) 215. (Refer to figure 30.) Using a normal climb, how much fuel would be required from engine start to climb to a 12,000 feet pressure altitude? Aircraft weight.... 3,700 lb Airport pressure altitude.... 4,000 ft Temperature.... 21C(如圖A21_Fig30)
- (A)30 pounds. (B)37 pounds. (C)46 pounds.

題目圖：

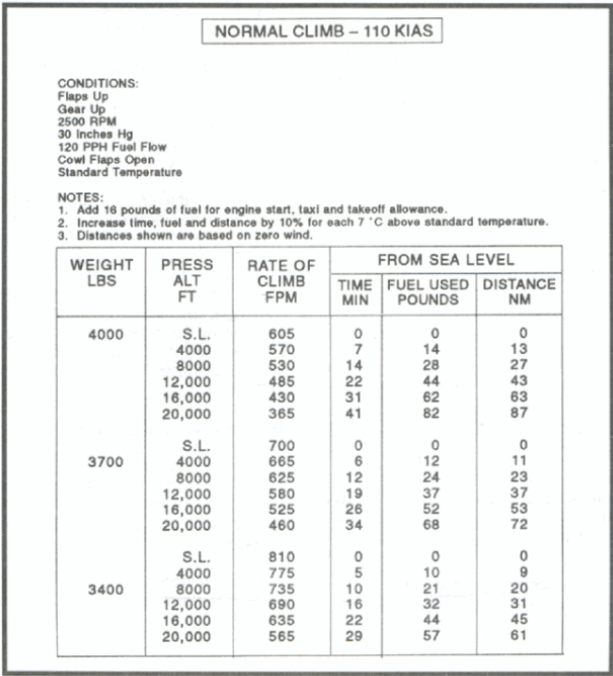


FIGURE 14.—Fuel, Time, and Distance to Climb.

原始題號:0011647 題組:1 難易度:易 (R20130125)

- (C) 216.(Refer to figure 31 on page 12-35.) If the tower-reported surface wind is 010 at 18 knots, what is the crosswind component for RWY 08 landing?(如圖A21_Fig31)
(A)7 knots. (B)15 knots. (C)17 knots.

題目圖：

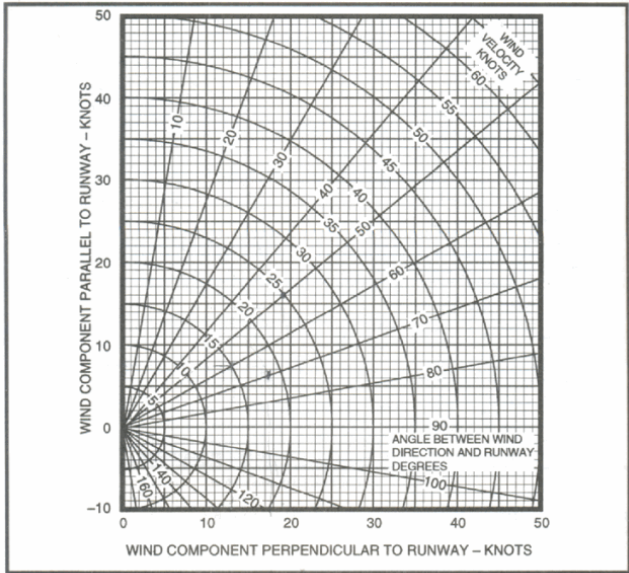


FIGURE 31.—Wind Component Chart.

原始題號:0011648 題組:2 難易度:易 (R20180207)

- (A) 217.(Refer to Fig. 31) Rwy 30 is being used for landing. Which surface wind would exceed the airplane's crosswind capability of 0.2 Vso, if Vso is 60 knots?(如圖A21_Fig31)
(A)260 at 20 knots. (B)275 at 25 knots. (C)315 at 35 knots.

題目圖：

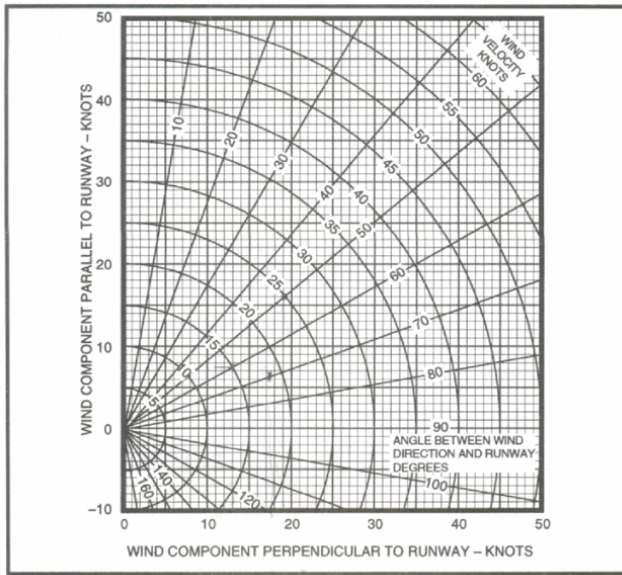


FIGURE 31.—Wind Component Chart.

原始題號:0011649 題組:3 難易度:易 (R20130125)

- (A) 218.(Refer to figure 31 on page 12-35.) What is headwind component for a RWY 13 takeoff if the surface wind is 190 at 15 knots ?(如圖A21_Fig31)
(A)7 knots. (B)13 knots. (C)15 knots.

題目圖：

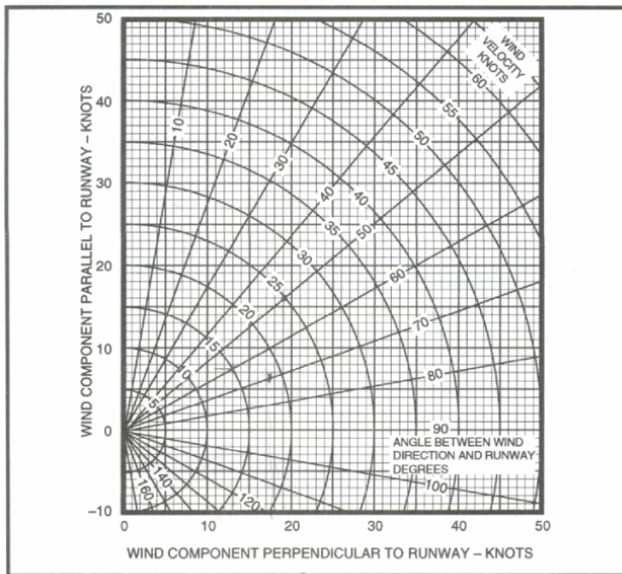


FIGURE 31.—Wind Component Chart.

原始題號:0011650 題組:4 難易度:易 (R20130125)

- (A) 219.(Refer to figure 31 on page 12-35.) The surface wind is 180 at 25 knots. What is the crosswind component for a RWY 13 landing ?(如圖A21_Fig31)
(A)19 knots. (B)21 knots. (C)23 knots.

題目圖：

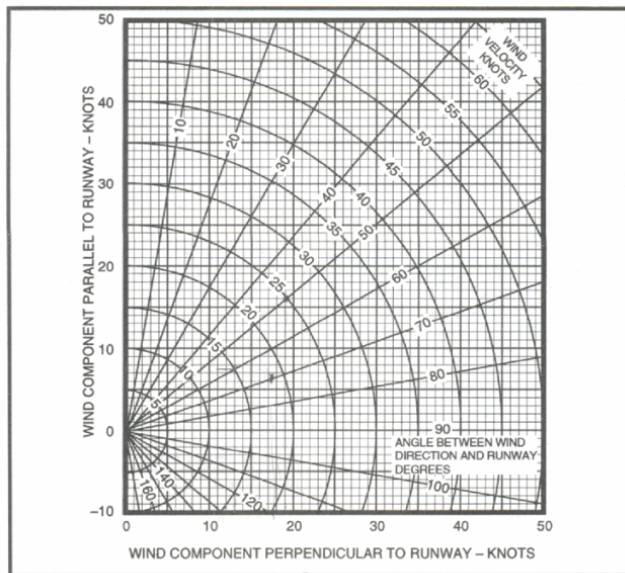


FIGURE 31.—Wind Component Chart.

原始題號:0011651 題組:0 難易度:易

- (C) 220. Wingtip bearing change 5 degree ; Time elapsed between bearing change 5 minutes.
True airspeed 115kts ; The distance to the station is
(A)36NM (B)57.5NM (C)115NM

原始題號:0011652 題組:0 難易度:易

- (A) 221. Wingtip bearing change 15 degree ; Time elapsed between bearing change 7.5 min ;
true airspeed 85 kts ; Rate of fuel consumption 9.6 gal/hr The time , distance
and fuel to the station
(A)30 minutes; 42.5 miles; 4.80 gallons. (B)32minutes; 48miles; 5.58 gallons.
(C)48 minutes; 48miles; 4.58 gallons.