

應變之智

WISDOM IN ADAPTATION

危機管理與行業韌性

Crisis Management and Industry Resilience

SARS與COVID-19應對

Countering SARS and COVID-19 Outbreaks



香港航空業在2003年爆發的嚴重急性呼吸系統綜合症(「沙士」)和2020至2022年間的2019冠狀病毒病疫情中，面對前所未有的挑戰。民航處在兩次危機中均積極支援業界，確保航空運作安全和穩定，並協助航空公司渡過難關。

The Hong Kong aviation industry faced unprecedented challenges during the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 and the Coronavirus Disease 2019 (COVID-19) pandemic between 2020 and 2022. The CAD took a proactive approach in supporting the industry to ensure the safety and stability of aviation operations and assisted airlines to tide over the crisis.

2003年「沙士」疫情

2003年3月開始爆發「沙士」，導致全球航空客運需求量下降，多間航空公司曾因此停辦來港的航空服務，本地航空公司甚至把定期客運航班的數目減半。幸而，隨着世界衛生組織於2003年5月撤除對香港的旅遊忠告後，市場迅速復元，定期航班服務更改申請因此大幅增加。民航處積極協調，以助航空公司盡快恢復正常服務。

民航處除積極協調航班服務恢復外，亦參與制定和實施防疫措施，提升旅客信心。當中包括統籌及協助國際民航組織評核香港國際機場的防疫措施，以確保各項措施完全符合該組織的建議。此外，民航處發出危險品通告，提示航空公司須以空運傳染性貨物的最高規格，運送「沙士」化驗樣本進出或途經香港。與此同時，載容量大跌，大量本港航機暫停服務期間，民航處亦繼續確保所有飛機仍然保持適航標準。



Outbreak of SARS in 2003

The outbreak of SARS in March 2003 triggered a worldwide reduction in demand for passenger air travel, leading to the suspension of air services to Hong Kong by a number of airlines, while local carriers had to cut their scheduled passenger flights by half. Fortunately, after the lifting of travel advisory against Hong Kong by the World Health Organization in May 2003, the market recovered quickly, resulting in a drastic increase in schedule change applications. The CAD had proactively facilitated the airline industry in ensuring their prompt resumption of normal services.

Apart from proactively coordinating the resumption of services, the CAD participated in the development and implementation of anti-SARS precautionary measures to help boost the confidence of the travelling public. These included coordinating and taking part in the ICAO Anti-SARS Airport Evaluation to confirm that the measures implemented at HKIA fully complied with ICAO recommendations. Additionally, the CAD issued a Dangerous Goods Advisory Circular to remind airlines that all SARS specimens to be transported by air to, from or over Hong Kong must be handled with the most stringent air transport standards for cargo containing infectious substances. Throughout the SARS epidemic, while many aircraft of local airlines were temporarily pulled out from service due to the tremendous reduction of passengers, the CAD continued to ensure that the airworthiness standards of all aircraft were being maintained at all times.

◆ 2019冠狀病毒病期間，多架飛機長期停泊在香港國際機場。
During the outbreak of COVID-19, a number of long-layover aircraft were parked at Hong Kong International Airport.



2019冠狀病毒病疫情

2020年全球爆發2019冠狀病毒病，再次嚴重影響航空客運需求。然而，緊急醫療和人道救援物資的運送需求大增，加上電子商貿日益繁重，貨運運力的需求出現前所未有的急劇增長。民航處因應需求的轉變推行因時制宜的措施，迅速為業界提供了多項適切支援，共同應對前所未見的挑戰。其中包括增派人手處理航空公司加開貨運航班和包機的申請、監管大量飛機長期停泊的安排，以及加快處理以客機客艙運載貨物的改裝及營運申請。在確保飛行安全的同時，既快捷回應航空業界的迫切營運需要，亦促進了疫苗和醫療用品的航空運輸。另外，民航處向業界提供一系列有關加快及簡化航班申請的指引，以協助航空公司準備及提交相關航班的申請和資料，並臨時加派人手處理航空公司的航班申請，支援業界營運。

Outbreak of COVID-19

The global outbreak of COVID-19 in 2020 again fiercely affected the demand for air passenger services. In spite of cancellations of passenger services, there was a growing demand for air transport of urgent medical and humanitarian supplies and a heavy reliance on e-commerce. In response to this shifted demand, the CAD made swift arrangements and worked closely with industry partners to handle the unprecedented challenges together. These included deploying extra manpower to process flight applications from airlines for additional cargo and chartered flights, overseeing the arrangement of the increased number of long-layover aircraft, and expediting the handling of airlines' applications for modification and operation of aircraft for the transportation of cargo in passenger cabin. Without compromising flight safety, the CAD promptly responded to the pressing operational needs of the aviation industry, and facilitated the transport of vaccines and medical supplies by air. The CAD also provided the industry with a series of guidelines on expediting and simplifying flight applications, in order to assist airlines in preparing and submitting such applications, and redeployed extra manpower temporarily to facilitate the processing of flight applications from airlines and support industry operations.

與此同時，根據《全球機場時刻準則》，航空公司在航季內使用獲分配航班時刻的比率至少須達八成，才能在來年的相同航季保留該等航班時刻。為減輕疫情對航空業的影響，民航處分別在2003年3月至10月和2019年8月至2023年3月期間，豁免該八成使用率的要求。

航空業復蘇

隨著旅遊限制於2022年年底放寬，本港航空公司持續加快復飛的步伐。民航處採用既審慎又便利的方式協助本地航空公司實施復航計劃，包括盡早提供監管指引，並優先安排各種與復航相關的技術和營運監察項目，以確保飛機的適航性及航空人員的運作準備和能力，符合相關的安全指引和要求。

因應航空業的疫後復蘇情況，航班時刻使用率的規則在2023年3月開始逐步恢復到六成至及後的八成。上述措施不但賦予航空公司更大彈性以靈活調配航班和規劃業務，亦維持香港國際機場長久建立下來的航空網絡，使香港得以保持國際和區域航空中心的地位。

Meanwhile, according to the Worldwide Airport Slot Guidelines, airlines are entitled to retain a series of slots for the next equivalent season if they were operated at least 80% of the time during the period for which they were allocated. To alleviate the impact on the aviation industry during the pandemics, the CAD suspended the 80% utilisation requirement from March to October 2003 and from August 2019 to March 2023 respectively.

Recovery of the Aviation Industry

With the ease of travel restrictions by the end of 2022, airlines gradually sped up the resumption of their flight services. The CAD took a facilitating yet prudent approach to oil the wheels of the resumption plans of local airlines by providing them with advanced regulatory guidance and prioritising the associated technical and operational oversight activities, to ensure that the airworthiness of aircraft, and the operational readiness and competency of the aviation personnel were in line with the relevant safety guidance and requirements.

Taking into account the post-pandemic recovery of the aviation industry, the slot utilisation requirement was gradually reinstated from March 2023, first to 60% and subsequently to 80%. The above measures not only provided airlines with greater flexibility in aircraft deployment and business planning, but also maintained HKIA's long-established aviation network and Hong Kong's status as a centre of international and regional aviation.



◆ 民航處人員檢查首架經改裝的國泰航空波音777-300ER型號飛機客艙運載貨物的情況。
The CAD officers inspected cargo carriage in passenger cabin of the first modified Cathay Pacific Airways Boeing 777-300ER aircraft.

極端天氣應對

Responding to Extreme Weather



◆ 惡劣天氣正靠近香港國際機場。
Inclement weather is approaching Hong Kong International Airport.

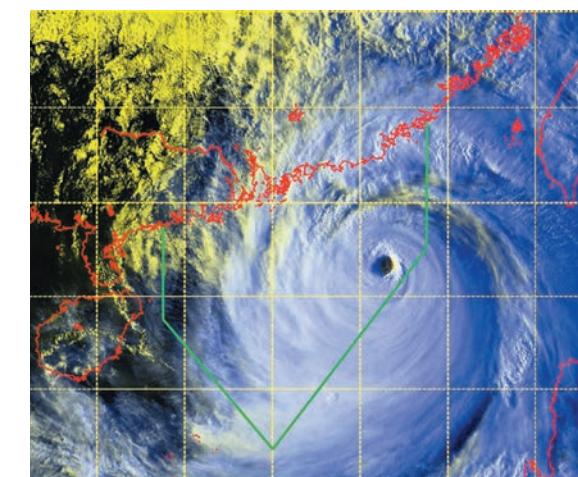
◆ 民航處定期與天文台舉行會議，討論應對極端天氣的策略。
The CAD holds regular meetings with HKO to discuss strategies for managing extreme weather.

在氣候變化的影響下，極端天氣事件的頻率與強度逐漸增加，對全球民航業構成前所未有的挑戰。尤其香港作為一個繁忙的國際航空樞紐，民航處必須具備高度的應變能力與應急策略，以全方位應對極端天氣，確保香港國際機場和香港飛行情報區的航班運作安全有序。

民航處與天文台一直以來有着緊密的合作關係。當預測到極端天氣事件，例如有廣泛雷暴即將來臨時，天文台會預早為民航處提供詳細的預報，包括極端天氣對香港國際機場和香港飛行情報區的航班運作可能造成的影響，令民航處能夠實施有效的航空交通流量管理措施。通過這種協作，民航處能夠及早識別和評估風險，主動執行必要的應對措施。



Under the influence of climate change, the frequency and intensity of extreme weather events are gradually increasing, posing unprecedented challenges to the global civil aviation industry. Particularly in Hong Kong, a busy international aviation hub, the CAD must possess a robust level of resilience and contingency management strategies to holistically handle extreme weather, ensuring the safe and orderly air traffic operations of HKIA and HKFIR.



◆ 2025年9月24日，超強颱風「華加沙」之衛星雲圖。該颱風最大陣風風速超過每小時295公里，對香港構成威脅，並橫過香港飛行情報區。
Satellite image of Super Typhoon "Ragasa", with maximum wind gusts exceeding 295 km/h, posing threat to Hong Kong and passing through Hong Kong Flight Information Region on 24 September 2025.

The CAD has long maintained a close cooperative relationship with the Hong Kong Observatory (HKO). When extreme weather events are anticipated, such as widespread thunderstorms, the HKO provides detailed forecasts to the CAD as early as possible, including potential impacts on air traffic operations of HKIA and HKFIR due to extreme weather. These forecasts enable the CAD to implement effective air traffic flow management measures. Through this collaborative effort, the CAD can identify and assess risks proactively and implement necessary response measures.



為加強民航處、香港天文台與其他航空交通服務和氣象服務提供者之間的合作，民航處處長廖志勇(右五)和香港天文台台長陳栢緯(右三)於2025年12月與多個歐洲和亞太區代表簽訂有關加強航空氣象合作的意向書。

To strengthen collaboration among the CAD, HKO and other providers of air traffic services and meteorological services, the Director-General of Civil Aviation, Mr Victor Liu (fifth right), and the Director of the Hong Kong Observatory, Dr Chan Pak-wai (third right), signed a Letter of Intent on "Strengthening Aviation Meteorology Collaboration" with representatives from Europe, Asia and Pacific regions in December 2025.

此外，在極端天氣事件發生前，例如當颱風迫近香港時，民航處會與香港機場管理局及航空公司展開全面的準備工作，確定所有相關設施均處於正常運作狀態，包括檢查所有空中導航服務設備和機場設施，確保能夠抵禦強風和暴雨的考驗。

In addition, before the occurrence of extreme weather events, such as when a typhoon approaches Hong Kong, the CAD works with AAHK and airlines to carry out comprehensive preparations, and ensures that all relevant facilities are functioning properly. This includes inspecting all air navigation service equipment and airport facilities to check that they can withstand strong winds and heavy rain.

在極端天氣過後，相關設施會接受檢查和評估，識別可能造成的損壞，並盡快安排復修，以保障空中導航服務和機場運作無間。另外，民航處和香港機場管理局會根據實際情況聯同航空公司調整在香港國際機場起降的航班時刻，優化各項資源配置，使香港國際機場和香港飛行情報區的航班運作有序地回復正常。

After extreme weather events, inspections and assessments are promptly conducted on relevant facilities to identify any possible damage while arranging the earliest possible repair, safeguarding uninterrupted air navigation services and airport operations. Besides, depending on actual circumstances, the CAD and AAHK may adjust flight schedules for departures and arrivals at HKIA in collaboration with airlines. This helps optimise resource allocation, allowing air traffic operations at HKIA and within HKFIR to resume normal in an orderly manner.



民航處主動管理及應對極端天氣的挑戰。透過與天文台、香港機場管理局和航空公司等各方的協作，即使在極端天氣的威脅下，仍能有效地維持香港國際機場和香港飛行情報區的航空交通運作安全有序。這種高度的應變能力，令香港在不斷變化的環境中繼續扮演國際航空樞紐的角色。

The CAD proactively manages and addresses extreme weather challenges. Through collaborations with HKO, AAHK and airlines, despite the threat of extreme weather, the safe and orderly air traffic operations of HKIA and HKFIR can be effectively maintained. This robust level of resilience enables Hong Kong to continue fulfilling its role as an international aviation hub amid an ever-changing environment.



香港機場管理局啟動機場緊急應變中心，以助不同部門及機構協調和溝通。
AAHK activated the Airport Emergency Centre to facilitate coordination and communications among various departments and organisations.

航空安全策略

Strategies for Aviation Safety



◆ 2009年，國際民航組織對香港航空系統進行安全監督審查。
ICAO conducted a Safety Oversight Audit on Hong Kong's aviation system in 2009.

80年來，民航處秉持「安全第一」的核心價值，以具前瞻性的安全策略應對航空交通增長及全球疫情等不同挑戰，確保香港航空系統安全穩健。

國際民航組織對香港航空系統進行安全監督審查

民航處及本港航空業界努力不懈，為國際民航組織於2009年2月26日至3月6日在香港展開審查計劃的實地審查階段作好準備。香港在維持有效的安全監察系統方面，整體得分為94.47%，在國際民航組織的審查計劃記錄中排名第五，相對於當時（截至2009年11月）完成審查的136個民航當局，全球平均得分為57.74%。

For 80 years, the CAD has adhered to the core value of "Safety First". Through forward-looking safety strategies, the CAD has successfully navigated various challenges, including air traffic growth and the global pandemic etc., while ensuring Hong Kong's aviation system maintains high safety standards and reliability.

The ICAO's Safety Oversight Audit on Hong Kong's Aviation System

After a long period of diligent preparation by the CAD and our aviation industry, the on-site phase of the ICAO's audit was conducted in Hong Kong between 26 February and 6 March 2009. Hong Kong achieved an overall score of 94.47% in the effective implementation of a safety oversight system, representing the fifth highest score in the ICAO's audit record, compared with the global average score of 57.74% among the 136 civil aviation authorities audited (as of November 2009).

完善安全管理體系

為奠定安全基礎，民航處建立完善管理體系，統籌實施《香港航空安全方案》，並採用國際民航組織的《持續監察方法》。

就香港的航空安全法例框架而言，香港已就國際民航組織有關安全管理的標準和建議措施，制訂相關的法例、運作規例及指引資料，以符合國際和本地標準的方式管理航空安全。民航處會不時檢討航空安全法例、運作規例、指引資料及執行政策，以確保航空安全法例繼續適用於香港，並與香港的實際情況相符。為衡量香港航空系統的安全表現，民航處已制訂安全表現指標，協助就安全表現持續進行衡量和監察。安全表現指標的詳情載於《香港航空安全計劃》。

在航空運作方面，香港已制訂監管規定，要求相關服務提供者實施獲民航處認可的安全管理系統。服務提供者在實施安全管理系統時，須辨識其航空運作中涉及的安全隱患和管理相關的安全風險，確保航空安全。民航處將視乎情況持續更新監管要求，使相關要求與服務提供者的實際航空運作情況相符。



◆ 2025年11月，民航處副處長黃嘉華(左)以國際民航組織亞太地區區域航空安全小組副主席身份出席該小組第15次會議。

The Deputy Director-General of Civil Aviation, Ms Clara Wong (left), attended the 15th Meeting of ICAO Asia Pacific Regional Aviation Safety Group in the capacity of Vice-Chairperson in November 2025.

Enhancing the Safety Management System

The CAD has established a comprehensive management system to lay a solid foundation for aviation safety through coordinating the implementation of the Hong Kong Aviation Safety Programme and adopting ICAO's Continuous Monitoring Approach.

In respect of Hong Kong's aviation safety legislative framework, pursuant to ICAO SARPs relating to safety management, Hong Kong has promulgated legislation, operating regulations and guidance materials which define how aviation safety is managed in compliance with the international and local standards. The aviation safety legislation, operating regulations, guidance materials and implementation policies are reviewed by the CAD from time to time to ensure that they remain relevant and applicable to Hong Kong. To measure the safety performance of Hong Kong's aviation system, safety performance indicators have been established by the CAD to facilitate ongoing safety performance measurement and monitoring. Details of safety performance indicators are set out in the Hong Kong Aviation Safety Plan.

On the aviation operational front, Hong Kong has established the regulatory requirements to mandate relevant service providers to implement a safety management system accepted by the CAD. In implementing the safety management system, the service providers are also required to identify safety hazards and manage safety risks in their respective aviation operations with a view to ensuring aviation safety. The CAD will continue to update the regulatory requirements as appropriate, so that they remain relevant and appropriate to the service providers.



因應複雜的環境變化，民航處持續優化安全監督系統和參照國際標準更新安全方案，以提升業界韌性與安全管理效能。民航處亦定期舉辦安全論壇匯聚專家推廣安全文化，強化安全管理與應變能力。

◆ 民航處分別於2024年和2025年舉辦航空安全管理簡介會和論壇，協力與香港航空業界深化對航空安全的承諾。
The CAD organised aviation safety briefing and forum in 2024 and 2025 respectively to strengthen the commitments to aviation safety in collaboration with the aviation industry in Hong Kong.

In response to the complex and evolving ecosystem, the CAD continuously refines the safety oversight system and updates the Hong Kong Aviation Safety Programme through making reference to international standards so as to enhance industry resilience and promotes effective safety management. The CAD also regularly holds safety forums to promote safety culture. These events bring experts together to strengthen the safety management and foster adaptive capacity.



參與國際和區域安全合作

民航處積極參與國際合作，付出的努力獲國際社會高度認可。民航處代表自2014年起擔任國際民航組織亞太地區區域航空安全小組主席或副主席，並於2025年2月牽頭籌劃國際民航組織在曼谷舉辦的安全管理研討會，吸引30個民航當局逾600人參與。民航處亦協助制定《亞太地區區域航空安全計劃（2026-2028年版）》，與區域夥伴制定安全策略。

安全是民航處的首要任務。民航處在香港致力提供安全、有效率及可持續發展的航空運輸系統，並會繼續努力加強對航空業界各職能領域的安全監督和表現監察，持續促進與各持份者（包括監管機構及服務提供者）之間的安全推廣，鼓勵各持份者建立安全夥伴關係，以加強國際和區域航空合作。

Engaging in International and Regional Safety Cooperation

The CAD actively participates in international affairs, and the efforts receive high recognition from the international community. Since 2014, the CAD representative has served as Chairperson or Vice-Chairperson of the ICAO Asia Pacific Regional Aviation Safety Group. The CAD also took the lead to plan the ICAO Safety Management Seminar in Bangkok in February 2025, which attracted over 600 participants from 30 civil aviation authorities. Furthermore, the CAD is assisting in the development of the Asia Pacific Regional Aviation Safety Plan (2026-2028), formulating safety strategies in collaboration with regional partners.

Safety is the highest priority of the CAD. In upholding the commitment to provide a safe, efficient and sustainable air transport system in Hong Kong, the CAD will strive to continuously enhance the safety oversight and performance monitoring of all functional areas in aviation, and will also continue to facilitate safety promotion with and amongst the stakeholders (including the regulators and service providers), and encourage safety partnership, in order to strengthen international and regional aviation cooperation.

航空保安策略 Strategies for Aviation Security

回望80年前，香港的航空保安與世界各地一樣仍處於起步階段。當時民航客運活動尚未普及，旅客在登機前主要接受簡單的人手檢查。隨着國際航空運輸在1960和1970年代迅速發展，全球逐步建立較明確的航空保安框架。

2001年的911事件，促使全球民航業重新審視當時的保安措施。事件發生後，民航處馬上要求香港機場管理局、機場保安有限公司等機構加強香港國際機場的保安措施，包括對旅客及手提行李進行第二次搜查，加強戒備和巡邏等行動。同時，民航處亦發出保安指示，禁止旅客攜帶刀具或帶有刀刃的物品進入機場禁區和機艙範圍。民航處一直與其他民航當局保持緊密聯繫，交換保安資訊，並且協助航空公司按照個別航空當局的要求實施額外的保安措施。

Looking back 80 years, similar to other places around the world, aviation security in Hong Kong was still at an early stage. Commercial air travel was uncommon, and passengers were mainly subject to simple hand searches before boarding. As international air transport expanded rapidly in the 1960s and 1970s, a clearer global framework for aviation security was gradually established.

The September 11 incident in 2001 prompted the global aviation community to reassess existing security measures. In response, the CAD promptly requested AAHK, Aviation Security Company Limited (AVSECO) and other relevant parties to implement increased security measures at HKIA, including secondary search of passengers and their carry-on bags, enhanced vigilance and patrol. The CAD also issued security directions prohibiting the carriage of knives or bladed items into the airport restricted area and the aircraft cabin. Meanwhile, the CAD has maintained close liaison with other civil aviation authorities to exchange security-related information and help airlines carry out additional security measures as required by their respective authorities.



◆ 香港國際機場引入智能保安檢查系統。(相片鳴謝：香港機場管理局)
Introduction of Smart Security Screening System at Hong Kong International Airport. (Photo Credit: Airport Authority Hong Kong)

民航處將繼續因應風險變化和科技發展審視保安措施，並與本地、內地和國際合作夥伴緊密協作，維持嚴謹、有效和具前瞻性的航空保安框架，支持香港作為國際和區域航空中心的長遠發展。

The CAD will continue to review aviation security measures in response to evolving risks and technological advancements. Working closely with local, Chinese Mainland and international partners, the CAD remains committed to maintaining a robust, effective and forward-looking aviation security framework that supports the long-term development of Hong Kong as a centre of international and regional aviation.