(A43) ATPL航空氣象

最近更新日期：無；更新題號：無

原始題號:0013727 題組:0 難易度:中

(B) 1.在隆冬時節，中緯度地區，噴射氣流 (jet stream)的位置常會:
(A)北移且速度減慢 (B)南移且速度增強 (C)北移且速度增強

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(A) 2.噴射氣流 (jet stream)之強度及位置:
(A)夏季時北移且強度變弱 (B)冬季時北移且強度增強 (C)夏季時北移且強度增強

原始題號:0013729 題組:0 難易度:中

(B) 3.哪一種噴射氣流 (jet stream)會帶來較強的亂流：
(A)直行的噴射氣流 (jet stream)並伴隨低壓槽(low-pressure trough) (B)彎曲的噴射氣流並伴隨深度之低壓槽 (low-pressure trough) (C)夏季低緯度地區的噴射氣流

原始題號:0013730 題組:0 難易度:中

(C) 4.颮線(squall lines)的特性為：
(A)形成的速度很慢但移動速度很快 (B)只伴隨鋒面天氣系統 (C)嚴重影響飛安的危害天氣

原始題號:0013731 題組:0 難易度:中

(C) 5.危害性的風切 (wind shear)通常發生在：
(A)靠近暖鋒及滯留鋒面(stationary frontal) (B)風速超過35節 (C)逆溫層及接近雷雨區

原始題號:0013732 題組:0 難易度:中 (R20180823)

(A) 6.在航機起飛或進場時若遭遇逆溫 (inversion) 現象，可能的立即危害為：
(A)風切 (B)強地面風 (C)強對流 (convective currents)

原始題號:0013733 題組:0 難易度:中 (R20190708)

(C) 7.對流層頂 (tropopause) 的特性為何?
(A)無風及無亂流區 (B)雲能發展到的最高位置 (C)溫度隨高度改變之突然變化

原始題號:0013734 題組:0 難易度:中

(C) 8.噴射氣流 (jet stream) 之風速定義為：
(A)30浬/時以上 (B)40浬/時以上 (C)50浬/時以上

原始題號:0013735 題組:0 難易度:中

(A) 9.逆溫 (temperature inversion) 的特性是：
(A)穩定的大氣 (stable layer of air) (B)不穩定的大氣 (unstable layer of air) (C)氣團雷雨 (Air mass thunderstorms)

原始題號:0013736 題組:0 難易度:中

(A) 10.逆溫 (temperature inversion) 通常只會發生在：
(A)穩定的空氣 (stable air) (B)不穩定的空氣 (unstable air) (C)層雲及積雲區

原始題號:0013737 題組:0 難易度:中

(A) 11.哪一種天氣在相對溼度高的情況下容易發生低層大氣的逆溫(temperature inversion)：
(A)低能見度及穩定大氣伴隨的霧, 霾(haze)或低雲 (B)霾(haze)或小雨伴隨的低能見度及輕微的風切(wind shear) (C)霧, 低雲或陣雨伴隨的低能見度及亂流

原始題號:0013738 題組:0 難易度:中

(B) 12.下列何項會增加雨滴凝結的速度？
(A)空氣的平流運動 (B)空氣的上升運動 (C)氣旋式的運動 (Cyclonic movement)

原始題號:0013739 題組:0 難易度:中

(A) 13.在哪一種狀況下你會發現濕雪 (Wet Snow)？
(A)巡航高度的溫度高於0°C (B)巡航高度的溫度低於0℃ (C)由暖氣團飛入冷氣團

原始題號:0013740 題組:0 難易度:中

(C) 14.當冰珠 (Ice Pellet) 出現時表示
(A)正在雷雨區 (B)剛通過冷鋒 (C)更高的高空正在下凍雨(freezing rain)

原始題號:0013741 題組:0 難易度:中

(C) 15.哪一種降水型態表示高空中正在下凍雨 (Freezng Rain)?
(A)雪 (B)冰雹 (Hail) (C)冰珠 (Ice Pellet)

原始題號:0013742 題組:0 難易度:中

(C) 16.哪一種雲係不穩定(Unstable)的氣團受地型抬升影響所致?
(A)層雲及少量的上升運動 (B)層雲及亂流 (C)直展雲

原始題號:0013743 題組:0 難易度:中

(B) 17.哪一種雲最不容易造成飛機結構性積冰(structural icing)?
(A)低雲 (B)高雲 (C)直展雲

原始題號:0013744 題組:0 難易度:中

(C) 18.在山區遇莢狀雲(Standing lenticular clouds)表示：
(A)逆溫 (inversion) (B)不穩定的大氣 (unstable air) (C)亂流

原始題號:0013745 題組:0 難易度:中

(A) 19.哪一種天候狀況造成平流霧(adventcion fog)：
(A)潮溼的氣團移動到較冷的水面或地面 (B)無風的狀態下,潮溼的暖氣團移動到較冷的水面或地面 (C)陸風夾帶冷氣團到暖洋流區 (warm water current)

原始題號:0013746 題組:0 難易度:中

(C) 20.哪一種霧形成時需要風的配合：
(A)蒸發霧(Steam fog)及下坡霧 (down slope fog) (B)地面霧(ground fog)及降水引發的霧 (Precipitation-induced fog) (C)平流霧(Advection fog)及升坡霧(up slope fog)

原始題號:0013747 題組:0 難易度:中

(A) 21.晴空積雲 (Fair weather cumulus clouds)的天氣表示：
(A)亂流區位於雲層及雲底處 (B)能見度差 (C)飛航天氣良好

原始題號:0013748 題組:0 難易度:中

(C) 22.下列何者為穩定大氣（stable air）的特徵：
(A)能見度良好，連續降水及層雲 (B)能見度惡劣，間歇性降水及積雲 (C)能見度惡劣，連續降水及層雲

原始題號:0013749 題組:0 難易度:中

(C) 23.鋒面前方連續性的降雨（Steady precipitation）表示：
(A)層雲及中度亂流 (B)積雲, 輕微或無亂流 (C)層雲輕微或無亂流

原始題號:0013750 題組:0 難易度:中

(C) 24.颮線(squall lines)形成的位置為：
(A)囚錮鋒 (occluded front) (B)冷空氣團裡 (C)冷鋒前方

原始題號:0013751 題組:0 難易度:中

(A) 25.如果機場現在天氣報告為颮線(squall lines)，表示：
(A)風速突然增加16節或以上,而其風速達22節或以上, 且至少持續一分鐘 (B)瞬間陣風至少35節,且至少持續一分鐘以上 (C)風向變化20度以上且瞬間強陣風之風速改變10節以上

原始題號:0013752 題組:0 難易度:中

(B) 26.哪一種雷雨(thunderstorms)會帶來嚴重的冰雹及破壞性強風?
(A)暖鋒 (B)颮線(squall lines) (C)氣團 (Air mass)

原始題號:0013753 題組:0 難易度:中

(C) 27.哪一種狀況是代表著隱藏的雷暴"embedded thunderstorms"的天氣?
(A)隱藏於颮線(squall lines)的強烈雷雨 (B)於穩定的大氣 (stable air mass)中預期雷雨發展 (C)雷暴被廣泛的雲層遮蔽而模糊不清

原始題號:0013754 題組:0 難易度:中

(A) 28.哪一種天氣伴隨著雷雨(thunderstorms)?
(A)閃電 (B)強陣雨 (C)過冷雨 (Supercooled raindrops)

原始題號:0013755 題組:0 難易度:中

(C) 29.飛行員通過亂流區應該:
(A)改變航向, 飛向合乎目視飛行的地區 (B)減速至操作速度並保持平飛 (C)調整推力至亂流穿越速度通過亂流並保持平飛

原始題號:0013756 題組:0 難易度:中

(C) 30.微爆氣流(microburst)的持續時間:
(A)持續時間約2分鐘, 強風持續1分鐘 (B)持續時間約2至4小時 (C)由微爆氣流(microburst)接觸地面開始算起不超過15分鐘

原始題號:0013757 題組:0 難易度:中

(C) 31.霜(frost)如何影響航行安全?
(A)改變機翼形狀和影響空氣動力原理 (B)降低飛機的控制效能 (C)使通過機翼表面氣流提早分離而降低昇力

原始題號:0013758 題組:0 難易度:中

(C) 32.哪一種天氣可以造成快速的結構性積冰(structural icing)?
(A)積雨雲 (B)溼度高及溫度達結冰溫度 (C)凍雨 (Freezing rain)

原始題號:0013759 題組:0 難易度:中

(C) 33.實驗資料指出，機翼前緣或上方有積冰、雪、或霜時，其厚度與粗糙度相似於粗糙的沙紙
(A)降低約50%的升力且增加50%的阻力 (B)增加升力和阻力各約25% (C)降低約30%的升力且增加40%的阻力

原始題號:0013760 題組:0 難易度:中

(C) 34.風切(wind shear)發生的區域為:
(A)只會發生在雷暴中 (B)發生在溫度和壓力驟降的地方 (C)任何高度發生在風向及風速驟變的地方

原始題號:0013761 題組:0 難易度:中

(C) 35.當以3°下滑角飛行，風由尾風轉變成靜風。飛行員應該預期下列何種狀況？
(A)空速和姿態(pitch attitude)減低且飛機有低於下滑道(glide slope)的趨勢 (B)空速和姿態(pitch attitude)增加且飛機有低於下滑道(glide slope)的趨勢 (C)空速和姿態(pitch attitude)增加且飛機有高於下滑道(glide slope)的趨勢

原始題號:0013762 題組:0 難易度:中

(B) 36.航機飛進凍雨(rain which freezes on impact)區域時表示:
(A)航機已在雷暴區 (B)較高空之溫度高於結冰溫度 (C)航機飛入冷鋒鋒面

原始題號:0013763 題組:0 難易度:中

(C) 37.下列何者是預測目的機場(ETA)天氣主要來源：
(A)區域預報(Area Forecast) (B)雷達資料和天氣圖 (C)機場天氣預報TAF

原始題號:0013764 題組:0 難易度:中

(B) 38.SIGMETs是用來警告航員潛在的危險天氣
(A)特別是針對小型飛航器 (B)針對所有的飛航器 (C)針對所有的小型飛航器

原始題號:0013765 題組:0 難易度:中

(C) 39.航員預計於1100Z離場做儀器飛行。何種資料可以提供最精確的現在和預測的積冰狀況？
(A)低層大氣顯著危害天氣圖和區域預報 (B)區域預報和結冰層圖 (C)PIREPs, AIRMETS, and SIGMETS.

原始題號:0013766 題組:0 難易度:中

(B) 40.反氣旋(anticyclone)的天氣形態為何?
(A)靜風 (B)高壓區 (C)鞍場 (Col)

原始題號:0013767 題組:0 難易度:中

(B) 41.高氣壓(high pressure area)的氣流流動方式為:
(A)地面高壓的上升氣流移動到高空低壓 (B)下降至地表後幅散 (C)高空時由高壓向外輻散,地表時則流向高壓

原始題號:0013768 題組:0 難易度:中

(C) 42.熱力低壓(thermal low)常發生在:
(A)極區 (B)颱風眼 (C)日照強烈的乾燥地區

原始題號:0013769 題組:0 難易度:中

(C) 43.滯留鋒(stationary front)的特性為:
(A)暖鋒移動速度為冷鋒的一半 (B)其天氣為強烈冷鋒及強烈暖鋒的組合 (C)地面風有平行流向鋒面之趨勢

原始題號:0013770 題組:0 難易度:中

(C) 44.航機通過鋒面到達冷空氣時:
(A)溫度露點差(Temperature/dew point spread)變小 (B)風改成由左方來 (C)大氣壓力增加

原始題號:0013771 題組:0 難易度:中

(A) 45.造成地面鋒面(surface fronts)快速移動的原因:
(A)高空高流經鋒面 (B)高層低壓系統與地面低壓系統位置一致 (C)冷鋒抬起暖鋒並取代之

原始題號:0013772 題組:0 難易度:中

(B) 46.什麼情況下平流霧(advection fog)會消散或是抬升成低層雲 (stratus clouds)?
(A)逆溫 (Temerature Inversion) (B)風速超過15節 (C)地表輻射

原始題號:0013773 題組:0 難易度:中

(A) 47.形成升坡霧(upslope fog)的天氣條件為:
(A)風帶動暖濕而穩定的空氣向緩坡移動 (B)晴空靜風或微風, 相對濕度達100% (C)降水通過層雲區且風速10到25節使得降水升坡移動

原始題號:0013775 題組:0 難易度:中

(A) 48.如何判斷大氣穩定度(stability)?
(A)環境溫度遞減率 (Ambient temperature lapse rate) (B)不同空層之大氣壓力 (C)地面溫度和露點的差距

原始題號:0013776 題組:0 難易度:中

(B) 49.通常逆溫(inversion)發生於:
(A)對流層頂 (B)平流層 (C)積雲底

原始題號:0013777 題組:0 難易度:中

(A) 50.逆溫(inversion)的特性是:
(A)穩定大氣 (B)不穩定大氣 (C)氣團性雷暴 (Air mass thunderstorms)

原始題號:0013778 題組:0 難易度:中

(C) 51.地表逆溫(ground-based inversion)的特性是:
(A)對流局限於地表 (B)低溫 (C)低能見度

原始題號:0013779 題組:0 難易度:中

(B) 52.場站氣壓值，係指：
(A)高度表撥定值 (B)機場標高之實際壓力值 (C)已修正至海平面的場站氣壓

原始題號:0013780 題組:0 難易度:中

(B) 53."氣團性雷暴(Air mass thunderstorms)"及"穩定性雷暴(Steady-state thunderstorms)"有何不同?
(A)氣團性雷暴(Air mass thunderstorms)的降雨區在上升氣流以外的區域 (B)降雨及下沖氣流會抑制氣團性雷暴(Air mass thunderstorms)的上升氣流 (C)地表加熱是造成穩定狀態雷暴(Steady-state thunderstorms)的主要因素

原始題號:0013781 題組:0 難易度:中

(B) 54.哪一種雷暴最容易產生漏斗雲或龍捲風 ?
(A)氣團性雷暴 (B)冷鋒或颮線的雷暴 (C)夾帶積冰和過冷水的雷暴

原始題號:0013782 題組:0 難易度:中

(A) 55.哪一種雲夾帶嚴重的亂流以及產生漏斗狀雲?
(A)乳房狀積雨雲 (B)莢狀雲 (C)層積雲

原始題號:0013783 題組:0 難易度:中

(B) 56.颮線最常發生的位置為:
(A)囚錮鋒 (B)冷鋒前 (C)滯留鋒後

原始題號:0013784 題組:0 難易度:中

(B) 57.航機遇到冰珠(ice pellets)時顯示:
(A)高空中有雷暴 (B)高空中有凍雨 (Freezing rain) (C)高空中有雪

原始題號:0013785 題組:0 難易度:中 (R20190702)

(A) 58.飛機表面何時最容易結霜:
(A)晴朗夜間,微風,穩定大氣 (B)夜間密雲,並夾帶凍毛毛雨 (freezing drizzle) (C)晴朗夜間,微風,對流強烈, 溫度露點差 (temperature/dew point spread)小

原始題號:0013786 題組:0 難易度:中

(B) 59.過冷水(supercooled water)的特性為
(A)過冷水碰撞後即昇華成冰 (B)不穩定的水滴，遇到物體表面即迅速結冰 (C)是0°C的水滴遇到機體表面即累積成明冰 (clear ice)

原始題號:0013787 題組:0 難易度:中

(A) 60.噴射氣流(jet stream)的最強風速位於:
(A)噴射氣流核心之靠近極地對流層頂斷裂處 (B)噴射氣流核心下方之噴射氣流區域 (C)近熱帶地區之噴射氣流核心下方

原始題號:0013789 題組:0 難易度:易

(A) 61.導致全球天氣變化的主要因素為何？
(A)地球表面受到太陽照射的不同。 (B)地表上的氣壓變化。 (C)從潮濕地區到乾燥地區的氣團移動。

原始題號:0013790 題組:0 難易度:中

(C) 62.熱低壓(thermal low)的通常位置在何處？
(A)在北極上空。 (B)在颶風眼(eye of a hurricane)上空。 (C)位於乾燥、晴朗的地表上空。

原始題號:0013791 題組:0 難易度:易

(B) 63.高壓地區氣流的特徵為何？
(A)在高高度時由地表高處往較低壓處上升。 (B)下沈至地表然後向外擴散。 (C)高高度時由高處向外延伸，地表處則往高處移動。

原始題號:0013792 題組:0 難易度:易

(A) 64.在較低的大氣層中，摩擦導致風吹越等壓線(isobars)，吹向低壓處，其原因為摩擦力(A)減低了風速與科氏力(Coriolis force)。 (B)減少了氣壓梯度力(pressure gradient force)。 (C)製造了亂流(air turbulence)並提高了大氣壓力(atmospheric pressure)。

原始題號:0013793 題組:0 難易度:易

(C) 65.科氏力(Coriolis force)在何地對風向的影響最小？
(A)兩極(poles)。 (B)中緯度區(30度到 60度)。 (C)赤道(Equator)。

原始題號:0013794 題組:0 難易度:易

(A) 66.在南半球，科氏力(Coriolis force)如何影響風向？
(A)導致低氣壓順時鐘方向旋轉。 (B)導致風從低壓吹向高壓。 (C)與北半球完全一樣的影響。

原始題號:0013795 題組:0 難易度:易

(B) 67.哪一種氣候狀況被稱為反氣旋(anti-cyclone)？
(A)靜風(calm)。 (B)高氣壓地區。 (C)鞍點(COL)。

原始題號:0013796 題組:0 難易度:中

(B) 68.北半球的哪一個或哪些地區，其天氣系統大多是由東向西移動的？
(A)只有北極(Arctic)。 (B)北極與亞熱帶(subtropical)。 (C)只有亞熱帶。

原始題號:0013797 題組:0 難易度:中

(A) 69.北極(Arctic)區的夏季雷暴(thunderstorm)通常會如何移動？
(A)在極地東風帶(polar easterlies)中，從東北移向西南。 (B)伴隨著噴射氣流(jetstream)，由西南往東北移動。 (C)伴隨著低壓極地氣流(low level polar airflow)，直接由北朝南移動。

原始題號:0013798 題組:0 難易度:易

(B) 70.對流層(troposphere)的特性為何？
(A)包含了大氣層(atmosphere)中所有的水分。 (B)大體而言，溫度隨著高度的增加而下降。 (C)對流層頂的平均高度大約為六英里。

原始題號:0013799 題組:0 難易度:易

(A) 71.當高度接近對流層頂(tropopause)，其天氣特徵為何？
(A)有極大的風以及狹窄的風切區(wind shear zone)。 (B)對流層頂以上，溫度驟然上升。 (C)對流層頂有一薄層捲雲和冰晶。

原始題號:0013800 題組:0 難易度:易

(C) 72.哪一項特點與對流層頂(tropopause)有關？
(A)沒有風及亂流(turbulence)。 (B)是雲生成的絕對上限。 (C)溫度直減率(temperature lapse rate)的驟然改變。

原始題號:0013801 題組:0 難易度:中

(B) 73.逆溫(inversion)通常出現在何處？
(A)對流層頂(tropopause)。 (B)平流層(stratosphere)。 (C)積雲(cumulus clouds)底部。

原始題號:0013802 題組:0 難易度:易

(B) 74.噴射氣流(jetstream)通常出現在何處？
(A)平流層(stratosphere)中具有強烈低氣壓系統的區域。 (B)在對流層頂(tropopause)，氣溫梯度(temperature gradient)密集的地方。 (C)是一個環繞地球連續相連之帶狀地區，位於赤道與極地對流層頂(tropopause)的斷裂處。

原始題號:0013803 題組:0 難易度:中

(B) 75.哪一種雲可能與噴射氣流(jetstream)有關？
(A)噴射氣流通過冷鋒(cold front)處的積雨雲(Cumulonimbus)。 (B)噴射氣流近赤道側(equatorial side)的捲雲(Cirrus)。 (C)近極地側(polar side)及噴射氣流下方的卷層雲帶(Cirrostratus cloud band)。

原始題號:0013804 題組:0 難易度:中

(A) 76.噴射氣流(jetstream)引起的最大陣風通常出現於何處？
(A)在噴流心(jet core)近極地側(polar side)，對流層頂(tropopause)斷裂處的附近。 (B)位於伸展得很長的噴射氣流的噴流心下方。 (C)位於噴射氣流的近赤道側(equatorial side)，水氣形成卷狀雲(cirriform cloud)之處。

原始題號:0013805 題組:0 難易度:易

(A) 77.何者是用以描述一狹長的低壓帶？
(A)低壓槽(Trough)。 (B)高壓脊(Ridge)。 (C)颶風(hurricane)或颱風 (typhoon)。

原始題號:0013806 題組:0 難易度:中

(C) 78.滯留鋒(stationary front)的特徵為何？
(A)暖鋒面(warm front surface)的移動速度是冷鋒面(cold front surface)的一半。 (B天氣情況為強烈冷鋒與強烈暖鋒的混合天氣。 (C)地表風向與鋒面帶(frontal zone)平行。

原始題號:0013807 題組:0 難易度:中

(C) 79.當航空器穿越鋒面(front)，進入較冷的大氣後，通常會引起什麼樣的狀況？
(A)溫度／露點差(temperature/ dewpoint spread)降低。 (B)風向轉向左方。 (C)氣壓(atmospheric pressure)增加。

原始題號:0013808 題組:0 難易度:中

(B) 80.當一個地區出現鋒消(frontolysis)的報告時，可以預期天氣型態將會有什麼樣的改變？
(A)鋒面天氣將會變得更強。 (B)鋒面(front)正在消散。 (C)鋒面正加快速度移動中。

原始題號:0013809 題組:0 難易度:易

(A) 81.哪一種大氣因素導致地表鋒面(surface front)的快速移動？
(A)高空風吹過鋒面。 (B)高空低壓的位置直接覆蓋在地表低壓之上。 (C)冷鋒(cold front)追上並抬起暖鋒(warm front)。

原始題號:0013810 題組:0 難易度:中

(B) 82.何種天氣狀況會形成鋒面波(frontal wave)及低壓區？
(A)暖鋒(warm front)或囚錮鋒(occluded front)。 (B)移動緩慢的冷鋒(cold front)或滯留鋒(stationary front)。 (C)冷鋒囚錮(cold front occlusion)。

原始題號:0013811 題組:0 難易度:中

(B) 83."乾燥線"(dry line)兩側的天氣有何差異？
(A)極端的溫度差。 (B)露點(dewpoint)差異。 (C)層雲(stratus cloud)與積雲(cumulus cloud)的差異。

原始題號:0013812 題組:0 難易度:易

(A) 84.相對於地表低壓(surface low)及鋒面(front)，噴射氣流(jetstream)通常出現在何處？
(A)噴射氣流位於地表系統的北方。 (B)噴射氣流位於低壓和暖鋒的南方。 (C)噴射氣流位於低壓之上，並穿越暖鋒(warm front)與冷鋒(cold front)。

原始題號:0013813 題組:0 難易度:中

(C) 85.噴射氣流(jetstream)通常穿越何種鋒面系統(frontal system)？
(A)冷鋒(cold front)與暖鋒(warm front)。 (B)暖鋒。 (C)囚錮鋒(occluded front)。

原始題號:0013814 題組:0 難易度:易

(C) 86.下列何者用於描述大氣溫度因壓縮(compression)或膨脹(expansion)而改變，但熱力(heat)並無增減的情況？
(A)下滑(katabatic)。 (B)平流(advection)。 (C)絕熱(adiabatic)。

原始題號:0013815 題組:0 難易度:易

(A) 87.導致絕熱冷卻(adiabatic cooling)的過程為何？
(A)當空氣上升時的膨脹(expansion)。 (B)空氣流過較冷的地表。 (C)氣化過程(vaporization process)中的潛熱(latent heat)釋放。

原始題號:0013816 題組:0 難易度:中

(C) 88.哪一種風吹下坡時會變得溫暖而乾燥？
(A)陸風(land breeze)。 (B)谷風(valley wind)。 (C)下吹風(katabatic wind)。

原始題號:0013817 題組:0 難易度:易

(A) 89.未飽和空氣(unsaturated air)往上坡吹時的冷卻率約為何？
(A)每一千呎3度C。 (B)每一千呎2度C。 (C)每一千呎4度C。

原始題號:0013818 題組:0 難易度:易

(A) 90.當水蒸氣(water vapor)在雷暴(thunderstorm)中被抬昇轉化為液態時，會產生怎樣的結果？
(A)潛熱(latent heat)被釋放到大氣中。 (B)潛熱被轉化為單純的能量(pure energy)。 (C)潛熱被周遭空氣裡的小水滴(water droplet)所吸收。

原始題號:0013819 題組:0 難易度:易

(A) 91.在露點直減率(dewpoint lapse rate)和乾絕熱直減率(dry adiabatic lapse rate)會合(converge)的高度，會產生何種氣候狀況？
(A)雲底形成。 (B)開始降水。 (C)穩定的空氣變得不穩定。

原始題號:0013820 題組:0 難易度:易

(B) 92.當飽和空氣(saturated air)往山下移動，其溫度的增加情形為何？
(A)由於潛熱(latent heat)的釋放，所以會以高於乾空氣的速率增加。 (B)由於氣化(vaporization)需要熱量，所以會以較低於乾空氣的速率增加。 (C)由於熱因凝結(condensation)而釋出，所以會以低於乾空氣的速率增加。

原始題號:0013821 題組:0 難易度:易

(A) 93.下列何者與逆溫(temperature inversion)有關？
(A)穩定的大氣層。 (B)不穩定的大氣層。 (C)氣團性雷暴(air mass thunderstorm)。

原始題號:0013822 題組:0 難易度:易

(C) 94.一個氣團(air mass)中如果隨著高度上升，其溫度不變或是僅略微下降，則
(A)該氣團不穩定。 (B)有逆溫(temperature inversion)層存在。 (C)該氣團是穩定的。

原始題號:0013823 題組:0 難易度:易

(A) 95.若一塊區域性的氣團是穩定的，則會出現何種現象？
(A)該氣團會抗拒對流(convection)。 (B)將無法強迫該氣團吹向上坡(uphill)。 (C)當該氣團向上抬升時，其溫度會變得較其周圍空氣為暖。

原始題號:0013824 題組:0 難易度:易

(A) 96.如何確定大氣的穩定性(stability)？
(A)環境溫度直減率(ambient temperature lapse rate)。 (B)各別高度的大氣壓力(atmospheric pressure)。 (C)地表溫度/露點(dewpoint)差(spread)。

原始題號:0013825 題組:0 難易度:易

(C) 97.何者是陸基逆溫(ground-based inversion)的特徵？
(A)地表的對流氣流(convection current)。 (B)溫度寒冷。 (C)能見度(visibility)低。

原始題號:0013826 題組:0 難易度:易 (R20190702)

(A) 98.一天24小時當中，最低溫通常發生在何時？
(A)日出後。 (B)大約日出前一小時。 (C)午夜。

原始題號:0013827 題組:0 難易度:易

(C) 99.何種情況最常造成陸基或地表逆溫(ground- or surface-based inversion)？
(A)較冷空氣移至暖空氣下方，或是暖空氣移至冷空氣上方。 (B)在高處大範圍的氣流下沈因壓縮(compression)而生熱 (C)在晴朗、幾乎無風夜裡的地球輻射(terrestrial radiation)。

原始題號:0013828 題組:0 難易度:易

(B) 100.霾層(haze layer)如何變得清朗或消散(dispersed)？
(A)藉由涼爽夜晚的對流混合(convective mixing)。 (B)藉由風或大氣的流動。 (C)藉由類似霧氣(fog)消散的蒸發(evaporation)方式。

原始題號:0013829 題組:0 難易度:中

(B) 101.當平流霧(advection fog)形成後，何者可能將其驅散或抬昇成為低層雲(stratus cloud)？
(A)逆溫(temperature inversion)。 (B)速度大於15節的風。 (C)地表輻射(surafce radiation)。

原始題號:0013830 題組:0 難易度:易

(A) 102.何者是上坡霧(upslope fog)形成所需的要素？
(A)潮濕穩定的空氣，被風吹向逐漸抬昇的地面。 (B)清朗的天空，極少或者無風，以及百分之百的相對濕度(relative munidity)。 (C)穿越層雲(strtus cloud)的降水，被風速10到25節的風吹升上坡。

原始題號:0013831 題組:0 難易度:易

(A) 103.下列哪一種情況會在大湖的背風面(lee side)產生天氣變化？
(A)暖空氣流經較冷湖面可能產生霧(fog)。 (B)冷空氣流經較暖湖面可能產生平流霧。 (C)暖空氣流經涼爽湖面可能產生陣雨(rain shower)。

原始題號:0013832 題組:0 難易度:易

(B) 104.哪一種大氣現象代表著雷暴(thunderstorm)成熟階段(mature stage)的開始？
(A)砧狀雲頂(anvil top)的出現。 (B)降雨開始到達地表。 (C)雲的成長率(growth rate of the cloud)達到最大。

原始題號:0013833 題組:0 難易度:易

(B) 105.在雷暴的生命週期中，哪一個階段特徵為絕大多數是下衝流(downdraft)？
(A)積雲(cumulus)。 (B)消散(dissipating)。 (C)成熟(mature)。

原始題號:0013834 題組:0 難易度:易

(C) 106.通常和雷暴(thunderstorm)的積雲(cumulus)期有關的特徵為何？
(A)降雨開始到達地表。 (B)閃電(lightning)頻繁。 (C)持續的上衝流(updraft)。

原始題號:0013835 題組:0 難易度:中

(A) 107.成熟雷暴(mature thunderstorm)中的下衝流(downdraft)為何會危險？
(A)下衝流因冰冷的雨水而維持在冷卻的狀態，這會加快下衝速度的傾向。 (B)下衝流在觸及地面後，會向位於雷雨下方的中央處會合。 (C)下衝流變得比周遭空氣溫暖並且在觸及地表前反向變為上衝流(updraft)。

原始題號:0013836 題組:0 難易度:易

(B) 108.颮線(squall line)最常形成於何處？
(A)囚錮鋒(occluded front)。 (B)冷鋒(cold front)前方。 (C)滯留鋒(stationary front)後方。

原始題號:0013837 題組:0 難易度:中

(B) 109.氣團性雷暴(air mass thunderstorm)和穩定狀態雷暴(steady-state thunderstorm)有何不同？
(A)氣團性雷暴的降水落在上衝氣流(updraft)之外。 (B)氣團性雷暴的氣流下衝(downdraft)，且降水會減緩上衝氣流並使其逆轉(reverse)。 (C)穩定性雷暴與局部地表加熱(surface heating)有關。

原始題號:0013838 題組:0 難易度:易

(B) 110.哪一種雷暴(storm)最可能產生漏斗雲(funnel cloud)或龍捲風(tornado)？
(A)氣團性雷暴(air mass thunderstorm)。 (B)冷鋒(cold front)或颮線雷暴(squall line thunderstorm)。 (C)和積冰(icing)以及過冷水(supercolled water)有關的暴風。

原始題號:0013839 題組:0 難易度:易

(A) 111.哪一種類型的雲與暴亂流(violent turbulence)有關，並且有發展為漏斗雲(funnel cloud)的趨勢？
(A)乳房狀積雨雲(cumulonimbus mamma)。 (B)靜止的筴狀雲(standing lenticular)。 (C)層積雲(stratocumulus)。

原始題號:0013840 題組:0 難易度:易

(A) 112.何者為非鋒面性不穩定帶(nonfrontal instability band)的典型天候？
(A)颮線(squall line)。 (B)平流霧(advective fog)。 (C)鋒生(frontgenesis)。

原始題號:0013841 題組:0 難易度:中

(A) 113.劇烈雷暴(severe thunderstorm)的地表風速為多少？
(A)風速58英里(MPH)或更大，且(或是)地表冰雹(hail)的直徑達四分之三英吋或以上。 (B)風速50節(knot)或以上，且（或是）地表冰雹的直徑達二分之一英吋或以上。 (C)風速45節或以上，且（或是）地表冰雹的直徑達一英吋或以上。

原始題號:0013842 題組:0 難易度:中

(B) 114.所謂的颮(squall)，係指平均風速至少16節(knot)的風突然增加於持續風速:
(A)24節或以上，持續至少一分鐘。 (B)22節或以上，持續至少一分鐘。 (C)20節或以上，持續至少一分鐘。

原始題號:0013843 題組:0 難易度:中

(B) 115.肇因於雷暴(thunderstorm)的大氣壓力改變，其最低值出現在何時？
(A)出現於下衝氣流(downdraft)及大陣雨(heavy shower)期間。 (B)當雷暴接近時。 (C就在陣雨(rain shower)剛結束之際。

原始題號:0013844 題組:0 難易度:易

(C) 116.穿透層雲層(stratus layer)的對流雲(convective cloud)會對儀器飛行(instrument flight)造成何種威脅？
(A)凍雨(freezing rain)。 (B)晴空亂流(clear air turbulence)。 (C)隱藏的雷暴(embedded thunderstorm)。

原始題號:0013845 題組:0 難易度:易

(C) 117.何謂"隱藏的雷暴(embedded thunderstorm)"？
(A)掩藏於颮線(squall line)中的劇烈雷暴(severe thunderstorm)。 (B)於穩定氣團(air mass)中預期發展之雷暴。 (C)強烈雷暴(severe thunderstorm)被其他種類的雲所阻礙了。

原始題號:0013846 題組:0 難易度:易

(C) 118.雷達螢幕(radar scope)上，一連串雷暴回波(thunderstorm)中，沒有回波(clear)的區域意味著？
(A)該區域無雲。 (B)沒有對流亂流(convective turbulence)的區域。 (C)未偵察到有降水(precipitation)的區域。

原始題號:0013847 題組:0 難易度:易

(A) 119.飛越強烈雷暴(severe thunderstorm)上方時，至少需較雲層高多少？
(A)風速每10節(knot)高1000呎。 (B)2500呎。 (C)較任何中度至強烈亂流層(moderate to severe turbulence layer)高500呎。

原始題號:0013848 題組:0 難易度:中

(B) 120."強烈風切(severe wind shear)"的定義為何？
(A)快速的水平風速改變超過25節(knot)，垂直風切除外。 (B)風向或風速的快速改變，導致空速改變大於15節，或垂直升降速率(vertical speed)改變超過每分鐘500呎。 (C)任何持續超過20秒且大於20節的空速改變，或垂直升降速率改變超過每分鐘100呎。

原始題號:0013849 題組:0 難易度:易

(B) 121.相較於中度頂風(moderate headwind)時進場，沿著下滑道(glide slope)下降時，什麼樣的情形代表著可能遭遇到頂風減少的風切(wind shear)？
(A)需要的動力減少了。 (B)需要較高的俯仰姿態(pitch attitude)。 (C)下降率(descent rate)減低。

原始題號:0013850 題組:0 難易度:易

(C) 122.當頂風(headwind)變為靜風(calm wind)，飛航組員首先應該發現駕駛艙顯示為何？
(A)指示空速(indicated airspeed)減少，航空器俯仰上升(pitch up)，且高度降低。 (B)指示空速增加，航空器俯仰降低(pitch down)，且高度增加。 (C)指示空速減少，航空器俯仰降低，且高度降低。

原始題號:0013851 題組:0 難易度:易

(C) 123.什麼狀況一開始會導致指示空速(indicated airspeed)以及俯仰角度(pitch)增加，並使下沈率(sink rate)減低？
(A)頂風分量(headwind component)的突然減少。 (B)尾風(tailwind)速度突然增加。 (C)頂風分量的突然增加。

原始題號:0013852 題組:0 難易度:易

(C) 124.當一持續的(constant)尾風(tailwind)變為靜風(calm wind)，飛航組員首先應該發現到的駕駛艙顯示為何？
(A)高度增加，俯仰(pitch)及指示空速(indicated airspeed)減少。 (B)高度、俯仰以及指示空速減少。 (C)高度、俯仰以及指示空速增加。

原始題號:0013853 題組:0 難易度:易

(B) 125.何種風切(wind-shear)會導致空速(airspeed)喪失？
(A)頂風(headwind)或尾風(tailwind)減少。 (B)頂風減少及尾風增加。 (C)頂風增加及尾風減少。

原始題號:0013854 題組:0 難易度:易

(C) 126.何種風切(wind-shear)會使得空速(airspeed)增加？
(A)尾風(tailwind)增加及頂風(headwind)減少。 (B)尾風及頂風增加。 (C)尾風減少及頂風增加。

原始題號:0013855 題組:0 難易度:易

(A) 127.當起飛時遭遇強度增加的尾風風切(tailwind shear)，飛機的性能有何改變？
(A)空速(airspeed)喪失或減低。 (B)起飛距離減少。 (C)起飛後爬升性能(climb performance)會立刻增加。

原始題號:0013856 題組:0 難易度:易

(B) 128.在下滑道(glide slope)上以推力(thrust)來維持所需的指示空速(indicated airspeed)，當尾風風切突然改變成恆定的頂風(constant headwind)時，會有和變化？
(A)俯仰姿態(pitch attitude)：增加。垂直速度(vertical speed)：增加。指示空速(indicated airspeed)：先減少，然後再增加至進場速度(approach speed)。 (B)俯仰姿態：增加。垂直速度：減少。指示空速：先增加，然後再減少。 (C)俯仰姿態：減少。垂直速度：減少。指示空速：先減少，然後再增加至進場速度。

原始題號:0013857 題組:0 難易度:易

(C) 129.風切(wind shear)的重要特徵為何？
(A)主要與雷雨(thunderstorm)所造成的水平渦流(lateral vortex)有關。 (B)通常只存在於雷雨周遭，但也可能存在於強烈逆溫層(temperature inversion)附近。 (C)可能與風向改變(wind shift)有關，或者跟任一空層的風速梯度(windspeed gradient)有關。

原始題號:0013858 題組:0 難易度:易

(C) 130.與雷暴(thunderstorm)有關，由風切(wind shear)所引起會造成最大危害的區域位於何處？
(A)雷雨胞(thunderstorm cell)前方(砧狀雲側(anvil side))且位於雷雨胞的西南側。 (B)滾軸雲(roll cloud)或陣風鋒面(gust front)之前，且在砧狀雲正下方。 (C)雷雨胞正下方的每一方位。

原始題號:0013859 題組:0 難易度:中

(B) 131.發生低高度逆溫風切(low-level temperature inversion wind shear)的必要條件為何？
(A)冷熱兩層間的溫度差異至少有10度C。 (B)地表附近無風或有微風，且逆溫層正上方有相對較強的風。 (C)地表附近與逆溫層正上方的風向差異至少為30度。

原始題號:0013860 題組:0 難易度:中

(B) 132.亂流(turbulence)(中度或強烈)的關鍵，水平風切的風速為每150哩多少節？
(A)18節(knot)或更低。 (B)高於18節。 (C)無關緊要，只有垂直風切(vertical shear)才是關鍵。

原始題號:0013861 題組:0 難易度:易

(C) 133.單獨一個微爆氣流(microburst)的預期持續時間為多久？
(A)兩分鐘，而其最大的風，持續約一分鐘。 (B)一個微爆氣流可能會持續兩到四小時。 (C)從微爆氣流侵襲地面至消散為止的時間，極少超過15分鐘。

原始題號:0013862 題組:0 難易度:易

(C) 134.在微爆氣流(microburst)中遭遇到的最大下衝流(downdraft)，其強度可能為？
(A)每分鐘8000呎。 (B)每分鐘7000呎。 (C)每分鐘6000呎。

原始題號:0013863 題組:0 難易度:易

(B) 135.當航空器在微爆氣流(microburst)中遭遇40節頂風時，可預期穿越微爆氣流時的總風速改變為多少？
(A)40節(knot)。 (B)80節。 (C)90節。

原始題號:0013864 題組:0 難易度:易

(C) 136.都卜勒風速計(Doppler wind measurement)顯示出，當穿越微爆氣流(microburst)的最強處，飛航組員可預期的風速改變大約為多少？
(A)15節(knot)。 (B)25節。 (C)45節。

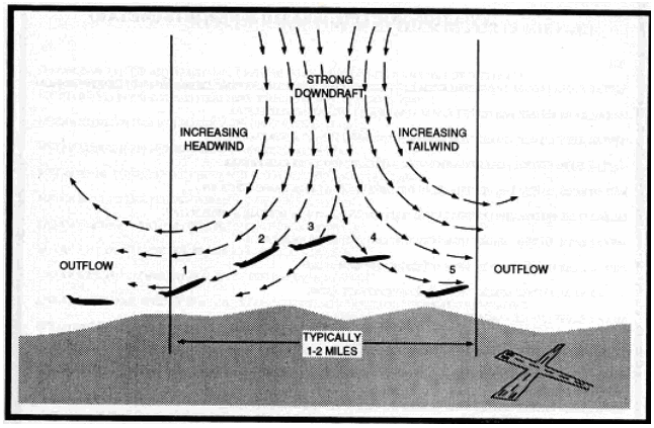
原始題號:0013865 題組:0 難易度:易

(C) 137.當航空器在微爆氣流(microburst)中遭遇45節頂風時，可預期穿越微爆流時的總風速改變為多少？
(A)40節(knot)。 (B)80節。 (C)90節。

原始題號:0013866 題組:1 難易度:中 (R20130125)

(C) 138.(參閱figure A) 假使遭遇到微爆氣流(microburst)，航空器所處的哪一個位置有最劇烈的下衝流(downdraf)？
(如圖A43_figureA)
(A)4和5。 (B)2和3。 (C)3和4。

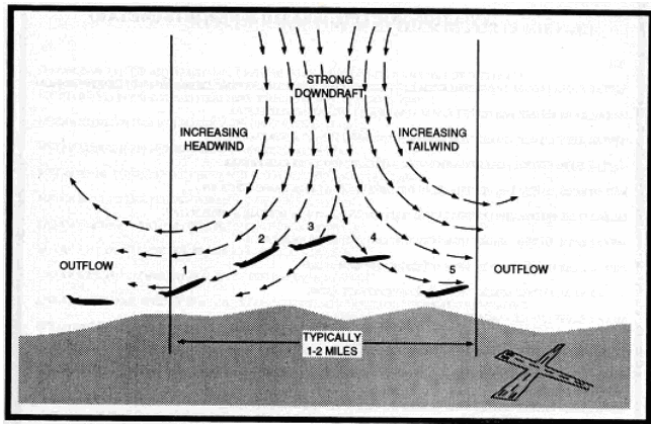
題目圖：



原始題號:0013867 題組:2 難易度:易 (R20130125)

(C) 139.(參閱figure A) 當穿越微爆流(microburst)，在沒有改變俯仰(pitch)或動力(power)的情況下，哪一架航空器將會有性能(performance)的提升？
(如圖A43_figureA)
(A)3 (B)2 (C)1

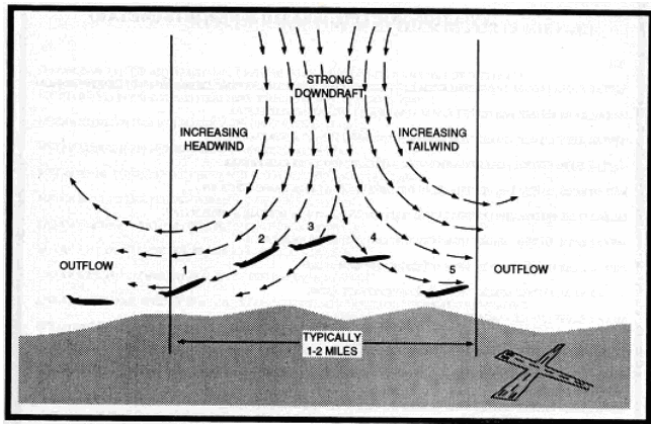
題目圖：



原始題號:0013868 題組:3 難易度:易 (R20130125)

(C) 140.(參閱figure A) 當航空器在位置3遭遇微爆氣流(microburst)時，會產生什麼結果？
(如圖A43_figureA)
(A)頂風(headwind)減少。 (B)尾風(tailwind)增加。 (C)強烈下衝流(downdraft)。

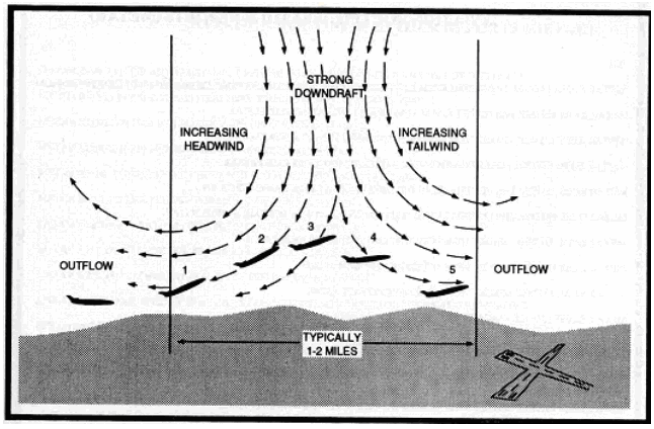
題目圖：



原始題號:0013869 題組:4 難易度:易 (R20130125)

(A) 141.(參閱figure A) 當航空器在位置4遭遇微爆氣流(microburst)時，會產生什麼結果？(如圖A43_figureA)
(A)強烈尾風(tailwind)。 (B)強烈上衝流(updraft)。 (C)性能(performance)的顯著提升。

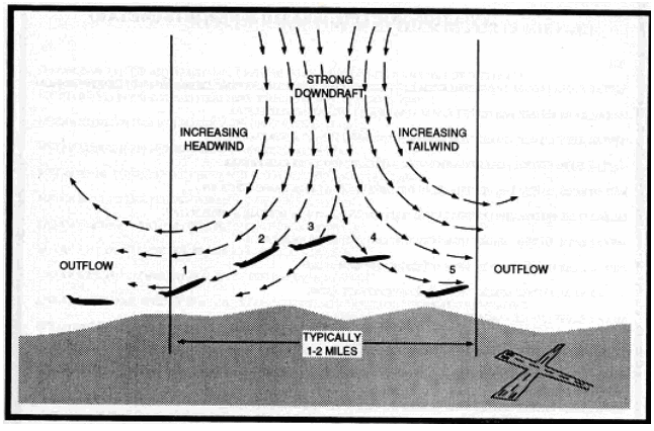
題目圖：



原始題號:0013870 題組:5 難易度:易 (R20130125)

(B) 142.(參閱figure A) 位置4的航空器遭遇微爆氣流(microburst)時會受到何影響？(如圖A43_figureA)
(A)尾風(tailwind)與上衝流(updraft)使性能(performance)提升。 (B)尾風與下衝流(downdraft)使性能降低。 (C)頂風與下衝流使性能降低。

題目圖：



原始題號:0013871 題組:0 難易度:易

(C) 143.來自塔台的下述指示傳達出何種資訊？"SOUTH BOUNDARY WIND ONE SIX ZERO AT TWO FIVE WEST BOUNDARY WIND TWO FOUR ZERO AT THREE FIVE."
(A)下爆氣流(downburst)位於機場中央。 (B)起降跑道西側有機尾亂流(wake turbulence)。 (C)機場上空或附近可能有風切(wind shear)。

原始題號:0013872 題組:0 難易度:中

(C) 144.因風切(wind shear)導致的空速損失及其後的升力損失，應用何種操作技巧來應對？
(A)降低俯仰姿態(pitch)，重新獲取失去的空速。 (B)應避免飛機遭受過多應力，應"控制俯仰姿態以維持速度(pitch to airspeed)"，並將油門加至最大。 (C)維持或增加俯仰姿態並忍受低於正常之空速。

原始題號:0013873 題組:0 難易度:易

(A) 145.飛機上結冰、雪、霜時，會有何影響？
(A)增加失速速度(stall speed)。 (B)增加俯仰向下(pitch down)的傾向。 (C)增加失速時的攻角(angle of attack)。

原始題號:0013874 題組:0 難易度:中

(C) 146.測試資料顯示，位於機翼前緣(leading edge)及上層(upper surface)，厚度與粗糙度近似於中號或大顆粒砂紙的冰、雪或霜將導致？
(A)升力(lift)降低百分之四十，阻力(drag)增加百分之三十。 (B)增加阻力並降低升力各百分之四十。 (C)升力降低百分之三十，阻力增加百分之四十。

原始題號:0013875 題組:0 難易度:易

(C) 147.冰、雪或霜對航空器性能及飛行特性所造成的不利影響包括升力的減低及？
(A)推力(thrust)的增加。 (B)失速速度(stall speed)的降低。 (C)失速速度的增加。

原始題號:0013876 題組:0 難易度:中

(C) 148.將飛機除/ 防冰(deicing/anti-icing)時，相較於兩步驟法(two-step process)，單步驟(one-step)法之缺點為何？
(A)較為複雜。 (B)維持時間(holding time)增加。 (C)當飛機上有大片冰層及雪淤積必須去除時，單步驟法需要用到更多的液體。

原始題號:0013877 題組:0 難易度:中

(B) 149.在無降水(non-precipitation)的狀況下用水稀釋乙烯(ethylene)乙二醇(glycol)除冰液(deicing fluid)的目的在於？
(A)降低溶點(eutectic point)。 (B)降低冰點(freeze point)。 (C)增加最低冰點(minimum freeze point)(開始結晶化點)。

原始題號:0013878 題組:0 難易度:中

(A) 150.採用兩步驟法(two-step process)將飛機除/ 防冰(deicing/anti-icing)時，何種程序能夠增加維持時間(holding time)？
(A)先用加熱過的一型液體(Type 1 fluid)，再用冷的二型液體(Type 2 fluid)。 (B)先用冷的二型液體，再用熱的二型液體。 (C)先用加熱過的一型或二型液體，再用冷的一型液體。

原始題號:0013879 題組:0 難易度:中

(A) 151.採用兩步驟法(two-step process)除冰的過程中，下例何者將會使持續時間(holding time)減少？
(A)使用加熱過的二型液體(Type 2 fluid)。 (B)減少水的含量。 (C)增加一型液體(Type 1 fluid)的黏性。

原始題號:0013880 題組:0 難易度:中

(C) 152.進行兩步驟法(two-step process)的最後一個步驟時，除/ 防冰(deicing/anti-icing)液的溫度應該為何？
(A)熱的。 (B)溫的。 (C)冷的。

原始題號:0013881 題組:0 難易度:中

(C) 153.一型除/防冰液體(Type 1 deicing/anti-icing fluid)的乙二醇(glycol)最低含量為多少？
(A)百分之三十。 (B)百分之五十。 (C)百分之八十。

原始題號:0013882 題組:0 難易度:中

(B) 154.二型除/防冰液體(Type 2 deicing/anti-icing fluid)的乙二醇(glycol)最低含量為多少？
(A)百分之三十。 (B)百分之五十。 (C)百分之八十。

原始題號:0013883 題組:0 難易度:中

(C) 155.除冰液(anit-icing fluid)應提供防止結冰保護至？
(A)至外界溫度華氏零下20度。 (B)至外界溫度華氏32度或更低。 (C)不超過低於外界或飛機表面溫度華氏20度的冰點(freezing point)。

原始題號:0013884 題組:0 難易度:中

(B) 156.用於除冰的冰點抑制劑(Freezing Point Depressant, FPD)
(A)能夠在飛行當中提供積冰防護。 (B)只能夠在地面上提供積冰防護。 (C)只用於在地面時，不會使起飛時的性能變差(performance degradation)。

原始題號:0013885 題組:0 難易度:中

(B) 157.附著於防冰液(anti-icing fluid)上的雪
(A)不需被認定為附著於航空器上。 (B)必須被認定為附著於航空器上。 (C)必須被認定為附著於航空器上，但因會被吹散，故可以安全起飛。

原始題號:0013886 題組:0 難易度:中

(C) 158.冰點抑制劑(Freezing Point Depressant, FPD)高度地可溶於水，但是
(A)接觸到FPD時，冰的吸收慢，但溶解快。 (B)當接觸到FPD時，冰吸收得非常快，但溶解速度慢。 (C)當接觸到FPD時，冰的吸收與溶解都慢。

原始題號:0013887 題組:0 難易度:易

(C) 159.冰點抑制劑(Freezing Point Depressant, FPD)的液體殘留於引擎風扇(engine fan)或壓縮機葉片(compressor blade)
(A)可提升性能(performance)並導致失速(stall)或衝激(surge) (B)可能導致FDP氣化進入航空器內，但不影響引擎推力(thrust)及動力(power)。 (C)可能導致引擎性能降低並造成衝激及/或壓縮機失速。

原始題號:0013888 題組:0 難易度:中

(B) 160.由北美民航業所發展出並廣為接受的程序，是使用傳統的北美除冰液(fluid)，這可以保證所留在飛機上薄薄一層的冰點(freeze point)比外界溫度低至少
(A)華氏10度。 (B)華氏20度。 (C)攝氏20度。

原始題號:0013889 題組:0 難易度:易

(B) 161.過冷水(supercooled water)的特徵為何？
(A)水滴在撞擊之後會昇華(sublimate)為冰粒(ice particle)。 (B)不穩定的水滴在撞擊無遮蔽的物體之後會結成冰(freeze)。 (C)水滴溫度會維持在0℃，等到撞擊飛機機體之後會結成明冰(clear ice)。

原始題號:0013890 題組:0 難易度:易

(C) 162.飛行中形成結構性積冰(structural icing)的必要狀況為何？
(A)過冷水滴(supercooled water drop)。 (B)水氣(water vapor)。 (C)可見水(visible water)。

原始題號:0013891 題組:0 難易度:易

(C) 163.哪一種積冰(icing)與類似於低高度層雲(stratus cloud)中的最小水滴(water droplet有關？
(A)明冰(clear ice)。 (B)霜冰(frost ice)。 (C)淞冰(rime ice)。

原始題號:0013892 題組:0 難易度:易

(B) 164.爬升時遭遇凍雨(freezing rain)通常代表著？
(A)可在不遭遇大過輕度積冰(light icing)的情況下爬升至更高的高度。 (B)上方有一層較暖空氣。 (C)較高空層的冰珠(ice pellet)已在其下方的較暖空氣中轉變為雨。

原始題號:0013893 題組:0 難易度:易

(B) 165.下列何種降水(precipitation)顯示過冷水(supercooled water)的存在？
(A)濕雪(wet snow)。 (B)凍雨(freezing rain)。 (C)冰珠(ice pellet)。

原始題號:0013894 題組:0 難易度:易

(B) 166.飛行中遭遇冰珠(ice pellet)代表著何種狀況？
(A)較高空層有雷雨(thunderstorm)。 (B)較高空層有凍雨(freezing rain)。 (C)較高空層有雪(snow)。

原始題號:0013895 題組:0 難易度:易

(A) 167.飛行中有濕雪(wet snow)降下，顯示是何種溫度狀況？
(A)該飛行空層的溫度是在冰點(freezing)以上。 (B)較高飛行空層的溫度是在冰點以上。 (C)有逆溫層(inversion)，而較低處的空氣溫度較低。

原始題號:0013896 題組:0 難易度:易

(C) 168.何種情況會導致霜(frost)的形成？
(A)小滴的水氣落在溫度在冰點(freezing)或以下的表面上。 (B)露(dew)在表面上生成然後結凍(freeze)，因為表面的溫度低於外界空氣溫度。 (C)生成霜的表面溫度低於露點(dewpoint)，且該露點低於冰點。

原始題號:0013897 題組:0 難易度:中

(A) 169.航空器表面何時最容易結霜(frost)？
(A)氣流穩定且有微風的晴朗夜晚。 (B)天上有密雲(overcast)且下著凍毛雨(freezing drizzle)的夜晚。 (C)有對流活動(convective action)且露點差(temperature/dewpoint spread)值小的晴朗夜晚。

原始題號:0013898 題組:0 難易度:易

(B) 170.機長於飛行中認定預期會碰到對飛行安全有不利影響的積冰(icing)狀況，何者為適當的應對？
(A)機長可在爬升到更高高度之後，繼續前往原定目的地機場。 (B)機長不該繼續飛進積冰狀況中。 (C)只要防冰及除冰(anti-icing and de-icing)裝備正常且使用，則可繼續前往原定目的地機場。

原始題號:0013899 題組:0 難易度:易

(B) 171.起飛前假使有雪附著於機翼上，需採取何種行動？
(A)盡可能將雪掃除，且須將殘餘物磨光。 (B)確保已將雪從飛機上移除。 (C)將正常仰轉速度(VR)加15節(knot)，雪就會被吹走。

原始題號:0013900 題組:0 難易度:中

(B) 172.依照聯邦航空135法規(FAR Part 135)，起飛前需檢查有無雪、冰或霜(snow, ice or frost)等污染物(contamination)，此一檢查需
(A)在起飛滾行(takeoff roll)前兩分鐘之內做。 (B)於起飛前五分鐘內完成。 (C)確認航空器無污染物(clean)，以便能在接下來的五分鐘內安全的起飛。

原始題號:0013901 題組:0 難易度:易

(C) 173.為大型運輸機(large transport airplane)所發展出來的除冰(deicing)程序及設備
(A)並不適用於聯邦航空135法規(FAR Part 135)下的較小航空器。 (B)適用於所有聯邦航空135法規下的較小航空器， (C)對某些聯邦航空135法規下的較小航空器，可能不適用。

原始題號:0013902 題組:0 難易度:易

(A) 174.在飛行中碰到會引起輕度、快速且有點節奏的顛簸(bumpiness)，但姿態(attitude)或高度並沒有很大的改變，且時間在1/3以下時，應報告為何種亂流(turbulence)？
(A)偶發的輕度跳動(occasional light chop)。 (B)中度亂流(moderate turbulence)。 (C)中度跳動(moderate chop)。

原始題號:0013903 題組:0 難易度:易

(B) 175.在飛行中碰到會改變姿態(attitude)及/或高度，且時間在2/3但全時仍保有對飛機的完全操控(positive control)，而時間在2/3以上時，應報告為何種亂流(turbulence)？
(A)持續性的嚴重跳動(continuous severe chop)。 (B)持續性中度亂流(continuous moderate turbulence)。 (C)間歇性中度亂流(intermittent moderate turbulence)。

原始題號:0013904 題組:0 難易度:易

(C) 176.在飛行中碰到會暫時、輕度不規律地改變姿態(attitude)及/或高度，而時間在1/3到2/3之間時，應報告為何種亂流(turbulence)？
(A)偶發的輕度跳動(occasional light chop)。 (B)中度跳動(moderate chop)。 (C)間歇性輕度亂流(intermittent light turbulence)。

原始題號:0013905 題組:0 難易度:易

(C) 177.在地表15,000呎(AGL)以上所遭遇到與雲無關的亂流(turbulence)，應報告為
(A)對流性亂流(convective turbulence)。 (B)高空亂流。 (C)晴空亂流(clear air turbulence)。

原始題號:0013906 題組:0 難易度:易

(B) 178.哪種雲是有強烈亂流(strong turbulence)的象徵？
(A)雨層雲(nimbostratus)。 (B)靜止的莢狀雲(standing lenticular)。 (C)卷積雲(cirrocumulus)。

原始題號:0013907 題組:0 難易度:易

(A) 179.與山岳波(mountain wave)有關，靜止群(stationary group)中的最低層雲為何？
(A)滾軸雲(rotor cloud)。 (B)靜止的莢狀雲(standing lenticular)。 (C)低層雲(stratus)。

原始題號:0013908 題組:0 難易度:中

(B) 180.與山岳波(mountain wave)有關的晴空亂流(clear air turbulence, CAT)可延伸多遠
(A)山的下游(downstream)處1,000哩或更遠。 (B)對流層頂(tropopause)以上5,000呎。 (C)山的上游(upstream)處100哩或更遠。

原始題號:0013909 題組:0 難易度:易

(A) 181.晴空亂流(clear air turbulence)通常發生於何處？
(A)在噴射氣流(jetstream)近極地側的高空槽(upper trough)中。 (B)在高壓氣流(high pressure flow)近赤道側的高空脊(ridge aloft)附近。 (C)在噴射氣流(jetstream)近赤道側的下游(downstream)。

原始題號:0013910 題組:0 難易度:中

(C) 182.哪種噴射氣流(jetstream)會導致較強烈亂流？
(A)伴隨著高壓脊(high pressure ridge)的直線式噴射氣流(straight jetstream)。 (B有寬闊的等溫線(isotherm)間距的噴射氣流。 (C)伴隨著很深的低壓槽(deep low pressure trough)的彎曲式噴射氣流(curving jetstream)。

原始題號:0013911 題組:0 難易度:易

(C) 183.若遭遇到有正頂風或正尾風的噴射氣流亂流(jetstream turbulence)時，建議採取哪種行動？
(A)加速以便儘速脫離該區域。 (B)改變航向飛到噴射氣流的近極地側。 (C)改變高度或航向以避開可能存在的廣大亂流區。

原始題號:0013912 題組:0 難易度:易

(A) 184.關於高度方面建議採取哪種行動，以便脫離噴射氣流亂流(jetstream turbulence)？
(A)若外界溫度(ambient temperature)下降就下降高度。 (B)若外界溫度上升就下降高度。 (C)若外界溫度沒有改變就維持高度。

原始題號:0013913 題組:0 難易度:易

(A) 185.當遭遇到因風變(wind shift)且與極端低壓槽(sharp pressure trough)有關的亂流(turbulence)時，建議採取哪種行動？
(A)建立一航向以跨越該低壓槽。 (B)爬升或下降至較平穩的空層。 (C)加速以便儘速離開該低壓槽。

原始題號:0013914 題組:0 難易度:易

(B) 186.在被雪或冰所覆蓋的地面上，有一層厚度均勻的雲時，會導致何種極地飛行危險？
(A)冰霧(ice fog)。 (B)零能見度(whiteout)。 (C)高吹雪(blowing snow)。

原始題號:0013915 題組:0 難易度:易

(C) 187.當熱帶風暴(tropical storm)晉級為颶風(hurricane)時，會有何天氣狀況？
(A)最大風速100節(knot)或以上。 (B)會形成一晴朗無雲的區域或是颱風眼(hurricane eye)。 (C)持續風速65節或以上。。

原始題號:0013916 題組:0 難易度:易

(A) 188.在加勒比海或墨西哥灣區的颶風(hurricane)其通常移動方向為何？
(A)西北向然後彎成東北向。 (B)在接觸陸地前朝西，之後朝東。 (C)在開闊水域上是反時鐘方向，在陸地上則向外消散(dissipating)。

原始題號:0013917 題組:1 難易度:易 (R20130125)

(A) 189.(參閱chart 1) 台灣桃園國際機場(RCTP)例行天氣報告(METAR)的發布時間為何？(如圖A43_chart1)
(A)00:00UTC。 (B)08:00UTC。 (C)00:00L。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013918 題組:2 難易度:易 (R20130125)

(C) 190.(參閱chart 1) 嘉手納(RODN)25日22:55世界標準時間(Z)的天氣報告是哪一種？(如圖A43_chart1)
(A)航空特選天氣報告(Aviation selected special weather report)。 (B)關於觀測站氣壓很低的特別報告。 (C)特別天氣報告(SPECI)。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013919 題組:3 難易度:易 (R20180823)

（ A ）191.(參閱chart 1) 清泉崗(RCMQ)天氣如何？(如圖A43_chart1)
(A)有輕霧(BR)，能見度5公里。 (B)在該小時42分後開始有強陣雨(heavy rain shower)。
(C)雲幕高(ceiling)為很結實的密雲(overcast)，約在海平面以上1,800呎。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
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260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
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260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013920 題組:4 難易度:易 (R20130125)

（ C ）192.(參閱chart 1) 成田機場(RJAA)天氣如何？
(如圖A43_chart1)
(A)密雲(overcast)雲頂高10,000呎。 (B)溫度與露點溫度差(temperature/ dewpoint spread)為華氏8度。 (C)高度表撥定值(altimeter setting)為999百帕。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013921 題組:0 難易度:易

（ C ）193.METAR KSPS 131800Z 09014KT 6SM -RA SCT025 OVC090 24/22 A3005. SPECI KSPS 131820Z 01025KT 3SM +RA FC OVC015 22/21 A3000. 威奇塔瀑布市（KSPS）在1800與1820世界標準時間(UTC)之間的天氣產生了何種變化？
(A)降雨轉小。 (B)大氣壓力增加。 (C)觀測到漏斗雲(funnel cloud)。

原始題號:0013922 題組:0 難易度:中

(A) 194.在下列機場例行天氣報告(METAR)中，的盛行能見度(prevailing visibility)為多少？ METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV004 06/05 A2989 RMK AO2 $
(A)小於1/4英哩(statute mile)。 (B)測報為1/4英哩(statute mile)。 (C)平均為1/4英哩(statute mile)。

原始題號:0013923 題組:0 難易度:中

(B) 195.在上列機場例行天氣報告(METAR)中，VV001表示什麼意思？ METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV001 A2989 RMK AO2 VIS 3/4 RWY 19 CHINO RWY19 $
(A)有觀測者報告垂直能見度(vertical visibility)為100呎。 (B)天空狀況不明，但可觀測到垂直能見度為100呎。 (C)變異值(variability value)為100呎。

原始題號:0013926 題組:0 難易度:易

(C) 196.決定預計到達目的地機場時(ETA)預計天氣狀況，主要用哪一種資訊來源？
(A)低空預報圖(Low-Level Prog Chart) (B)雷達彙報圖(Radar Summary)及天氣描繪圖(Weather Depiction chart) (C)機場預報(Terminal Aerodrome Forecast)

原始題號:0013927 題組:0 難易度:易

(A) 197.當天氣狀況預期會發生在機場附近，而非在機場時，會使用代碼"VC"來表示。當機場預報(Terminal Aerodrome Forecast)出現"VC"時，其涵蓋的範圍為
(A)機場周邊半徑8到16公里。 (B)以跑道設施(runway complex)為中心半徑8公里。 (C)發布預報場站的16公里範圍。

原始題號:0013928 題組:0 難易度:易

(A) 198.機場預報(Terminal Aerodrome Forecast)中的"VCTS"代表什麼意思？
(A)附近預期會有雷雨(thunderstorm)。 (B)場站上空及場站周邊50哩之內可能會有雷雨。 (C)跑道設施周邊(runway complex)5到25哩的範圍內預期會有雷雨。

原始題號:0013929 題組:0 難易度:易

(B) 199.機場預報(Terminal Aerodrome Forecast)中唯一會預報出來的雲是什麼？
(A)高積雲(altocumulus)。 (B)積雨雲(cumulonimbus)。 (C)層積雲(stratocumulus)。

原始題號:0013930 題組:0 難易度:易

(B) 200.靜風(calm wind)在機場預報(Terminal Aerodrome Forecast, TAF)中編碼方式為何？
(A)VRB00KT. (B)00000KT. (C)00003KT.

原始題號:0013931 題組:0 難易度:易

(C) 201.風向不定(variable wind direction)在機場預報(Terminal Aerodrome Forecast, TAF)中是以"VRB"代碼，來取代用以顯示風向的三碼數字，而靜風(calm wind)的編碼方式為何?
(A)00003KT. (B)VARB00KT. (C)00000KT.

原始題號:0013932 題組:0 難易度:易

(B) 202.針對某一特定地區，唯一包含火山噴發、亂流、以及結冰狀況的參考資料為何？
(A)天氣描繪圖(Weather Depiction chart)。 (B)航路天氣諮詢(In-Flight Weather Advisories)。 (C)地區性預報(Area Forecast)。

原始題號:0013933 題組:0 難易度:易

(A) 203.在定壓分析圖(constant pressure analysis chart)上有等值線(contour)、等溫線(isotherm)，有些會有等風速線(isotach)。這些等值線表示
(A)高壓脊(ridge)、低壓(low)、低壓槽(trough)以及高壓(high)。 (B)高壓脊(ridge)、低壓(low)、低壓槽(trough)以及地面上的高壓脊(ridge)。 (C)高壓脊(ridge)、低壓(low)、低壓槽(trough)以及修正至海平面高度的(corrected to MSL)高壓脊(ridge)。

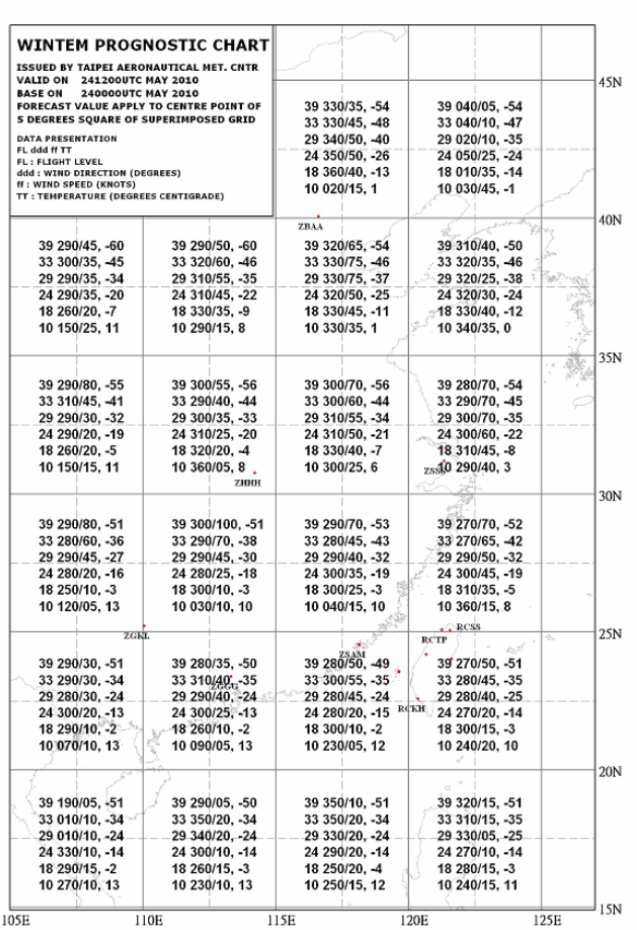
原始題號:0013934 題組:0 難易度:易

(B) 204.垂直風切(vertical wind shear)可以透過比較在定壓分析圖(constant pressure analysis chart)上垂直相鄰的風速來決定。對於形成亂流很重要的垂直風切為
(A)每1,000呎4節(knot)或以上。 (B)每1,000呎6節(knot)或以上。 (C)每1,000呎8節(knot)或以上。

原始題號:0013935 題組:1 難易度:易 (R20180823)

(A) 205.(參閱chart 3) ZGGG 18,000英呎高空風的預報為何？
(如圖A43_chart3)
(A)真向(true)260度，速度10節。 (B)真向(true)23度，速度6節。 (C)磁向(magnetic)235度，速度6節最大陣風(gust)到16節。

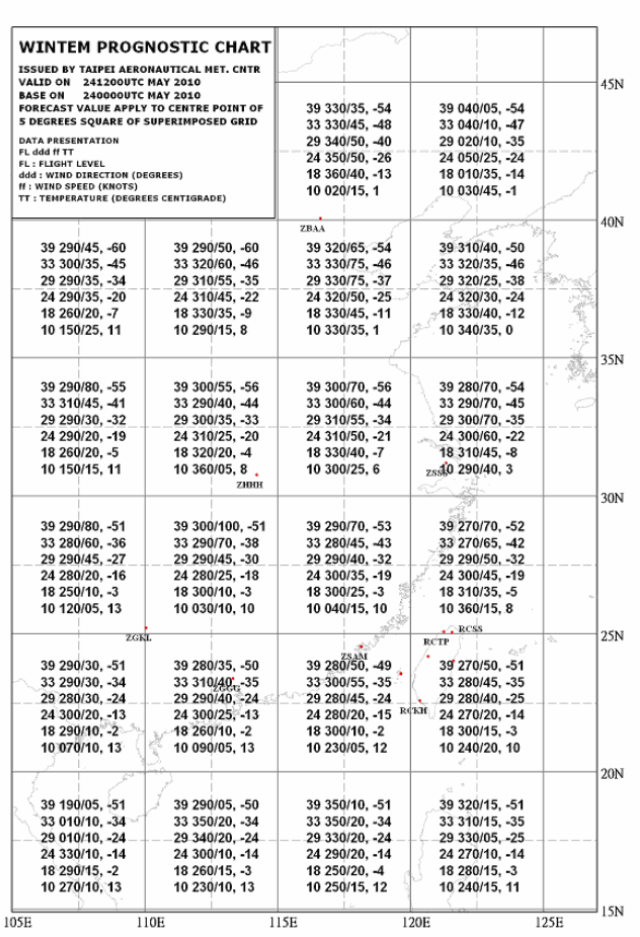
題目圖：



原始題號:0013936 題組:2 難易度:易 (R20180823)

(B) 206.(參閱chart 6) ZSSS附近29,000英呎高空風及溫度的預報為何？(如圖A43_chart3)
(A)磁向(magnetic)023度，速度53節，溫度攝氏47
度
。 (B)真向(true)300度，速度70節，溫度攝氏負35度。
(C)真向(true)235度，速度34節，溫度攝氏負7度。

題目圖：



原始題號:0013937 題組:0 難易度:中

(B) 207. 地面天氣圖上的等壓線(isobar)代表何處的壓力相等
(A)地表上的。 (B)降到海平面上。 (C)在某一給定的大氣壓力高度(atmospheric pressure altitude)。

原始題號:0013938 題組:0 難易度:中

(A) 208. 在何種情況下最容易遭遇晴空亂流(clear air turbulence, CAT)？
(A)當定壓圖(constant pressure chart)上，顯現20節等風速線(isotach)相距不到60海浬(NM)時。 (B)當定壓圖上，顯現60節等風速線相距不到20海浬(NM)時。 (C)當一個劇烈的高壓槽(trough)，以低於20節的速度移動時。

原始題號:0013939 題組:0 難易度:易

(A) 209. 何處預期會有強風切(wind shear)
(A)核心速度100節(knot)的噴射氣流(jetstream)的低壓側。 (B)距離等於2.5海浬(NM)緯度以內，而有15節的水平風切時。 (C)如果5°C的等溫線間距，為100海浬(NM)或更近時。

原始題號:0013940 題組:1 難易度:中 (R20130125)

(A) 210. (參閱figure 11)在加拿大低壓中心的300毫巴(millibar)線其高度為多少？
(如圖A43_figure11)
(A)海平面以上高度(MSL)9,120呎。 (B)海平面以上高度(MSL)18,000呎。 (C)海平面以上高度(MSL)11,850呎。

題目圖：

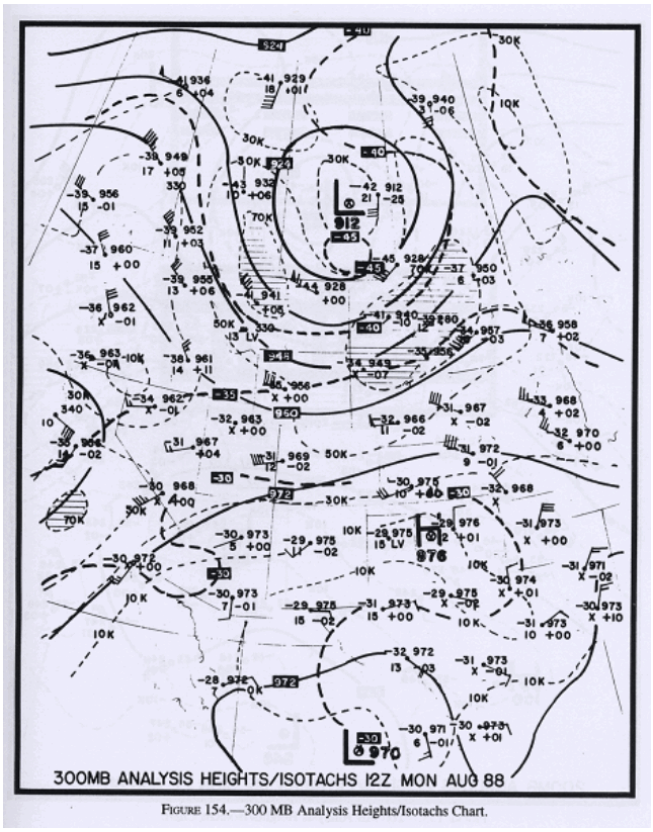


FIGURE 154.—300 MB Analysis Heights/Isotachs Chart.

原始題號:0013946 題組:1 難易度:易 (R20130125)

(A) 211.(參閱figure 12) 什麼型態的天氣系統正在從西邊逼近加州海岸？
(如圖A43_figure12)
(A)低壓(LOW)。 (B)高壓(HIGH)。 (C)冷鋒(clod front)。

題目圖：

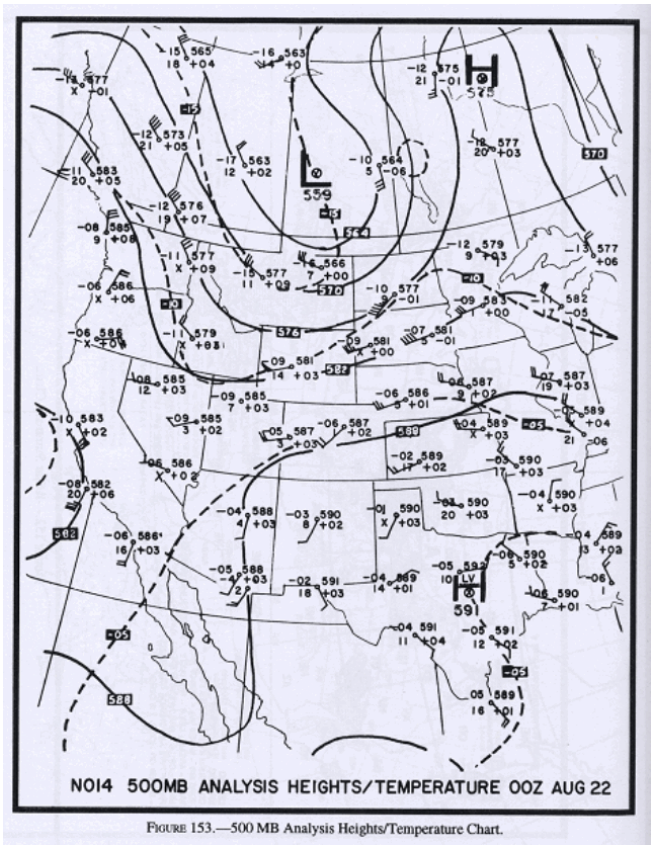


FIGURE 153.—500 MB Analysis Heights/Temperature Chart.

原始題號:0013947 題組:1 難易度:易 (R20130125)

(A) 212.(參閱figure 9) 12小時顯著天氣預報圖(12-Hour Significant Weather Prognostic Chart)顯示西維吉尼亞州可能會經歷
(如圖A43_figure9)
(A)該區域的一半或超過一半，會有持續性或陣雨性降水(showery precipitation)。 (B)該區域的一半或超過一半，會有雷雨(thunderstorm)或陣雨(rain shower)。 (C)該區域低於一半的部分，會有持續性下雨。

題目圖：

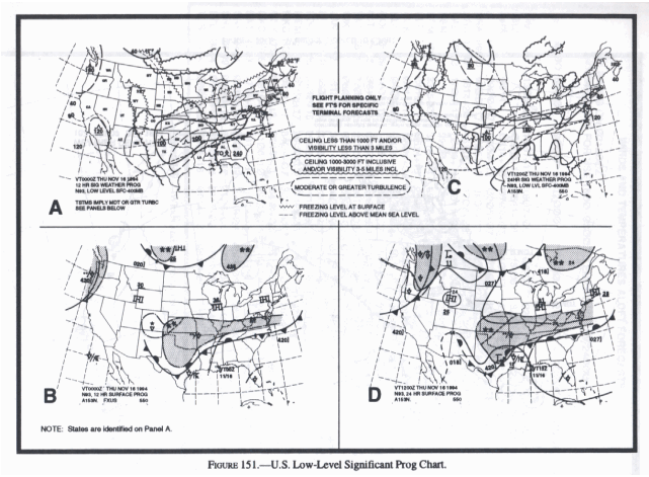


FIGURE 151.—U.S. Low-Level Significant Prog Chart.

原始題號:0013949 題組:3 難易度:易 (R20130125)

(A) 213.(參閱figure 9)12小時顯著天氣預報圖(12-Hour Significant Weather Prognostic Chart)上位於加州南部的符號顯示
(如圖A43_figure9)
(A)預計中度亂流(turbulence)層頂高度為海平面以上高度(MSL)12,000呎。 (B)預計中度亂流層底部高度為，海平面以上高度(MSL)12,000呎。 (C)預計海平面以上高度(MSL)12,000呎以上，會有輕度亂流。

題目圖：

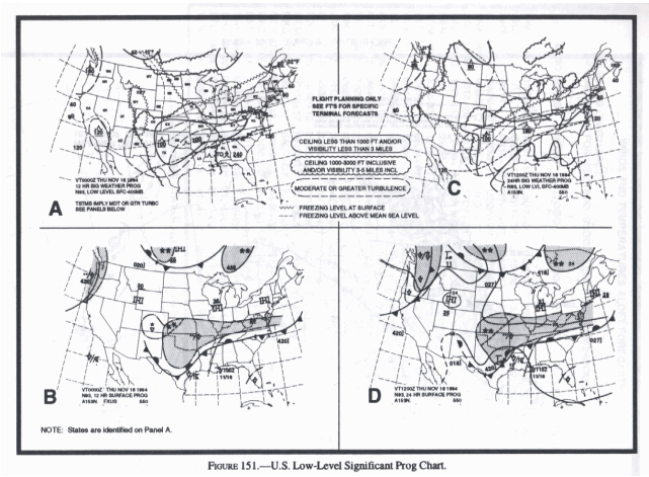


FIGURE 151.—U.S. Low-Level Significant Prog Chart.

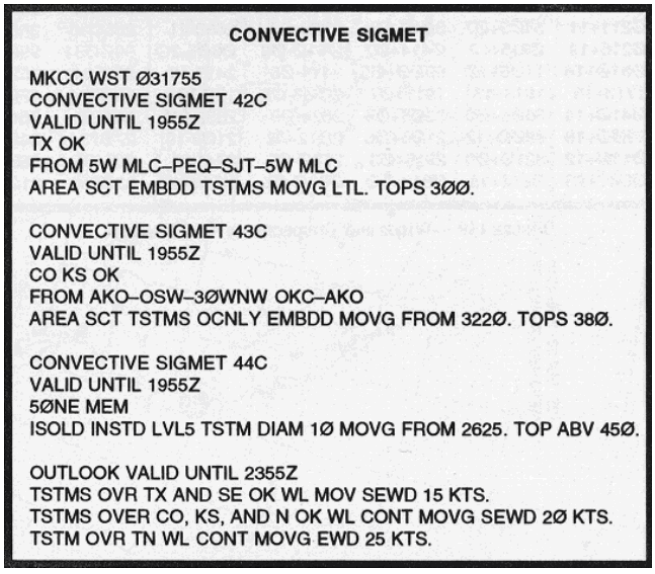
原始題號:0013951 題組:0 難易度:中

(B) 214.若目的地機場預報有颮(squall)，則當時風的狀況將會是如何？
(A)風速突然增加至少15節(knot)到持續風速20節，持續至少1分鐘。 (B)風速突然增加至少16節，風速增至22節或以上且持續1分鐘或以上。 (C)風向快速的改變至少20°且風速改變最大與最小值間差距最少10節。

原始題號:0013952 題組:1 難易度:易 (R20130125)

(C) 215.(參閱chart 4)對流性顯著天氣報告(Convective SIGMET)中的哪一個系統，最有可能生成最強烈的風暴(storm)？
(如圖A43_chart4)
(A)在德州及奧克拉荷馬州的風暴。 (B)在科羅拉多州、堪薩斯州及奧克拉荷馬州的風暴。 (C)曼菲斯(MEM)東北50哩的獨立風暴。

題目圖：



CONVECTIVE SIGMET

MKCC WST Ø31755
CONVECTIVE SIGMET 42C
VALID UNTIL 1955Z
TX OK
FROM 5W MLC–PEQ–SJT–5W MLC
AREA SCT EMBDD TSTMS MOVG LTL. TOPS 3ØØ.

CONVECTIVE SIGMET 43C
VALID UNTIL 1955Z
CO KS OK
FROM AKO–OSW–3ØWNW OKC–AKO
AREA SCT TSTMS OCNLY EMBDD MOVG FROM 322Ø. TOPS 38Ø.

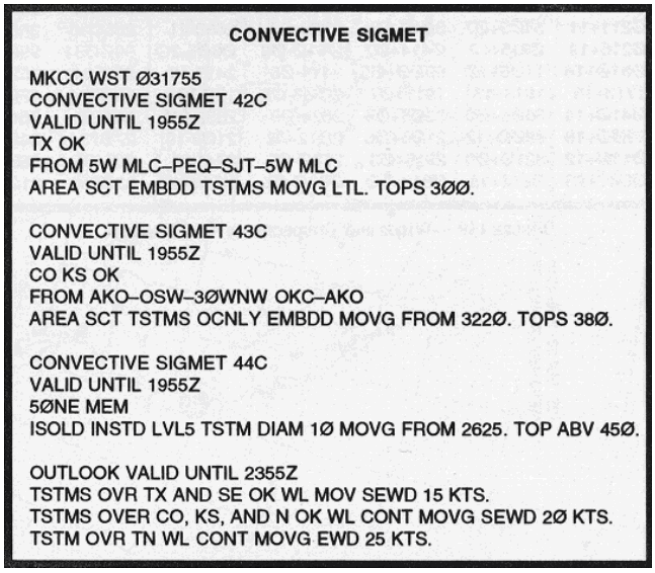
CONVECTIVE SIGMET 44C
VALID UNTIL 1955Z
5ØNE MEM
ISOLD INSTD LVL5 TSTM DIAM 1Ø MOVG FROM 2625. TOP ABV 45Ø.

OUTLOOK VALID UNTIL 2355Z
TSTMS OVR TX AND SE OK WL MOV SEWD 15 KTS.
TSTMS OVER CO, KS, AND N OK WL CONT MOVG SEWD 2Ø KTS.
TSTM OVR TN WL CONT MOVG EWD 25 KTS.

原始題號:0013953 題組:2 難易度:易 (R20130125)

(B) 216.(參閱chart 4)對流性顯著天氣報告(Convective SIGMET)中的預測(outlook section)所包含之時間為？
(如圖A43_chart4)
(A)有效時間後24小時。 (B)有效時間後2到6小時。 (C)有效時間後不超過2小時。

題目圖：



CONVECTIVE SIGMET

MKCC WST Ø31755
CONVECTIVE SIGMET 42C
VALID UNTIL 1955Z
TX OK
FROM 5W MLC–PEQ–SJT–5W MLC
AREA SCT EMBDD TSTMS MOVG LTL. TOPS 3ØØ.

CONVECTIVE SIGMET 43C
VALID UNTIL 1955Z
CO KS OK
FROM AKO–OSW–3ØWNW OKC–AKO
AREA SCT TSTMS OCNLY EMBDD MOVG FROM 322Ø. TOPS 38Ø.

CONVECTIVE SIGMET 44C
VALID UNTIL 1955Z
5ØNE MEM
ISOLD INSTD LVL5 TSTM DIAM 1Ø MOVG FROM 2625. TOP ABV 45Ø.

OUTLOOK VALID UNTIL 2355Z
TSTMS OVR TX AND SE OK WL MOV SEWD 15 KTS.
TSTMS OVER CO, KS, AND N OK WL CONT MOVG SEWD 2Ø KTS.
TSTM OVR TN WL CONT MOVG EWD 25 KTS.

原始題號:0013954 題組:0 難易度:易

(C) 217.哪種來源可以顯示現在及預測結冰狀況的最正確資訊？
(A)低空顯著天氣預報圖(Low-Level Sig Weather Prog Chart)、雷達圖(RADAT)、及地區性預報(Area Forecast)。 (B)飛行員天氣報告(PIREP)、地區性預報及結冰層圖(freezing level chart) (C)飛行員天氣報告(PIREP)、低空危害天氣資訊 (AIRMET)、及顯著危害天氣資訊 (SIGMET)

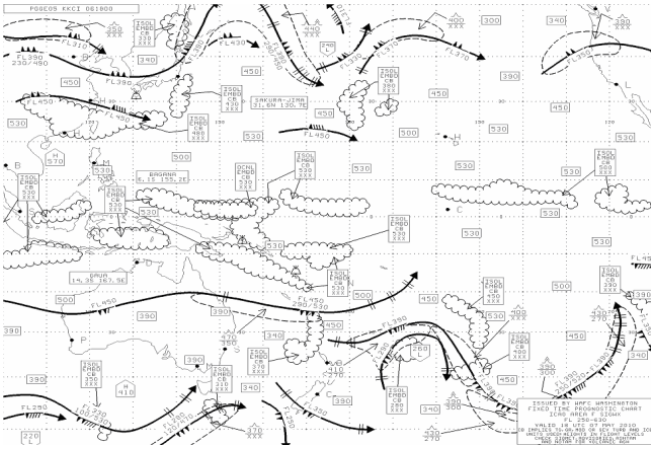
原始題號:0013955 題組:0 難易度:易

（ A ）218.何種天氣僅於飛行中直接觀測後，加諸於飛行員天氣報告(PIREP)中？
(A)亂流(turbulence)及結構性積冰(structural icing)。 (B)噴射氣流型的風(jetstream-type wind)及積冰(icing)。 (C)對流層頂(tropopause)的高度及亂流(turbulence)。

原始題號:0013956 題組:1 難易度:中 (R20130125)

（ B ）219.(參閱figure 1) N45W170之亂流強度為何？
(如圖A43_figure1)
(A)輕度亂流 (B)中度亂流 (C)強烈亂流

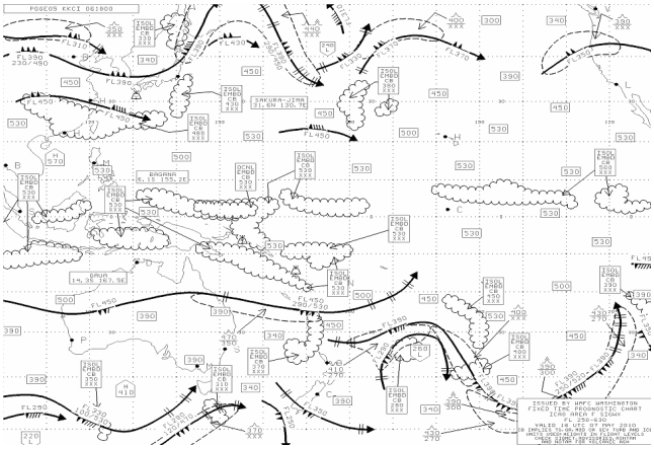
題目圖：



原始題號:0013957 題組:2 難易度:中 (R20130125)

（ B ）220.(參閱figure 1) N45W170噴射氣流狀況為何？
(如圖A43_figure1)
(A)於FL280有噴射氣流強度100kts (B)於FL370 有噴射氣流強度110kts (C)於FL360有噴射氣流強度100kts

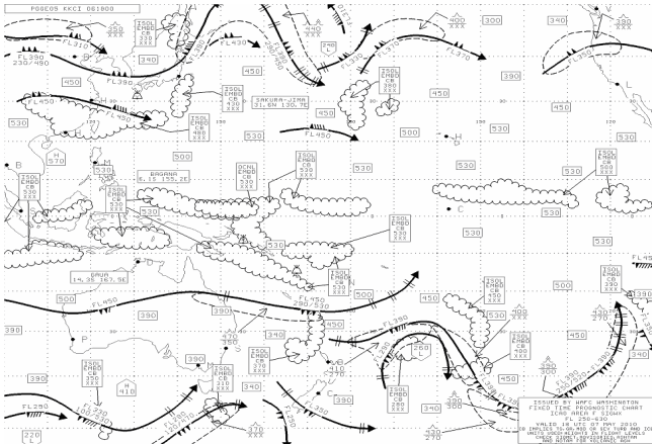
題目圖：



原始題號:0013958 題組:1 難易度:中 (R20190708)

（ B ）221.(參閱figure 1) HIGH LEVEL SIGWX CHART預報有效時間為何？
(如圖A43_figure1)
(A)2010年5月6日0000世界標準時 (B)2010年5月7日1800世界標準時 (C)2010年5月06日1200台北地方時

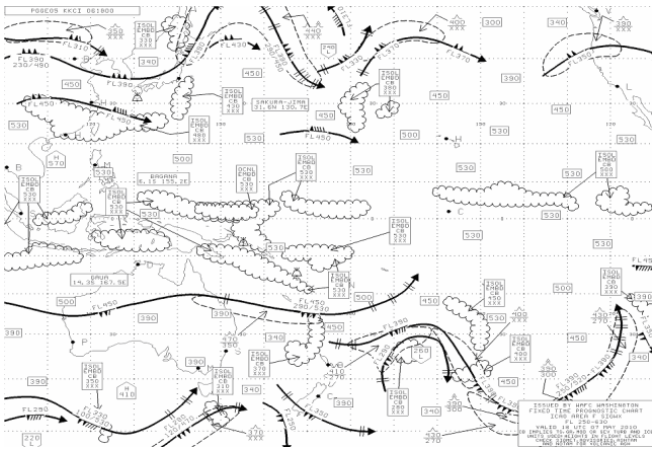
題目圖：



原始題號:0013959 題組:2 難易度:中 (R20130125)

(C) 222.(參閱figure 1) N15E140之標記？
(如圖A43_figure1)
(A)Turbulence level FL500 (B)CIELING level FL500 (C)tropopause level FL500

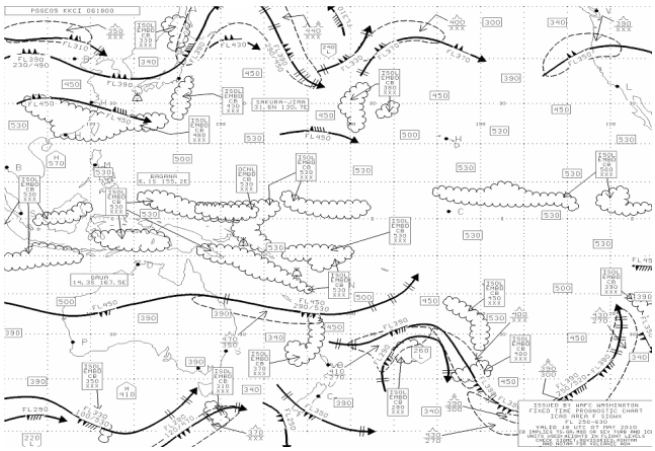
題目圖：



原始題號:0013960 題組:3 難易度:中 (R20180823)

(B) 223.(參閱figure 1) 圖表有效高度為？(如圖A43_figure1)
(A)FL250以下 (B)FL250-FL630 (C)全部皆對

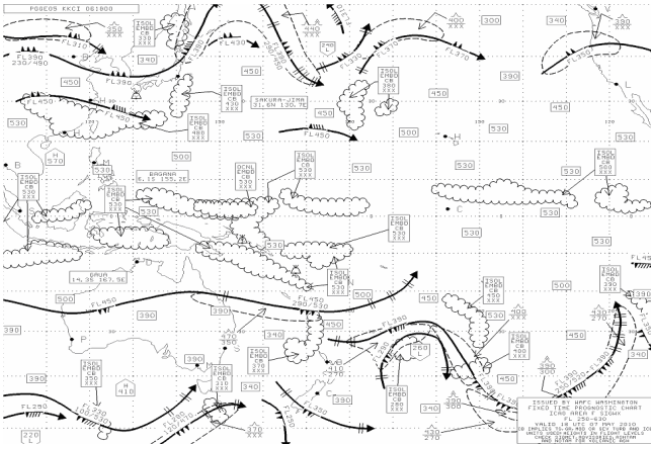
題目圖：



原始題號:0013961 題組:4 難易度:中 (R20130125)

(B) 224.(參閱figure 1) N30E140 之CB雲頂高為何？(如圖A43_figure1)
(A)FL 250 (B)FL430 (C)由地表海平面至FL320

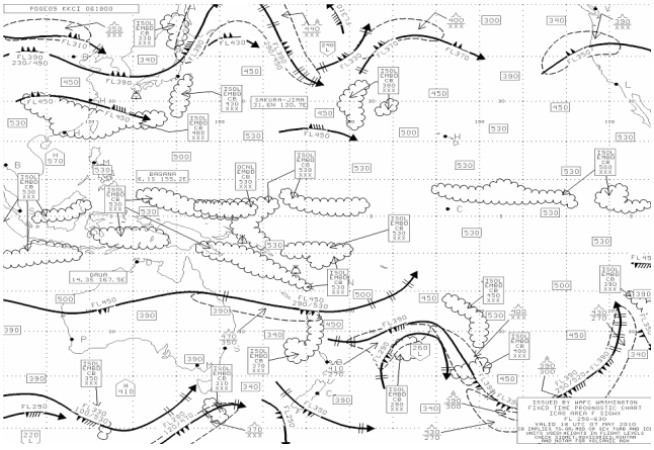
題目圖：



原始題號:0013962 題組:5 難易度:中 (R20130125)

(B) 225.(參閱figure 1) 於N42W125之標記所指為何？
(如圖A43_figure1)
(A)輕度C.A.T. (B)中度C.A.T. (C)強度C.A.T.

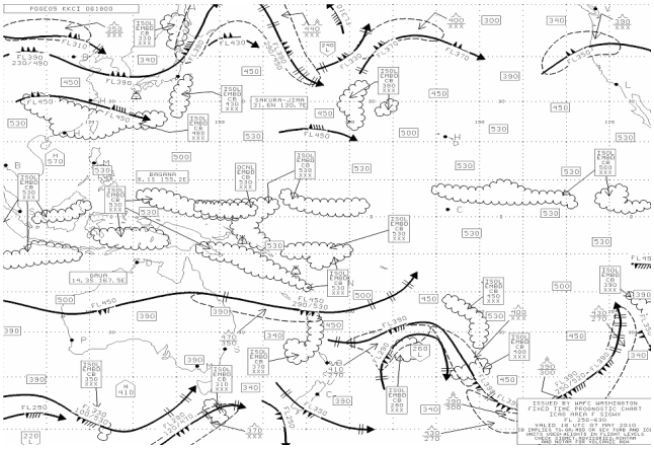
題目圖：



原始題號:0013963 題組:6 難易度:中 (R20130125)

(C) 226.(參閱figure 1) S10E110 之雲頂高為？
(如圖A43_figure1)
(A)FL250 (B)SEA level-FL320 (C)FL530

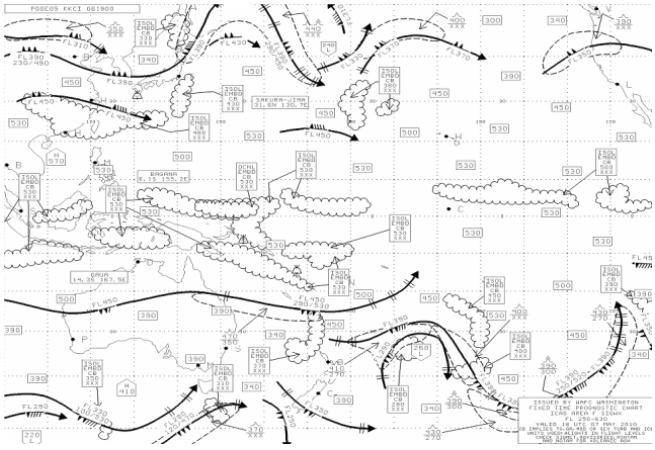
題目圖：



原始題號:0013964 題組:7 難易度:中 (R20130125)

(B) 227.(參閱figure 1) 於N40W130之標記為何意義？
(如圖A43_figure1)
(A)亂流層高FL360 (B)FL350之噴射氣流強度100kts (C)雲系之移動方向

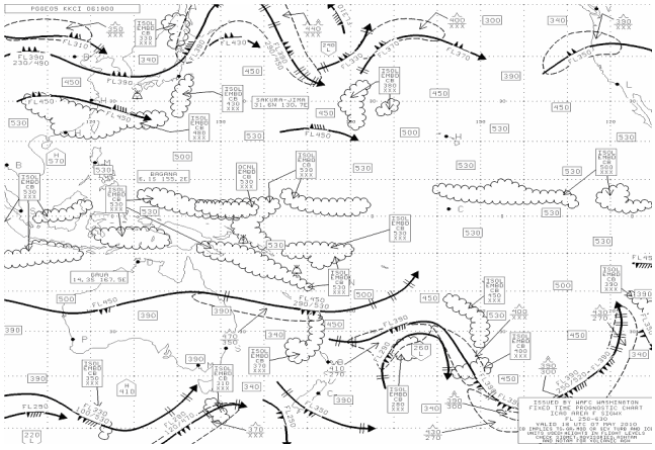
題目圖：



原始題號:0013965 題組:8 難易度:中 (R20130125)

(A) 228.(參閱figure 1) 請問於本圖中是否可以找到輕度亂流的資料？
(如圖A43_figure1)
(A)無輕度亂流之標示 (B)N40E164之亂流為輕度亂流 (C)全部皆非

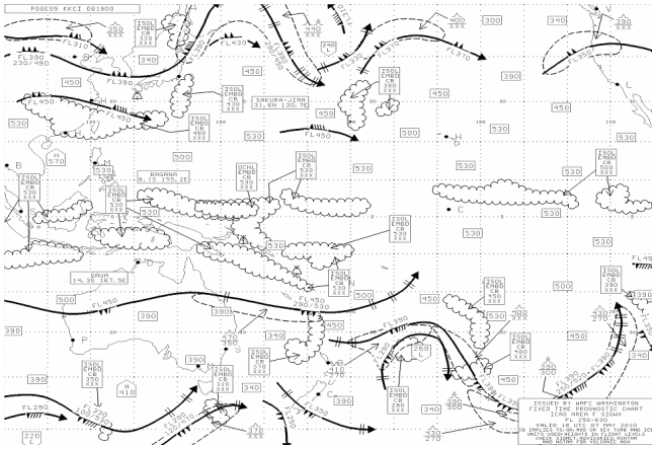
題目圖：



原始題號:0013966 題組:9 難易度:中 (R20130125)

(B) 229.(參閱figure 1) S25E160標記之亂流高度為何？
(如圖A43_figure1)
(A)FL250-FL450 (B)FL350-FL470 (C)FL250-FL500 (D)全部皆非

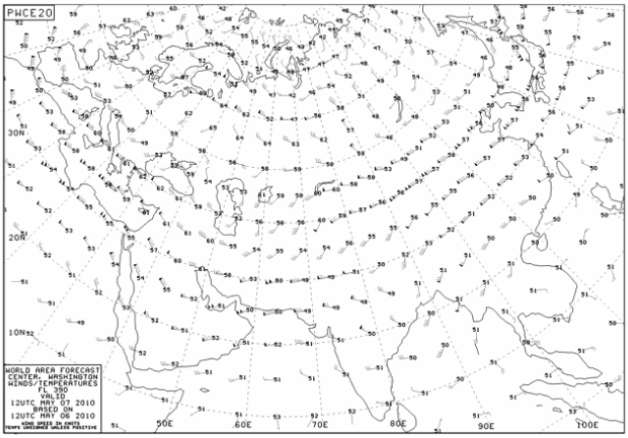
題目圖：



原始題號:0013967 題組:1 難易度:中 (R20130125)

(B) 230.(參閱figure 2) ，在標準天候下，請問200hPa之飛航高層為何？
(如圖A43_figure2)
(A)FL350 (B)FL390 (C)FL200

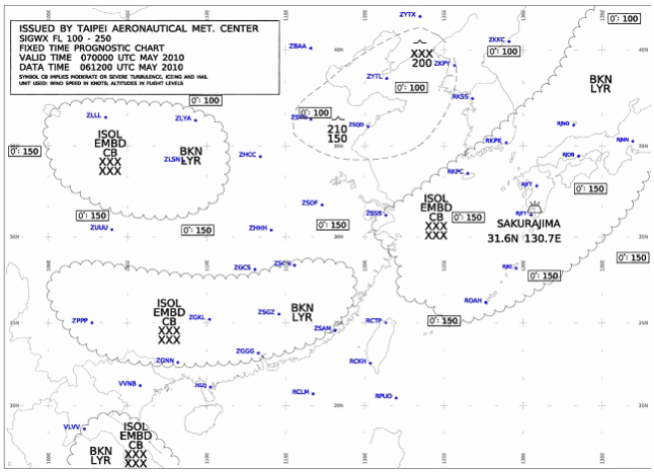
題目圖：



原始題號:0013969 題組:1 難易度:中 （R20130125）

（ B ）231.(參閱figure 3)依據所提供之SIGNIFICANT WEATHER PROGNOSTIC CHART,_自RCTP飛往ZSQD將遭遇到：
(如圖A43_figure3)
(A)中度積冰 (B)中度亂流 (C)重度積冰 (D)強烈亂流

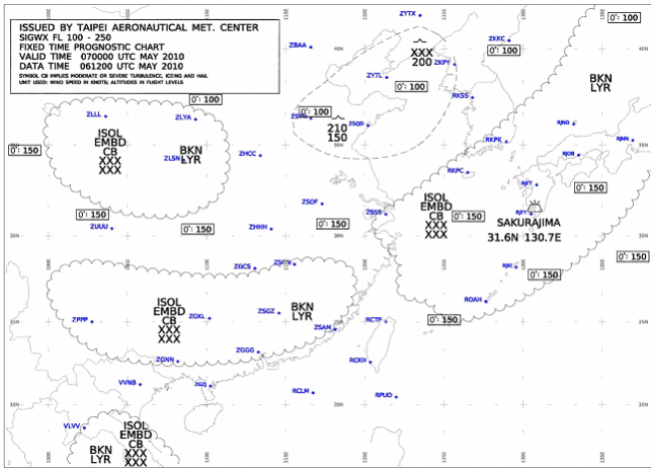
題目圖：



原始題號:0013970 題組:2 難易度:中 （R20130125）

（ D ）232.依據figure 3, ROAH 上空雲層之狀況為何：
(如圖A43_figure3)
(A)240-360 hPa之間 (B)240-360毫米之間 (C)從10,000公尺-25,000公尺之間
(D)10,000-25,000英尺之間

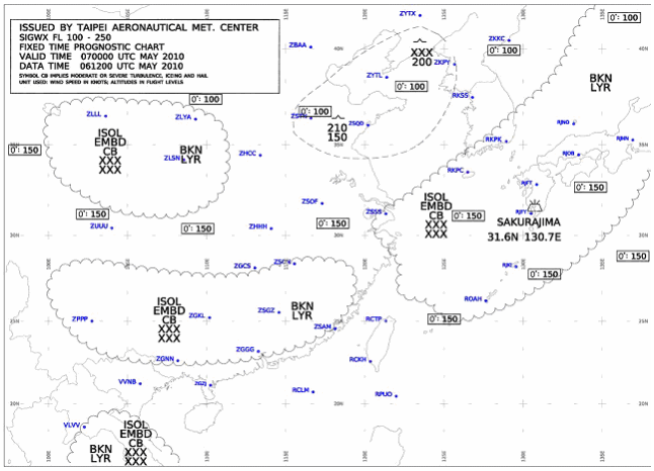
題目圖：



原始題號:0013972 題組:4 難易度:中 （R20130125）

（ C ）233.依據figure 3之有效時間，降落ZGGG，遭遇到ISOL CB意謂：
(如圖A43_figure3)
(A)CB呈線狀排列 (B)CB滿佈所標示之全區 (C)獨立之CB (D)CB在減弱中

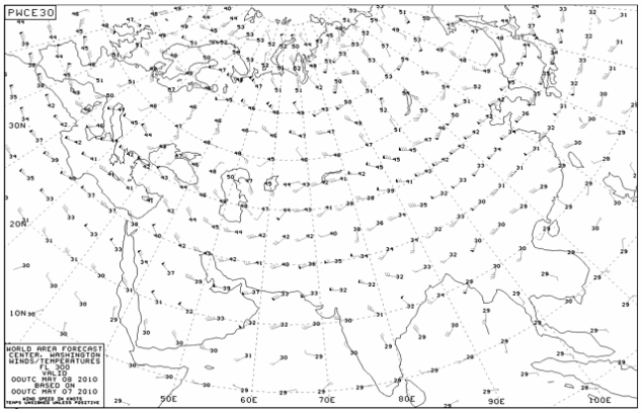
題目圖：



原始題號:0013974 題組:1 難易度:中 (R20130125)

（ C ）234.依據figure 4,所提供之300 hPa PROGNOSTIC CHART,此圖氣象與何一高度最為接近：(如圖A43_figure4)
(A)40,000英尺 (B)35,000英尺 (C)30,000英尺 (D)25,000英尺

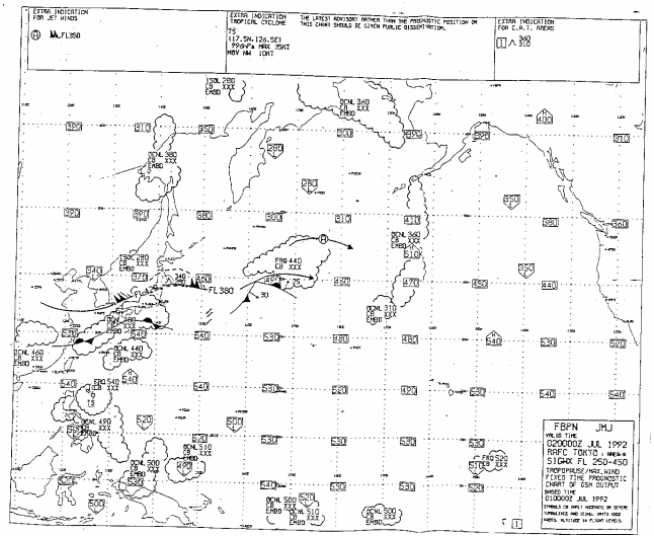
題目圖：



原始題號:0013975 題組:1 難易度:易 (R20130125)

（ A ）235.依據figure 5之顯著天氣預報圖, 菲島東方之熱帶氣旋區內積雨雲頂高度為：(如圖A43_figure5)
(A)54000呎 (B)50000呎 (C)49000呎

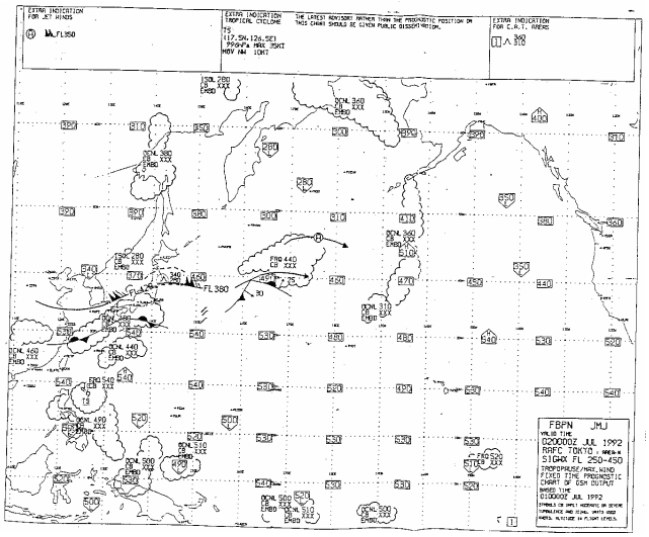
題目圖：



原始題號:0013976 題組:2 難易度:易 (R20130125)

（ B ）236.依據figure 5,該熱帶氣旋之移動方向及速度為：(如圖A43_figure5)
(A)W 5KT (B)NW 10KT (C)NW 5KT

題目圖：



原始題號:0013727 題組:0 難易度:中

(B) 237. During the winter months in the middle latitudes, the jet stream shifts toward the
(A)north and speed decreases. (B)south and speed increases. (C)north and speed increases.

原始題號:0013728 題組:0 難易度:中

(A) 238. The strength and location of the jet stream is normally
(A)weaker and farther north in the summer. (B)stronger and farther north in the winter. (C)stronger and farther north in the summer.

原始題號:0013729 題組:0 難易度:中

(B) 239. Which type of jet stream can be expected to cause the greater turbulence?
(A)A straight jet stream associated with a low-pressure trough. (B)A curving jet stream associated with a deep low-pressure trough. (C)A jet stream occurring during the summer at the lower latitudes.

原始題號:0013730 題組:0 難易度:中

(C) 240. Which statement is true concerning squall lines?
(A)They form slowly, but move rapidly. (B)They are associated with frontal systems only. (C)They offer the most intense weather hazards to aircraft.

原始題號:0013731 題組:0 難易度:中

(C) 241. Hazardous wind shear is commonly encountered
(A)near warm or stationary frontal activity. (B)when the wind velocity is stronger than 35 knots. (C)in areas of temperature inversion and near thunderstorms.

原始題號:0013732 題組:0 難易度:中 (R20180823)

(A) 242. If a temperature inversion is encountered immediately after takeoff or during an approach to a landing, a potential hazard exists due to
(A)wind shear. (B)strong surface winds. (C)strong convective currents.

原始題號:0013733 題組:0 難易度:中 (R20190708)

(C) 243.Which feature is associated with the tropopause?
(A)Absence of wind and turbulent conditions (B)Absolute upper limit of cloud formation (C)Abrupt change in temperature lapse rate.

原始題號:0013734 題組:0 難易度:中

(C) 244.A jet stream is defined as wind of
(A)30 knots or greater (B)40 knots or greater (C)50 knots or greater

原始題號:0013735 題組:0 難易度:中

(A) 245.What feature is association with a temperature inversion
(A)A stable layer of air (B)an unstable layer of air (C)Air mass thunderstorms

原始題號:0013736 題組:0 難易度:中

(A) 246.A temperature inversion will normally form only
(A)in stable air (B)in unstable air (C)when a stratiform layer merges with a cumuliform mass.

原始題號:0013737 題組:0 難易度:中

(A) 247.Which weather conditions should be expected beneath a low-level temperature inversion layer when the relative humidity in high?
(A)Smooth air and poor visibility due to fog, haze, or low clouds. (B)Light wind shear and poor visibility due to haze and light rain. (C)Turbulent air and poor visibility due to fog, low stratus-type cloud, and showery precipitation.

原始題號:0013738 題組:0 難易度:中

(B) 248.What enhances the growth rate of precipitation?
(A)Advective action. (B)Upward currents. (C)Cyclonic movement.

原始題號:0013739 題組:0 難易度:中

(A) 249.What temperature condition is indicated if wet snow is encountered at your flight altitude?
(A)The temperature is above freezing at your altitude (B)The temperature is below freezing at your altitude. (C)You are flying from a warm air mass into a cold air mass.

原始題號:0013740 題組:0 難易度:中

(C) 250.The presence of ice pellets at the surface is evidence that
(A)there are thunderstorms in the area. (B)a cold front has passed. (C)there is freezing rain at a higher altitude.

原始題號:0013741 題組:0 難易度:中

(C) 251.Which precipitation type normally indicates freezing rain at higher altitude?
(A)Snow (B)Hail (C)Ice pellets.

原始題號:0013742 題組:0 難易度:中

(C) 252. What type clouds can be expected when an unstable air mass is forced to ascend a mountain slope?
(A)Layered clouds with little vertical development. (B)Stratified clouds with considerable associated turbulence. (C)Clouds with extensive vertical development.

原始題號:0013743 題組:0 難易度:中

(B) 253. Which family of clouds is least likely to contribute to structural icing on aircraft?
(A)Low clouds (B)High clouds (C)Clouds with extensive vertical development

原始題號:0013744 題組:0 難易度:中

(C) 254. Standing lenticular clouds, in mountainous areas, indicated
(A)An inversion (B)Unstable air (C)Turbulence

原始題號:0013745 題組:0 難易度:中

(A) 255. Under which condition does adventcion fog usually form?
(A)Moist air moving over colder ground or water. (B)Warm, moist air setting over a cool surface under no-wind conditions. (C)A land breeze blowing a cold air mass over a warm water current.

原始題號:0013746 題組:0 難易度:中

(C) 256. What types of fog depend upon a wind in order to exist?
(A)Steam fog and down slope fog. (B)Precipitation-induced fog and ground fog. (C)Advection fog and up slope fog.

原始題號:0013747 題組:0 難易度:中

(A) 257. Fair weather cumulus clouds often indicate:
(A)turbulence at and below the cloud level. (B)poor visibility (C)smooth flying conditions.

原始題號:0013748 題組:0 難易度:中

(C) 258. What are the characteristics of stable air?
(A)Good visibility, steady precipitation, and stratus-type clouds. (B)Poor visibility, intermittent precipitation, and cumuliform-type clouds. (C)Poor visibility, steady precipitation, and stratus-type clouds.

原始題號:0013749 題組:0 難易度:中

(C) 259. Steady precipitation, in contrast to showers, preceding a front is an indication of:
(A)Stratiform clouds with moderate turbulence. (B)Cumiliform clouds with little or no turbulence. (C)Stratiform clouds with little or no turbulence.

原始題號:0013750 題組:0 難易度:中

(C) 260. Where do squall lines most often develop?
(A)In an occluded front. (B)In a cold air mass. (C)Ahead of a cold front.

原始題號:0013751 題組:0 難易度:中

(A) 261. If squalls are reported at your destination, what wind conditions should you anticipate?
(A)Sudden increases in wind speed of at least 16 knots, rising to 22 knots or more, lasting for at least 1 minute. (B)Peak gusts of at least 35 knots for a sustained period of 1 minute or longer, (C)Rapid variation in wind direction of at least 20? and changes in speed of at least 10 knots between peaks and lulls.

原始題號:0013752 題組:0 難易度:中

(B) 262. Which thunderstorms generally produce the most severe conditions, such as heavy hail and destructive winds?
(A)Warm front. (B)Squall line. (C)Air mass.

原始題號:0013753 題組:0 難易度:中

(C) 263. What is indicated by the term "embedded thunderstorms"?
(A)Severe thunderstorms are embedded within a squall line. (B)Thunderstorms are predicted to develop in a stable air mass. (C)Thunderstorms are obscured by massive cloud layers and cannot be seen.

原始題號:0013754 題組:0 難易度:中

(A) 264. Which weather phenomenon is always associated with a thunderstorm?
(A)Lightning. (B)Heavy rain showers. (C)Supercooled raindrops.

原始題號:0013755 題組:0 難易度:中

(C) 265. Which procedure is recommended if a pilot should unintentionally penetrate embedded thunderstorm activity?
(A)Reverse aircraft heading or proceed toward an area of known VFR conditions. (B)Reduce airspeed to maneuvering speed and maintain a constant altitude. (C)Set power for recommended turbulence penetration airspeed and attempt to maintain a level flight attitude.

原始題號:0013756 題組:0 難易度:中

(C) 266. What is the expected duration of an individual microburst?
(A)Two minutes with maximum winds lasting approximately 1 minute. (B)One microburst may continue for as long as 2 to 4 hours. (C)Seldom longer than 15 minutes from the time the burst strikes the ground until dissipation.

原始題號:0013757 題組:0 難易度:中

(C) 267. Why is frost considered hazardous to flight operation?
(A)Frost changes the basic aerodynamic shape of the airfoil. (B)Frost decreases control effectiveness. (C)Frost causes early airflow separation resulting in a loss of lift.

原始題號:0013758 題組:0 難易度:中

(C) 268. In which meteorological environment is aircraft structural icing most likely to have the highest rate of accumulation?
(A)Cumulonimbus clouds. (B)High humidity and freezing temperature. (C)Freezing rain.

原始題號:0013759 題組:0 難易度:中

(C) 269. Test data indicate that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of an airfoil.
(A)reduce lift by as much as 50 percent and increase drag by as much as 50 percent. (B)increase drag and reduce lift by as much as 25 percent. (C)reduce lift by as much as 30 percent and increase drag by 40 percent.

原始題號:0013760 題組:0 難易度:中

(C) 270. Where does wind shear occur?
(A)Exclusively in thunderstorms. (B)Wherever there is an abrupt decrease in pressure and/or temperature. (C)With either a wind shift or a wind speed gradient at any level in the atmosphere.

原始題號:0013761 題組:0 難易度:中

(C) 271. While flying a 3? glide slope, a constant tailwind shears to a calm wind. Which conditions should the pilot expect?
(A)Airspeed and pitch attitude decrease and there is a tendency to go below glide slope. (B)Airspeed and pitch attitude increase and there is a tendency to go below glide slope. (C)Airspeed and pitch attitude increase and there is a tendency to go above glide slope.

原始題號:0013762 題組:0 難易度:中

(B) 272. What is an operational consideration if you fly into rain which freezes on impact?
(A)You have flown into an area of thunderstorms. (B)Temperatures are above freezing at some higher altitude (C)You have flown through a cold front.

原始題號:0013763 題組:0 難易度:中

(C) 273. Which primary source should be used to obtain forecast weather information at your destination for the planned ETA?
(A)Area Forecast. (B)Radar Summary and Weather Depiction Charts. (C)Terminal Aerodrome Forecast (TAF).

原始題號:0013764 題組:0 難易度:中

(B) 274. SIGMETs are issued as a warning of weather conditions potentially hazardous
(A)particularly to light aircraft. (B)to all aircraft. (C)only to light aircraft operations.

原始題號:0013765 題組:0 難易度:中

(C) 275. A pilot planning to depart at 1100Z on an IFR flight is particularly concerned about the hazard of icing. What sources reflect the most accurate information on icing conditions (current and forecast) at the time of departure?
(A)Low-Level Significant Weather Prognostic Chart, and the Area Forecast. (B)The Area Forecast, and the Freezing Level Chart. (C)Pilot weather reports (PIREPs), AIRMETS, and SIGMETS.

原始題號:0013766 題組:0 難易度:中

(B) 276. Which weather condition is defined as an anticyclone?
(A)Calm. (B)High pressure area. (C)Col.

原始題號:0013767 題組:0 難易度:中

(B) 277. What is a feature of air movement in a high pressure area?
(A)Ascending from the surface high to lower pressure at higher altitudes. (B)Descending to the surface and then outward. (C)Moving outward from the high at high altitudes and into the high at the surface.

原始題號:0013768 題組:0 難易度:中

(C) 278. Where is the usual location of a thermal low?
(A)Over the arctic region. (B)Over the eye of a hurricane. (C)Over the surface of a dry, sunny region.

原始題號:0013769 題組:0 難易度:中

(C) 279. What is a feature of a stationary front?
(A)The warm front surface moves about half the speed of the cold front surface. (B)Weather conditions are a combination of strong cold front and strong warm front weather. (C)Surface winds tend to flow parallel to the frontal zone.

原始題號:0013770 題組:0 難易度:中

(C) 280. Which event usually occurs after an aircraft passes through a front into the colder air?
(A)Temperature/dew point spread decreases. (B)Wind direction shifts to the left (C)Atmospheric pressure increases.

原始題號:0013771 題組:0 難易度:中

(A) 281. Which atmospheric factor causes rapid movement of surface fronts?
(A)Upper winds blowing across the front. (B)Upper low located directly over the surface low. (C)The cold front overtaking and lifting the warm front.

原始題號:0013772 題組:0 難易度:中

(B) 282. When advection fog has developed, what may tend to dissipate or lift the fog into low stratus clouds?
(A)Temperature inversion. (B)Wind stronger than 15 knots. (C)Surface radiation.

原始題號:0013773 題組:0 難易度:中

(A) 283.Which conditions are necessary for the formation of upslope fog?
(A)Moist, stable air being moved over gradually rising ground by a wind. (B)A clear sky, little or no wind, and 1 00 percent relative humidity. (C)Rain falling through stratus clouds and a 10- to 25-knot wind moving the precipitation up the slope.

原始題號:0013775 題組:0 難易度:中

(A) 284.How can the stability of the atmosphere be determined?
(A)Ambient temperature lapse rate. (B)Atmospheric pressure at various levels. (C)Surface temperature/dew point spread.

原始題號:0013776 題組:0 難易度:中

(B) 285.Where is a common location for an inversion?
(A)At the tropopause. (B)In the stratosphere. (C)At the base of cumulus clouds.

原始題號:0013777 題組:0 難易度:中

(A) 286.What feature is associated with a temperature inversion?
(A)A stable layer of air. (B)An unstable layer of air. (C)Air mass thunderstorms.

原始題號:0013778 題組:0 難易度:中

(C) 287.What characterizes a ground-based inversion?
(A)Convection currents at the surface. (B)Cold temperatures. (C)Poor visibility.

原始題號:0013779 題組:0 難易度:中

(B) 288.Which pressure is defined as station pressure?
(A)Altimeter setting. (B)Actual pressure at field elevation. (C)Station barometric pressure reduced to sea level.

原始題號:0013780 題組:0 難易度:中

(B) 289.What is a difference between an air mass thunderstorm and a steady-state thunderstorm?
(A)Air mass thunderstorms produce precipitation which falls outside of the updraft. (B)Air mass thunderstorm downdrafts and precipitation retard and reverse the updrafts. (C)Steady-state thunderstorms are associated with local surface heating.

原始題號:0013781 題組:0 難易度:中

(B) 290.Which type storms are most likely to produce funnel clouds or tornadoes?
(A)Air mass thunderstorms. (B)Cold front or squall line thunderstorms. (C)Storms associated with icing and supercooled water.

原始題號:0013782 題組:0 難易度:中

(A) 291.Which type cloud is associated with violent turbulence and a tendency toward the production of funnel clouds?
(A)Cumulonimbus mamma. (B)Standing lenticular. (C)Stratocumulus.

原始題號:0013783 題組:0 難易度:中

(B) 292.Where do squall lines most often develop?
(A)In an occluded front. (B)Ahead of a cold front. (C)Behind a stationary front.

原始題號:0013784 題組:0 難易度:中

(B) 293.What condition is indicated when ice pellets are encountered during flight?
(A)Thunderstorms at higher levels. (B)Freezing rain at higher levels. (C)Snow at higher levels.

原始題號:0013785 題組:0 難易度:中 (R20190702)

(A) 294.When will frost most likely form on aircraft surfaces?
(A)On clear nights with stable air and light winds. (B)On overcast nights with freezing drizzle precipitation. (C)On clear nights with convective action and a small temperature/dew point spread.

原始題號:0013786 題組:0 難易度:中

(B) 295.What is a feature of supercooled water?
(A)The water drop sublimates to an ice particle upon impact. (B)The unstable water drop freezes upon striking an exposed object. (C)The temperature of the water drop remains at 0蚓 until it impacts a part of the airframe, then clear ice accumulates.

原始題號:0013787 題組:0 難易度:中

(A) 296.Where do the maximum winds associated with the jet stream usually occur?
(A)In the vicinity of breaks in the tropopause on the polar side of the jet core. (B)Below the jet core where a long straight stretch of the jet stream is located. (C)On the equatorial side of the jet stream where moisture has formed cirriform clouds.

原始題號:0013789 題組:0 難易度:易

(A) 297.What is the primary cause of all changes in the Earth's weather?
(A)Variations of solar energy at the Earth's surface. (B)Changes in air pressure over the Earth's surface. (C)Movement of air masses from moist areas to dry areas.

原始題號:0013790 題組:0 難易度:中

(C) 298.Where is the usual location of a thermal low?
(A)Over the arctic region. (B)Over the eye of a hurricane. (C)Over the surface of a dry, sunny region.

原始題號:0013791 題組:0 難易度:易

(B) 299.What is a feature of air movement in a high pressure area?
(A)Ascending from the surface high to lower pressure at higher altitudes. (B)Descending to the surface and then outward. (C)Moving outward from the high at high altitudes and into the high at the surface.

原始題號:0013792 題組:0 難易度:易

(A) 300. At lower levels of the atmosphere, friction causes the wind to flow across isobars into a low because the friction
(A)decrease windspeed and Coriolis force. (B)decrease pressure gradient force. (C)creates air turbulence and raises atmospheric pressure.

原始題號:0013793 題組:0 難易度:易

(C) 301. At which location does Coriolis force have the least effect on wind direction?
(A)At the poles. (B)Middle latitudes (30 to 60 degree). (C)At the Equator.

原始題號:0013794 題組:0 難易度:易

(A) 302. How does Coriolis force affect wind direction in the Southern Hemisphere?
(A)Causes clockwise rotation around a low. (B)Cause wind to flow out of a low toward a high. (C)Has exactly the same effect as in the Northern Hemisphere.

原始題號:0013795 題組:0 難易度:易

(B) 303. Which weather condition is defined as an anti-cyclone?
(A)Calm. (B)High pressure area. (C)COL.

原始題號:0013796 題組:0 難易度:中

(B) 304. Which area or areas of the Northern Hemisphere experience a generally east to west movement of weather system?
(A)Arctic only; (B)Arctic and subtropical. (C)Subtropical only.

原始題號:0013797 題組:0 難易度:中

(A) 305. Summer thunderstorms in the arctic region will generally move
(A)northeast to southwest in polar easterlies. (B)southwest to northeast with the jetstream flow. (C)directly north to south with the low-level polar airflow.

原始題號:0013798 題組:0 難易度:易

(B) 306. What is a characteristic of the troposphere?
(A)It contains all the moisture of the atmosphere. (B)There is an overall decrease of temperature with an increase of altitude. (C)The average altitude of the top of the troposphere is about 6 miles.

原始題號:0013799 題組:0 難易度:易

(A) 307. What weather feature occurs at altitude levels near the tropopause?
(A)Maximum winds and narrow wind shear zones. (B)Abrupt temperature increase above the tropopause. (C)Thin layers of cirrus (ice crystal) clouds at the tropopause level.

原始題號:0013800 題組:0 難易度:易

(C) 308. Which feature is associated with the tropopause?
(A)Absence of wind and turbulence. (B)Absolute upper limit of cloud formation. (C)Abrupt change of temperature lapse rate.

原始題號:0013801 題組:0 難易度:中

(B) 309. Where is a common location for an inversion?
(A)At the tropopause. (B)In the stratosphere. (C)At the base of cumulus clouds.

原始題號:0013802 題組:0 難易度:易

(B) 310. Where are jetstreams normally located?
(A)In areas of strong low pressure systems in the stratosphere. (B)At the tropopause where intensified temperature gradients are located. (C)In a single continuous band, encircling the Earth, where there is a break between the equatorial and polar tropopause.

原始題號:0013803 題組:0 難易度:中

(B) 311. Which type clouds may be associated with the jetstream?
(A)Cumulonimbus cloud line where the jetstream crosses the cold front. (B)Cirrus clouds on the equatorial side of the jetstream. (C)Cirrostratus cloud band on the polar side and under the jetstream.

原始題號:0013804 題組:0 難易度:中

(A) 312. Where do the maximum winds associated with the jetstream usually occur?
(A)In the vicinity of breaks in the tropopause on the polar side of the jet core. (B)Below the jet core where a long straight stretch of the jetstream is located. (C)On the equatorial side of the jetstream where moisture has formed cirriform clouds.

原始題號:0013805 題組:0 難易度:易

(A) 313. What term describes an elongnated area of low pressure?
(A)Trough. (B)Ridge. (C)Hurricane or typhoon.

原始題號:0013806 題組:0 難易度:中

(C) 314. What is a feature of a stationary front?
(A)The warm front surface moves about half the speed of the cold front surface. (B)Weather conditions are a combination of strong cold front and strong warm front weather. (C)Surface winds tend to flow parallel to the frontal zone.

原始題號:0013807 題組:0 難易度:中

(C) 315. Which event usually occurs after an aircraft passes through a front into the colder air?
(A)Temperature/ dewpoint spread decreases. (B)Wind direction shifts to the left (C)Atmospheric pressure increases.

原始題號:0013808 題組:0 難易度:中

(B) 316. What type weather change is to be expected in an area where frontolysis is reported?
(A)The frontal weather is becoming stronger. (B)The front is dissipating. (C)The front is moving at a faster speed.

原始題號:0013809 題組:0 難易度:易

(A) 317. Which atmospheric factor causes rapid movement of surface fronts?
(A)Upper winds blowing across the front. (B)Upper low located directly over the surface low. (C)The cold front overtaking and lifting the warm front.

原始題號:0013810 題組:0 難易度:中

(B) 318. In which meteorological conditions can frontal waves and low pressure areas form?
(A)Warm fronts or occluded fronts. (B)Slow-moving cold fronts or stationary fronts. (C)Cold front occlusions.

原始題號:0013811 題組:0 難易度:中

(B) 319. What weather difference is found on each side of a "dry line"?
(A)Extreme temperature difference. (B)Dewpoint difference. (C)Stratus versus cumulus clouds.

原始題號:0013812 題組:0 難易度:易

(A) 320. Where is the normal location of the jetstream relative to surface lows and fronts?
(A)The jetstream is located north of the surface systems. (B)The jetstream is located south of the low and warm front. (C)The jetstream is located over the low and crosses both the warm front and the cold front.

原始題號:0013813 題組:0 難易度:中

(C) 321. Which type frontal system is normally crossed by the jetstream?
(A)Cold front and warm front. (B)Warm front. (C)Occluded front.

原始題號:0013814 題組:0 難易度:易

(C) 322. Which term applies when the temperature of the air changes by compression or expansion with no heat added or removed?
(A)Katabatic. (B)Advection. (C)Adiabatic.

原始題號:0013815 題組:0 難易度:易

(A) 323. Which process causes adiabatic cooling?
(A)Expansion of air as it rises. (B)Movement of air over a colder surface. (C)Release of latent heat during the vaporization process.

原始題號:0013816 題組:0 難易度:中

(C) 324. Which type wind flows downslope becoming warmer and dryer?
(A)Land breeze. (B)Valley wind. (C)Katabatic wind.

原始題號:0013817 題組:0 難易度:易

(A) 325.What is the approximate rate unsaturated air will cool flowing upslope?
(A)3oC per 1,000 feet. (B)2oC per 1,000 feet. (C)4oC per 1,000 feet.

原始題號:0013818 題組:0 難易度:易

(A) 326.What is the result when water vapor changes to the liquid state while being lifted in a thunderstorm?
(A)Latent heat is released to the atmosphere. (B)Latent heat is transformed into pure energy. (C)Latent heat is absorbed from the surrounding air by the water droplet.

原始題號:0013819 題組:0 難易度:易

(A) 327.What weather condition occurs at the altitude where the dewpoint lapse rate and the dry adiabatic lapse rate converge?
(A)Cloud bases form. (B)Precipitation starts. (C)Stable air changes to unstable air.

原始題號:0013820 題組:0 難易度:易

(B) 328.When saturated air moves downhill, its temperature increases
(A)at a faster rate than dry air because of the release of latent heat. (B)at a slower rate than dry air because vaporization uses heat. (C)at a slower rate than dry air because condensation releases heat.

原始題號:0013821 題組:0 難易度:易

(A) 329.What feature is associated with a temperatuer inversion?
(A)A stable layer of air. (B)An unstable layer of air. (C)Air mass thunderstorms.

原始題號:0013822 題組:0 難易度:易

(C) 330.What is indicated about an air mass if the termerature remains unchanged or decreases slightly as altitude is increased?
(A)The air is unstable. (B)A temperature inversion exists. (C)The air is stable.

原始題號:0013823 題組:0 難易度:易

(A) 331.Which condition is present when a local pracel of air is stable?
(A)The parcel of air resists convection. (B)The parcel of air cannot be forced uphill. (C)As the parcel of air moves upward, its temperature becomes warmer than the surrounding air.

原始題號:0013824 題組:0 難易度:易

(A) 332.How can the stability of the atmosphere be determined?
(A)Ambient temperature lapse rate. (B)Atmospheric pressure at various levels. (C)Surface temperature/ dewpoint spread.

原始題號:0013825 題組:0 難易度:易

(C) 333.What characterizes a ground-based inversion?
(A)Convection currents at the surface. (B)Cold temperatures. (C)Poor visibility.

原始題號:0013826 題組:0 難易度:易 (R20190702)

(A) 334. When does minimum temperature normally occur during a 24-hour period?
(A)After sunrise. (B)About 1 hour before sunrise. (C)At midnight.

原始題號:0013827 題組:0 難易度:易

(C) 335. What condition produces the most frequent type of ground- or surface-based temperature inversion?
(A)The movement of colder air under warm air or the movement of warm air over cold air. (B)Widespread sinking of air whthin a thick layer aloft resulting in heating by compression. (C)Terrestrial radiation on a clear, relative calm night.

原始題號:0013828 題組:0 難易度:易

(B) 336. How are haze layers cleared or dispersed?
(A)By convective mixing in cool night air. (B)By wind or the movement of air. (C)By evaporation similar to the clearing of fog.

原始題號:0013829 題組:0 難易度:中

(B) 337. When advection fog has developed, what may tend to dissipate or lift the fog into low stratus clouds?
(A)Temperature inversion. (B)Wind stronger than 15 knots. (C)Surface radiation.

原始題號:0013830 題組:0 難易度:易

(A) 338. Which conditons are necessary for the formation of upslope fog?
(A)Moist, stable air being moved over gradually rising ground by a wind. (B)A clear sky, little or no wind, and 100 percent relative humidity. (C)Rain falling through stratus clouds and a 10- to 25-knot wind moving the precipitation up the slope.

原始題號:0013831 題組:0 難易度:易

(A) 339. Which condition produces weather on the lee side of a large lake?
(A)Warm air flowing over a colder lake may produce fog. (B)Cold air flowing over a warmer lake may produce advection fog. (C)Warm air flowing over a cool lake may produce rain showers.

原始題號:0013832 題組:0 難易度:易

(B) 340. Which weather phenomenon signals the beginning of the mature stage of a thunderstorm?
(A)The appearance of an anvil top. (B)The start of rain at the surface. (C)Growth rate of the cloud is at its maximum.

原始題號:0013833 題組:0 難易度:易

(B) 341. During the life cycle of a thunderstorm, which stage is characterized predominately by downdrafts?
(A)Cumulus. (B)Dissipating. (C)Mature.

原始題號:0013834 題組:0 難易度:易

(C) 342. What featuer is normally associated with the cumulus stage of a thunderstorm?
(A)Beginning of rain at the surface. (B)Frequent lightning. (C)Continuous updraft.

原始題號:0013835 題組:0 難易度:中

(A) 343. Why are downdrafts in a mature thunderstorm hazardous?
(A)Downdrafts are kept cool by cold rain which tends to accelerate the downward velocity. (B)Downdrafts converge toward a central location under the storm after striking the surface. (C)Downdrafts become warmer than the surrounding air and reverse into an updraft before reaching the surface.

原始題號:0013836 題組:0 難易度:易

(B) 344. Where do squall lines most often develop?
(A)In an occluded front. (B)Ahead of a cold front. (C)Behind a stationary front.

原始題號:0013837 題組:0 難易度:中

(B) 345. What is a difference between an air mass thunderstorm and a steady-state thunderstorm?
(A)Air mass thunderstorms produce precipitation which falls outside of the updraft. (B)Air mass thunderstorm downdrafts and precipitation retard and reverse the updrafts. (C)Steady-state thunderstorms are associated with local surface heating.

原始題號:0013838 題組:0 難易度:易

(B) 346. Which type storms are most likely to produce funnel clouds or tornadoes?
(A)Air mass thunderstorms. (B)Cold front or squall line thunderstorms. (C)Storms associated with icing and supercooled water.

原始題號:0013839 題組:0 難易度:易

(A) 347. Which type clouds is associated with violent turbulence and a tendency toward the production of funnel clouds?
(A)Cumulonimbus mamma. (B)Standing lenticular. (C)Stratocumulus.

原始題號:0013840 題組:0 難易度:易

(A) 348. Which weather condition is an example of a nonfrontal instability band?
(A)Squall line. (B)Advective fog. (C)Frontogenesis.

原始題號:0013841 題組:0 難易度:中

(A) 349. A severe thunderstorm is one in which the surface wind is
(A)58 MPH or greater and/or surface hail is 3/4 inch or more in diameter. (B)50 knots or greater and/or surface hail is 1/2 inch or more in diameter. (C)45 knots or greater and/or surface hail is 1 inch or more in diameter.

原始題號:0013842 題組:0 難易度:中

(B) 350. A squall is a sudden increase of at least 16 knots in average wind speed to a sustained speed of
(A)24 knots or more for at least 1 minute. (B)22 knots or more for at least 1 minute. (C)20 knots or more for at least 1 minute.

原始題號:0013843 題組:0 難易度:中

(B) 351. Atmospheric pressure changes due to a thunderstorm will be at the lowest value
(A)during the downdraft and heavy rain showers. (B)when the thunderstorm is approaching. (C)immediately after the rain showers have stopped.

原始題號:0013844 題組:0 難易度:易

(C) 352. Convective clouds which penetrate a stratus layer can produce which threat to instrument flight?
(A)Freezing rain. (B)Clear air turbulence. (C)Embedded thunderstorms.

原始題號:0013845 題組:0 難易度:易

(C) 353. What is indicated by the term "embedded thunderstorms"?
(A)Severe thunderstorms are embedded in a squall line. (B)Thunderstorms are predicted to develop in a stable air mass. (C)Thunderstorms are obscured by other types of clouds.

原始題號:0013846 題組:0 難易度:易

(C) 354. A clear area in a line of thunderstorm echoes on a radar scope indicates
(A)the absence of clouds in the area. (B)an area of no convective turbulence. (C)an area where precipitation drops are not detected.

原始題號:0013847 題組:0 難易度:易

(A) 355. When flying over the top of a severe thunderstorm, the cloud should be overflown by at least
(A)1,000 feet for each 10 knots windspeed. (B)2,500 feet. (C)500 feet above any moderate to severe turbulence layer.

原始題號:0013848 題組:0 難易度:中

(B) 356. Which is a definition of "severe wind shear"?
(A)Any rapid change of horizontal wind shear in excess of 25 knots; vertical shear excepted. (B)Any rapid change in wind direction or velocity which causes airspeed changes greater than 15 knots or vertical speed changes greater than 500 ft/min. (C)Any change of airspeed greater than 20 knots which is sustained for more than 20 seconds or vertical speed changes in excess of 100 ft/min.

原始題號:0013849 題組:0 難易度:易

(B) 357. In comparison to an approach in a moderate headwind, which is an indication of a possible wind shear due to a decreasing headwind when descending on the glide slope?
(A)Less power is required. (B)Higher pitch attitude is required. (C)Lower descent rate is required.

原始題號:0013850 題組:0 難易度:易

(C) 358. Which INITIAL cockpit indications should a pilot be aware of when a headwind shears to a calm wind?
(A)Indicated airspeed decreases, aircraft pitches up, and altitude decreases.
(B)Indicated airspeed increases, aircraft pitches down, and altitude increases.
(C)Indicated airspeed decreases, aircraft pitches down, and altitude decreases.

原始題號:0013851 題組:0 難易度:易

(C) 359. Which condition would INITIALLY cause the indicated airspeed and pitch to increase and the sink rate to decrease?
(A)Sudden decrease in a headwind component. (B)Tailwind which suddenly increases in velocity. (C)Sudden increase in a headwind component.

原始題號:0013852 題組:0 難易度:易

(C) 360. Which INITIAL cockpit indications should a pilot be aware of when a constant tailwind shears to a calm wind?
(A)Altitude increase; pitch and indicated airspeed decrease. (B)Altitude, pitch and indicated airspeed decrease. (C)Altitude, pitch and indicated airspeed increase.

原始題號:0013853 題組:0 難易度:易

(B) 361. Which wind-shear condition results in a loss of airspeed?
(A)Decreasing headwind or tailwind. (B)Decreasing headwind and increasing tailwind. (C)Increasing headwind and decreasing tailwind.

原始題號:0013854 題組:0 難易度:易

(C) 362. Which wind-shear condition results in an increase in airspeed?
(A)Increasing tailwind and decreasing headwind. (B)Increasing tailwind and headwind. (C)Decreasing tailwind and increasing headwind.

原始題號:0013855 題組:0 難易度:易

(A) 363. Which airplane performance characteristics should be recognized during takeoff when encountering a tailwind shear that increases in intensity?
(A)Loss of, or diminished, airspeed performance. (B)Decreased takeoff distance. (C)Increased climb performance immediately after takeoff.

原始題號:0013856 題組:0 難易度:易

(B) 364. Thrust is being managed to maintain desired indicated airspeed and the glide slope is being flown. Which characteristics should be observed when a tailwind shears to a constant headwind?
(A)PITCH ATTITUDE: Increases. VIERTICAL SPEED: Increases. INDICATED AIRSPEED: Decreases, then increases to approach speed. (B)PITCH ATTITUDE: Increases. VIERTICAL SPEED: Decreases. INDICATED AIRSPEED: Increases, then decreases. (C)PITCH ATTITUDE: Decreases. VIERTICAL SPEED: Decreases. INDICATED AIRSPEED: Decreases, then increases to approach speed.

原始題號:0013857 題組:0 難易度:易

(C) 365. What is an important characteristic of wind shear?
(A)It is primarily associated with the lateral vortices generated by thunderstorms. (B)It usually exists only in the vicinity of thunderstorms, but may be found near a strong temperature inversion. (C)It may be associated with either a wind shift or windspeed gradient at any level in the atmosphere.

原始題號:0013858 題組:0 難易度:易

(C) 366. Where can the maximum hazard zone caused by wind shear associated with a thundersotrm be found?
(A)In front of the thunderstorm cell (anvil side) and on the southwest side of the cell. (B)Ahead of the roll cloud or gust front and directly under the anvil cloud. (C)On all sides and directly under the thundersotrm cell.

原始題號:0013859 題組:0 難易度:中

(B) 367. Which is a necessary condition for the occurrence of a low-level temperature inversion wind shear?
(A)The temperature differential between the cold and warm layers must be at least 10oC. (B)A calm or light wind near the surface and a relatively strong wind just above the inversion. (C)A wind direction difference of at least 30o between the wind near the surface and the wind just above the inversion.

原始題號:0013860 題組:0 難易度:中

(B) 368. The horizontal wind shear, critical for turbulence (moderate or greater) per 150 miles is
(A)18 knots or less. (B)greater than 18 knots. (C)not a factor, only vertical shear is a factor.

原始題號:0013861 題組:0 難易度:易

(C) 369. What is the expected duration of an individual microburst?
(A)Two minutes with maximum winds lasting approximately 1 minute. (B)One microburst may continue for as long as 2 to 4 hours. (C)Seldom longer than 15 minutes from the time the burst strikes the ground until dissipation.

原始題號:0013862 題組:0 難易度:易

(C) 370. Maximum downdrafts in a microburst encounter may be as strong as
(A)8,000 ft/min. (B)7,000 ft/min. (C)6,000 ft/min.

原始題號:0013863 題組:0 難易度:易

(B) 371. An aircraft that encounters a headwind of 40 knots, within a micraburst, may expect a total shear across the microburst of
(A)40 knots. (B)80 knots. (C)90 knots.

原始題號:0013864 題組:0 難易度:易

(C) 372. Doppler wind measurements indicate that the windspeed change a pilot may expect when flying through the peak intensity of a microburst is approximately
(A)15 knots. (B)25 knots. (C)45 knots.

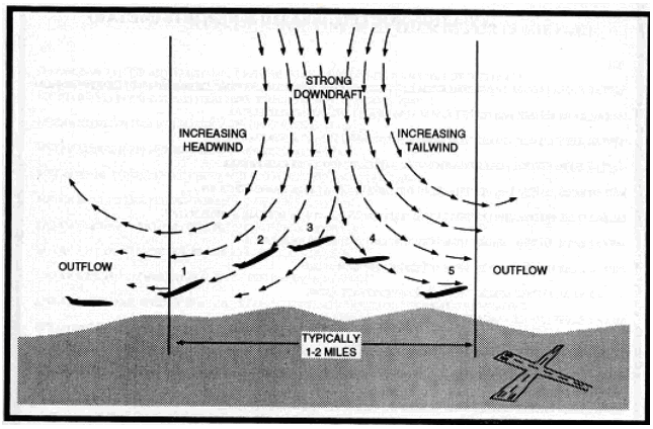
原始題號:0013865 題組:0 難易度:易

(C) 373. An aircraft that encounters a headwind of 45 knots, within a micraburst, may expect a total shear across the microburst of
(A)40 knots. (B)80 knots. (C)90 knots.

原始題號:0013866 題組:1 難易度:中 (R20130125)

(C) 374. (Refer to figure A.) If involved in a microburst encounter, in which aircraft positions will the most severe downdraft occur?(如圖A43_figureA)
(A)4 and 5. (B)2 and 3. (C)3 and 4.

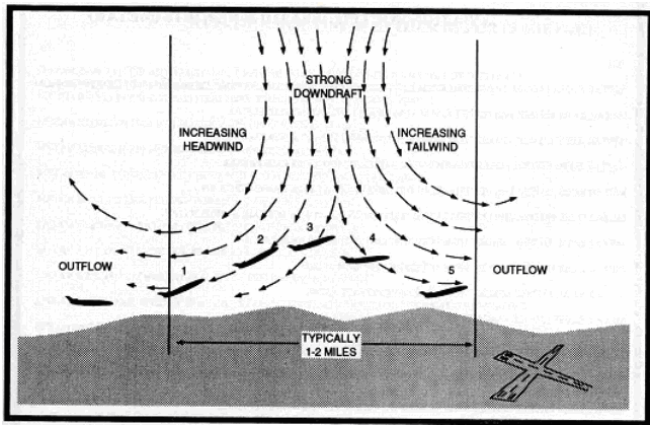
題目圖：



原始題號:0013867 題組:2 難易度:易 (R20130125)

(C) 375. (Refer to figure A.) When penetrating a microburst, which aircraft will experience an increase in performance without a change in pitch or power?(如圖A43_figureA)
(A)3 (B)2 (C)1

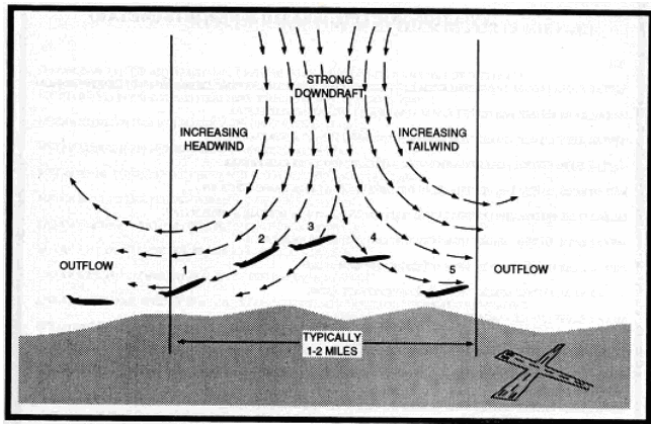
題目圖：



原始題號:0013868 題組:3 難易度:易 (R20130125)

(C) 376. (Refer to figure A.) What effect will a microburst encounter have upon the aircraft in position 3?(如圖A43_figureA)
(A)Decreasing headwind. (B)Increasing tailwind. (C)Strong downdraft.

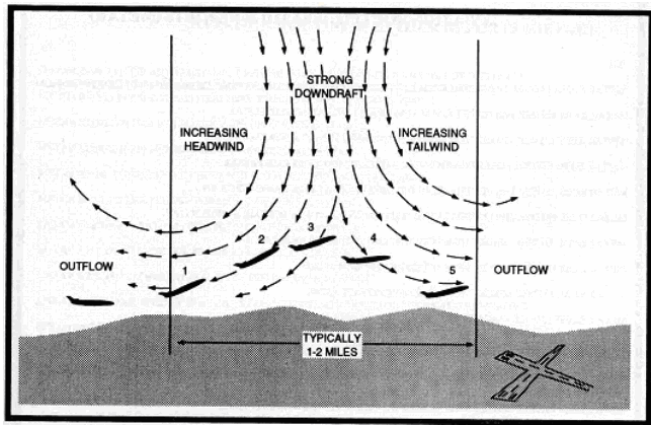
題目圖：



原始題號:0013869 題組:4 難易度:易 (R20130125)

(A) 377.(Refer to figure A.) What effect will a microburst encounter have upon the aircraft in position 4?(如圖A43_figureA)
(A)Strong tailwind. (B)Strong updraft. (C)Significant performance increase.

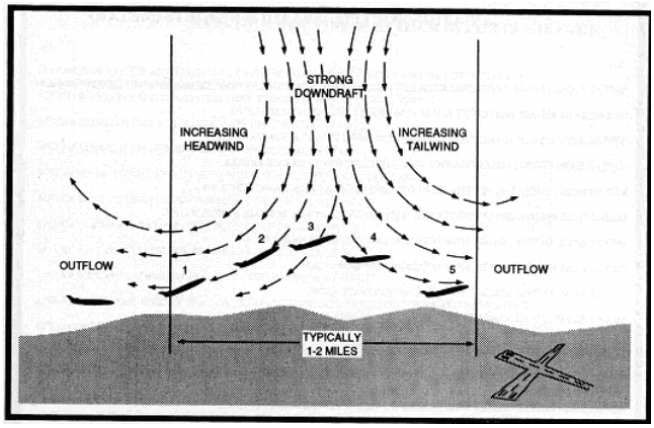
題目圖：



原始題號:0013870 題組:5 難易度:易 (R20130125)

(B) 378.(Refer to figure A.) How will the aircraft in position 4 be affected by a microburst encounter?(如圖A43_figureA)
(A)Perfoemance increasing with a tailwind and updraft. (B)Perfoemance decreasing with a tailwind and downdraft. (C)Perfoemance decreasing with a headwind and downdraft.

題目圖：



原始題號:0013871 題組:0 難易度:易

(C) 379. What information from the control tower is indicated by the following transmission? "SOUTH BOUNDARY WIND ONE SIX ZERO AT TWO FIVE, WEST BOUNDARY WIND TWO FOUR ZERO AT THREE FIVE."
(A)A downburst is located at the center of the airport. (B)Wake turbulence exists on the west side of the active runway. (C)There is a possibility of wind shear over or near the airport.

原始題號:0013872 題組:0 難易度:中

(C) 380. What is the recommended technique to counter the loss of airspeed and resultant lift from wind shear?
(A)Lower the pitch attitude and regain lost airspeed. (B)Avoid overstressing the aircraft, "pitch to airspeed," and apply maximum power. (C)Maintian, or increase, pitch attitude and accept the lower-than-normal airspeed indications.

原始題號:0013873 題組:0 難易度:易

(A) 381. Which is an effect of ice, snow, or frost formation on an airplane?
(A)Increased stall speed. (B)Increased pitchdown tendencies. (C)Increased angle of attack for stalls.

原始題號:0013874 題組:0 難易度:中

(C) 382. Test data indicate that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of a wing can
(A)reduce lift by as much as 40 percent and increase drag by 30 percent. (B)increase drag and reduce lift by as much as 40 percent. (C)reduce lift by as much as 30 percent and increase drag by 40 percent.

原始題號:0013875 題組:0 難易度:易

(C) 383. The adverse effects of ice, snow, or frost on aircraft performance and flight characteristics include decreased lift and
(A)increased thrust. (B)a decreased stall speed. (C)an increased stall speed.

原始題號:0013876 題組:0 難易度:中

(C) 384. Which is a disadvantage of the one-step over the two-step process when deicing/anti-icing an airplane?
(A)It is more complicated. (B)The holding time is increased. (C)More fluid is used with the one-step method when large deposits of ice and snow must be flushed off airplane surfaces.

原始題號:0013877 題組:0 難易度:中

(B) 385. The purpose of diluting ethylene glycol deicing fluid with water in non-precipitation conditions is to
(A)raise the eutectic point. (B)decrease the freeze point. (C)increase the minimum freezing point (onset of crystallization).

原始題號:0013878 題組:0 難易度:中

(A) 386.Which procedure increases holding time when deicing/anti-icing an airplane using a two-step process?
(A)Heated Type 1 fluid followed by cold Type 2 fluid. (B)Cold Type 2 fluid followed by hot Type 2 fluid. (C)Heated Type 1 or 2 fluid followed by cold Type 1 fluid.

原始題號:0013879 題組:0 難易度:中

(A) 387.Which of the following will decrease the holding time during anti-icing using a two-step process?
(A)Apply heated Type 2 fluid. (B)Decrease the water content. (C)Increase the viscosity of Type 1 fluid.

原始題號:0013880 題組:0 難易度:中

(C) 388.What should the deice/anti-ice fluid temperature be during the last step of a two-phase process?
(A)Hot. (B)Warm. (C)Cold.

原始題號:0013881 題組:0 難易度:中

(C) 389.What is the minimum glycol content of Type 1 deicing/anti-icing fluid?
(A)30 percent. (B)50 percent. (C)80 percent.

原始題號:0013882 題組:0 難易度:中

(B) 390.What is the minimum glycol content of Type 2 deicing/anti-icing fluid?
(A)30 percent. (B)50 percent. (C)80 percent.

原始題號:0013883 題組:0 難易度:中

(C) 391.Anti-icing fluid should provide freezing point protection to
(A)minus 20oF ambient temperature. (B)32oF outside temperature or below. (C)a freezing point no greater than 20oF below the ambient or airplane surface temperature.

原始題號:0013884 題組:0 難易度:中

(B) 392.Freezing Point Depressant (FPD) fluids used for deicing
(A)provide ice protection during flight. (B)are intended to provide ice protection on the ground only. (C)on the ground cause no performace degradation during takeoff.

原始題號:0013885 題組:0 難易度:中

(B) 393.Snow on top of deicing or anti-icing fluids
(A)need not be considered as adhering to the aircraft. (B)must be considered as adhering to the aircraft. (C)must be considered as adhering to the aircraft, but a safe takeoff can be made as it will blow off.

原始題號:0013886 題組:0 難易度:中

(C) 394. Freezing Point Depressant (FPD) fluids are highly soluble in water; however,
(A)ice is slow to absorb it but fast to melt when in contact with FPD. (B)ice absorbs it very fast but is slow to melt when in contact with it. (C)ice is slow to absorb it, and to melt when in contact with it.

原始題號:0013887 題組:0 難易度:易

(C) 395. Freezing Point Depressant (FPD) fluid residue on engine fan or compressor blades
(A)can increase preformance and cause stalls or surges. (B)could cause FDP vapors to enter the aircraft but would have no affect on engine thrust or power. (C)can reduce engine performance and cause surging and/or compressor stalls.

原始題號:0013888 題組:0 難易度:中

(B) 396. The practice developed and accepted by the North American air carrier industry using traditional North American fluids is to ensure that the freeze point of the remaining film is below ambient temperature by at least
(A)10oF. (B)20oF. (C)20oC.

原始題號:0013889 題組:0 難易度:易

(B) 397. What is a feature of supercooled water?
(A)The water drop sublimates to an ice particle upon impact. (B)The unstable water drop freezes upon striking an exposed object. (C)The temperature of the water drop remains at 0oC until it impacts a part of the airframe, then clear ice accumulates.

原始題號:0013890 題組:0 難易度:易

(C) 398. What condition is necessary for the formation of structural icing in flight?
(A)Supercooled water drops. (B)Water vapor. (C)Visible water.

原始題號:0013891 題組:0 難易度:易

(C) 399. Which type of icing is associated with the samllest size of water droplet similar to that found in low-level stratus clouds?
(A)Clear ice. (B)Frost ice. (C)Rime ice.

原始題號:0013892 題組:0 難易度:易

(B) 400. Freezing rain encountered during climb is normally evidence that
(A)a climb can be made to a higher altitude without encountering more than light icing. (B)a layer of warmer air exists above. (C)ice pellets at higher altitudes have changed to rain in the warmer air below.

原始題號:0013893 題組:0 難易度:易

(B) 401. Which type precipitation is an indication that supercooled water is present?
(A)Wet snow. (B)Freezing rain. (C)Ice pellets.

原始題號:0013894 題組:0 難易度:易

(B) 402. What condition is indicated when ice pellets are encountered during flight?
(A)Thunderstorms at higher levels. (B)Freezing rain at higher levels. (C)Snow at higher levels.

原始題號:0013895 題組:0 難易度:易

(A) 403. What temperature condition is indicated if precipitation in the form of wet snow occurs during flight:
(A)The temperature is above freezing at flight altitude. (B)The temperature is above freezing at higher altitudes. (C)There is an inversion with colder air below.

原始題號:0013896 題組:0 難易度:易

(C) 404. Which conditions result in the formation of frost?
(A)The temperature of the collecting surface is at or below freezing and small dorplets of moisture are falling. (B)Dew collects on the surface and then freezes because the surface temperature is lower than the air temperature.
(C)Temperature of the collecting surface is below the dewpoint and the dewpoint is also below freezing.

原始題號:0013897 題組:0 難易度:中

(A) 405. When will frost most likely form on aircraft surfaces?
(A)On clear nights with stable air and light winds. (B)On overcast nights with freezing drizzle precipitation. (C)On clear nights with convective action and a small temperature/ dewpoint spread.

原始題號:0013898 題組:0 難易度:易

(B) 406. The pilot in command of an airplane en route determines that icing conditions can be expected that might adversely affect safety of the flight. Which action is appropriate?
(A)The pilot in command may continue to the original destination airport, after climbing to a higher altitude. (B)The pilot in command shall not continue flight into the icing conditions. (C)The flight may continue to the original destination airport, provided all anti-icing and de-icing equipment is operational and is used.

原始題號:0013899 題組:0 難易度:易

(B) 407. What action is required prior to takeoff if snow is adhering to the wings of an air carrier airplane?
(A)Sweep off as much snow as possible and the residue must be polished smooth. (B)Assure that the snow is removed from the airplane. (C)Add 15 knots to the normal VR speed as the snow will blow off.

原始題號:0013900 題組:0 難易度:中

(B) 408. A pretakeoff contamination check for snow, ice or frost is required by FAR Part 135. this check is required to
(A)be made within 2 minutes of starting the takeoff roll. (B)be completed within 5 minutes prior to beginning the takeoff. (C)see that the aircraft is clean, therefore, a safe takeoff can be made during the next 5 minutes.

原始題號:0013901 題組:0 難易度:易

(C) 409. Deicing procedures and equipment developed for large transport airplanes
(A)will not be appropriate for the smaller aircraft, used under FAR Part 135.
(B)will be appropriate for all of the smaller aircraft, used under FAR Part 135.
(C)may not be appropriate for some of the smaller aircraft, used under FAR Part 135.

原始題號:0013902 題組:0 難易度:易

(A) 410. What type turbulence should be reported when it causes slight, rapid, and somewhat rhythmic bumpiness without appreciable changes in attitude or altitude less than one-third of the time?
(A)Occasional light chop. (B)Moderate turbulence. (C)Moderate chop.

原始題號:0013903 題組:0 難易度:易

(B) 411. What type turbulence should be reported when it causes changes in altitude and/or attitude more than two-thirds of the time, with the aircraft remaining in positive control at all times?
(A)Continuous severe chop. (B)Continuous moderate turbulecne. (C)Intermittent moderate turbulecne.

原始題號:0013904 題組:0 難易度:易

(C) 412. What type turbulence should be reported when it momentarily causes slight, erratic changes in altitude and/or attitude, one-third to two-thirds of the time?
(A)Occasional light chop. (B)Moderate chop. (C)Intermittent light turbulecne.

原始題號:0013905 題組:0 難易度:易

(C) 413. Turbulence encountered above 15,000 feet AGL, not associated with cloud formations, should be reported as
(A)convective turbulence. (B)hight altitude turbulence. (C)clear air turbulence.

原始題號:0013906 題組:0 難易度:易

(B) 414. Which type clouds are indicative of very strong turbulence?
(A)Nimbostratus. (B)Standing lenticular. (C)Cirrocumulus.

原始題號:0013907 題組:0 難易度:易

(A) 415. What is the lowest cloud in the stationary group associated with a mountain wave?
(A)Rotor cloud. (B)Standing lenticular. (C)Low stratus.

原始題號:0013908 題組:0 難易度:中

(B) 416. Clear air turbulence (CAT) associated with a mountain wave may extend as far as
(A)1,000 miles or more downstream of the mountain. (B)5,000 feet above the tropopause. (C)100 miles or more upwind of the mountain.

原始題號:0013909 題組:0 難易度:易

(A) 417. What is a likely location of clear air turbulences?
(A)In an upper trough on the polar side of a jetstream. (B)Near a ridge aloft on the equatorial side of a high pressure flow. (C)Downstream of the equatorial side of a jetstream.

原始題號:0013910 題組:0 難易度:中

(C) 418. Which type jetstream can be expected to cause the greater turbulence?
(A)A straight jetstream associated with a high pressure ridge. (B)A jetstream associated with a wide isotherm spacing. (C)A curving jetstream associated with a deep low pressure trough.

原始題號:0013911 題組:0 難易度:易

(C) 419. Which action is recommended if jetstream turbulence is encountered with a direct headwind or tailwind?
(A)Increase airspeed to get out of the area quickly. (B)Change course to fly on the polar side of the jetstream. (C)Change altitude or course to avoid a possible elongate turbulent area.

原始題號:0013912 題組:0 難易度:易

(A) 420. Which action is recommended regarding an altitude change to get out of jetstream turbulence?
(A)Descend if ambient temperature is falling. (B)Descend if ambient temperature is rising. (C)Maintain altitude if ambient temperature is not changing.

原始題號:0013913 題組:0 難易度:易

(A) 421. What action is recommended when encountering turbulence due to a wind shift associated with a sharp pressure trough?
(A)Establish a course across the trough. (B)Climb or descend to a smoother level. (C)Increase speed to get out of the trough as soon as possible.

原始題號:0013914 題組:0 難易度:易

(B) 422. Which arctic flying hazard is caused when a cloud layer of uniform thickness overlies a snow or ice covered surface?
(A)Ice fog. (B)Whiteout. (C)Blowing snow.

原始題號:0013915 題組:0 難易度:易

(C) 423. Which weather condition is present when the tropical storm is upgraded to a hurricane?
(A)Highest windspeed, 100 knots or more. (B)A clear area or hurrican eye has formed. (C)Sustained winds of 65 knots or more.

原始題號:0013916 題組:0 難易度:易

(A) 424. What is the general direction of movement of a hurricane located in the Carribean or Gulf of Mexico region?
(A)Northwesterly curving to northeasterly. (B)Westerly, until encountering land, then easterly. (C)Counterclockwise over open wate, then dissipating outward over land.

原始題號:0013917 題組:1 難易度:易 (R20130125)

(A) 425. (Refer to chart 1.) What was the METAR local Central Standard Time of the Aviation Routine Weather Report at Taiwan Taoyuan International Airport(RCTP)?(如圖A43_chart1)
(A)00:00UTC。 (B)08:00UTC。 (C)00:00L。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013918 題組:2 難易度:易 (R20130125)

(C) 426. (Refer to chart 1.) What type of report is listed forat Kadena (RODN) at 25/2255Z ?(如圖A43_chart1)
(A)An Aviation selected special weather report. (B)A special report concerning very low station pressure. (C)A special weather report (SPECI)

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
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260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
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260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013919 題組:3 難易度:易 (R20180823)

(A) 427.(Refer to chart 1.) What condition is reported at Taichung Ching-Chuang-Kang Airport(RCMQ)?(如圖A43_chart1)
(A)Mist (BR) ，the visibility is 5 kilometers (B)Heavy rain showers began 42 minutes after the hour. (C)The ceiling is solid overcast at an estimated 1,800 feet above sea level.

題目圖：

(MN) INTERNATIONAL NORTH BOUND

260000 RCTP METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000 RCKH METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000 RCSS METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000 RCBS METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000 RCFN METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000 RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000 RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000 RCYU RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000 ROAH METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255 RODN METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000 RJAA METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000 RJBB METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000 RJCC METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000 RJCH METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000 RJFF METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
260000 RJFK METAR RJFK 260000Z 31008KT 270V330 9999 FEW020 SCT/// 18/12 Q1008=
260000 RJFO METAR RJFO 260000Z 30009KT 270V350 9999 FEW020 BKN030 BKN040 19/12 Q1007=
260000 RJFT METAR RJFT 260000Z VRB02KT 8000 FEW010 BKN050 17/15 Q1008=
260000 RJFU METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000 RJGG METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000 RJNS METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000 RJOA METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000 RJOB METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000 RJOO METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000 RJOT METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000 RJSN METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000 RJSS METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000 RJTT METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000 RKJB METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000 RKPC METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000 RKPK METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000 RKSI METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000 RKSS METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000 RKTN METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=

原始題號:0013920 題組:4 難易度:易 (R20130125)

(C) 428.(Refer to chart 1.) What condition is reported at Narita Airport(RJAA))?(如圖A43_chart1)
(A)The tops of the overcast is 10,000 feet. (B)Temperature/ dewpoint spread is 8oF. (C)Altimeter setting is 999 hPa。

題目圖：

(MN) INTERNATIONAL NORTH BOUND

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260000  RCTP  METAR RCTP 260000Z 11007KT 060V140 9999 FEW018 BKN200 28/21 Q1009 NOSIG=
260000  RCKH  METAR RCKH 260000Z VRB02KT 6000 FEW015 BKN050 BKN080 29/23 Q1009 NOSIG=
260000  RCSS  METAR RCSS 260000Z 10009KT 9999 FEW020 SCT120 BKN200 27/22 Q1010 NOSIG=
260000  RCBS  METAR RCBS 260000Z 03013KT 8000 FEW012 SCT100 25/16 Q1011 NOSIG=
260000  RCFN  METAR RCFN 260000Z 35004KT 280V040 9999 FEW020 SCT060 BKN100 27/21 Q1010 NOSIG=
260000  RCMQ RCMQ 260000Z 03006KT 5000 BR FEW010 BKN100 26/24 Q1010 NOSIG RMK A2983=
260000  RCQC RCQC 260000Z 02008KT 6000 FEW012 SCT028 BKN050 27/24 Q1009 NOSIG RMK A2980=
260000  RCYU  RCYU 260000Z 00000KT 9999 FEW012 BKN100 27/23 Q1012 NOSIG RMK A2989=
260000  ROAH  METAR ROAH 260000Z 04003KT 320V090 9999 FEW020 25/18 Q1011=
252255  RODN  METAR RODN 252255Z AUTO 00000KT 9999 CLR 24/19 A2986 RMK AO2 SLP112 T02400189=
260000  RJAA  METAR RJAA 260000Z 03013KT 8000 BKN006 16/14 Q0999 NOSIG=
260000  RJBB  METAR RJBB 260000Z 27016KT 9999 FEW015 SCT060 18/11 Q1003 NOSIG=
260000  RJCC  METAR RJCC 260000Z 34012KT 9999 FEW020 BKN080 BKN100 15/05 Q1007=
260000  RJCH  METAR RJCH 260000Z 15006KT 9999 -SHRA FEW010 SCT030 BKN080 10/09 Q1007=
260000  RJFF  METAR RJFF 260000Z 35010KT 9999 FEW020 BKN030 BKN045 17/11 Q1009=
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260000  RJFU  METAR RJFU 260000Z 35003KT 300V040 9999 FEW025 SCT/// 20/14 Q1008=
260000  RJGG  METAR RJGG 260000Z 30007KT 9999 -SHRA FEW020 BKN030 17/13 Q1001 NOSIG=
260000  RJNS  METAR RJNS 260000Z 25015KT 9999 FEW030 22/13 Q0998=
260000  RJOA  METAR RJOA 260000Z 29014KT 9999 FEW020 BKN025 16/10 Q1005=
260000  RJOB  METAR RJOB 260000Z 24009KT 9999 FEW020 BKN030 16/12 Q1003=
260000  RJOO  METAR RJOO 260000Z VRB03KT 9999 FEW025 SCT100 19/10 Q1002=
260000  RJOT  METAR RJOT 260000Z 27015KT 9999 FEW025 SCT035 BKN060 17/11 Q1004=
260000  RJSN  METAR RJSN 260000Z 35003KT 5000 -SHRA BR FEW005 SCT020 BKN030 15/15 Q1001=
260000  RJSS  METAR RJSS 260000Z 09007KT 2000 -RADZ BR FEW002 SCT004 BKN006 13/12 Q1002=
260000  RJTT  METAR RJTT 260000Z 01005KT 330V040 7000 BR FEW015 BKN030 22/17 Q0998=
260000  RKJB  METAR RKJB 260000Z 24003KT 6000 FEW012 SCT025 17/13 Q1010 NOSIG =
260000  RKPC  METAR RKPC 260000Z 31004KT 280V340 7000 NSC 16/13 Q1010 NOSIG =
260000  RKPK  METAR RKPK 260000Z 30002KT 6000 FEW015 BKN050 19/14 Q1009 NOSIG =
260000  RKSI  METAR RKSI 260000Z 10007KT 060V130 9999 SCT030 BKN120 18/12 Q1010 NOSIG=
260000  RKSS  METAR RKSS 260000Z 13006KT 090V170 CAVOK 18/10 Q1010 NOSIG =
260000  RKTN  METAR RKTN 260000Z 01001KT 9000 FEW015 BKN060 18/15 Q1009 NOSIG=
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原始題號:0013921 題組:0 難易度:易

(C) 429. METAR KSPS 131757Z 09014KT 6SM -RA SCT025 OVC090 24/22 A3005. SPECI KSPS 131820Z 01025KT 3SM +RA FC OVC015 22/21 A3000. Which change took place at Wichita Falls (KSPS) between 1757 and 1820 UTC?
(A)The rain became lighter. (B)Atmospheric pressure increased. (C)A funnel cloud was observed.

原始題號:0013922 題組:0 難易度:中

(A) 430. The prevailing visibility in the following METAR is? METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV004 06/05 A2989 RMK AO2 $
(A)less than 1/4 statute mile. (B)measured 1/4 statute mile. (C)a mean (average) of 1/4 statute mile.

原始題號:0013923 題組:0 難易度:中

(B) 431. The VV001 in the following METAR indicates METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV001 A2989 RMK AO2 VIS 3/4 RWY 19 CHINO RWY19 $
(A)an observer reported the vertical visibility as 100 feet. (B)a 100 foot indefinite ceiling. (C)the variability value is 100 feet.

原始題號:0013926 題組:0 難易度:易

(C) 432. Which primary source contains information regarding the expected weather at the destination airport, at the ETA?
(A)Low-Level Prog Chart. (B)Radar Summary and Weather Depiction Charts. (C)Terminal Aerodrome Forecast.

原始題號:0013927 題組:0 難易度:易

(A) 433. Weather conditions expected to occur in the vicinity of the airport, but not at the airport, are denoted by the letters "VC". When VC appears in a Terminal Aerodrome Forecast, it covers a geographical area of
(A)a 8 to 16 statute kilometer radius from the airport. (B)a 8-kilometer radius of the center of a runway complex. (C)16 kilometers of the station originating the forecast.

原始題號:0013928 題組:0 難易度:易

(A) 434.What weather is predicted by the term VCTS in a Terminal Aerodrome Forecast?
(A)Thunderstorms are expected in the vicinity. (B)Thunderstorms may occur over the station and within 50 miles of the station. (C)Thunderstorms are expected between 5 and 25 miles of the runway complex.

原始題號:0013929 題組:0 難易度:易

(B) 435.Which are the only cloud types forecast in the Terminal Aerodrome Forecast?
(A)Altocumulus (B)Cumulonimbus (C)Stratocumulus.

原始題號:0013930 題組:0 難易度:易

(B) 436.A calm wind that is forecast, in the Terminal Aerodrome Forecast (TAF) is encoded as
(A)VRB00KT. (B)00000KT. (C)00003KT.

原始題號:0013931 題組:0 難易度:易

(C) 437.In the Terminal Aerodrome Forecast (TAF), a variable wind direction is noted by "VRB" where the three digit direction usually appears. A calm wind appears in the TAF as
(A)00003KT. (B)VARB00KT. (C)00000KT.

原始題號:0013932 題組:0 難易度:易

(B) 438.What is the single source reference that contains information regarding volcanic eruption, turbulence, and icing conditions for a specific region?
(A)Weather Depiction Chart. (B)In-Flight Weather Advisories. (C)Area Forecast.

原始題號:0013933 題組:0 難易度:易

(A) 439.Constant Pressure Analysis Charts contain contours, isotherms and some contain isotachs. The contours depict
(A)ridges, lows, troughs and high aloft. (B)ridges, lows, troughs and ridges on the surface. (C)ridges, lows, troughs and ridges corrected to MSL.

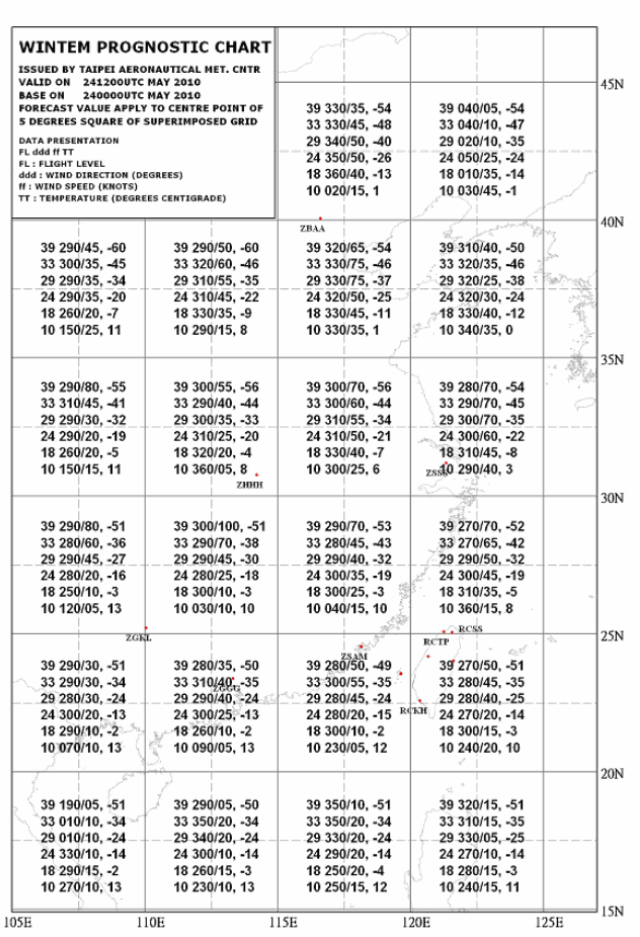
原始題號:0013934 題組:0 難易度:易

(B) 440.Vertical wind shear can be determined by comparing winds on vertically adjacent constant pressure charts. The vertical wind shear that is critical for probability of turbulence is
(A)4 knots or greater per 1,000 feet. (B)6 knots or more per 1,000 feet. (C)greater than 8 knots per 1,000 feet.

原始題號:0013935 題組:1 難易度:易 (R20180823)

(A) 441.(Refer to chart 3) What approximate wind direction and speed are expected for ZGGG at 18,000 feet?(如圖A43_chart3)
(A)260° true; 10 knots. (B)23° true; 6 knots (C)235° magnetic; 6-16 knots.

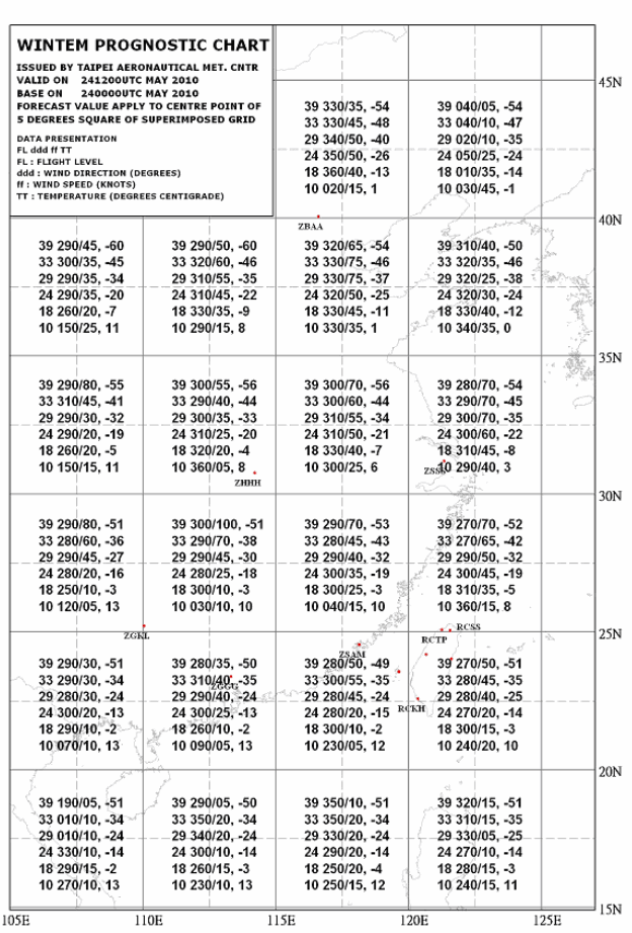
題目圖：



原始題號:0013936 題組:2 難易度:易 （R20180823）

（ B ）442.(Refer to chart 3)What approximate wind direction, speed, and temperature (relative to ISA) are expected for ZSSS at 29,000 feet?(如圖A43_chart3)
(A)023° magnetic; 53 knots; 47℃. (B)300° true; 70 knots; -35℃. (C)235° true; 34 knots; -7℃.

題目圖：



原始題號:0013937 題組:0 難易度:中

(B) 443. Isobars on a surface weather chart represent lines of equal pressure
(A)at the surface. (B)reduced to sea level. (C)at a given atmospheric pressure altitude.

原始題號:0013938 題組:0 難易度:中

(A) 444. Under what conditions would clear air turbulence (CAT) most likely be encountered?
(A)When constant pressure charts show 20-knot isotachs less than 60 NM apart.
(B)When constant pressure charts show 60-knot isotachs less than 20 NM apart.
(C)When a sharp trough is moving at a speed less than 20 knots.

原始題號:0013939 題組:0 難易度:易

(A) 445. A strong wind shear can be expected
(A)on the low pressure side of a 100-knot jetstream core. (B)where the horizontal wind shear is 15 knots, in a distance equal to 2.5o longitude. (C)if the 5° C isotherms are spaced 100 NM or closer together.

原始題號:0013940 題組:1 難易度:中 (R20130125)

(A) 446. (Refer to Figure 11.) What is the height of the 300-millibar level at the low pressure center in Canada?(如圖A43_figure11)
(A)9,120 meters MSL. (B)18,000 meters MSL. (C)11,850 meters MSL.

題目圖：

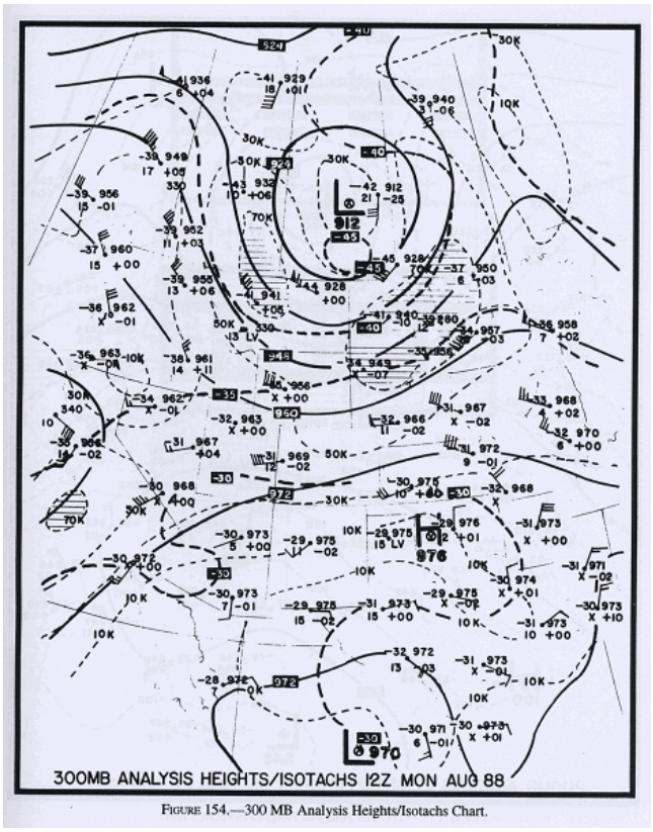


FIGURE 154.—300 MB Analysis Heights/Isotachs Chart.

原始題號:0013946 題組:1 難易度:易 (R20130125)

(A) 447.(Refer to Figure 12.) What type weather system is approaching the California Coast from the west?(如圖A43_figure12)
(A)LOW. (B)HIGH. (C)Cold front.

題目圖：

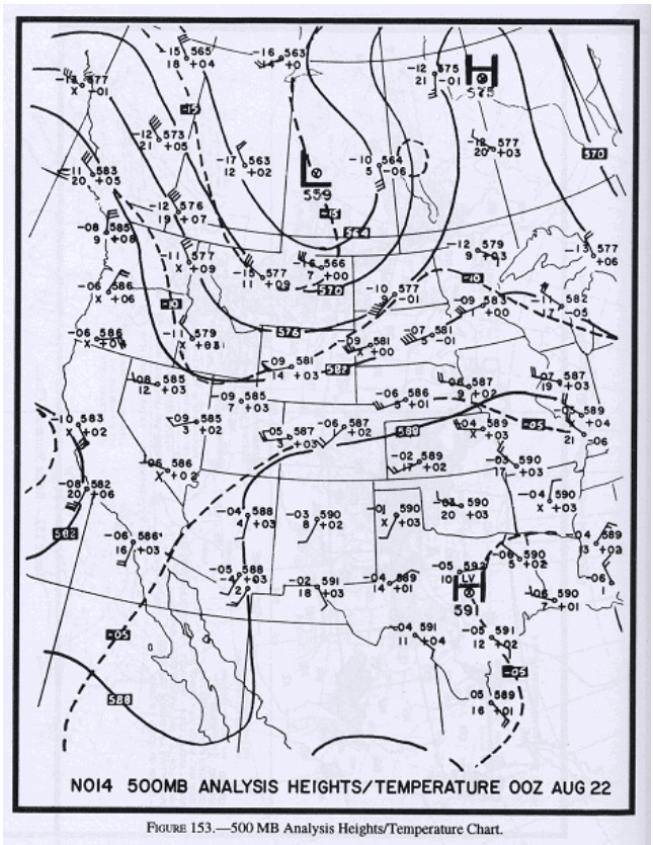


FIGURE 153.—500 MB Analysis Heights/Temperature Chart.

原始題號:0013947 題組:1 難易度:易 (R20130125)

(A) 448. (Refer to figure 9) The 12-Hour Significant Weather Prognostic Chart indicates that West Virginia will likely experience(如圖A43_figure9)
(A)continuous or showery precipitation covering half or more of the area.
(B)thunderstorms and rain showers covering half or more of the area.
(C)continuous rain covering less than half of the area.

題目圖：

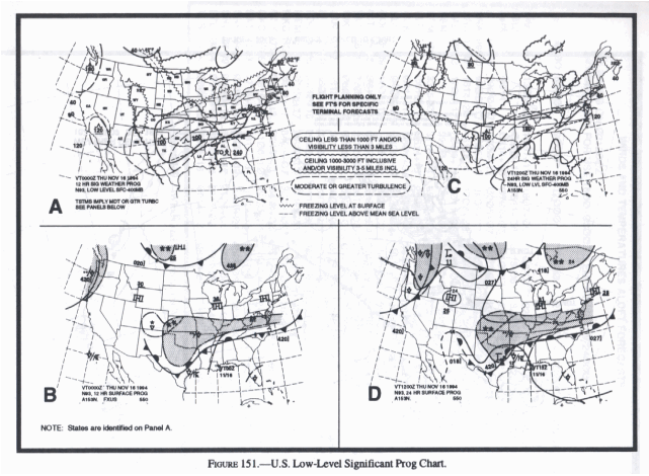


FIGURE 151.—U.S. Low-Level Significant Prog Chart.

原始題號:0013949 題組:3 難易度:易 (R20130125)

(A) 449. (Refer to figure 9) The chart symbols over southern California on the 12-Hour Significant Weather Prognostic Chart indicate(如圖A43_figure9)
(A)expected top of moderate turbulence layer to be 12,000 feet MSL. (B)expected base of moderate turbulence layer to be 12,000 feet MSL. (C)light turbulence expected above 12,000 feet MSL.

題目圖：

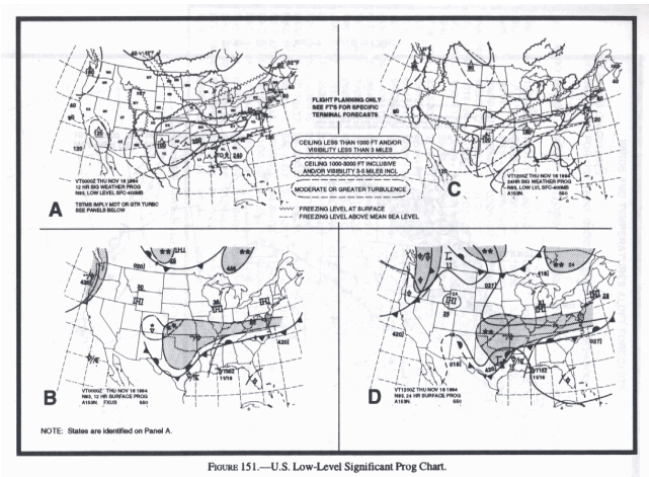


FIGURE 151.—U.S. Low-Level Significant Prog Chart.

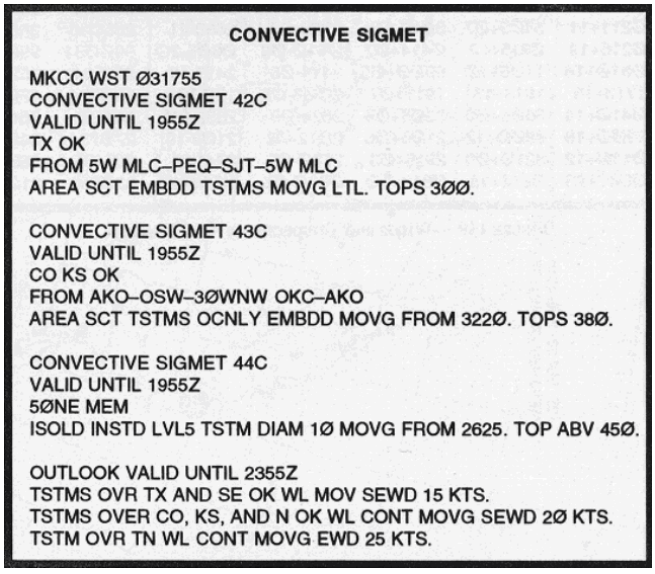
原始題號:0013951 題組:0 難易度:中

(B) 450. If squalls are reported at the destination airport, what wind conditions existed at the time?
(A)Sudden increases in windspeed of at least 15 knots, to a sustained wind speed of 20 knots, lasting for at least 1 minute. (B)Sudden increases in windspeed of at least 16 knots, the speed rising to 22 knots or more for 1 minute or longer.
(C)Rapid variation in wind direction of at least 20o and changes in speed of at least 10 knots between peaks and lulls.

原始題號:0013952 題組:1 難易度:易 (R20130125)

(C) 451.(Refer to Chart 4) Which system in the Convective SIGMET listing has the potential of producing the most severe storm?(如圖A43_chart4)
(A)The storms in Texas and Oklahoma. (B)The storms in Colorado, Kansas, and Oklahoma. (C)The isolated storm 50 miles northeast of Memphis (MEM).

題目圖：



CONVECTIVE SIGMET

MKCC WST Ø31755
CONVECTIVE SIGMET 42C
VALID UNTIL 1955Z
TX OK
FROM 5W MLC–PEQ–SJT–5W MLC
AREA SCT EMBDD TSTMS MOVG LTL. TOPS 3ØØ.

CONVECTIVE SIGMET 43C
VALID UNTIL 1955Z
CO KS OK
FROM AKO–OSW–3ØWNW OKC–AKO
AREA SCT TSTMS OCNLY EMBDD MOVG FROM 322Ø. TOPS 38Ø.

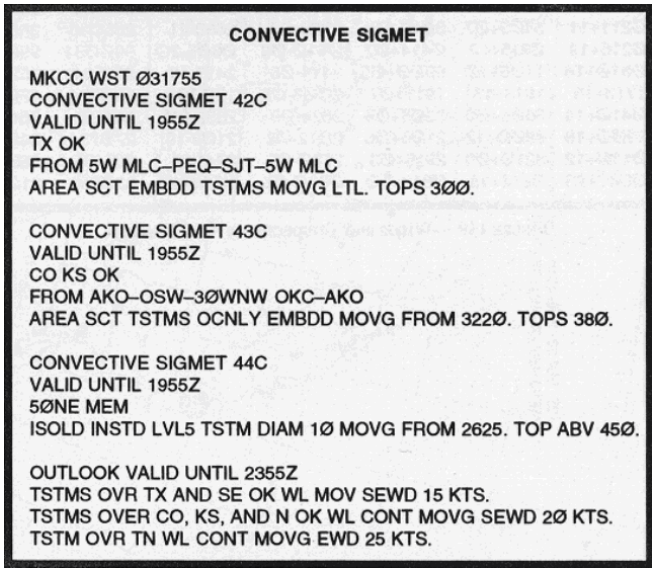
CONVECTIVE SIGMET 44C
VALID UNTIL 1955Z
5ØNE MEM
ISOLD INSTD LVL5 TSTM DIAM 1Ø MOVG FROM 2625. TOP ABV 45Ø.

OUTLOOK VALID UNTIL 2355Z
TSTMS OVR TX AND SE OK WL MOV SEWD 15 KTS.
TSTMS OVER CO, KS, AND N OK WL CONT MOVG SEWD 2Ø KTS.
TSTM OVR TN WL CONT MOVG EWD 25 KTS.

原始題號:0013953 題組:2 難易度:易 (R20130125)

(B) 452.(Refer to Chart 4)What time period is covered by the outlook section of the Convective SIGMET?(如圖A43_chart4)
(A)24 hours after the valid time. (B)2 to 6 hours after the valid time. (C)No more than 2 hours after the valid time.

題目圖：



CONVECTIVE SIGMET

MKCC WST Ø31755
CONVECTIVE SIGMET 42C
VALID UNTIL 1955Z
TX OK
FROM 5W MLC–PEQ–SJT–5W MLC
AREA SCT EMBDD TSTMS MOVG LTL. TOPS 3ØØ.

CONVECTIVE SIGMET 43C
VALID UNTIL 1955Z
CO KS OK
FROM AKO–OSW–3ØWNW OKC–AKO
AREA SCT TSTMS OCNLY EMBDD MOVG FROM 322Ø. TOPS 38Ø.

CONVECTIVE SIGMET 44C
VALID UNTIL 1955Z
5ØNE MEM
ISOLD INSTD LVL5 TSTM DIAM 1Ø MOVG FROM 2625. TOP ABV 45Ø.

OUTLOOK VALID UNTIL 2355Z
TSTMS OVR TX AND SE OK WL MOV SEWD 15 KTS.
TSTMS OVER CO, KS, AND N OK WL CONT MOVG SEWD 2Ø KTS.
TSTM OVR TN WL CONT MOVG EWD 25 KTS.

原始題號:0013954 題組:0 難易度:易

(C) 453.What sources reflect the most accurate information on current and forecast icing conditions?
(A)Low-Level Sig Weather Prog Chart, RADATs, and the Area Forecast. (B)PIREPs, Area Forecast, and the Freezing Level Chart. (C)PIREPs, AIRMETs, and SIGMETs.

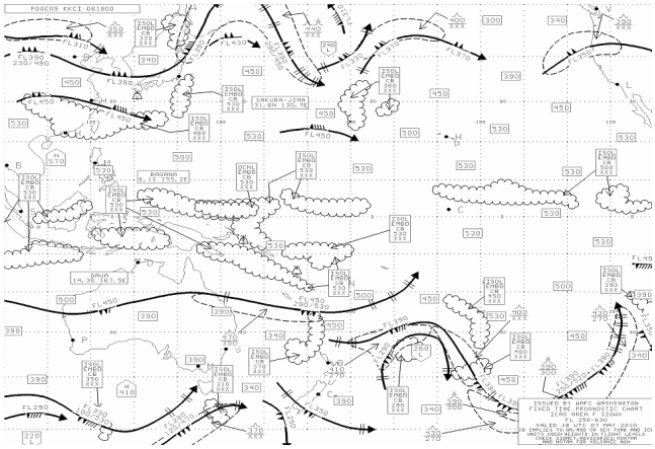
原始題號:0013955 題組:0 難易度:易

(A) 454. Which type of weather can only be directly observed during flight and then reported in a PIREP?
(A) Turbulence and structural icing. (B)Jestream-type winds and icing. (C)Level of the tropopause and turbulence.

原始題號:0013956 題組:1 難易度:中 (R20130125)

(B) 455. (Refer to figure 1) 'The turbulence located at N45W170 is (如圖A43_figure1)
(A)Light turbulence (B)moderate turbulence (C)severe turbulence

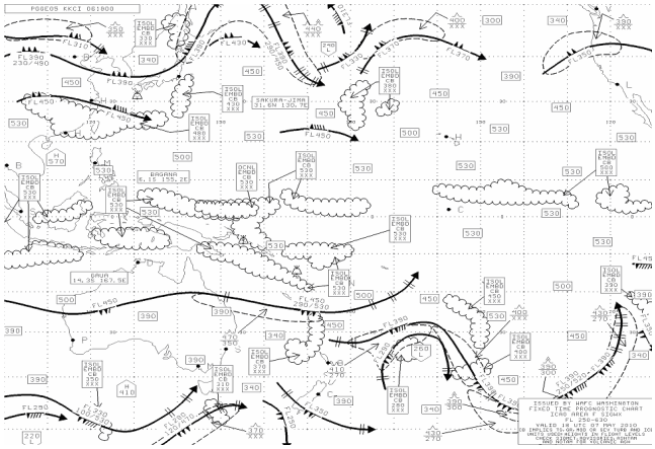
題目圖：



原始題號:0013957 題組:2 難易度:中 (R20130125)

(B) 456. (Refer to figure 1) 'What is the jet stream at N45W170t?(如圖A43_figure1)
(A)a jet stream with a maximum wind speed of 100kts at FL 280 (B)a jet stream with a maximum wind speed of 110kts at FL 370 (C)a jet stream with a maximum wind speed of 100kts at FL 360

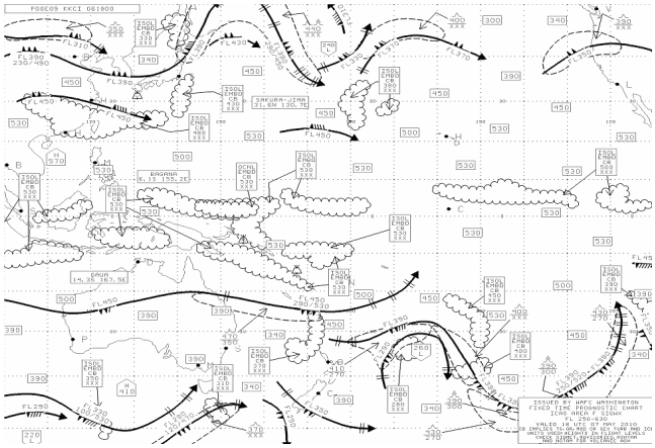
題目圖：



原始題號:0013958 題組:1 難易度:中 (R20190708)

(B) 457. (Refer to figure 1)' When does the HIGH LEVEL SIGWX CHART become valid(如圖A43_figure1)
(A)2010 MAY 06 0000Z (B)2010 MAY 07 1800Z (C)2010 MAY 06 1200L(TPE)

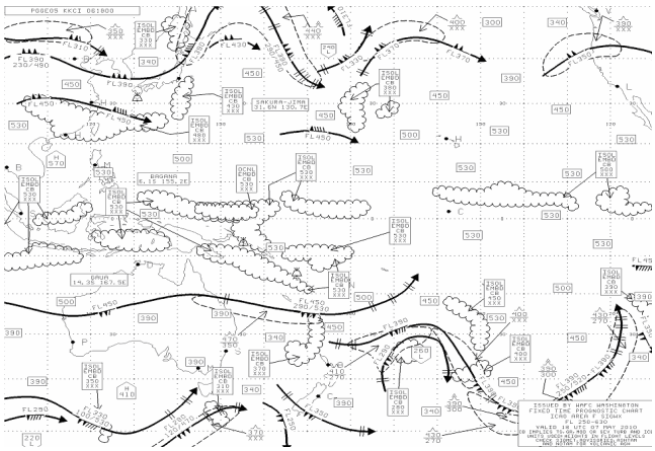
題目圖：



原始題號:0013959 題組:2 難易度:中 (R20130125)

(C) 458.(Refer to figure 1) 'The depiction N15E140 in figure 1 represents (如圖A43_figure1)
(A)Turbulence at FL500 (B)CIELING of FL500 (C)a tropopause height of FL500

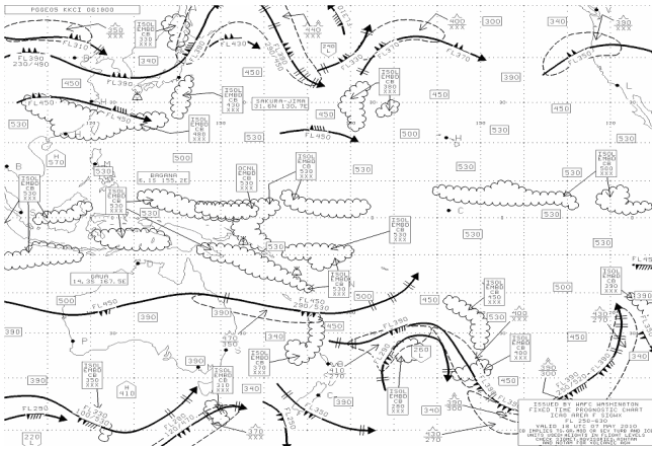
題目圖：



原始題號:0013960 題組:3 難易度:中 (R20180823)

(B) 459.(Refer to figure 1) The chart in figure 1 encompasses airspace(如圖A43_figure1)
(A)FL250 and below (B)FL250-FL630 (C)Other answers are correct.

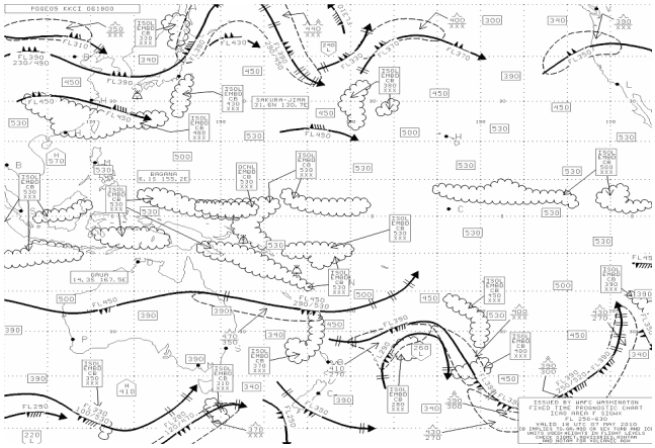
題目圖：



原始題號:0013961 題組:4 難易度:中 (R20130125)

(B) 460.(Refer to figure 1)' what is the ceiling of the CB located at N30E140 (如圖A43_figure1)
(A)FL 250 (B)FL430 (C)from sea level to FL 320

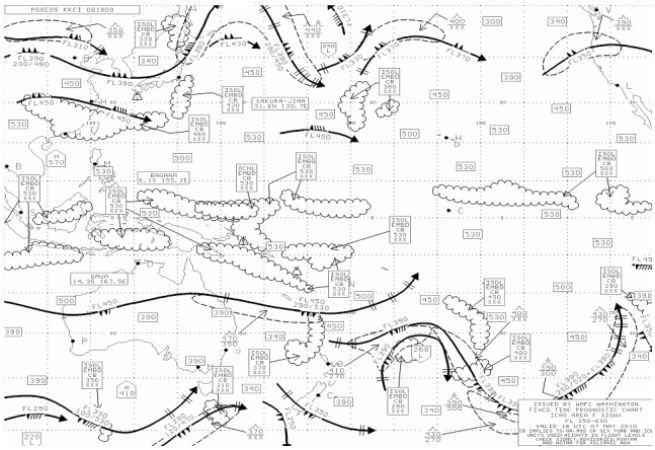
題目圖：



原始題號:0013962 題組:5 難易度:中 (R20130125)

(B) 461.(Refer to figure 1), in figure 1 at N42W125 represents(如圖A43_figure1)
(A)Light C.A.T. (B)Moderate C.A.T. (C)Severe C.A.T.

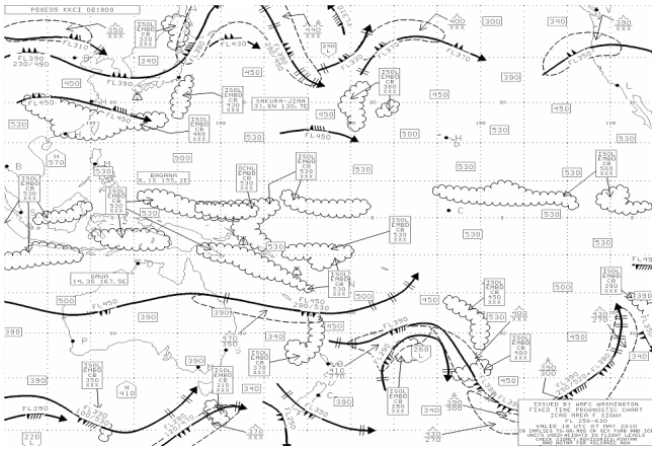
題目圖：



原始題號:0013963 題組:6 難易度:中 (R20130125)

(C) 462.(Refer to figure 1)', the height of the cloud at S10E110 is(如圖A43_figure1)
(A)FL250 (B)SEA level-FL320 (C)FL530

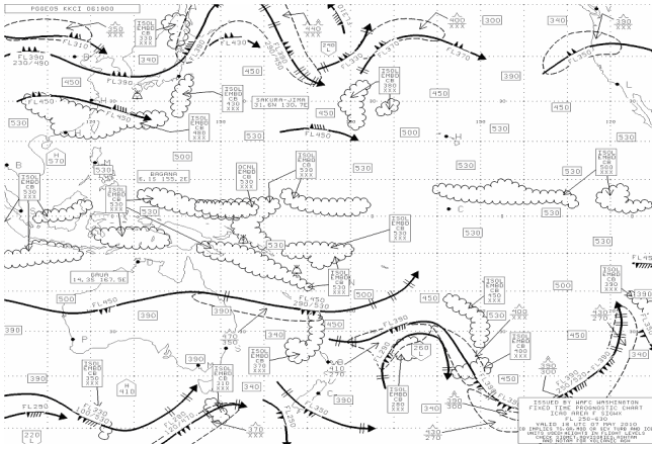
題目圖：



原始題號:0013964 題組:7 難易度:中 (R20130125)

(B) 463.(Refer to figure 1), N40W130 represents(如圖A43_figure1)
(A)turbulence at FL360 (B)jet stream at FL350 with maximum wind speed of 100kts
(C)the moving direction of the cloud

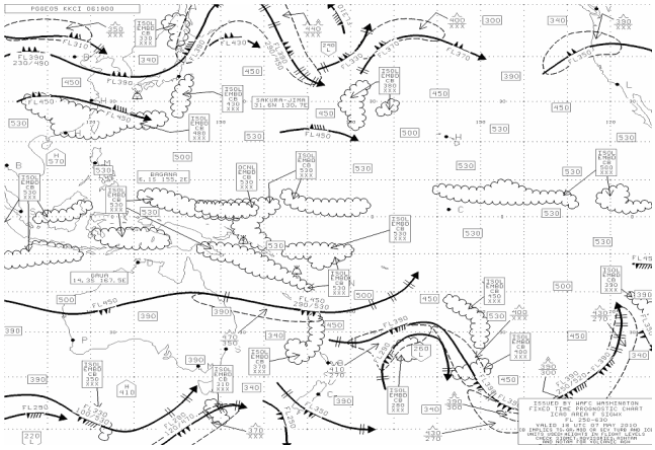
題目圖：



原始題號:0013965 題組:8 難易度:中 (R20130125)

(A) 464.(Refer to figure 1)', is there any information in this figure indicates light turbulence(如圖A43_figure1)
(A)no indication of light turbulence (B)light turbulence at N40E164 (C)The ohter answers are wrong. (D)The ohter answers are wrong.

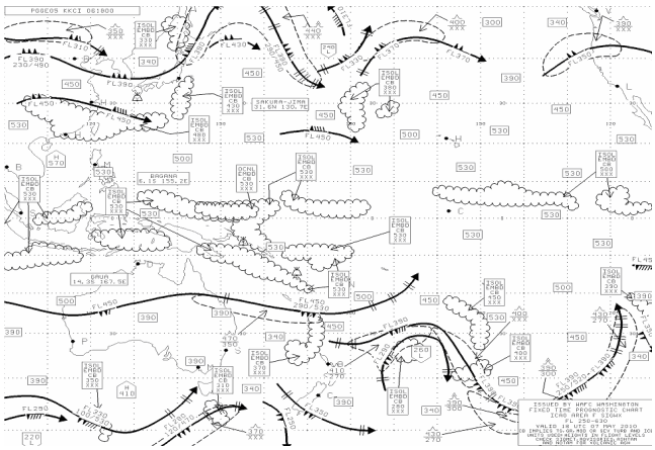
題目圖：



原始題號:0013966 題組:9 難易度:中 (R20130125)

(B) 465.(Refer to figure 1)', S25E160 at which flight level will the turbulence to occur?(如圖A43_figure1)
(A)FL250-FL450 (B)FL350-FL470 (C)FL250-FL500 (D)The ohter answers are wrong.

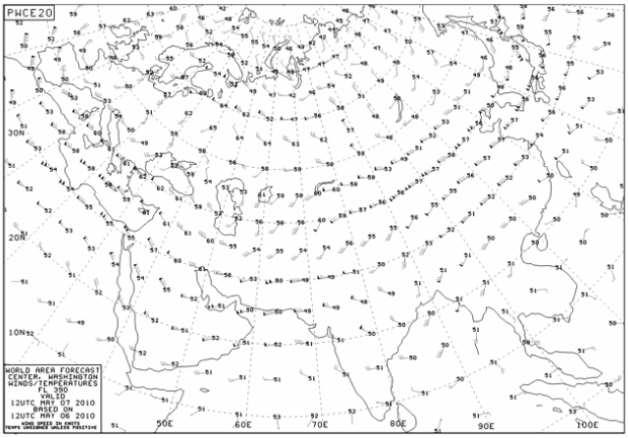
題目圖：



原始題號:0013967 題組:1 難易度:中 (R20130125)

(B) 466.(Refer to figure 2)', under standard atmosphere, at which flight level will 200hpa be?(如圖A43_figure2)
(A)FL350 (B)FL390 (C)FL200

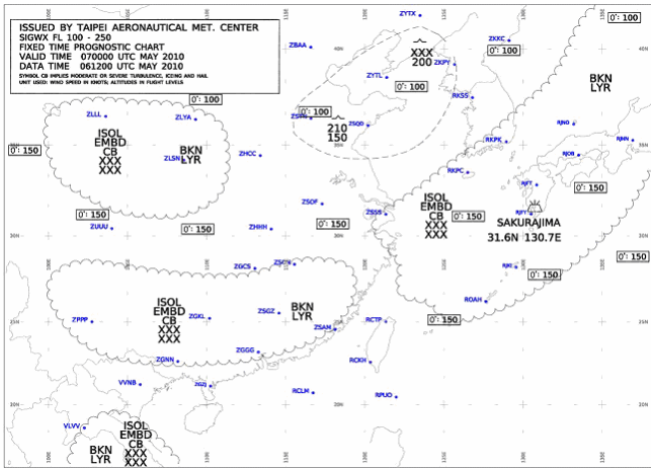
題目圖：



原始題號:0013969 題組:1 難易度:中 （R20130125）

（ B ）467. According to figure 3, the SIGNIFICANT WEATHER PROGNOSTIC CHART figure 3, what kind of significant weather will the flight from RCTP toZSQD encounter?(如圖A43_figure3)
(A)moderate icing (B)moderate turbulence (C)severe icing (D)severe turbulence

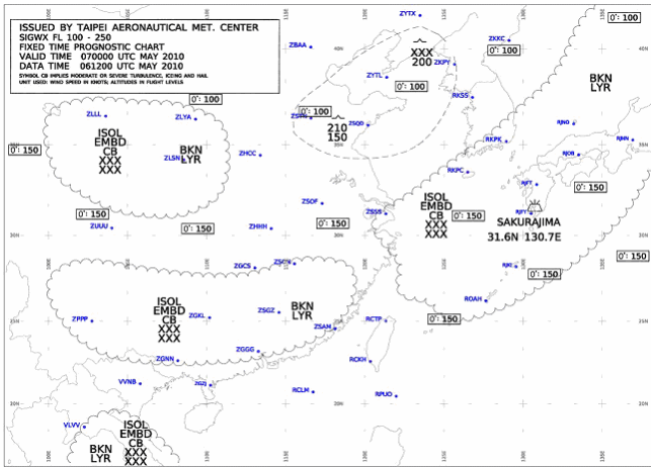
題目圖：



原始題號:0013970 題組:2 難易度:中 （R20130125）

（ D ）468. According to the figure 3’What is the altitude range of the cloud heights aboveROAH ?(如圖A43_figure3)
(A)between 240 and 360hPa (B)between 240 and 360mm (C)between 10,000 meters and 25,000 meters (D)between FL 100 and 250

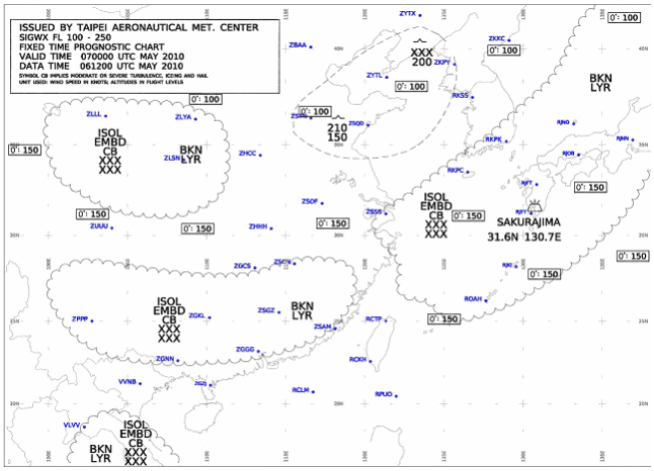
題目圖：



原始題號:0013972 題組:4 難易度:中 （R20130125）

（ C ）469. According to the figure 3,’the ISOL CB encountered in the previous question means:(如圖A43_figure3)
(A)cumulonimbus clouds spread up in line (B)cumulonimbus cover all the mark area
(C)isolated cumulonimbus (D)cumulonimbus weakening

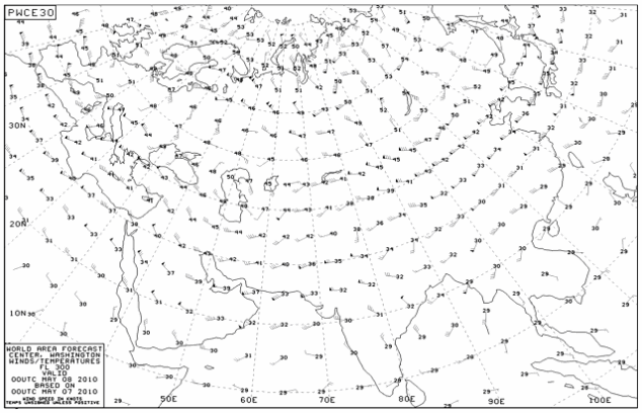
題目圖：



原始題號:0013974 題組:1 難易度:中 （R20130125）

（ C ）470. Refer to the 300 hPa PROGNOSTIC CHART provided in figure 4, which flight level will be related to this figure in general?(如圖A43_figure4)
(A)FL 400 (B)FL 350 (C)FL 300 (D)FL250

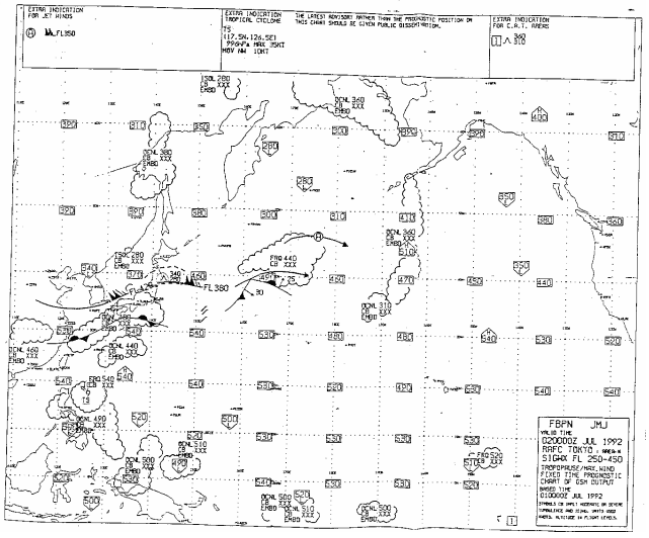
題目圖：



原始題號:0013975 題組:1 難易度:易 （R20130125）

（ A ）471. Refer to the significant weather prognostic chart in figure 5 , what is the ceiling of the CB in the topical cyclone to the east of Philippines?(如圖A43_figure5)
(A)FL 540 (B)FL500 (C)FL 490

題目圖：



原始題號:0013976 題組:2 難易度:易 (R20130125)

(B) 472. Refer to the figure 5, the moving direction and speed of this tropical cyclone is(如圖A43_figure5)
(A)W 5KT (B)NW 10KT (C)NW 5KT

題目圖：