

飛航管理程序修編小組第90次會議議程

114年4月11日

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二、小組成員介紹

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(一) 待修編事項：

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(二) 提案討論

編號	參考文件/版本	摘要	提案單位	頁碼
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三、(一)、待修編事項

1. ATMP 5-2-12 高度顯示確認

	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>5-2-12高度顯示確認 在接受不同單位之交管、初次追蹤、滑離／暫存欄資料後之重新追蹤、消失或不合理之高度顯示後，應再次確認高度顯示是否有效。</p> <p>a. 視高度顯示有效，當：(遇有下列情形時，其高度顯示視為有效之高度顯示：)</p> <p>1. 顯示高度與駕駛員報告之高度相差小於300呎。</p> <p>術語— 確認空層為(空層)</p> <p>2. 持續收到地面航空器顯示之空層與機場標高—相差小於300呎。</p> <p>註— 當高度顯示設定範圍包含機場標高時，其持續高度顯示為有效。</p> <p>參考— 選擇空層範圍，5-2-20。 選擇空層範圍，5-13-5。</p> <p>3. (經由與其他單位管制員口頭協調)確認該航空器資料方塊內之高度顯示與其他單位相同航空器所顯示之高度相同。</p> <p>b. 若如果不能確認高度顯示正</p>	<p>5-2-12高度顯示確認 在接受不同單位之交管、初次追蹤、滑離／暫存欄資料後之重新追蹤、消失或不合理之高度顯示後，應再確認高度顯示是否有效。</p> <p>a. 視高度顯示有效，當：(下列情形視為有效之高度顯示：)</p> <p>1. 顯示高度與駕駛員報告之高度相差小於300呎。</p> <p>術語— 確認空層為(空層)</p> <p>2. 持續收到地面航空器顯示之空層與機場標高，相差小於300呎。</p> <p>註— 當高度顯示設定範圍包含機場標高時，其持續高度顯示為有效。</p> <p>參考— 選擇空層範圍，5-2-20。 選擇空層範圍，5-13-5。</p> <p>3. (經由與其他單位管制員口頭協調)確認航空器資料方塊內之高度顯示與其他單位相同航空器所顯示之高度相同。</p> <p>b. 如果不能確認高度顯示正確，不要</p>	<p>【4/11決議】 1、本節 <u>c 項2.(C)</u>及 <u>d 項2.(C)</u> 中文部份，文字改為「應通知下一席位及相鄰航管單位適當之席位」。 2、其餘部分照案通過。</p>

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	<p>確，不要使用該數值做為隔離之依據。</p> <p>c. 當觀察到低於飛航空層130之航機其無效之高度顯示無效時，且該空層低於飛航空層130時，：</p> <p>1. 頒發正確之高度表撥定值，並查證駕駛員是否正確地報告空層。</p> <p>術語— (地點)高度表撥定值(適當之高度表值)，檢查高度表撥定值並確認空層為(空層)</p> <p>2. 如高度顯示仍無效： (a) 指示駕駛員關閉迴波器之高度報告部分，並說明原因。 (b) 通知班務督導該航空器之呼號。 (c) 如高度顯示無效，應通知下一席位及相鄰航管單位適當之席位。</p> <p>術語— 停止SQUAWK高度，顯示錯誤 當觀察到無效之高度顯示時，應通知相關單位。</p> <p>d. 當如觀察到飛航空層130或以上之航機無效之其高度顯示無效時，除非該航空器正要下降要穿越轉換空層：</p>	<p>使用高度顯示做為隔離之依據。</p> <p>c. 當觀察到一無效之高度顯示，且該空層低於飛航空層130時，</p> <p>1. 頒發正確之高度表撥定值，並查證駕駛員正確地報告空層。</p> <p>術語— (地點)高度表撥定值(適當之高度表值)，檢查高度表撥定值並確認空層為(空層)</p> <p>2. 如高度顯示仍無效： (a) 指示駕駛員關閉迴波器之高度報告部分，並說明原因。 (b) 通知班務督導該航空器之呼號。 (c) 如高度顯示無效，應通知下一席位及相鄰航管單位適當之席位。</p> <p>術語— 停止SQUAWK高度，顯示錯誤當觀察到無效之高度顯示時，應通知相關單位。</p> <p>d. 如觀察到無效之高度顯示，在飛航空層130或以上，除非該航空器正下降要穿越轉換空層：</p>	

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	<p>1. 確認駕駛員使用1013百帕為高度表撥定值設定，並正確地的報告空層。</p> <p>術語一 確認使用公洞公三設定高度表撥定值，確認空層為(空層)</p> <p>2. 如高度顯示仍無效： (a) 指示駕駛員關閉迴波器之高度報告部分，並說明原因。 (b) 通知班務督導該航空器之呼號。 (c) 如高度顯示無效，應通知下一席位及相鄰航管單位適當之席位。</p> <p>術語一 停止SQUAWK高度，顯示錯誤</p> <p>e. 因地面裝備不正常而導致多次高度顯示無效時，應停用各席位之高度顯示。</p>	<p>1. 確認駕駛員使用1013百帕為高度表設定，並正確的報告空層。</p> <p>術語一 確認使用公洞公三設定高度表，確認空層為(空層)</p> <p>2. 如高度顯示仍無效： (a) 指示駕駛員關閉迴波器之高度報告部分，並說明原因。 (b)通知班務督導該航空器之呼號。 (c) 如高度顯示無效，應通知下一席位及相鄰航管單位適當之席位。</p> <p>術語一 停止SQUAWK高度，顯示錯誤</p> <p>e. 因地面裝備不正常而導致多次高度顯示無效時，應停用各席位之高度顯示。</p>	

2. ATMP 7-3-1 目視進場

FAA/ICAO 原文參考資料	建議修正文字	ATMP 現行章節	說明/建議
<p>FAA 7110.65AA</p> <p>7-4-1 VISUAL APPROACH</p> <p>A visual approach is an ATC authorization for an aircraft on an IFR flight plan to proceed visually and clear of clouds to the airport of intended landing. A visual approach is not a standard instrument approach procedure and has no missed approach segment. An aircraft unable to complete a landing from a visual approach must be handled as any go-around and appropriate IFR separation must be provided until the aircraft lands or the pilot cancels their IFR flight plan.</p> <p>a. At airports with an operating control tower, aircraft executing a</p>	<p>7-3-1 VISUAL APPROACH</p> <p>a. Daytime: Clearance for an IFR flight to execute a visual approach may be requested by a flight crew or initiated by the controller. In the latter case, the concurrence of the flight crew shall be required.</p> <p>Nighttime: When the pilot is familiar with the destination airport and the surrounding environment, and can maintain visual reference to the terrain and obstacles continuously, the pilot can request to execute visual approach from controller.</p> <p>NOTE: <i>During nighttime, controller shall issue the instrument approach procedures preferentially and shall not initiate a visual approach.</i> <i>The limitation of visual approach operations at night is not applicable to military.</i></p> <p>b. Controllers shall exercise caution in initiating a visual approach when there is reason to believe that the flight crew</p>	<p>7-3-1 VISUAL APPROACH</p> <p>a. Daytime: Clearance for an IFR flight to execute a visual approach may be requested by a flight crew or initiated by the controller. In the latter case, the concurrence of the flight crew shall be required.</p> <p>Nighttime: When the pilot is familiar with the destination airport and the surrounding environment, and can maintain visual reference to the terrain and obstacles continuously, the pilot can request to execute visual approach from controller.</p> <p>NOTE: <i>During nighttime, controller shall issue the instrument approach procedures preferentially and shall not initiate a visual approach.</i> <i>The limitation of visual approach operations at night is not applicable to military.</i></p> <p>b. Controllers shall exercise caution in initiating a visual approach when there is reason to believe that the flight crew</p>	<p>【4/11決議】</p> <p>請航管組與總臺於會後研議提出共同版本，待下次修編小組會議中討論。</p>

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<p>go-around may be directed to:</p> <ol style="list-style-type: none"> 1. Enter the traffic pattern for landing. An altitude assignment is not required. The pilot is expected to climb to pattern altitude and is responsible to maintain terrain and obstruction avoidance. ATC must provide approved separation or visual separation from other IFR aircraft, or 2. Proceed as otherwise instructed by ATC. The pilot is expected to comply with assigned instructions, and responsible to maintain terrain and obstruction avoidance until reaching an ATC assigned altitude. ATC is responsible to provide instructions to the pilot to facilitate a climb to the minimum altitude for instrument operations. ATC must 	<p>concerned is not familiar with the aerodrome and its surrounding terrain. Controllers should also take into consideration the prevailing traffic and meteorological conditions when initiating visual approaches.</p> <p>c. An IFR flight may be cleared to execute a visual approach provided the pilot can maintain visual reference to the terrain under the approach path and:</p> <ol style="list-style-type: none"> 1. The reported ceiling is at or above the approved initial approach level for the aircraft so cleared; or 2. The pilot reports at the initial approach level or at any time during the instrument approach procedure that the meteorological conditions are such that with reasonable assurance a visual approach and landing can be completed. <p>PHRASEOLOGY : <i>REPORT VISUAL.</i> <i>CLEARED VISUAL APPROACH, RUNWAY (number).</i></p>	<p>concerned is not familiar with the aerodrome and its surrounding terrain. Controllers should also take into consideration the prevailing traffic and meteorological conditions when initiating visual approaches.</p> <p>c. An IFR flight may be cleared to execute a visual approach provided the pilot can maintain visual reference to the terrain under the approach path and:</p> <ol style="list-style-type: none"> 1. The reported ceiling is at or above the approved initial approach level for the aircraft so cleared; or 2. The pilot reports at the initial approach level or at any time during the instrument approach procedure that the meteorological conditions are such that with reasonable assurance a visual approach and landing can be completed. <p>PHRASEOLOGY : <i>REPORT VISUAL.</i> <i>CLEARED VISUAL APPROACH, RUNWAY (number).</i></p>	

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<p>provide approved separation or visual separation from other IFR aircraft.</p> <p>NOTE— The pilot is responsible for their own terrain and obstruction avoidance during a go-around after conducting a visual approach. The facility can assign headings towards the lowest terrain and obstructions.</p> <p>b. At airports without an operating control tower, aircraft executing a go-around are expected to complete a landing as soon as possible or contact ATC for further clearance. ATC must maintain approved separation from other IFR aircraft.</p> <p>FAA AIM 5.4.23 Visual Approach A visual approach is not</p>	<p>d. Separation shall be provided between an aircraft cleared to execute a visual approach and other arriving and departing aircraft.</p> <p>e. For successive visual approaches, radar or nonradar separation shall be maintained until the pilot of a succeeding aircraft reports having the preceding aircraft in sight. The aircraft shall then be instructed to follow and maintain own separation from the preceding aircraft. When both aircraft are of a SUPER or HEAVY wake turbulence category, or the preceding aircraft is of a heavier wake turbulence category than the following, and the distance between the aircraft is less than the appropriate wake turbulence minimum, the controller shall issue a caution of possible wake turbulence. The pilot-in-command of the aircraft concerned shall be responsible for ensuring that the spacing from a preceding aircraft of a heavier wake turbulence category is acceptable. If it is</p>	<p>d. Separation shall be provided between an aircraft cleared to execute a visual approach and other arriving and departing aircraft.</p> <p>e. For successive visual approaches, radar or nonradar separation shall be maintained until the pilot of a succeeding aircraft reports having the preceding aircraft in sight. The aircraft shall then be instructed to follow and maintain own separation from the preceding aircraft. When both aircraft are of a SUPER or HEAVY wake turbulence category, or the preceding aircraft is of a heavier wake turbulence category than the following, and the distance between the aircraft is less than the appropriate wake turbulence minimum, the controller shall issue a caution of possible wake turbulence. The pilot-in-command of the aircraft concerned shall be responsible for ensuring that the spacing from a preceding aircraft of a heavier wake turbulence category is acceptable. If it is</p>	

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<p>an IAP and therefore has no missed approach segment. If a go-around is necessary for any reason, aircraft operating at controlled airports will be issued an appropriate clearance or instruction by the tower to enter the traffic pattern for landing or proceed as otherwise instructed. In either case, the pilot is responsible to maintain terrain and obstruction avoidance until reaching an ATC assigned altitude if issued, and ATC will provide approved separation or visual separation from other IFR aircraft.</p> <p>國籍航空作業手冊 8.12.9.1 Visual Approach A visual approach is not an IAP and therefore has no missed segment. If a go around is necessary</p>	<p>determined that additional spacing is required, the flight crew shall inform the ATC unit accordingly, stating their requirements.</p> <p>f. Transfer of communications to the aerodrome controller should be effected at such a point or time that information on essential local traffic, if applicable, and clearance to land or alternative instructions can be issued to the aircraft in a timely manner.</p> <p>g. Daytime: There is no missed approach segment A visual approach is not a standard instrument approach procedure and has no missed approach segment. An aircraft unable to complete a visual approach shall be handled as any go-around and appropriate separation must be provided. aircraft executing a go-around may be directed to:</p> <p>1. Enter the traffic pattern for landing. An altitude assignment is not required. The pilot is expected to climb to pattern altitude and is responsible to maintain terrain and obstruction</p>	<p>determined that additional spacing is required, the flight crew shall inform the ATC unit accordingly, stating their requirements.</p> <p>f. Transfer of communications to the aerodrome controller should be effected at such a point or time that information on essential local traffic, if applicable, and clearance to land or alternative instructions can be issued to the aircraft in a timely manner.</p> <p>g. Daytime: There is no missed approach segment. An aircraft unable to complete a visual approach shall be handled as any go-around and appropriate separation must be provided.</p>	

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<p>for any reason, aircraft operating to controlled airports will be issued an appropriate advisory/clearance/instruction by the tower</p> <p>ATMP 2-1-3 提供隔離</p> <p>e. 在2-1-1飛航服務目的未包含提供航空器與地障間之隔離，本手冊所述的程序並未解除駕駛員應確認航管單位頒發許可是否安全之責任。惟當雷達引導儀器飛航之航空器或是給予直飛路徑使航空器偏離飛航服務航線時，雷達管制員於頒發許可時，應確保航空器與地面障礙物間有安全隔離，直到該航空器恢復正常航行。</p> <p>飛航規則</p> <p>第 7 條</p> <p>機長於負責航空器飛航期間，對航空器之處置有最後決定權。</p> <p>第 20 條</p> <p>1. 航空器飛航於各類空域或在機場活動區作業時，機長均應保持警覺，以偵測潛在之碰撞，並應採取最佳之避</p>	<p>avoidance. ATC must provide approved separation or visual separation from other aircraft, or</p> <p>2. Proceed as otherwise instructed by ATC. The pilot is expected to comply with assigned instructions, and responsible to maintain terrain and obstruction avoidance until reaching an ATC assigned altitude. ATC is responsible to provide instructions to the pilot to facilitate a climb to the minimum altitude for instrument operations. ATC must provide approved separation or visual separation from other aircraft.</p> <p>Nighttime:</p> <p>1. If the pilot abandons visual approach to landing, shall advise the controller and overfly the runway, climb and enter the traffic circuit via the crosswind leg.</p> <p>2. If the controller instructs the pilot to abandon the visual approach, the controller shall give further instruction, and</p>	<p>Nighttime:</p> <p>1. If the pilot abandons visual approach to landing, shall advise the controller and overfly the runway, climb and enter the traffic circuit via the crosswind leg.</p> <p>2. If the controller instructs the pilot to abandon the visual approach, the controller shall give further instruction, and</p>	

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<p>撞措施，包括依據空中防撞系統之避讓警示所建議之避讓行動。</p> <p>2. 航空器不得與其他航空器接近至有肇致碰撞危險之程度。</p>	<p>shall not initiate the pilot to join the traffic circuit.</p> <p>NOTE: <i>The pilot is responsible for their own terrain and obstruction avoidance during a go-around after conducting a visual approach. The facility can assign headings towards the lowest terrain and obstructions.</i></p> <p>REFERENCE: <i>WAKE TURBULENCE CAUTION, Para 2-1-21.</i> <i>UPDATING INFORMATION ON FINAL APPROACH, Para 3-10-2.</i> <i>VISUAL SEPARATION, Para 7-2-1.</i> <i>GENERAL PROVISIONS OF SEPARATION, Para 2-1-3.</i> <i>Rules of the Air, article 7.</i> <i>Rules of the Air, article 20.</i></p> <p>7-3-1 目視進場 a. 日間：駕駛員可要求或管制員可主動准許儀器飛航航空器實施目視進場。如為後者，則應於頒發許可前取得駕駛員同意。</p> <p>夜間：駕駛員熟悉目的地機場與周遭環境，並能持續目視參考地形與障礙物，</p>	<p>shall not initiate the pilot to join the traffic circuit.</p> <p>7-3-1 目視進場 a. 日間：駕駛員可要求或管制員可主動准許儀器飛航航空器實施目視進場。如為後者，則應於頒發許可前取得駕駛員同意。</p> <p>夜間：駕駛員熟悉目的地機場與周遭環境，並能持續目視參考地形與障礙物，</p>	

FAA/ICAO 原文參考資料	建議修正文字	ATMP 現行章節	說明/建議
	<p>駕駛員方得主動向航管申請實施目視進場。</p> <p>註--於夜間時，管制員應優先頒發儀器進場程序並不得主動頒發目視進場。軍方不受夜間目視進場規定之限制。</p> <p>b. 管制員如對於駕駛員是否熟悉目的地機場與其周遭地形有疑慮時，於主動頒發目視進場許可時應更為謹慎，亦須考量當時航情與天氣情況。</p> <p>c. 如駕駛員可持續目視進場路徑之參考地形，管制員得准許儀器飛航航空器實施目視進場，且：</p> <ol style="list-style-type: none"> 1. 雲幕高高於或等於航空器被許可實施儀器進場程序之最初進場點之空層；或 2. 駕駛員於儀器進場程序之最初進場空層或於儀器進場程序過程報告按當時天氣情況確認可完成目視進場和降落無虞。 <p>術語- 目視呼叫。 許可目視進場，(跑道號碼)跑道。</p> <p>d. 應提供已許可做目視進場航空器與其他離、到場航空器之隔離。</p> <p>e. 維持對連續目視進場航空器提供雷達或非雷達隔離，直到後一架航空器駕駛員報告目視前一航空器，指示後一架</p>	<p>駕駛員方得主動向航管申請實施目視進場。</p> <p>註--於夜間時，管制員應優先頒發儀器進場程序並不得主動頒發目視進場。軍方不受夜間目視進場規定之限制。</p> <p>b. 管制員如對於駕駛員是否熟悉目的地機場與其周遭地形有疑慮時，於主動頒發目視進場許可時應更為謹慎，亦須考量當時航情與天氣情況。</p> <p>c. 如駕駛員可持續目視進場路徑之參考地形，管制員得准許儀器飛航航空器實施目視進場，且：</p> <ol style="list-style-type: none"> 1. 雲幕高高於或等於航空器被許可實施儀器進場程序之最初進場點之空層；或 2. 駕駛員於儀器進場程序之最初進場空層或於儀器進場程序過程報告按當時天氣情況確認可完成目視進場和降落無虞。 <p>術語- 目視呼叫。 許可目視進場，(跑道號碼)跑道。</p> <p>d. 應提供已許可做目視進場航空器與其他離、到場航空器之隔離。</p> <p>e. 維持對連續目視進場航空器提供雷達或非雷達隔離，直到後一架航空器駕駛員報告目視前一航空器，指示後一架</p>	

FAA/ICAO 原文參考資料	建議修正文字	ATMP 現行章節	說明/建議
	<p>航空器跟隨並自行與前行航空器保持隔離。如前後兩航空器均為超重型或重型航空器，或前一航空器比後者產生較大之機尾亂流，且兩航空器間之隔離低於機尾亂流最低隔離時，應頒發機尾亂流警告。機長負責與產生較大機尾亂流前行航空器之隔離。如確認需要更大之隔離時，駕駛員應向管制單位告知所需。</p> <p>f. 與塔臺通信交管的時機應足以令塔臺提供相關航情、頒發落地許可或其他指示。</p> <p>g. 日間：目視進場非標準儀器進場程序且無誤失進場階段，當航空器如無法完成目視進場時，航管單位應按重飛方式處理，並提供適當隔離。可按下列方式給予執行重飛之航機指示：</p> <p>1. 加入機場航線執行落地：航管不需指示高度，駕駛員將負責保持避讓地障並爬高至航線高度。航管需提供該機與其他航機之法定隔離或目視隔離。</p> <p>2. 依航管其他指示飛航：駕駛員將遵循航管之其他指示，並負責保持避讓地障爬高至航管指示高度，航管應負責提供指示予駕駛員，俾其操作航機爬高至最低儀器飛航高度，並提供該重飛航機與其他航機之法定隔離或目視隔離。</p> <p>夜間：</p>	<p>航空器跟隨並自行與前行航空器保持隔離。如前後兩航空器均為超重型或重型航空器，或前一航空器比後者產生較大之機尾亂流，且兩航空器間之隔離低於機尾亂流最低隔離時，應頒發機尾亂流警告。機長負責與產生較大機尾亂流前行航空器之隔離。如確認需要更大之隔離時，駕駛員應向管制單位告知所需。</p> <p>f. 與塔臺通信交管的時機應足以令塔臺提供相關航情、頒發落地許可或其他指示。</p> <p>g. 日間：目視進場無誤失進場階段。航空器如無法完成目視進場，航管單位應按重飛方式處理，並提供適當隔離。</p> <p>夜間：</p>	

FAA/ICAO 原文參考資料	建議修正文字	ATMP 現行章節	說明/建議
	<p>1. 駕駛員因故放棄繼續進場落地，應告知管制員並飛越跑道上空爬高由二邊加入機場航線；</p> <p>2. 航管指示駕駛員放棄繼續進場落地，航管應頒發後續指示，惟不得主動指示航機加入機場航線。</p> <p>註一 駕駛員於執行目視進場後即負有重飛時自行避讓地障之責，航管單位可頒發朝向最低地障及障礙物之航向。</p> <p>參考一 機尾亂流警告，2-1-21。 於最後進場階段更新資料，3-10-2。 提供隔離，2-1-3。 飛航規則，第7條。 飛航規則，第20條。</p>	<p>1. 駕駛員因故放棄繼續進場落地，應告知管制員並飛越跑道上空爬高由二邊加入機場航線；</p> <p>2. 航管指示駕駛員放棄繼續進場落地，航管應頒發後續指示，惟不得主動指示航機加入機場航線。</p> <p>參考一 機尾亂流警告，2-1-21。 於最後進場階段更新資料，3-10-2。</p>	

3. ATMP 2-4-16 ICAO PHONETICS/國際民航組織發音法

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議												
ICAO Annex 10 Aeronautical Telecommunications Volume II Communication Procedures including those with PANS status	<p>2-4-16 ICAO PHONETICS</p> <p>Use the ICAO pronunciation of numbers and individual letters. (See the ICAO radiotelephony alphabet and pronunciation in TBL 2-4-1).</p> <p>TBL 2-4-1 ICAO PHONETICS</p> <table><tr><th>Character</th><th>Word</th><th>Pronunciation</th></tr><tr><td>A</td><td>Alfa Alpha</td><td>AL FAH</td></tr></table>	Character	Word	Pronunciation	A	Alfa Alpha	AL FAH	<p>2-4-16 ICAO PHONETICS</p> <p>Use the ICAO pronunciation of numbers and individual letters. (See the ICAO radiotelephony alphabet and pronunciation in TBL 2-4-1).</p> <p>TBL 2-4-1 ICAO PHONETICS</p> <table><tr><th>Character</th><th>Word</th><th>Pronunciation</th></tr><tr><td>A</td><td>Alpha</td><td>AL FAH</td></tr></table>	Character	Word	Pronunciation	A	Alpha	AL FAH	<p>【4/11決議】</p> <p>1、修改 Word (字)拼法，與 ICAO 一致。</p> <p>2、保留現行 Pronunciation (發音)部分，不做修訂。</p>
Character	Word	Pronunciation													
A	Alfa Alpha	AL FAH													
Character	Word	Pronunciation													
A	Alpha	AL FAH													

FAA/ICAO 原文/其他參考資料	建議修正文字			ATMP 現行章節			說明/建議/決議
Seventh Edition, July 2016							
5.2 RADIOTELEPHONY PROCEDURES							
5.2.1.2 LANGUAGE TO BE USED							
5.2.1.3 Word spelling in radiotelephony. When proper names, service abbreviations and words of which the spelling is doubtful are spelled out in radiotelephony, the alphabet in Figure 5-1 shall be used.							
	B	Bravo	BRAH VOH	B	Bravo	BRAH VOH	
	C	Charlie	CHAR LEE or SHAR LEE	C	Charlie	CHAR LEE	
	D	Delta	DELL TAH	D	Delta	DELL TAH	
	(略)			(略)			
	U	Uniform	YOU NEE FORM or OO NEE FORM	U	Uniform	YOU NEE FORM	
	(略)			(略)			
	2-4-16 國際民航組織發音法 為辨別個別字元，應使用下列發音法：(見表2-4-1) 表2-4-1國際民航組織發音法			2-4-16 國際民航組織發音法 為辨別個別字元，應使用下列發音法：(見表2-4-1) 表2-4-1國際民航組織發音法			
	字元	字	發音	字元	字	發音	
	A	Alfa Alpha	AL FAH	A	Alpha	AL FAH	
	B	Bravo	BRAH VOH	B	Bravo	BRAH VOH	
	C	Charlie	CHAR LEE or SHAR LEE	C	Charlie	CHAR LEE	
	D	Delta	DELL TAH	D	Delta	DELL TAH	
	(略)			(略)			
	U	Uniform	YOU NEE FORM or OO NEE FORM	U	Uniform	YOU NEE FORM	
	(略)			(略)			

Approximate pronunciation

Letter	Word	International Phonetic Convention	Latin alphabet representation
A	Alfa	ˈalfə	AL FAH
B	Bravo	ˈbrɑːvo	BRAH VOH
C	Charlie	ˈtʃɑːli	CHAR LEE or SHAR LEE
D	Delta	ˈdeltə	DELL TAH
E	Echo	ˈekʊ	ECK OH
F	Foxtrot	ˈfɒksrɒt	EOKS TROT
G	Golf	ɡɒlf	GOLF
H	Hotel	ˈhoʊtəl	HO TELL
I	India	ˈɪndiə	IN DEE AH
J	Juliett	ˈdʒiːt	JEW LEE ETT
K	Kilo	ˈkiːlo	KEY LOH
L	Lima	ˈliːmə	LEE MAH
M	Mike	ˈmiːk	MIKE
N	November	nəˈvembər	NO VEM BER
O	Oscar	ˈɒskə	OSS CAH
P	Papa	ˈpɑːpə	PAH PAH
Q	Quebec	ˈkeɪbɛk	KEH BECK
R	Romeo	ˈroʊmiːo	ROW ME OH
S	Sierra	ˈsiːrə	SEE AIR RAH
T	Tango	ˈtæŋɡo	TANG OH
U	Uniform	ˈjuːnɪfɔːrm	YOU NEE FORM or OO NEE FORM
V	Victor	ˈvɪktər	VIK TAH
W	Whiskey	ˈwɪki	WISS KEY
X	X-ray	ˈeksreɪ	ECKS RAY
Y	Yankee	ˈjɒŋki	YANG KEY
Z	Zulu	ˈzuːlu	ZOO LOO

Note — In the approximate representation using the Latin alphabet, syllables to be emphasized are underlined.

Site 1 — The pronunciation of the words in the alphabet was very according to the language habits of the speakers. In order to eliminate such variations in pronunciation, pointers illustrating the desired pronunciation are available from ICAO.

Site 2 — The Spelling Alphabet specified in 5.2.1.3 is also prescribed for use in the Maritime Mobile Service (ITU Radio Regulations, Appendix 6.4).

Figure 5-1 The Radiotelephony Spelling Alphabet (see 5.2.1.3).

Letter	Word	Approximate pronunciation	
		International Phonetic Convention	Latin alphabet representation
A	Alfa	'a:fa	AL FAH
B	Bravo	'bra:və	BRAH VOH
C	Charlie	'tʃɑ:lɪ or 'tʃɑ:lɪ	CHAR LEE or SHAR LEE
D	Delta	'deltə	DELL TAH
E	Echo	'ekə	ECK OH
F	Foxtrot	'fɒks.tɹɒt	FOKS TROT
G	Golf	gɒlf	GOLF
H	Hotel	'həʊ.təl	HO TELL
I	India	'ɪndi.ə	IN DEE AH
J	Juliett	'dʒu:li'e:t	JEW LEE ETT
K	Kilo	'ki:lə	KEY LOH
L	Lima	'li:mə	LEE MAH
M	Mike	'mi:k	MIKE
N	November	nə'vembə	NO VEM BER
O	Osce	'ɒs.ə	OSS CAH
P	Papa	'pe:pə	PAH PAH
Q	Quebec	'ke:bek	KEH BECK
R	Romeo	'rə:mi:ə	ROW ME OH
S	Sierra	'si:ərə	SEE AIR RAH
T	Tango	'tæŋɡə	TANG GO
U	Uniform	'ju:nɪfɔ:m or 'ju:nɪfɔ:m	YOU NEE FORM or OO NEE FORM
V	Victor	'vɪktə	YIK TAH
W	Whiskey	'wi:ki	WISS KEY
X	X-ray	'eks:reɪ	ECKS RAY
Y	Yankee	'jæŋki	YANG KEY
Z	Zulu	'zu:lə	ZOO LOO

Note.— In the approximate representation using the Latin alphabet, syllables to be emphasized are underlined.

Note 1.— The pronunciation of the words in the alphabet may vary according to the language habits of the speakers. In order to eliminate such variations in pronunciation, greater attention to the actual pronunciation is available from ICAO.

Note 2.— The Spelling Alphabet specified in 5.2.1.3 is also prescribed for use in the Maritime Mobile Service (ITU Radio Regulations, Appendix 12A).

Figure 5-1. The Radiotelephony Spelling Alphabet (see 5.2.1.3)

4. ATMP 3-7-2 TAXI AND GROUND MOVEMENT OPERATION/滑行與地面活動作業

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>FAA Order 7110.65AA 3-7-2. TAXI AND GROUND MOVEMENT OPERATIONS (略)</p> <p>g. Crossing of active runway(s) by aircraft/vehicle(s): 1. During departure operations, ensure that aircraft/vehicles intending to cross a runway do not cross the runway holding position markings until the controller visually observes the departure aircraft in a turn, or the departure aircraft has passed the point where the crossing aircraft/vehicle is located, regardless of altitude, unless authorized in FAA Order JO 7110.65, paragraph 3-10-10, Altitude Restricted Low Approach. <i>REFERENCE— AIM, Runway Position</i></p>	<p>3-7-2 TAXI AND GROUND MOVEMENT OPERATION (略)</p> <p>g. Issue instructions to expedite a taxiing aircraft or a moving vehicle. <i>PHRASEOLOGY— EXPEDITE TAXI [(reason)].</i></p> <p>h. Crossing of active runway(s) by aircraft/vehicle(s): 1. During departure operations, ensure that aircraft/vehicles intending to cross a runway do not cross the runway holding position markings until the controller visually observes the departure aircraft in a turn, or the departure aircraft has passed the point where the crossing aircraft/vehicle is located, regardless of altitude, unless authorized in paragraph 3-10-10, LEVEL RESTRICTED LOW APPROACH. <i>REFERENCE: LEVEL RESTRICTED LOW APPROACH, Para 3-10-10</i></p>	<p>3-7-2 TAXI AND GROUND MOVEMENT OPERATION (略)</p> <p>g. Issue instructions to expedite a taxiing aircraft or a moving vehicle. <i>PHRASEOLOGY— EXPEDITE TAXI [(reason)].</i></p>	<p>【4/11決議】</p> <p>1、中文版 h 項第2點 (b)(1)之文字修改為「管制員目視觀察到落地航機在航機/車輛預計穿越跑道位置前正在脫離跑道。」</p> <p>2、其餘照案通過。</p>

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p><i>Holding Markings, Subpara 2-3-5a. FAA Order 7110.65, Para 3-10-10, Altitude Restricted Low Approach.</i></p> <p>2. During arrival operations, ensure the following:</p> <p>(a) An aircraft/vehicle has completed crossing prior to the arriving aircraft crossing the landing threshold, or <i>REFERENCE—P/CG Term – Clear of the Runway.</i></p> <p>(b) A crossing aircraft/vehicle will not cross the runway holding position markings until the arrival has landed and either:</p> <p>(1) The controller has confirmed by verbal commitment from the pilot that the arriving aircraft will exit the runway prior to the point at which the crossing is</p>	<p>2. During arrival operations, ensure the following:</p> <p>(a) An aircraft/vehicle has completed crossing prior to the arriving aircraft crossing the landing threshold, or</p> <p>(b) A crossing aircraft/vehicle will not cross the runway holding position markings until the arrival has landed and either:</p> <p>(1) The controller visually observes the aircraft exiting the runway prior to the point at which the crossing is intended, or</p> <p>(2) The arriving aircraft has passed the point at which the crossing is intended.</p> <p>3-7-2 滑行與地面活動作業 (略)</p> <p>g. 頒發指示以加速航空器之滑行或車輛之移動。 術語—— 儘速通/滑行〔（理由）〕。</p> <p>h. 航機/車輛穿越使用跑道作業：</p> <p>1. 於航機離場時，除非已授權航機依 3-10-10「限制空層之低空通過」章節作業，在管制員目視觀察到離場航</p>	<p>3-7-2 滑行與地面活動作業 (略)</p> <p>g. 頒發指示以加速航空器之滑行或車輛之移動。 術語—— 儘速通/滑行〔（理由）〕。</p>	

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>intended, or (2)The controller visually observes the aircraft exiting the runway prior to the point at which the crossing is intended, or (3) The arriving aircraft has passed the point at which the crossing is intended.</p> <p>REFERENCE— FAA Order JO 7110.65, Para 3-10-4, <i>Intersecting Runway/Intersecting Flight Path Separation</i>. FAA Order JO 7210.3, Para 10-3-7, <i>Land and Hold Short Operations (LAHSO)</i>.</p> <p>臺北機場管制臺業務手冊 2.2機場/地面管制及許可頒發作業程序補充規定 2.2.1.13 d. 借用跑道時機 1. 到場航機通過欲穿越或進入跑道航情之所在位置後，始得借用跑道；或到場航機開始脫離且部分機身通過跑</p>	<p>機開始轉彎，或是已通過等待穿越之航機/車輛所在位置之前，應確保欲穿越跑道之航機/車輛不超越跑道等待位置標線。</p> <p>參考— 限制空層之低空通過，3-10-10。 2. 於航機到場時，確保下列事項： (a)航機/車輛在到場航機通過跑道頭前已穿越並淨空跑道。 (b)欲穿越跑道之航機/車輛不超越跑道等待位置標線，直到航機已落地並且滿足下列情況之一： (1)管制員目視觀察到落地航機在航機/車輛預計穿越跑道位置前開始脫離跑道。 (2)到場航機已通過航機/車輛預計穿越跑道之位置。</p>		

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>道邊線始得借用跑道。</p> <p>2. 離場航機滾行通過欲穿越或進入跑道航情之所在位置後，始得借用跑道；考量N9-L1及N11-L2為跑道入侵熱點，使用05跑道由前述缺口進入或穿越跑道時，應等待離場航空器已起飛且通過跑道末端，或已轉彎離開跑道後始得借用跑道。</p>			

5. ATMP 4-7-1 CLEARANCE INFORMATION/許可資料

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>4-7-1 CLEARANCE INFORMATION (略)</p> <p>f. ATC instructions to an aircraft to rejoin a STAR shall include:</p> <ol style="list-style-type: none"> 1. the designator of the STAR to be rejoined, unless advance notification of rejoin has been provided in accordance with e.; 2. the cleared level on rejoining the STAR in accordance with d.; and 3. the position at which it is expected to rejoin the STAR. <p>EXAMPLE:</p> <p>① <i>TWB671 has previously been cleared to descend via Yanma One alfa Alpha RNAV Arrival to FL200, after passing Yanma, ATC</i></p>	<p>4-7-1 CLEARANCE INFORMATION (略)</p> <p>f. ATC instructions to an aircraft to rejoin a STAR shall include:</p> <ol style="list-style-type: none"> 1. the designator of the STAR to be rejoined, unless advance notification of rejoin has been provided in accordance with e.; 2. the cleared level on rejoining the STAR in accordance with d.; and 3. the position at which it is expected to rejoin the STAR. <p>EXAMPLE:</p> <p>① <i>TWB671 has previously been cleared to descend via Yanma One Alpha RNAV Arrival to FL200, after passing Yanma, ATC</i></p>	<p>【4/11決議】</p> <p>1、勘誤部分照案通過。</p> <p>本次其他勘誤內容列表參考「勘誤附錄」。</p> <p>2、本節中文版 f 項第1點保留現行版本，其餘照案通過。</p>

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>vectors TWB671 off the STAR. ATC intends that TWB671 will rejoin the STAR. “TWB671, turn left heading two zero zero vector for traffic, descend and maintain flight level one six zero, expect to rejoin STAR at Whiskey <i>Whiskey</i> Papa tree eight tree.” TWB671 will turn left heading 200° and descend to FL160. All the STAR restrictions are cancelled. The pilot will retain the STAR in the FMS for future rejoin instructions.</p> <p>② After a while, ATC instructs TWB671 back to <i>the</i> STAR. “TWB671, proceed direct Whiskey <i>Whiskey</i> Papa tree eight tree rejoin STAR, descend via STAR, maintain five thousand. ”</p> <p>③ TWB671 will descend to FL140 <i>5,000 feet</i>, proceed direct to WP383 to rejoin <i>the</i> STAR and comply with the published level and speed restrictions at and after WP383.</p> <p>4-7-1 許可資料 (略)</p>	<p>vectors TWB671 off the STAR. ATC intends that TWB671 will rejoin the STAR. “TWB671, turn left heading two zero zero vector for traffic, descend and maintain flight level one six zero, expect to rejoin STAR at Whiskey Papa four zero seven. ” TWB671 will turn left heading 200° and descend to FL160. All the STAR restrictions are cancelled. The pilot will retain the STAR in the FMS for future rejoin instructions.</p> <p>② After a while, ATC instruct TWB671 back to STAR. “TWB671, proceed direct <u>Whiskey</u> Papa tree eight tree rejoin STAR, descend via STAR, maintain flight level one four zero. ”</p> <p>③ TWB671 will descend to <u>FL140</u>, proceed direct to WP383 to rejoin STAR and comply with the published level and speed restrictions at and after WP383.</p> <p>4-7-1 許可資料 (略)</p>	

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>f. 航管指示航空器重新加入標準終端到場程序時應包含：</p> <ol style="list-style-type: none"> 1. 將加入的標準終端到場程序名稱，除非先前已按照 e. 項告知駕駛員預計重新加入標準終端到場程序； 2. 按照 d. e. 項頒發重新加入標準終端到場程序之許可高度； 3. 預計重新加入標準終端到場程序之位置。 <p>例－</p> <p>① TWB671 先前被許可經由 Yanma One Alpfa alfa RNAV 到場下降到飛航空層 200，在通過 Yanma 後，航管引導 TWB671 離開標準終端到場程序，並且預劃 TWB671 後續重新加入。</p> <p>「德威671六拐么，左轉航向兩洞洞雷達引導避讓航情，下降保持飛航空層么六洞，預計在 WP 四洞拐 Whiskey Papa 三八三 重新加入 STAR。」</p> <p>收到指示後，TWB671 將左轉航向 200°，並下降至飛航空層 160，標準終端到場程序上所有限制不再適用，但駕駛員將保留飛航管理系統（FMS）上的標準終端到場程序設定，以利後續重新加入。</p> <p>② 不久後，航管指示 TWB671 重回標準終端到場程序。</p> <p>「德威六拐么，直飛 Whiskey Papa</p>	<p>f. 航管指示航空器重新加入標準終端到場程序時應包含：</p> <ol style="list-style-type: none"> 1. 將加入的標準終端到場程序名稱，除非先前已按照 e. 項告知駕駛員預計重新加入標準終端到場程序； 2. 按照 e. 項頒發重新加入標準終端到場程序之許可高度； 3. 預計重新加入標準終端到場程序之位置。 <p>例－</p> <p>① TWB671 先前被許可經由 Yanma One <u>Alpfa</u> RNAV 到場下降到飛航空層 200，在通過 Yanma 後，航管引導 TWB671 離開標準終端到場程序，並且預劃 TWB671 後續重新加入。</p> <p>「德威671，左轉航向兩洞洞雷達引導避讓航情，下降保持飛航空層么六洞，預計在 WP 四洞拐重新加入 STAR。」</p> <p>收到指示後 TWB671 將左轉航向 200° 並且下降至飛航空層 160，標準終端到場程序上所有限制不再適用，但駕駛員將保留飛航管理系統（FMS）上的標準終端到場程序設定以利後續重新加入。</p> <p>② 不久後，航管指示 TWB671 重回標準終端到場程序。</p> <p>「德威六拐么，直飛 WP 四洞拐重新加入 STAR，經由 STAR 下降，保持飛航空層么四洞。」</p>	

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>三八三 WP 四洞拐重新加入 STAR，經由 STAR 下降，保持五千。」</p> <p>TWB671 將下降至飛航空層1405,000呎，直飛WP407383，重新加入標準終端到場程序，並遵循WP407383及其後程序頒布之高度與速度限制。</p>	<p>TWB671 將下降至飛航空層140，直飛 WP407 重新加入標準終端到場程序，並且遵循WP407 以及其後程序上頒布之高度與速度限制。</p>	

6. ATMP 4-8-2 CLEARANCE LIMIT/許可限制點

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>FAA 7110.65 AA_CHG3</p> <p><u>4-8-2. APPROACH CLEARANCE TO UNCONTROLLED AIRPORTS</u></p> <p><u>When issuing an approach clearance at locations without an operating control tower or where part-time towers are closed, state the name of the airport.</u></p> <p><i>PHRASEOLOGY—</i> <i>CLEARED (type) APPROACH TO (airport name)</i> <i>or</i> <i>CLEARED APPROACH TO (airport name)</i> <i>(To authorize a pilot to execute his/her choice of instrument approach)</i></p>	<p>4-8-2 CLEARANCE LIMIT CLEARANCE TO UNCONTROLLED AIRPORTS</p> <p>Issue approach or other clearances, as required, specifying the destination aerodrome as the clearance limit if aerodrome traffic control service is not provided even though this is a repetition of the initial clearance.</p> <p>When issuing an approach clearance at locations without an operating control tower or where part-time towers are closed, state the name of the airport.</p> <p>PHRASEOLOGY: <i>CLEARED (destination) AERODROME. (type) APPROACH TO (airport name)</i></p>	<p>4-8-2 CLEARANCE LIMIT</p> <p>Issue approach or other clearances, as required, specifying the destination aerodrome as the clearance limit if aerodrome traffic control service is not provided even though this is a repetition of the initial clearance.</p> <p>PHRASEOLOGY: <i>CLEARED TO (destination) AERODROME.</i></p>	<p>【4/11決議】</p> <p>照案通過。</p>

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p><i>or</i></p> <p><i>CLEARED APPROACH TO (airport name)</i></p> <p><i>Note : To authorize a pilot to execute his/her choice of instrument approach.</i></p> <p>4-8-2許可限制點許可至無機場管制塔臺運作之機場</p> <p>當需頒發進場或其他許可時，如目的地機場未提供機場管制服務，即使是重複最初許可亦應指定目的地機場為許可限制點。當頒發進場許可至無機場管制塔臺運作或部份時段關閉之機場時，敘明機場名稱。</p> <p>術語－</p> <p>許可（種類）進場至（目的地）機場（機場名稱）。</p> <p>或</p> <p>許可進場至（機場名稱）。</p> <p>註：此術語授權駕駛員執行自選之儀器進場種類。</p>	<p>4-8-2許可限制點</p> <p>當需頒發進場或其他許可時，如目的地機場未提供機場管制服務，即使是重複最初許可亦應指定目的地機場為許可限制點。</p> <p>術語－</p> <p>許可至（目的地）機場。</p>	

7. ATMP 5-7-1適用範圍

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
FAA 7110.65 AA_CHG3 5-7-1 APPLICATION g. Express speed adjustments in terms of knots based on indicated airspeed (IAS) in 5-knot increments. At or above FL 240, speeds may be expressed in terms of Mach numbers in 0.01 increments for aircraft with Mach meters (Mach 0.69, 0.70, 0.71, etc.).	5-7-1 APPLICATION g. Express speed adjustments in terms of knots based on indicated airspeed (IAS) in 5-knot increments. At or above FL 250, speeds may be expressed in terms of Mach numbers in 0.01 increments for turbojet aircraft with Mach meters (i.e., Mach 0.69, 0.70, 0.71, etc.). 5-7-1適用範圍 g. 以指示空速5浬為速度調整之單位。在飛航空層250或以上，對具馬赫表之噴射航空器可以0.01馬赫數為速度調整之單位(即0.69，0.70，0.71馬赫等)。	5-7-1 APPLICATION g. Express speed adjustments in terms of knots based on indicated airspeed (IAS) in 5-knot increments. At or above FL 250, speeds may be expressed in terms of Mach numbers in 0.01 increments for turbojet aircraft with Mach meters (i.e., Mach 0.69, 0.70, 0.71, etc.). 5-7-1適用範圍 g. 以指示空速5浬為速度調整之單位。在飛航空層250或以上，對具馬赫表之噴射航空器可以0.01馬赫數為速度調整之單位(即0.69，0.70，0.71馬赫等)。	【4/11決議】 照案通過。

8. ATMP 5-2-18 廣播式自動回報監視(ADS-B)發射器作業

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>DOC 4444 16th, and 12</p> <p>8.5.3.3 Aircraft equipped with Mode S having an aircraft identification feature shall transmit the aircraft identification as specified in <u>the corresponding item of the filed flight plan, such as</u> Item 7 of the <u>FPL</u>, or, when no flight plan has been filed, the aircraft registration.</p> <p>8.5.4.1 Aircraft equipped with ADS-B having an aircraft identification feature shall transmit the aircraft identification as specified in <u>the corresponding item of the filed flight plan, such as</u> Item 7 of the <u>FPL</u>, or, when no flight plan has been filed, the aircraft registration.</p>	<p>5-2-18 OPERATION OF ADS-B TRANSMITTERS</p> <p>Note 2 :</p> <p>a. Aircraft equipped with ADS-B having an aircraft identification feature shall transmit the aircraft identification as specified in the corresponding item of the filed flight plan, such as Item 7 of the ICAO flight plan FPL or, when no flight plan has been filed, the aircraft registration.</p> <p>5-2-18 廣播式自動回報監視(ADS-B)發射器作業</p> <p>註二：</p> <p>a. 配備具發送航空器識別功能之ADS-B航空器，應依ICAO飛航計畫申報之飛航計畫對應項如第7欄指定之航空器識別發送，未提送飛航計畫時，則發送航空器註冊編號。</p>	<p>5-2-18 OPERATION OF ADS-B TRANSMITTERS</p> <p>Note 2 :</p> <p>a. Aircraft equipped with ADS-B having an aircraft identification feature shall transmit the aircraft identification as specified in Item 7 of the ICAO flight plan or, when no flight plan has been filed, the aircraft registration.</p> <p>5-2-18 廣播式自動回報監視(ADS-B)發射器作業</p> <p>註二：</p> <p>a. 配備具發送航空器識別功能之ADS-B航空器，應依ICAO飛航計畫第7欄指定之航空器識別發送，未提送飛航計畫時，則發送航空器註冊編號。</p>	<p>【4/11決議】</p> <p>請管制科蒐集參考國內外官方文件之文字用語後，於下次修編小組會議中提出討論。</p>

FAA/ICAO 原文/其他參考資料	建議修正文字	ATMP 現行章節	說明/建議/決議
<p>9.2.2.4 In obtaining the necessary information as required under 5.2.2.1 of Annex 11, attention shall particularly be given to informing the relevant rescue coordination centre of the distress frequencies available to survivors, as listed in <u>the corresponding item of the flight plan</u>, such as Item 19 of the <u>FPL</u>, but not normally transmitted.</p>			

9. ATMP 5-3-3 BEACON IDENTIFICATION METHODS/次級雷達識別方法

	建議修正文字	ATMP 現行章節	說明/建議/決議
	<p>6. 觀察到航空器依指示開啟迴波器識別信號。 術語— SQWAK SQUAWK〔電碼〕並開啟識別信號。</p>	<p>6. 觀察到航空器依指示開啟迴波器識別信號。 術語— SQWAK〔電碼〕並開啟識別信號。</p>	<p>【4/11決議】 照案通過。</p>

(二) 提案討論

提案參考之 ICAO 原文及中文翻譯	本區現行參考之 ICAO 原文及中文翻譯	ATMP 現行章節	說明/建議/決議
<p>8.7.3.6 When applying the wake turbulence groups in Chapter 4, 4.9.1.2, the following distance-based wake turbulence separation minima shall be applied to aircraft being provided with an ATS surveillance service in the approach and departure phases of flight, in the circumstances given in 8.7.3.7:</p> <p>8.7.3.6 在使用第 4 章 4.9.1.2 所列的機尾亂流群組且遇 8.7.3.7 所述情況時，對提供 ATS 監視服務的航空器在飛行的進近和離場階段必須使用下列以尾流</p>	<p>DOC 4444 16th, amd12</p> <p>4.9.1.1 Except as provided for in 4.9.1.2, wake turbulence separation minima shall be based on a grouping of aircraft types into four categories according to the maximum certificated take-off mass as follows:</p> <p>a) SUPER (J) — aircraft types specified as such in Doc 8643, Aircraft Type Designators;</p> <p>b) HEAVY (H) — aircraft types of 136 000 kg or more, with the exception of aircraft types listed in Doc 8643 in the SUPER (J) category;</p> <p>c) MEDIUM (M) — aircraft types less than 136 000 kg but more than 7 000 kg; and</p> <p>d) LIGHT (L) — aircraft types of 7 000 kg or less.</p> <p>Note. — The wake turbulence category for each aircraft type is contained in Doc 8643, Aircraft Type Designators.</p>	<p>ATMP GENERAL CONTROL</p> <p>2-1-20 Wake Turbulence</p> <p>a. Except as provided for in 2-1-20 e., wake turbulence separation minima shall be based on a grouping of aircraft types into four categories according to the maximum certificated take-off mass as follows:</p> <p>1. SUPER (J) — aircraft types specified as such in ICAO Doc 8643, Aircraft Type Designators ;</p> <p>2. HEAVY (H) — all aircraft types of 136,000 kg or more, with the exception of aircraft types listed in ICAO Doc 8643 in the SUPER (J) category;</p> <p>3. MEDIUM (M) — aircraft types less than 136,000 kg but more than 7,000 kg; and</p> <p>4. LIGHT (L) — aircraft types of 7,000 kg or less.</p> <p>b. Apply wake turbulence procedures to an aircraft operating behind another aircraft when wake turbulence separation is required.</p> <p>a NOTE:</p> <p>① <i>The wake turbulence category for each aircraft type is contained in ICAO Doc 8643,</i></p>	<p>【4/11決議】</p> <p>1、WTG 及 TBS 的推行目前尚存在許多限制。</p> <p>2、尾流重分類的推行理論上可縮減航機間的隔離，惟需更多資訊以進行評估。</p> <p>3、綜上考量，本項持續研議。</p>

提案參考之 ICAO 原文及中文翻譯	本區現行參考之 ICAO 原文及中文翻譯	ATMP 現行章節	說明/建議/決議
<p>距離為基準的最低間隔： (圖表請見附圖2)</p>	<p>4.9.1.2 When approved by the appropriate ATS authority, wake turbulence separation minima may be applied utilizing wake turbulence groups and shall be</p>	<p><i>Aircraft Type Designators.</i></p> <p>② <i>Para 5-5-4, Minima and Para 5-5-7, Passing or Diverging specify the required radar wake turbulence separations. Time-based separations are contained in Para 3-9-7, Same Runway Separation, Para 3-9-8, Wake Turbulence Separation for Intersection Departures, Para 3-9-9, Intersecting Runway /Intersecting flight path separation, Para 6-1-4, Arrival Minima, and Para 6-7-5, Interval Minima.</i></p> <p>c. The separation minima shall continue to touchdown for all IFR aircraft not making a visual approach or maintaining visual separation.</p> <p>d. Wake turbulence separation need not be applied:</p> <p>1. For arriving VFR flights landing on the same runway as a preceding landing SUPER, HEAVY or MEDIUM aircraft; and</p> <p>2. Between arriving IFR flights executing visual approach when the aircraft has reported the preceding aircraft in sight and has been instructed to follow and maintain own separation from that aircraft.</p> <p>e. When approved by the appropriate ATS authority, wake turbulence separation minima may be applied utilizing <u>wake turbulence groups</u> and</p>	

提案參考之 ICAO 原文及中文翻譯	本區現行參考之 ICAO 原文及中文翻譯	ATMP 現行章節	說明/建議/決議
	<p>based on wake generation and resistance characteristics of the aircraft. These depend primarily on maximum certificated take-off mass, wing characteristics and speeds. The group designators are described as follows:</p> <p>a) GROUP A — aircraft types of 136 000 kg or more, and a wing span less than or equal to 80 m but greater than 74.68 m;</p> <p>b) GROUP B — aircraft types of 136 000 kg or more, and a wing span less than or equal to 74.68 m but greater than 53.34 m;</p> <p>c) GROUP C — aircraft types of 136 000 kg or more, and a wing span less than or equal to 53.34 m but greater than 38.1 m;</p> <p>d) GROUP D — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span greater than 32 m;</p> <p>e) GROUP E — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span less than or equal to 32 m but greater than 27.43 m;</p>	<p>shall be based on wake generation and resistance characteristics of the aircraft. These depend primarily on maximum certificated take-off mass, wing characteristics and speeds; the group designators are described as follows:</p> <p>1. GROUP A — aircraft types of 136,000 kg or more, and a wing span less than or equal to 80 m but greater than 74.68 m;</p> <p>2. GROUP B — aircraft types of 136,000 kg or more, and a wing span less than or equal to 74.68 m but greater than 53.34 m;</p> <p>3. GROUP C — aircraft types of 136,000 kg or more, and a wing span less than or equal to 53.34 m but greater than 38.1 m;</p> <p>4. GROUP D — aircraft types less than 136,000 kg but more than 18,600 kg, and a wing span greater than 32 m;</p> <p>5. GROUP E — aircraft types less than 136,000 kg but more than 18,600 kg, and a wing span less than or equal to 32 m but greater than 27.43 m;</p> <p>6. GROUP F — aircraft types less</p>	

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	<p>f) GROUP F — aircraft types less than 136 000 kg but more than 18 600 kg, and a wing span less than or equal to 27.43 m;</p> <p>g) GROUP G — aircraft types of 18 600 kg or less (without wing span criterion).</p> <p>Note 1. — Information on the wake turbulence group for each aircraft type is contained in Doc 8643, Aircraft Type Designators.</p> <p>Note 2. — Guidance on the implementation of wake turbulence separation between wake turbulence groups can be found in the Manual on Implementation of Wake Turbulence Separation Minima (Doc 10122).</p>	<p>than 136,000 kg but more than 18,600 kg, and a wing span less than or equal to 27.43 m;</p> <p>7. GROUP G — aircraft types of 18,600 kg or less (without wing span criterion).</p> <p>NOTE :</p> <p>① <i>Information on the wake turbulence group for each aircraft type is contained in ICAO Doc 8643 Aircraft Type Designators.</i></p> <p>② <i>Guidance on the implementation of wake turbulence separation between wake turbulence groups can be found in the Manual on Implementation of Wake Turbulence Separation Minima (ICAO Doc 10122).</i></p> <p>③ <i>Wake turbulence Group A is equivalent to the SUPER wake turbulence category, and Groups B and C are equivalent to the HEAVY category.</i></p> <p>2-1-20 機尾亂流</p> <p>a. 除2-1-20 e項之規定外，機尾亂流最低隔離應基於航空器機型依最大核定起飛重量分為下列四類：</p> <p>1. 超重型航空器 (J) — 國際民航組織</p>	

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		<p>8643號文件所列之超重型航空器類型。</p> <p>2. 重型航空器（H）—136,000 公斤或以上之所有航空器；</p> <p>3. 中型航空器（M）—介於7,000 公斤與136,000 公斤間之所有航空器；</p> <p>4. 輕型航空器（L）—7,000 公斤或以下之所有航空器。</p> <p>b. 當一航空器跟隨在另一須提供機尾亂流隔離之航空器後方時，適用機尾亂流程序。</p> <p>註—</p> <p>①各航空器機型之機尾亂流類別，規範於國際民航組織8643號文件航空器類型代號中。②以雷達隔離為機尾亂流隔離標準之規定在5-5-4「最低限度」、5-5-7「通過或分歧」等章節。以時間隔離為機尾亂流隔離標準之規定在3-9-7「同跑道之隔離」、3-9-8「交叉口離場之機尾亂流隔離」、3-9-9「交叉跑道之隔離」、3-10-4「同跑道隔離」、6-1-4「到場最低限度」及6-7-5「時間間隔最低限度」等章節。</p> <p>c. 對實施目視進場或保持目視隔離之外的所有儀器飛航航空器，最低隔離應持續至航空器落地。</p> <p>d. 不需使用機尾亂流隔離者：</p> <p>1. 到場之目視飛航航空器在超重型、重型</p>	

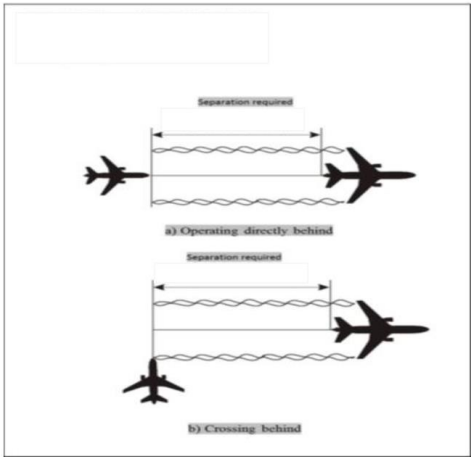
提案參考之 ICAO 原文及中文翻譯	本區現行參考之 ICAO 原文及中文翻譯	ATMP 現行章節	說明/建議/決議
		<p>或中型航空器之後降落於同一跑道時。</p> <p>2. 到場之儀器飛航航空器，實施目視進場已報告目視前一航空器，且已被指示跟隨前一航空器自行保持隔離時。</p> <p>e. 經由適當飛航服務主管機關核可後，可以基於形成機尾亂流及阻力之特性，規範應用機尾亂流最低隔離之群組，上述群組之分類主要取決於最大核定起飛重量，機翼特性和速度；群組分類如下：</p> <p>1. A組—136,000公斤或以上，且翼展大於74.68公尺但不超過80公尺之所有航空器。</p> <p>2. B組—136,000公斤或以上，且翼展大於53.34公尺但不超過74.68公尺之所有航空器。</p> <p>3. C組—136,000公斤或以上，且翼展大於38.1公尺但不超過53.34公尺之所有航空器。</p> <p>4. D組—大於18,600公斤但小於136,000公斤，且翼展大於32公尺之所有航空器。</p> <p>5. E組—大於18,600公斤但小於136,000公斤，且翼展大於27.43公尺但不超過32公尺之所有航空器。</p> <p>6. F組—大於18,600公斤但小於136,000公斤，且翼展不超過27.43公尺之所有航空器。</p> <p>7. G組—不超過18,600公斤(無翼展限制)</p>	

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	<p>8.7.3.1 Unless otherwise prescribed in accordance with 8.7.3.2, 8.7.3.3, 8.7.3.4 or <u>8.7.3.5</u>, or Chapter 6 (with respect to independent and dependent parallel approaches), the horizontal separation minimum based on radar and/or ADS-B and/or MLAT systems shall be 9.3 km (5.0 NM).</p> <p>8.7.3.5 When using wake turbulence categories contained in Chapter 4, 4.9.1.1, the following distance-based wake turbulence separation minima shall be applied to aircraft being provided with an ATS surveillance service in the approach and departure phases of</p>	<p>之所有航空器。 註— ①各航空器機型之機尾亂流類別，規範於國際民航組織8643號文件之航空器類型代號中。 ②運用上述組別之機尾亂流隔離說明文件為國際民航組織10122號文件。 ③A組之機尾亂流類別與超重型航空器之機尾亂流類別相同，B組與C組之機尾亂流類別與重型航空器之機尾亂流類別相同。</p> <p>5-5-4 MINIMA Unless otherwise prescribed by the ATS authority, the horizontal separation based on radar and /or ADS-B shall be 5 NM.</p> <p>a. MILITARY: When using Single Radar Mode, separate aircraft by the following minima:</p> <ol style="list-style-type: none"> 1. When less than 40 miles from the antenna - 3 miles. 2. When 40 miles or more from the antenna - 5 miles. <p>b. TERMINAL: The application of 3 mile separation will be applied by ATS unit and individually approved by the CAA.</p> <p>(略)</p>	

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	<p>flight in the circumstances given in 8.7.3.6.</p> <p>8.7.3.7 The minima set out in 8.7.3.5 and 8.7.3.6 shall be applied when:</p> <p>a) an aircraft is operating directly behind another aircraft at the same altitude or less than 300 m (1 000 ft) below (see Figure 8-1); or</p> <p>b) both aircraft are using the same runway, or parallel runways separated by less than 760 m (2 500 ft); or</p> <p>c) an aircraft is crossing behind another aircraft, at the same altitude or less than 300 m (1 000 ft) below (see Figure 8-1).</p> <p>8.7.3.1除非根據 8.7.3.2、8.7.3.3、8.7.3.4 或 8.7.3.5，或第六章關於獨立和相關平行進場的有關內容另有規定者外，基於雷達和/或 ADS-B 和/或 MLAT 的最低水平隔離為 9.3 公里（5.0 海浬）。</p> <p>8.7.3.5 在使用第 4 章 4.9.1.1 所列的機尾亂流類別且遇 8.7.3.6 所述情況時，對提供 ATS 監視服務的航空</p>	<p>WAKETURBULENCE APPLICATION</p> <p>d. The minima set out in para 5-5-4 e. shall be applied when:</p> <p>1. An aircraft is operating directly behind another aircraft at the same altitude or less than 1,000 ft below (See FIG5-5-1); or</p> <p>2. Both aircraft are using the same runway or parallel runways separated by less than 760 m /2,500 ft ;or</p> <p>3. An aircraft is crossing behind another aircraft at the same altitude or less than 1,000 ft below (See FIG5-5-1).</p> <p>e. When using wake turbulence categories contained in para 2-1-20 a., the following distance-based wake turbulence separation minima shall be applied to aircraft being provided with an ATS surveillance service in the approach and departure phases of flight in the circumstances given in 5-5-4 d.:</p>	

提案參考之 ICAO 原文及中文翻譯	本區現行參考之 ICAO 原文及中文翻譯	ATMP 現行章節	說明/建議/決議																							
	<p>器在飛行的進近和離場階段必須使用下列以尾流距離為基準的最低間隔：（圖表請見附圖1）</p> <p>8.7.3.7 在 8.7.3.5 和 8.7.3.6 中規定的最低標準適用於下列情況：</p> <p>a) 一航空器在同一或小於 300 米（1 000 英尺）高度緊隨另一航空器後面飛行（見圖 8-1）；或</p> <p>b) 兩架航空器使用同一跑道，或間隔小於 760 米（2 500 英尺）的平行跑道；或</p> <p>c) 一航空器在同一或小於 300 米（1 000 英尺）高度飛行時從後面橫越另一航空器（見圖 8-1）。</p>	<table><tr><th colspan="3">Aircraft category</th></tr><tr><th>Preceding aircraft</th><th>Succeeding aircraft</th><th>Distance-based wake turbulence separation minima</th></tr><tr><td rowspan="3">SUPER</td><td>HEAVY</td><td>5NM</td></tr><tr><td>MEDIUM</td><td>7NM</td></tr><tr><td>LIGHT</td><td>8NM</td></tr><tr><td rowspan="3">HEAVY</td><td>HEAVY</td><td>4NM</td></tr><tr><td>MEDIUM</td><td>5NM</td></tr><tr><td>LIGHT</td><td>6NM</td></tr><tr><td>MEDIUM</td><td>LIGHT</td><td>5NM</td></tr></table> <p>FIG 5-5-1 Operating directly behind or crossing behind</p>	Aircraft category			Preceding aircraft	Succeeding aircraft	Distance-based wake turbulence separation minima	SUPER	HEAVY	5NM	MEDIUM	7NM	LIGHT	8NM	HEAVY	HEAVY	4NM	MEDIUM	5NM	LIGHT	6NM	MEDIUM	LIGHT	5NM	
Aircraft category																										
Preceding aircraft	Succeeding aircraft	Distance-based wake turbulence separation minima																								
SUPER	HEAVY	5NM																								
	MEDIUM	7NM																								
	LIGHT	8NM																								
HEAVY	HEAVY	4NM																								
	MEDIUM	5NM																								
	LIGHT	6NM																								
MEDIUM	LIGHT	5NM																								

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		<p>5-5-4 最低限度 除飛航服務主管機關另行規定，使用雷達及/或 ADS-B 時航空器之最低水平隔離為5哩。</p> <p>a. 軍方:使用單一雷達信號源時，航空器隔離之最低限度：</p> <ol style="list-style-type: none"> 1. 距雷達天線小於40哩－3哩。 2. 距雷達天線40哩或以外－5哩。 <p>b. 終端：航管單位提報並經民航局個案核准後得應用3哩隔離。</p> <p>(略)</p> <p>機尾亂流程序</p> <p>d. 5-5-4 e. 項之最低限度應用於：</p> <ol style="list-style-type: none"> 1. 同空層在一航空器之後，或在一航空器之後且空層間隔不足1,000 呎時(見圖5-5-1)； <p>或</p> <ol style="list-style-type: none"> 2. 對使用同跑道或兩平行跑道間距離少於760公尺/2,500呎之兩架航空器；或 3. 同空層或空層間隔不足1,000 呎(見圖5-5-1)，穿越前機飛行路徑之航空器； <p>e. 當使用2-1-20 a. 機尾亂流類別時，在雷達服務下之航空器，於5-5-4 d. 情況之進場和離場階段，應提供下列以距離為基準之機尾亂流最低隔離：</p>	

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		<table><tr><th colspan="2">航空器類別</th><th></th></tr><tr><td>前機</td><td>後機</td><td>距離基準之機尾亂流最低隔離</td></tr><tr><td rowspan="3">超重型</td><td>重型</td><td>5 浬</td></tr><tr><td>中型</td><td>7 浬</td></tr><tr><td>輕型</td><td>8 浬</td></tr><tr><td rowspan="3">重型</td><td>重型</td><td>4 浬</td></tr><tr><td>中型</td><td>5 浬</td></tr><tr><td>輕型</td><td>6 浬</td></tr><tr><td>中型</td><td>輕型</td><td>5 浬</td></tr></table> <p>圖 5-5-1 在一航空器之後或穿越前機飛行路徑</p> 	航空器類別			前機	後機	距離基準之機尾亂流最低隔離	超重型	重型	5 浬	中型	7 浬	輕型	8 浬	重型	重型	4 浬	中型	5 浬	輕型	6 浬	中型	輕型	5 浬	
航空器類別																										
前機	後機	距離基準之機尾亂流最低隔離																								
超重型	重型	5 浬																								
	中型	7 浬																								
	輕型	8 浬																								
重型	重型	4 浬																								
	中型	5 浬																								
	輕型	6 浬																								
中型	輕型	5 浬																								

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【勘誤附錄】

勘誤內容	ATMP	章節/位置	數量
ALPHA	英文版	2-4-16	1
		2-4-20	1
		2-5-1	1
		2-5-2	1
		2-5-3	1
		2-9-1	1
		2-9-2	1
		2-9-3	2
		3-7-2	5
		3-9-5	1
		3-10-12	3
		4-2-4	6
		4-3-2	10
		4-5-6	3
		4-6-4	1
		4-7-1	6
		4-8-1	4
		5-2-1	1
		5-9-4	8
		FIG 6-4-20	1
	中文版	2-4-16	1
		2-4-20	1
		2-5-2	1

勘誤內容	ATMP	章節/位置	數量
ALPHA	中文版	2-5-3	1
		2-9-1	1
		2-9-2	2
		3-7-2	5
		3-10-12	3
		4-2-4	7
		4-3-2	10
		4-5-6	3
		4-7-1	4
		5-9-4	8
		FIG 6-4-20	1
ALPFA	英文版	4-2-4	2
	中文版	2-5-2	1
		4-7-1	2
Whiskey	英文版	4-7-1	3
		5-6-2	3
	中文版	4-2-4	1
		4-3-2	1
Whisky	英文版	2-5-3	1
SQWAK	中文版	5-5-3	1