



香港民航處

Civil Aviation Department Hong Kong

2009-2010

年度報告 Annual Report

致力保障航空安全
Maintaining safety
in Aviation



我們的理想

► Our Vision

致力於安全及有效率的航空系統

Committed to a Safe and Efficient Air Transport System

我們的使命

► Our Mission

- 奠定香港作為國際及區域頂尖航空中心的地位
- 維持有效法律制度，以實施根據適用國際民航公約制訂的相關條文
- 借助先進航空導航系統科技，推動航空業發展
- 確保航空交通管理服務及系統建立高水平的安全標準，並能達到和維持相關標準
- 在香港飛行情報區內維持既安全、快捷又秩序井然的航空交通
- 在香港飛行情報區內提供航空資訊服務及警報服務
- 香港搜救區內飛機出現緊急情況和發生意外時，協調搜索和救援行動
- 制訂和貫徹執行機場安全及航空保安標準
- 確保香港註冊的飛機和以香港為基地的航空公司符合既定的適航及運作標準
- 確保香港認可的飛機維修機構符合國際標準
- 確保香港註冊的空勤人員和飛機維修工程師符合國際標準
- 制訂策略並積極採取措施，確保所有航機運作符合相關可承受的安全水平，盡量減低航空安全風險
- 監察航空公司有否遵守雙邊民用航空運輸協定
- 制訂有效措施以減少飛機噪音對社區的影響
- 以公正持平方式進行意外調查，確定肇事原因及實況，以保障人命安全和防止同類意外再次發生
- Positioning Hong Kong as a leading centre of international and regional aviation
- Maintaining an effective legal system for the implementation of relevant provisions under applicable civil aviation related international conventions
- Facilitating the growth of aviation through the application of leading edge technology in Air Navigation Systems
- Ensuring that a high standard of safety in the provision of air traffic management services and systems is established, achieved and maintained
- Maintaining a safe, orderly and expeditious flow of air traffic within the Hong Kong Flight Information Region
- Providing aeronautical information service and alerting service within the Hong Kong Flight Information Region
- Coordinating search and rescue operation in the event of aircraft emergencies and accidents within the Hong Kong Search and Rescue Region
- Setting and enforcing aerodrome safety and aviation security standards
- Ensuring compliance with established airworthiness and flight operations standards by Hong Kong registered aircraft and locally based airlines
- Ensuring compliance with international standards by Hong Kong approved aircraft maintenance organisations
- Ensuring compliance with international standards by Hong Kong licensed flight crew and aircraft maintenance engineers
- Developing strategies and implementing proactive measures to minimise safety risks to aviation by ensuring that all operations are conducted in conformity with the respective acceptable levels of safety
- Monitoring compliance by airlines with bi-lateral Air Services Agreements
- Developing workable measures to minimise the impact of aircraft noise on local communities
- Conducting fair and impartial accident investigations to determine the circumstances and causes of accidents with a view to the preservation of life and avoidance of accidents in the future

我們的信念

► Our Values

- 安全至上
- 專業精神
- 講求效率
- 嚴守標準
- 誠信可靠
- Utmost concern for safety
- Professionalism
- Efficiency and effectiveness
- Compliance with standards
- Integrity





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處長報告 Director-General's Review

民航處將繼續努力與業界一同提供一個安全和高效率的航空系統，維護香港作為國際和區域航空中心的地位。

CAD is committed to working with the industry to sustain a safe and efficient air transport system so as to maintain Hong Kong's status as an international and regional aviation centre.





羅崇文太平紳士
Mr Norman Lo Shung-man, JP
民航處處長 | Director-General of Civil Aviation



我很高興向各位報告，本處於二零零九/一零年在各方面的工作皆取得進展；而本處人員一如既往，繼續提供高效率而優質的服務。

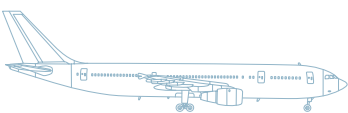
受到環球經濟不景氣的影響，航空業在本年度持續承受沉重壓力。香港國際機場的航班總升降量跌至281 413架次，較上一個財政年度下跌5.4%。客運量亦下跌1.2%至4 576萬人次。在多個數據皆錄得跌幅之際，可喜的是航空貨運量較上一年度上升4.4%，至358萬噸。雖然飛機升降及客運量皆下跌，但自二零零九年七月起，飛機升降架次出現緩慢但穩定升勢。

為提高香港空中航道系統的運作效率，本處於二零零九年十月二十二日起，優化從西面及北面抵港航道，以縮短航程。經調整後，從內地、東南亞或歐洲抵港航班最多可節省約210公里飛行航程，即每班航班節省約14分鐘飛行時間。新航道每年可為抵港航班節省總飛行里數超過1 000萬公里，即12 000小時總飛行時數。航空公司可減低航機燃料消耗量，航機的二氧化碳排放量因而下降，公眾可享更綠化的環境。

I am pleased to report that the Civil Aviation Department has made good progress in various areas in the year 2009-10. Additionally, our staff have continued to provide efficient and quality service.

During 2009-10, the aviation industry was persistently subject to tremendous pressure as a result of the economic downturn. The total number of aircraft movements at the Hong Kong International Airport dropped to 281 413, representing a decline of 5.4% over the previous financial year. Passenger throughput also dropped by 1.2% to 45.76 million. Amid the downward trend, we were happy to see air cargo throughput grew by 4.4% to 3.58 million tonnes. Although there were contractions in aircraft movement and passenger throughput, the former has been increasing slowly and steadily since July 2009.

To enhance the operating efficiency of Hong Kong's air route system, the CAD implemented express air routes in the Hong Kong Flight Information Region, commencing October 22, 2009, by shortening and optimising the approach routes for aircraft arriving from the West and North of Hong Kong. Following the adjustment, flights arriving in Hong Kong from the Mainland, South East Asia and Europe via the new routes are able to save up to 210 km, or approximately 14 minutes in terms of flight time per flight. These new routes also enable annual savings for arrival aircraft of more than 10 million km, or 12 000 hours in flight time. Airline operators will also benefit from reduced aviation fuel consumption and the general public will enjoy a greener environment through the reduction of CO₂ emissions from aircraft.



二零零九年十二月二十九日，香港與澳門的航空交通服務訊息處理系統和航空電訊網投入運作，標誌航空電訊進入新紀元。港澳兩地是亞太區內首對城市使用航空電訊網，提供全面的航空訊息處理服務。航空電訊由傳統航空專用電訊網，改為透過網上航空電訊網及航空交通服務訊息處理系統傳遞，令訊息傳輸更快捷穩妥。

為確保香港航空營運許可證持證公司和飛機維修機構建立有效的安全管理系統，本處在二零零九年十月成立飛行安全組。除了有系統地持續監督業界實施的安全管理系統外，該組亦致力加強監察航空營運許可證持證公司的風險管理能力，以便更有效地調配巡查工作的資源。

在國際事務方面，本處人員在年內積極參與海外會議和研討會。我們於二零零九年四月起接任國際民航組織亞洲太平洋區互助航空保安計劃第六次主導委員會會議主席一職，在香港主辦會議和航空保安研討會。該計劃旨在協助參與成員符合《國際民用航空公約》附件9及附件17所訂的航空保安標準及建議守則，並加強他們的航空保安能力。

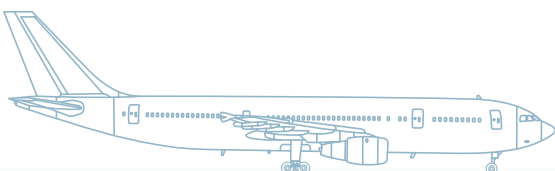
為應付航空交通量的長遠增長及加強香港飛行情報區內航空交通服務的效率，本處正更換一套高效能及配備最新功能的空管系統及興建民航處新總部。年內，是項計劃的進展良好。其中新總部大樓的「設計及建造」合約於二零零九年五月批出，地盤工程如期進行。二零零九年第四季為大樓計劃首個重要階段，十一月二十七日，我們很榮幸邀請到政務司司長唐英年為新總部奠基石揭幕。

On December 29, 2009, the new Air Traffic Services Message Handling System (AMHS) and Aeronautical Telecommunication Network (ATN) circuit between Hong Kong and Macao was put into operation, marking a new era for aeronautical telecommunications. Hong Kong and Macao is the first city-pair in the Asia Pacific Region that provides a full aeronautical message handling service over ATN. This migration from the legacy Aeronautical Fixed Telecommunication Network (AFTN) to the internet-based ATN/AMHS operations enables faster and more reliable transmission of data.

To ensure implementation of a robust Safety Management System (SMS) by Hong Kong Air Operator's Certificate (AOC) holders and aircraft maintenance organisations, the CAD established the Flight Safety Office in October 2009. Apart from maintaining a continuous and systematic oversight of the SMS in the industry, the new office also supported the strengthening of risk management on the surveillance of AOC holders with a view to allocating the inspectorate's resources in a more efficient manner.

As for international affairs, the CAD continued to participate actively in overseas meetings and conferences during the year. We took over the Chairmanship of the Sixth Steering Committee Meeting of the ICAO Cooperative Aviation Security Programme – Asia Pacific in April 2009 and organised a meeting and a seminar in Hong Kong. The programme aims to assist states and administrations in the Asia Pacific Region to comply with ICAO Standards and Recommended Practices for aviation security in Annexes 9 and 17, and enhance their aviation security capabilities.

To sustain the aviation industry's long-term growth and enhance air traffic services in the Hong Kong Flight Information Region, we initiated a project to replace the ATC system with the most up-to-date features and also to develop a new CAD Headquarters. The project made good progress during the year. The design-and-build contract of the new Headquarters was awarded in May 2009 and the on-site works also proceeded as scheduled. The first important milestone of this building project was marked in the fourth quarter of 2009. We were honoured to have the Chief Secretary for Administration, Mr Henry Tang to unveil the commemorative foundation stone of the new CAD Headquarters on November 27.



最後，我希望在此感謝所有同事在過去一年付出的努力、專業精神和團隊合作。我並感謝業界伙伴一直以來的鼎力支持和寶貴貢獻，使香港的民航業得以持續發展。

展望未來，2011年將是香港動力飛行一百周年，我邀請大家一同慶祝這個重要的里程碑。踏進新紀元，民航處將繼續努力與業界一同提供一個安全和高效率的航空系統，維護香港作為國際和區域航空中心的地位。



民航處處長

羅崇文太平紳士

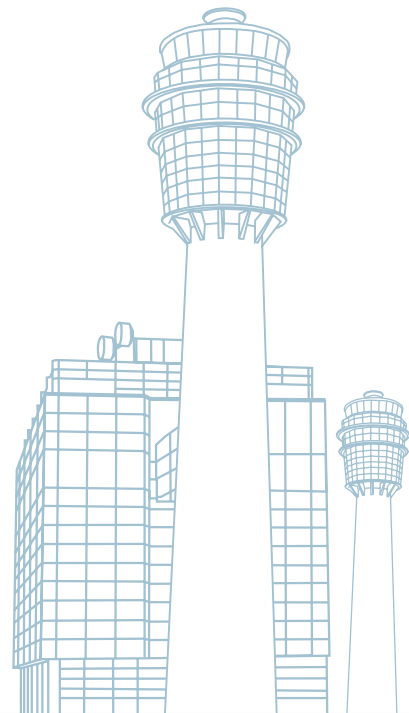
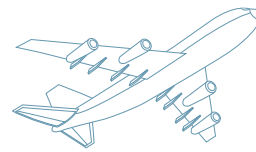
Finally, I would like to express my gratitude to all colleagues for their dedication, professionalism and team spirit during the year. My thanks also extend to our industry partners for their unfailing support and invaluable contribution to sustaining the growth and development of the civil aviation market in Hong Kong.

Looking ahead, 2011 marks the 100th anniversary of the first powered flight in Hong Kong, and I would like to invite all of you to join in our celebratory programmes for this important milestone. In entering a new centenary, CAD is committed to working with the industry to sustain a safe and efficient air transport system so as to maintain Hong Kong's status as an international and regional aviation centre.

A handwritten signature in black ink, reading "Norman Lo", positioned above the printed name.

Mr Norman Lo Shung-man, JP

Director-General of Civil Aviation



1

民航處處長
Director-General of Civil Aviation
羅崇文太平紳士
Mr Norman Lo Shung-man, JP

2

民航處副處長
Deputy Director-General of Civil Aviation
梁汝強太平紳士
Mr Leung Yu-keung, JP

3

助理處長 (航班事務)
Assistant Director-General (Air Services)
郭桂源太平紳士
Mr Stephen Kwok Kwai-yuen, JP

4

助理處長 (機場標準)
Assistant Director-General (Airport Standards)
伍崇正太平紳士
Mr Colman Ng Shung-ching, JP

5

助理處長 (飛行標準)
Assistant Director-General (Flight Standards)
譚禮漢太平紳士
Mr Anthony Tam Lai-hon, JP

6

助理處長 (航空交通管理)
Assistant Director-General (Air Traffic Management)
王炳輝先生
Mr Wong Ping-fai

7

助理處長 (航空交通工程及標準)
Assistant Director-General
(Air Traffic Engineering and Standards)
李天柱先生
Mr Simon Li Tin-chui

8

助理處長 (計劃)
Assistant Director-General (Project)
林偉珊女士
Miss Priscilla Lam Wai-shan

9

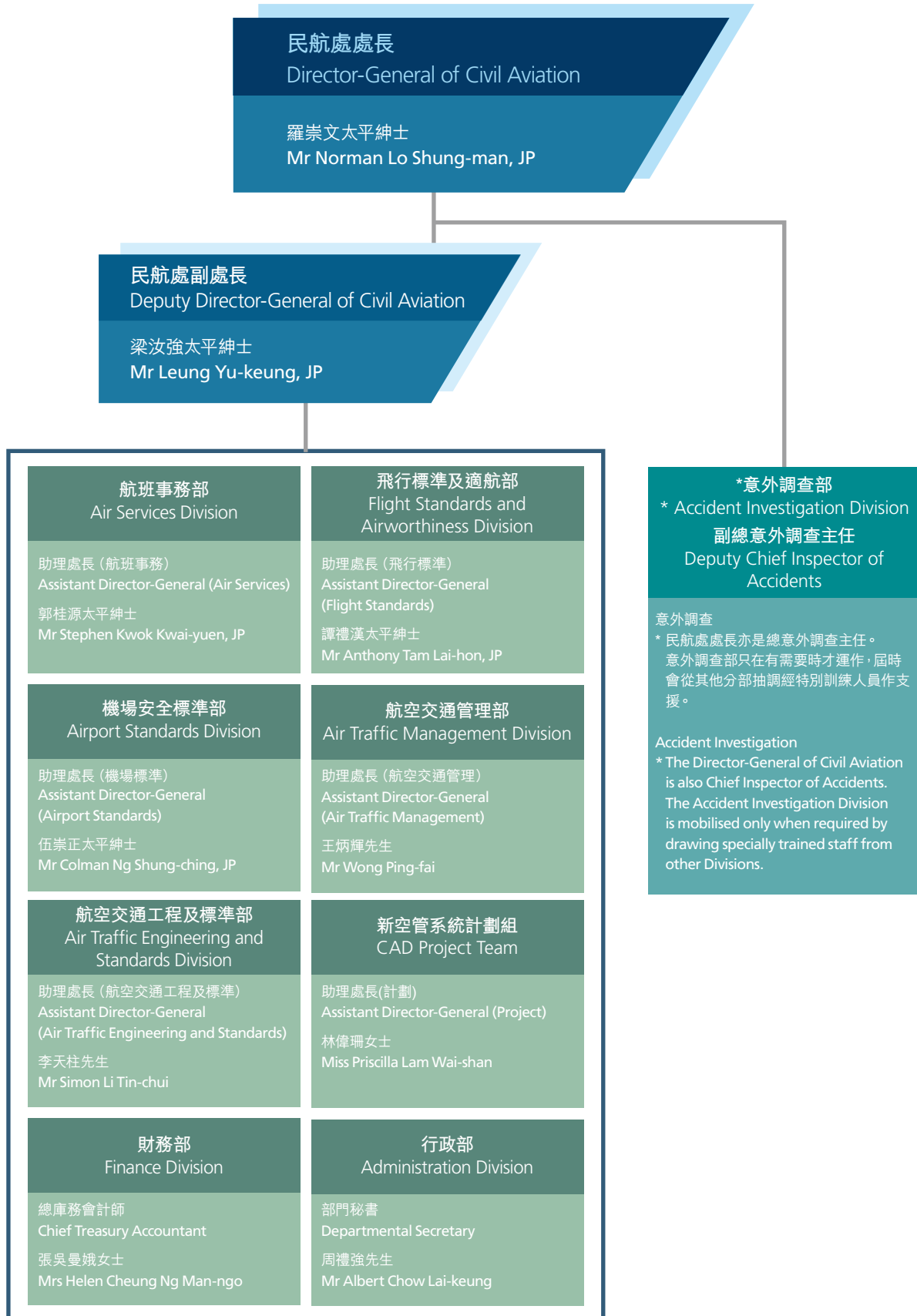
部門秘書
Departmental Secretary
周禮強先生
Mr Albert Chow Lai-keung

10

總庫務會計師
Chief Treasury Accountant
張吳曼娥女士
Mrs Helen Cheung Ng Man-ngo



組織圖 Organisation Chart



大事紀要 Calendar of Events

2009

四月一日

April 1

先進場面活動引導和控制系統投入服務，以提升香港國際機場跑道的安全水平。

The Advanced Surface Movement Guidance and Control System (A-SMGCS) was put into operational use to enhance runway safety of the Hong Kong International Airport.

四月二十一至二十四日

April 21-24

民航處主辦國際民航組織亞洲太平洋區互助航空保安計劃第六次主導委員會會議及航空保安研討會。

CAD hosted the Sixth Steering Committee Meeting of the ICAO Cooperative Aviation Security Programme – Asia Pacific and an Aviation Security Seminar.



九月十四日
September 14

部門主辦為期一天的協同決策工作坊，共吸引一百三十名來自本地航空業界的代表參加。

The one-day Collaborative Decision Making (CDM) workshop was hosted by this Department with more than 130 participants from local aviation communities supporting the event.



十月二十二日
October 22

實施從內地、東南亞和歐洲抵港航班的新進場航道。

Implementation of new arrival routes for arrival flights from the Mainland, South East Asia and Europe.

十月二十五日
October 25

香港國際機場雙跑道運作容量增至每小時58班。

The declared runway capacity for dual runway operations increased to 58 movements per hour.

十一月一日
November 1

與香港機場管理局就航空交通管制中心供應及安裝光纖電纜網絡簽署的協議書正式生效。

An entrustment agreement with Airport Authority Hong Kong to supply and install optical fibre cable network for the new Air Traffic Control Centre took effect.

十一月三日至五日
November 3 - 5

民航處與國際民航組織亞太辦公室合辦有關機場發牌標準的研討會。



In conjunction with the ICAO Asia and Pacific Regional Office, CAD organised a regional seminar on Aerodrome Certification.

十一月二十七日
November 27

民航處為新總部舉行奠基典禮。

CAD held the foundation stone laying ceremony for the new CAD Headquarters.



十二月二十九日
December 29

航空交通服務訊息處理系統及香港與澳門之間的航空電訊網（為亞太地區首個城市與城市之間的航空交通服務訊息處理系統）投入服務。

ATS Message Handling System (AMHS) and Aeronautical Telecommunication Network (ATN) service between Hong Kong and Macao, the first AMHS implementation between city pairs in the Asia and Pacific Regions, was put into operational use.

2010

一月二十二日
January 22

批出控制塔模擬機合約。

The contract of a Control Tower Simulator (CTS) was awarded.

二月十日
February 10

批出電子飛行進程單系統合約。

The contract of an Electronic Flight Strip System (EFSS) was awarded.

三月二十三日
March 23

民航處與機電工程署簽訂新的服務水平協議，為民航處場地的電機及機械系統、屋宇設備設施及電子裝置提供保養維修服務。

CAD signed the new Service Level Agreement with EMSD on the provision of maintenance services for electrical & mechanical systems, building services facilities and electronics installation at CAD venues.

三月二十八日
March 28

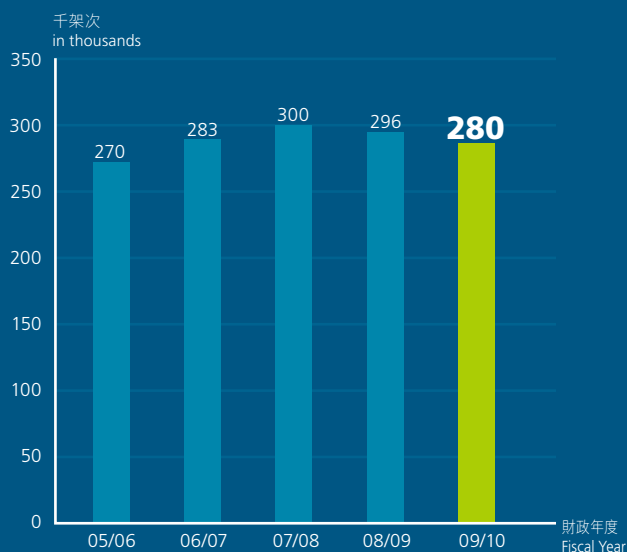
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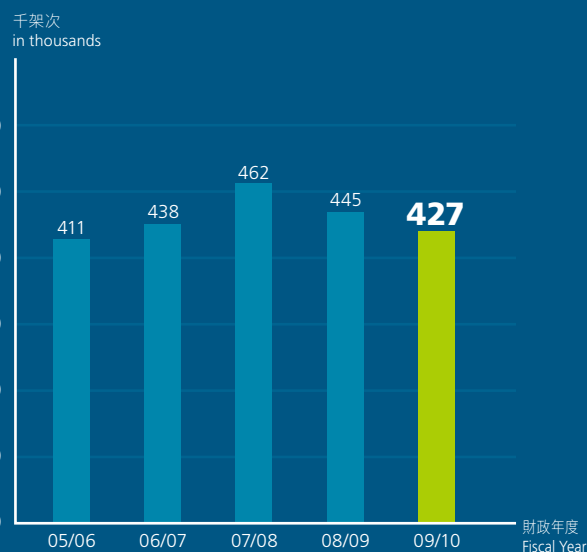


航空交通統計 Air Traffic Statistics

香港國際機場過往五財政年度航機升降次數
Aircraft Movement at the Hong Kong
International Airport in the past 5 Fiscal Years



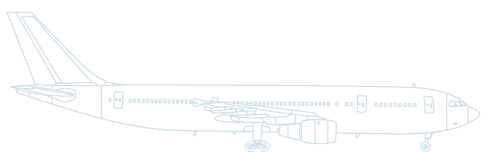
過往五財政年度航空交通管理部處理的航班總數
Total Flights Handled by the Air Traffic
Management Division in the past 5 Fiscal Years



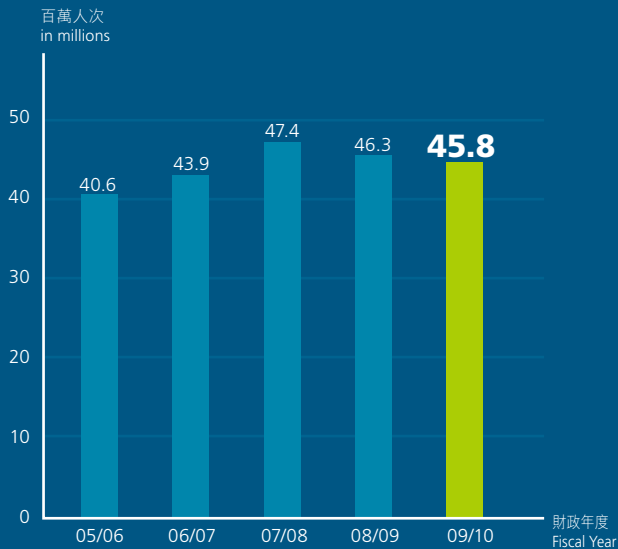
過往五財政年度國際民航交通概況 Civil International Air Traffic in the past 5 Fiscal Years

(二零零五年四月至二零一零年三月) (April 2005 - March 2010)

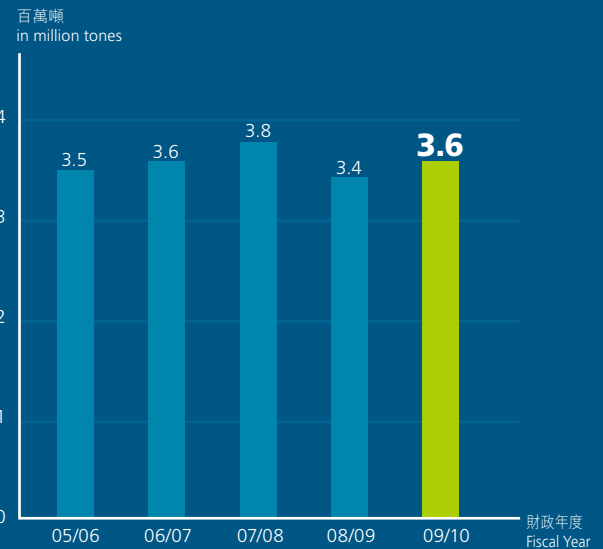
財政年度 Fiscal Year	飛機升降次數 Aircraft Movement		乘客 Passenger		商業貨物 Commercial Cargo	
	升降次數 Movement	升跌百分比 % Change	人次 Number	升跌百分比 % Change	公噸 Tonnes	升跌百分比 % Change
2005-2006	270 069	11%	40 607 239	9%	3 473 456	11%
2006-2007	282 953	5%	43 864 612	8%	3 575 482	3%
2007-2008	299 617	6%	47 433 535	8%	3 809 177	7%
2008-2009	296 183	-1%	46 328 005	-2%	3 426 614	-10%
2009-2010	280 218	-5%	45 764 431	-1%	3 576 659	4%



香港國際機場過往五財政年度客運量 Five-Year Passenger Traffic at the Hong Kong International Airport



香港國際機場過往五財政年度貨運量 Five-Year Cargo Traffic at the Hong Kong International Airport



過往五財政年度航空交通管理部處理的航班總數

Total Flights Handled by the Air Traffic Management Division in the past 5 Fiscal Years

(二零零五年四月至二零一零年三月) (April 2005 – March 2010)

財政年度 Fiscal Year	航班總數* Flights Handled*	升跌百分比(比上年) % Change (from last year)
2005-2006	411 208	11%
2006-2007	437 805	6%
2007-2008	461 693	5%
2008-2009	445 089	-4%
2009-2010	427 181	-4%

* [Flights Handled] is the total number of aircraft handled by the Air Traffic Management Division of CAD in the year. It includes:

- (1) international and local aircraft movements at the Hong Kong International Airport;
- (2) flights transiting the Hong Kong Flight Information Region not landing Hong Kong;
- (3) flights landing and departing Macao International Airport handled by the Air Traffic Management Division.

* 「航班總數」乃由香港民航處航空交通管理部每年所處理的班機數目。其中包括：

- (1) 在香港國際機場升降的國際及本地航班；
- (2) 所有飛越香港飛行情報區而不在本港升降的航班；
- (3) 由航空交通管理部處理進出澳門國際機場的航班。

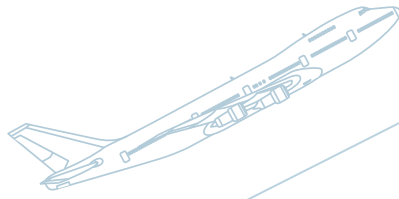
航空交通管理

Air Traffic Management

航空交通管理部負責在國際民用航空組織(國際民航組織)指定的香港飛行情報區內，提供航空導航服務，包括航空交通服務、通訊、導航及監察服務、飛行情報服務，以及搜索及救援服務。

The Air Traffic Management Division (ATMD) is responsible for the provision of air navigation services, including air traffic services, Communications, Navigation, Surveillance services, aeronautical information services and search and rescue services within the Hong Kong Flight Information Region (FIR) as assigned by the International Civil Aviation Organization (ICAO).





航空交通管理 Air Traffic Management

航空交通運作

本財政年度內，該部共處理281 413架次在香港國際機場升降的國際及本地航班，並為109 542架次飛越香港飛行情報區，以及36 226架次進出澳門國際機場的航班提供空管服務。與上一財政年度比較，在香港國際機場升降及飛越香港的航班分別減少5.4%和1.2%，主要由於全球金融不景氣的持續影響。不過，自二零零九年七月起，飛機升降架次出現緩慢但穩定升勢。

跑道升降容量

隨着航空交通和空域管理不斷改善，香港國際機場雙跑道運作容量自二零零九年十月起遞增至每小時58班，在二零一零年三月進一步遞增至每小時59班。

空管主任執照考試和覆核

為維持高水準的空管運作，該部的訓練及安全組每年安排航空交通管制主任(空管主任)的各類執照考試。就塔台管制、進場管制和區域管制這三個組別進行的考試共有215次。

此外，該部向考核合格的人員頒發助理管制員證書、空管氣象記錄員證書、導師證書和搜索及拯救證書。

AIR TRAFFIC OPERATIONS

During the financial year, the Division handled a total of 281 413 international and local aircraft movements at the Hong Kong International Airport (HKIA). In addition, the Division handled 109 542 flights overflying the Hong Kong FIR and 36 226 flights into and out of the Macao International Airport. Compared to the previous financial year, the number of aircraft movements at the HKIA and overflights decreased by 5.4 per cent and 1.2 per cent respectively. The decrease in movement was mainly due to the continuous wake effect of the global financial downturn. However, the movement figures have been on a slow but steady increase trend since July 2009.

Runway Capacity

With the continued enhancement to air traffic and airspace management, the declared capacity for dual runway operations was progressively increased to 58 movements per hour since October 2009 and 59 movements per hour since March 2010.

Annual Examinations and Revalidations on ATCO Ratings

To ensure a high standard in ATC operations, the Training and Safety Section of the Division carried out annual practical examinations on ratings held by Air Traffic Control Officers (ATCO). A total of 215 practical examinations were conducted in the three control streams - Aerodrome, Approach and Area Control.

In addition, the Division also issued Assistant Controller Certificates, ATC Meteorological Reporter Certificates, Instructor Certificates, Search and Rescue Certificates to officers who have attained their respective qualifications.

機場雙跑道運作容量自二零一零年三月遞增至每小時59班。

The declared capacity for dual runway operations was progressively increased to 59 movements per hour since March 2010.





截至二零一零年三月三十一日，民航處共有262名空管主任。

As of March 31, 2010, there are 262 Air Traffic Control Officers working in CAD.

招聘及培訓 航空交通管制人員

招聘見習航空交通管制主任

為應付預期的交通增長及中長期的人事升遷需求，空管人員的招聘和培訓工作必須審慎管理。由於本地就業市場欠缺符合相關資歷的航空交通管制員，一般而言，民航處會在本地招聘見習空管主任，經過所需專門培訓後，再晉升為空管主任。合資格申請人須經過一連串甄選步驟，包括才能測驗筆試、工作性格測驗及面試，最後在評估中心接受更深入的認知能力及性格評估測試。

見習空管主任由入職至可全面執行各項空管工作，須接受嚴格訓練，過程漫長。各階段的訓練單元需要周詳規劃，以令見習空管主任可達致表現進展基準。為符合簽發執照的條件，各訓練單元內容均包括在課堂接受訓練，以及模擬機實習訓練，最後讓見習空管主任在導師指導下，處理「實況」航空交通，直至通過所有評核考試為止。

RECRUITMENT AND TRAINING OF AIR TRAFFIC CONTROL STAFF

Recruitment of Student Air Traffic Control Officer

The recruitment and training of ATC staff have to be carefully managed to meet anticipated traffic growth and medium to long term manpower succession needs. As qualified air traffic controllers are not readily available in the local job market, potential ATCOs are normally recruited locally as Student Air Traffic Control Officers (SATCOs) to receive the necessary specialised training. Suitable candidates will go through a series of screening steps – written aptitude test, occupational personality quiz and interview. The shortlisted candidates will then attend the “Assessment Centre”, which comprises more in-depth assessment tests on cognitive ability and personality traits.

SATCOs receive intensive training from entry until the attainment of full performance status. This is a lengthy process requiring carefully staged training modules to match the performance development benchmarks. To fulfil the licensing requirements, each module involves training in classrooms and practical training in the simulator before progressing to handling “live” traffic under the guidance of an instructor until passing all validation check examinations.

航空交通管理 Air Traffic Management

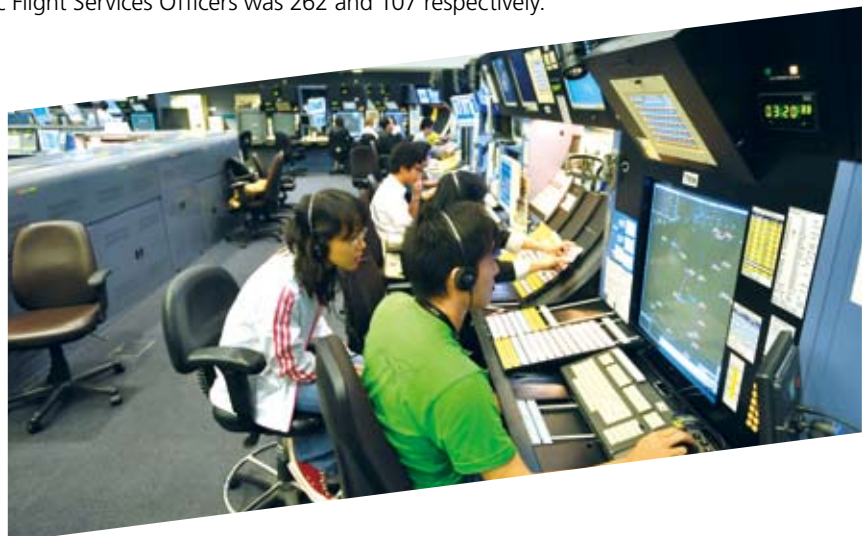
為加深公眾和求職人士對空管行業的認識，民航處積極參與每年舉行的「教育及職業博覽」、在大學舉辦就業講座，並在年內定期安排學生參觀部門的空管設施。

截至二零一零年三月三十一日，在職的空管主任及航空交通事務員分別為262人及107人。

見習空管主任須取得多項不同範疇的空管資歷，成為合資格的管制員，以擔任二級空管主任職位。
A SATCO needs to acquire qualifications in various ATC disciplines to become a fully qualified controller at the rank of ATCO II.

With the objective of introducing the profession to the public and potential job applicants, CAD participated in the annual Education and Career Expo, held career talks in universities and conducted regular students visits to our ATC facilities throughout the year.

As of March 31, 2010, the strength of Air Traffic Control Officers and Air Traffic Flight Services Officers was 262 and 107 respectively.



空管培訓

職員培訓是該部的重點任務。年內，該部持續舉辦多項課程及在職訓練活動。除了已安排的內部空管培訓和有關處理飛機緊急事故的複修課程外，該部亦與民航訓練中心合辦航空交通管理概論課程。

培訓一名見習空管主任成為合資格的管制員，以擔任二級空管主任職位，一般需時五年。其間該名人員須取得多項不同範疇的空管資歷。年內，本處共舉辦了36項空管培訓課程，受訓人員取得多項專業資格及獲發29項空管執照。我們亦為293名在職空管主任舉辦三項複修課程，以確保他們一旦面對突發情況，如航機遇到惡劣天氣或其他緊急事故等，都能應付自如。此外，該部又安排11名見習空管主任參加海外航空交通管

ATC Training

Staff development constitutes one of the major tasks for the Division. Courses of instruction and on-the-job training activities continued to be intensive throughout the year. Apart from the programmed in-house ATC training and refresher courses on handling of aircraft emergency situations, the Division also conducted an Air Traffic Management introductory course in conjunction with the Civil Aviation Training Centre.

Training of a SATCO to become a fully qualified controller at the rank of ATCO II normally takes around five years. During these five years, the officer would have to acquire qualifications in various ATC disciplines. During the year, a total of 36 ATC training courses were conducted, leading to the issuance of 29 ATC ratings and the attainment of various other professional qualifications. Three refresher training courses were conducted for 293 qualified ATCOs to ensure their competency in responding to unusual circumstances, such as poor weather operations and aircraft emergencies, are maintained to the required standard. As part of their career development, 11 SATCOs were arranged to attend overseas courses on air traffic control with Private Pilot



航空交通管制主任於控制塔模擬機內接受訓練。

Air Traffic Control Officers attend training in Control Tower Simulator.

制課程及私人飛機駕駛執照飛行訓練，以配合他們的工作發展。此類海外培訓活動的目的是讓受訓人員增進航空知識、促進個人發展及豐富有關空管運作的閱歷。

Licence (PPL) flying training. These overseas training activities are designed to enhance their aviation knowledge, to accelerate personal development and to broaden their exposure to ATC operations.

年內，多名較資深的空管主任獲選接受安全管理系統、新式飛機操作、搜救、空管及飛機事故調查的進階訓練，以便承擔責任更重的管理及督導職務。

In addition, more senior ATCOs were selected in the year to attend advanced training on Safety Management Systems, Operations of Modern Aircraft, Search and Rescue, ATC Incident Investigation and Aircraft Accident Investigation in order to undertake management and supervisory duties at a higher level.

其他培訓

Other Training Offered

該部亦與民航訓練中心合辦「航空交通管理概論」課程。這課程舉辦多年，深受歡迎，學員包括航空相關界別的從業員及對航空有興趣的市民。

In conjunction with the Civil Aviation Training Centre, the Division also conducted a course on "Introduction to Air Traffic Management". The course is conducted regularly and has been well received by personnel engaged in the aviation-related industries and interested public.

航空交通管制員處理航空交通及過境航班。
Air Traffic Controllers handling air traffic and overflights.



航空交通管理 Air Traffic Management

新航空交通管制程序

香港飛行情報區實施快捷航道

二零零九年十月二十二日起，從西面及北面抵港航道作出優化，以縮短航程。經調整後，從內地、東南亞或歐洲抵港航班最多可節省約210公里飛行航程，即每班航班節省約14分鐘飛行時間。新航道每年可為抵港航班節省總飛行里數超過1 000萬公里，即12 000小時總飛行時數。以平均每天約150架次航班使用新航道計算，每年約有800萬人次的旅客因節省飛行時間而受惠。航空公司可減低航機燃料消耗量，航機的二氧化碳排放量因而下降，公眾亦可享更綠化的環境。

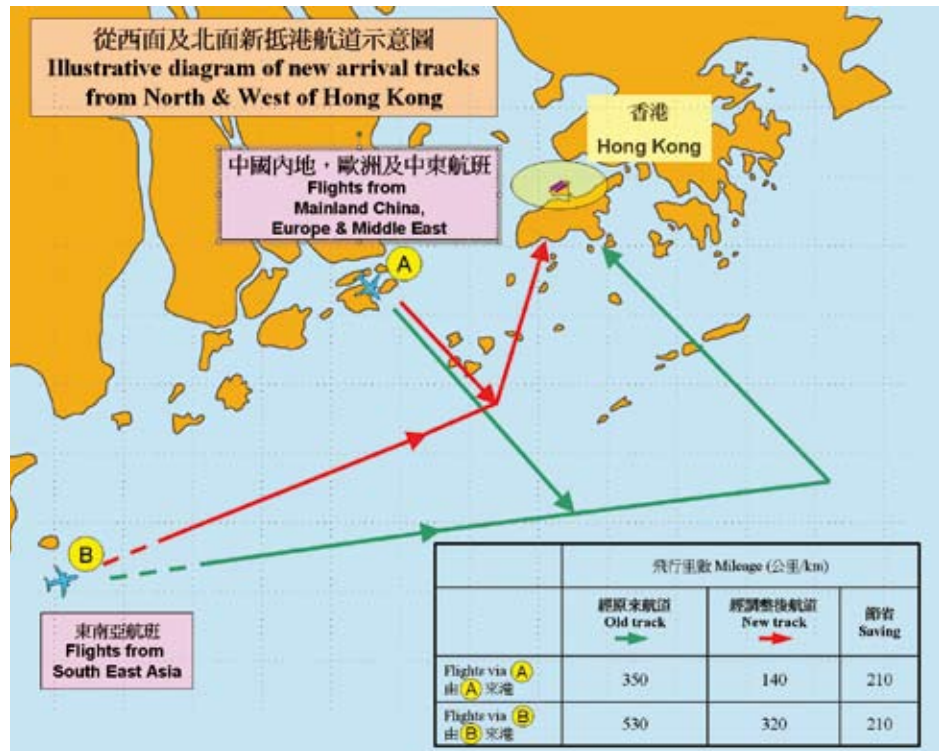
新航道每年可為抵港航班節省總飛行里數超過一千萬公里，而總飛行時數可減省超過一萬二千小時。

New routes will enable annual savings of more than 10 million kilometres in journey, or 12 000 hours in flight time for the arrival aircraft.

NEW AIR TRAFFIC CONTROL PROCEDURES

Implementation of Express Air Routes in Hong Kong Flight Information Region

Commencing October 22, 2009, the arrival routes for aircraft from the West and North of Hong Kong have been shortened and optimised. After the adjustment, flights arriving Hong Kong from the Mainland, South East Asia and Europe via the new routes would be able to save up to approximately 210 km, i.e. 14 minutes in terms of flight time per flight. The new routes would enable annual savings for arrival aircraft by more than 10 million km in journey, i.e. 12 000 hours in flight time. With an average of approximately 150 flights using the new routes daily, approximately 8 million passengers would benefit from shorter flying time annually. Airline operators would benefit from less aviation fuel consumption and the general public would also enjoy a greener environment through reduction of CO₂ emission from aircraft.



從內地、東南亞或歐洲抵港航班的新航道。
New arrival route for arrival flights from the Mainland, South East Asia and Europe.

安全管理系統

二零零九至二零一零年度，航空導航服務安全管理系統繼續發展，制訂和實施安全管理程序方面都有重大改善。

安全保證方面，二零零九年八月，航空交通管理部制訂安全趨勢研究及變革管理程序，有助以更積極及有系統方式管理安全保證。此外，該部推出航空導航服務機構網站及相關行政及管制程序，再加上定期出版安全短訊，都有效協助推廣安全的工作。

至於衡量和監察安全表現方面，航空交通管理部遵照規管要求，定期並適時向航空交通管理標準組提交安全表現目標及指標，以便監管。該部已按照規定，提交四輪目標及指標，每季一次。

年內，該部就主要職能範疇進行四次內部安全審計，作為安全監察的持續工作。該部同時繼續為航空交通管理標準組提供所需支援，協助安全監管工作。

二零零九至二零一零年度，該部繼續為人員提供合適安全管理系統培訓，推廣安全

SAFETY MANAGEMENT SYSTEM (SMS)

The ongoing development of the air navigation services (ANS) SMS continued in 2009-10 with significant enhancement in terms of formulation and implementation of safety management procedures.

In respect of safety assurance, the procedures for Safety Trend Study and Management of Change were put in place in August 2009. These procedures facilitated ATMD to manage safety assurance in a more proactive and systematic manner. Moreover, the implementation of the Air Navigation Services Providers (ANSP) Website and the associated Administrative and Control Procedures, together with the publication of the Safety Flash periodicals, have effectively helped the Division in promoting safety.

In regard of safety performance measurement and monitoring, ATMD complied with the regulatory requirements by timely and regularly submitting to the Air Traffic Management Standards Office (ATMSO) the Safety Performance Targets and Safety Performance Indicators for regulatory oversight. Four rounds of submission were presented on a quarterly basis as required.

As a means for continuous safety surveillance, four internal audits were conducted on key functional areas of ATMD within the report period. In the meantime, the Division continued to provide necessary support to the ATMSO in facilitating regulatory safety oversight activities.

In promoting safety culture, ATMD continued its efforts to provide staff with appropriate SMS training in 2009-10. An external training service

控制塔台為航機提供二十四小時的航空交通管制服務。
The Air Traffic Control Tower provides round-the-clock air traffic control services to aircraft operating at the airport.



航空交通管理 Air Traffic Management

文化。該部邀請歐洲一間培訓機構，在港舉行兩個安全風險辨識方法學培訓課程，加強執行安全風險評估人員的知識及技能。此外，該部舉辦一系列內部安全管理系統簡報會，以特定安全管理主題為重點，目的是加強人員提供導航服務的安全意識。

搜索及救援(搜救)服務

年內，該部繼續培訓更多空管主任，使他們合資格參與搜救行動。該部共舉辦三個培訓課程，有22名空管主任取得搜救資格。

為了解搜救服務的最新國際發展，該部與區域及國際搜救機關保持密切聯繫，又繼續參加有關搜救的國際民航組織會議及其他研討會。

珠江三角洲(珠三角)地區 航空交通管理計劃

香港民航處、中國民航局與澳門民航局組成的三方工作組於年內舉行一次會議，檢討二零零九年的工作進度。二零零九年，三個民航機關又各派代表成立新的特別專責小組，研究制訂離場流量管理系統，目的是更全面管理珠三角主要機場的航機離場次序，以加強珠三角地區航空交通管制的整體運作效率。特別專責小組首次會議在二零一零年三月舉行，三個民航機關就系統結構的主要原則取得一致意見。

provider from Europe was invited to conduct two training courses locally on Safety Hazard Identification Methodologies, which helped strengthen the knowledge and skills of our staff in discharging safety risk assessment duties. In addition, a series of in-house SMS presentations with focus on specific safety management themes were also organised with a view to stepping up safety awareness of staff in the provision of ANS.

SEARCH AND RESCUE (SAR) SERVICES

During the year, the Division has continued to train more ATCOs to become qualified in SAR operations. Three training courses were conducted and a total of 22 ATCOs attained the SAR qualification.

To keep abreast of latest global development on SAR services, the Division maintained close liaison with regional and international SAR authorities, and continued to participate in ICAO meetings and other forums concerning SAR.

AIR TRAFFIC MANAGEMENT PLAN FOR THE PEARL RIVER DELTA (PRD) REGION

The Tripartite Working Group formed by the Hong Kong CAD, the Civil Aviation Administration of China and the Macao Civil Aviation Authority met once during the year to review the work progress of 2009. A new special task force, also represented by the three civil aviation authorities, was established in 2009 to study the development of a departure flow management system. The objective was to manage the departure sequence of major PRD airports in a more holistic manner, with a view to enhancing the overall Air Traffic Control operating efficiency in the Region. The first special task force meeting was held in March 2010 and the three authorities have agreed on the major principles of the system architecture.

同事出席由德國空中交通管理局提供的風險辨識方法學培訓班。

Colleagues attend the Hazard Identification Methodologies conducted by DFS Deutsche Flugsicherung GmbH, an ANS training services provider of Germany.



海外空管會議和研討會

年內，該部繼續積極參與航空交通管理事務的海外會議和研討會，包括由國際民航組織、其他航空機關和民用航空導航服務組織主辦的會議和研討會。

OVERSEAS ATC MEETINGS AND CONFERENCES

During the year, the Division continues to participate actively in overseas meetings and conferences on issues related to air traffic management. These include meetings, seminars and conferences initiated by ICAO, other aviation authorities and the Civil Air Navigation Services Organisation (CANSO).



同事出席在泰國曼谷舉行的第二十屆國際民用航空組織亞太區航空導航策劃及執行地區小組會議。
Staff attending the 20th Asia/Pacific Air Navigation Planning and Implementation Regional Group Meeting held in Bangkok, Thailand.

電訊服務

二零零九年標誌着航空電訊的新紀元。二零零九年十二月，香港與澳門的航空交通服務訊息處理系統網絡啟用，航空電訊其後由傳統航空專用電訊網，改為透過網上航空電訊網及航空交通服務訊息處理系統傳遞。

關於固定航空通訊服務，航空通訊組年內處理的資訊達31 516 241個，較上一年度增加6.55%。

航空氣象廣播服務方面，航空通訊組年內為航機提供合共216 042次氣象報告，較上一年度微增0.19%。

TELECOMMUNICATIONS SERVICES

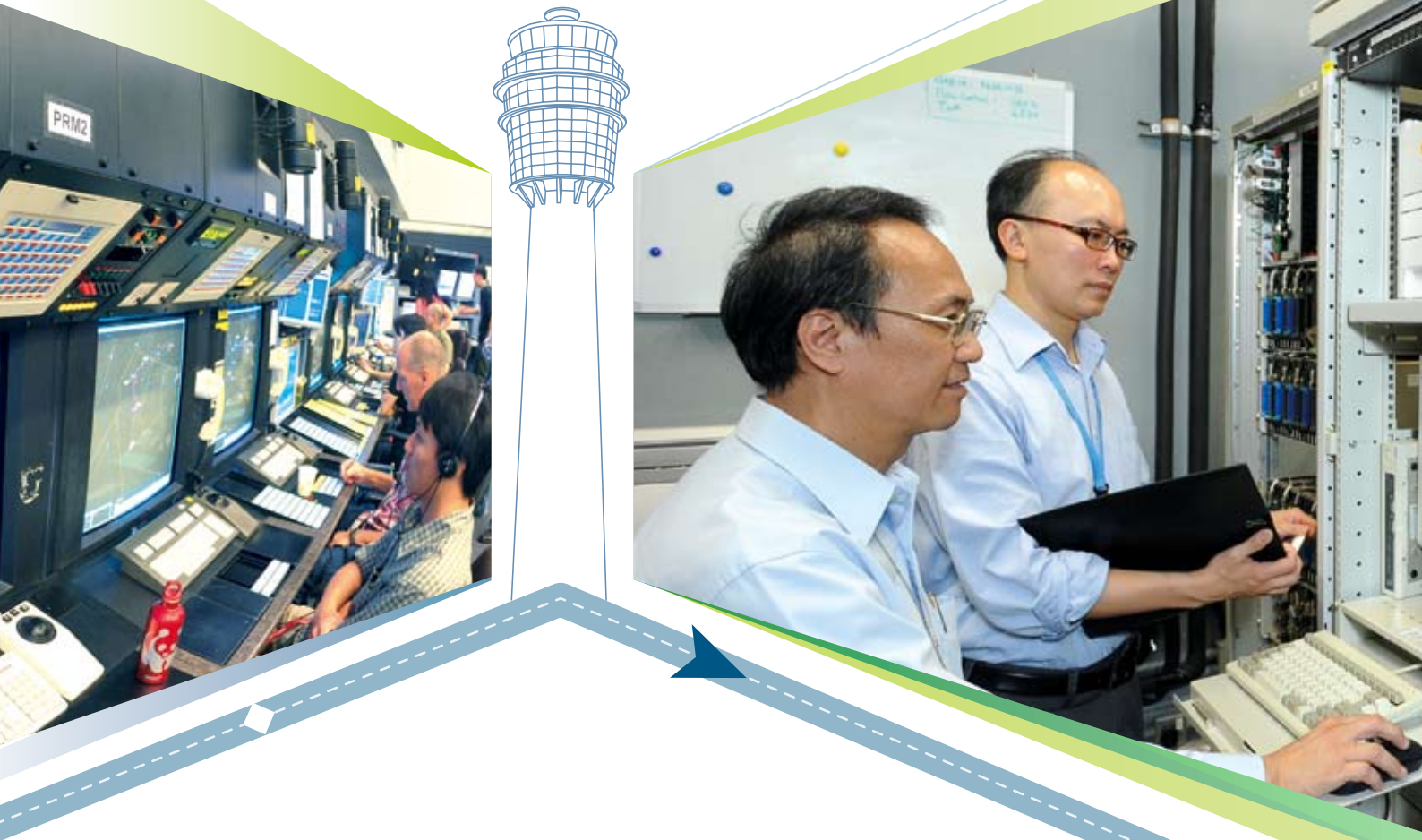
2009 marked a new era for aeronautical telecommunications. The migration from the legacy Aeronautical Fixed Telecommunication Network (AFTN) to the internet-based Aeronautical Telecommunication Network/ATS Message Handling System (ATN/AMHS) operations began with the implementation of the Hong Kong-Macao AMHS circuit in December 2009.

On Aeronautical Fixed Service, the number of messages handled by the Telecommunications Unit of the Division during the year reached a total of 31 516 241, representing a 6.55 per cent increase over last year.

On Aeronautical Broadcast Service, a total of 216 042 weather messages were provided to aircraft in flight during the year. The amount was slightly increased by 0.19 per cent as compared with the previous year.

航空交通工程及標準

Air Traffic Engineering and Standards



航空交通工程及標準部負責設計、規劃、統籌和提供空管系統、雷達、導航儀器和通訊設備，並監管香港空中航行服務(包括進行航空事故調查)，簽發空管執照及相關級別。

The Air Traffic Engineering and Standards Division (AESD) is responsible for the design, planning, coordination, and provision of ATC systems, radar, navigational aids, and communication facilities for Hong Kong ATC operations. The Division is also responsible for regulating Hong Kong air navigation services including conducting incident investigation, and issuing air traffic control licences and the associated air traffic control ratings.



航空交通工程及標準 Air Traffic Engineering and Standards

年內，本部繼續致力維持高水準服務及穩定可靠的空管系統，以支援各項航空交通服務。二零零七年五月十一日，立法會財務委員會通過撥款更換現有空管系統。新空管系統的整體設計、詳細運作要求、招標文件及招標等準備工作亦隨即展開，進度良好。

衛星通訊、導航及監察／航空交通管理系統的發展計劃現正穩步推展，七個系統構件已投入運作，另外七個正進行測試，以評估相關運作效益。為應付區內航空交通增長的需求，新的系統構件如抵港航機排序系統、電子飛行進程單系統、廣播式自動相關監察系統和飛行計劃衝突提示系統，現正進行測試，務求盡早採用。

本部繼續推行新的資訊科技應用系統，提升電腦網絡的基建與設施，以配合本處電子化服務和數碼政府的目標。二零零九年，本部就建立資訊科技服務的品質管理系統展開工作，預定在二零一零年年底完成。

During the year, the Division continued its efforts in maintaining a high standard, stable, and reliable ATC system to support air traffic services. With funding approval received from the Finance Committee of the Legislative Council on May 11, 2007 for replacement of the existing ATC system, detailed design of the system architecture, refinement of operational requirements, preparation of tender documents, and tender invitation for the new ATC system were progressing well.

Steady progress was made on the Satellite-based Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Systems Project, with seven system elements now in operational use and seven on trials to assess their operational benefits. To cope with the rapid air traffic growth in the region, trials and early implementation of new CNS/ATM system elements like Arrival Manager System, Electronic Flight Strip System, Automatic Dependent Surveillance-Broadcast (ADS-B), Flight Plan Conflict Advisory System etc., were being pursued.

The Division also continued to implement new IT applications and enhance the computer network and infrastructure in line with the departmental e-business development and e-government objectives. The Quality Management System (QMS) for IT services was initiated in 2009 with a target completion date towards the end of 2010.



本部負責設計、規劃、統籌和提供空管系統。

The Division is responsible for the design, planning, coordination, and provision of ATC systems.

航空交通管制系統的發展

更換航空交通管制系統

現有空管系統的處理能力和功能已無法應付預期中的航空交通增長需求及航空業的發展。為保持香港作為國際及區內航空交通樞紐的地位，民航處有需要更換一套高效能及配備最新功能的空管系統，以加強香港飛行情報區內航空交通服務的效率。本處在二零零七年五月獲得撥款，並在二零零八年完成詳細的市場調查/系統設計後，在年內進行了各主要空管系統運作要求及系統規格的制訂工作。首份合約在二零一零年一月二十二日批出，採購項目為控制塔模擬機。通訊主幹和航空交通管理系統先後在二零零九年五月及十一月進行招標，其餘各系統的招標工作會在二零一零年至二零一一年分期進行。

AIR TRAFFIC CONTROL SYSTEMS DEVELOPMENT

Replacement of Air Traffic Control System

The capacity and functionalities of the existing ATC system were unable to cope with the projected air traffic growth and expansion of the aviation industry. To maintain Hong Kong's position as an international and regional aviation hub, it was considered necessary to replace the existing ATC system with a higher capacity and the latest functionalities so as to enhance the efficiency in the provision of air traffic services in the Hong Kong Flight Information Region. With funding approval given in May 2007 and detailed market survey/system design completed in 2008, preparation of the operational requirements and system specifications for major ATC systems was made during the year. The first contract for the provision of Control Tower Simulator (CTS) was awarded on January 22, 2010. Tender invitation for Communications Backbone and Air Traffic Management System was also mounted in May 2009 and November 2009 respectively, with the remaining tenders to be rolled out in phases in 2010-2011.



民航處人員測試新航空交通服務訊息處理系統。
Staff testing the new AMHS operator position.



本部安排更換空管系統以支援各項航空交通服務。
The Division arranged replacement of the existing ATC system to support air traffic services.

航空交通工程及標準 Air Traffic Engineering and Standards

空管系統和重要屋宇設施的 安全管理系統

本部繼續致力就本地航空交通服務制訂和實施各個安全管理系統構件。首輪內部審核涵蓋定期審核本部八個主要職能範圍，為期共16個月，並在二零一零年三月圓滿結束。新增的審核範圍仍在考慮中。二零零九年十一月，本部進行分析，以確定通訊、導航及監察/航空交通管理系統所實施的安全程序與監管要求之間的差距。本部現正制訂改善範疇和相關額外工作，務求進一步提升本地航空交通服務各方面的安全水平。

民航處航站修葺工程

為改善民航處航站的實質狀況和屋宇裝備，使航站得以持續運作，本部自二零零九年一月起在18個民航處航站和天線場進行修葺工程。二零一零年三月底，所有工程按財政預算如期竣工。上述工程計劃為期15個月，完成約160項工程，包括安裝保安系統，以及改善屋宇設備和避雷裝置。整項計劃由專責小組密切監察，小組成員包括本處、建築署和機電工程署的高級專業人員。

Safety Management System (SMS) for Air Traffic Control (ATC) Systems and Critical Building Services Facilities

The Division continued putting in substantial efforts to develop and implement various safety management system (SMS) elements in provision of air traffic services in Hong Kong. The first round of 16-month internal audit cycle, consisting of regular audits to eight major AESD's functional areas, was satisfactorily completed in March 2010. Additional audit area(s) is under review. In addition, the Division carried out an analysis in November 2009 to identify gaps between implemented safety processes and regulatory requirements for CNS/ATM systems. Areas of improvement and associated additional efforts are being worked out to further enhance various safety aspects of our air traffic services.

Renovation Works at CAD Outstations

To improve physical and building services conditions of CAD outstations for sustainable operations, the Division initiated a renovation work project for 18 CAD outstations and antenna farms since January 2009 which was completed on time and within budget by the end of March 2010. The 15-month project, closely supervised by a task force comprising senior professionals from the Department, Architectural Services Department (ArchSD) and Electrical and Mechanical Services Department (EMSD), completed some 160 work items, covering installation of security systems, and enhancements of building services facilities and lightning protection facilities, etc.



衛星通訊、導航及監察/ 航空交通管理系統

為配合國際民航組織就衛星通訊、導航及監察/航空交通管理系統所訂的全球和地區實施計劃，本處繼續研究系統的最新發展，並詳細測試系統各個構件。有關係統的技術和運作測試均取得良好進展。

為了早日發揮系統的功能，部分技術成熟的系統構件已投入服務，藉此提升和優化香港空管服務的水平。該等系統構件包括數據化自動航站情報服務、數據化遠航氣象情報服務、飛前放行指示數據鏈路服務、先進場面活動引導和控制系統、香港與曼谷和澳門之間的航空電訊網、與澳門的航空交通服務訊息處理系統，以及與三亞的空中交通服務設施間數據通訊。

飛前放行指示雙向數據鏈路服務

飛前放行指示數據鏈路服務在二零零八年提升為雙向傳輸後，服務使用率由約50%的離港航機逐步增至70%，使用服務的航空公司數目由最初的11家增至二零一零年三月底的44家。預計未來數年會有更多航機使用此服務，以提升空管人員與飛行員的通訊效率。

SATELLITE-BASED COMMUNICATIONS, NAVIGATION AND SURVEILLANCE/AIR TRAFFIC MANAGEMENT (CNS/ATM) SYSTEMS

To comply with the Global and Regional Implementation Plans of the ICAO for the Satellite-based CNS/ATM systems, studies on the latest CNS/ATM development and detailed investigation on various elements of the CNS/ATM systems continued. Satisfactory progress was achieved on relevant technical and operational system trials.

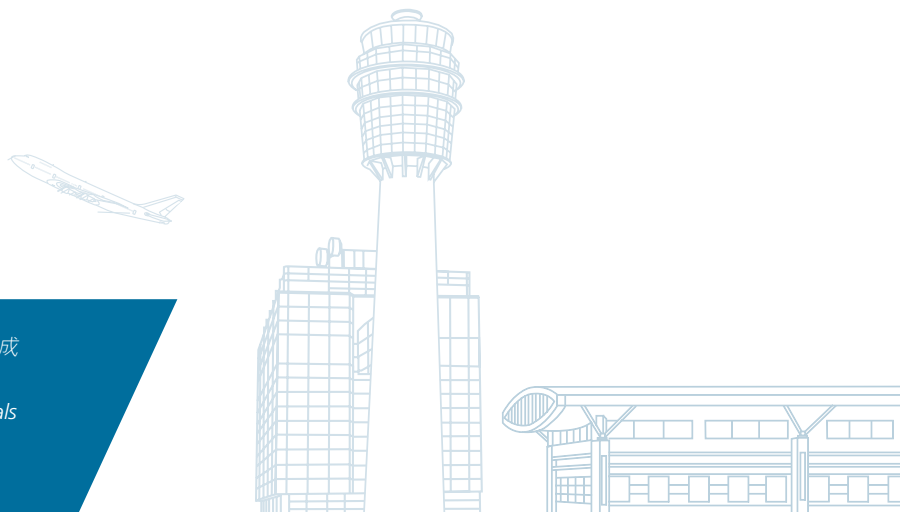
To reap the benefits of early CNS/ATM applications, some mature CNS/ATM system elements such as Digital-Automatic Terminal Information Service (D-ATIS), Digital-Meteorological Information for Aircraft in Flight (D-VOLMET) service, Pre-Departure Clearance (PDC) datalink service, Advanced Surface Movement Guidance and Control System (A-SMGCS), Aeronautical Telecommunication Network (ATN) connecting Hong Kong with Bangkok and Macao, ATS Message Handling System (AMHS) service with Macao, and Air Traffic Services Inter-facility Data Communication (AIDC) with Sanya have been put into operational use which enhanced and upgraded the ATC services of Hong Kong.

Pre-Departure Clearance Two-way Datalink Service

Since the upgrading of the Pre-Departure Clearance (PDC) Datalink Service to two-way operation in 2008, utilisation rate has increased steadily from about 50% up to 70% of the departure flights and the number of active participating airlines has also increased from an initial 11 to 44 airlines as of end March 2010. It is anticipated that more aircraft will use the service to grasp the benefit of efficient communications between ATC and pilots in the coming years.

本部領導由民航處、建築署及機電工程署等高級專業人員組成的專責小組審核修葺工程進度。

The Division led the task force comprising senior professionals from CAD, ArchSD and EMSD to review progress of renovation works project.



航空交通工程及標準 Air Traffic Engineering and Standards

位於沙洲的進場監察雷達站。
Sha Chau Approach Surveillance Radar Station.



航空交通管制中心內的抵港航機排序系統。
Arrival Manager System in the air traffic control centre.



航空電訊網及航空交通服務訊息處理系統

香港作為航空電訊網及航空交通服務訊息處理中樞，配合國際民航組織亞太地區航空電訊網及航空交通服務訊息處理系統實施計劃，在二零零九年七月啟用高容效航空交通服務訊息處理系統。與澳門進行的新系統相容測試和運作測試已經完成，結果令人滿意。二零零九年十二月二十九日，香港與澳門的航空交通服務訊息處理系統和航空電訊網投入運作。港澳兩地是亞太區內首對城市使用航空電訊網，提供全面的航空訊息處理服務。本處計劃由二零零九年年末開始，再分階段與北京、台北、東京、馬尼拉和其他鄰近地區的航空交通電訊中心進行測試。

Aeronautical Telecommunication Network and ATS Message Handling System

In accordance with ICAO Asia-Pacific Regional Aeronautical Telecommunication Network (ATN) and ATS Message Handling System (AMHS) Implementation Plan, with Hong Kong being an ATN and AMHS backbone site, a high capacity AMHS was commissioned in July 2009. Interoperability tests and operational trials of the new system with Macao were completed with satisfactory results. The new AMHS and ATN circuit between Hong Kong and Macao was put into operation on December 29, 2009, marking the first city-pair in the Asia and Pacific Regions that provides a full aeronautical message handling service over ATN. Further tests and trials with Beijing, Taipei, Tokyo, Manila and other adjacent ATS authorities are planned in stages commencing from the end of 2009.

先進場面活動引導和控制系統

由二零零八年十一月起，先進場面活動引導和控制系統先後進行為期16個月的運作評估、系統性能優化和空管及技術人員培訓。上述工作順利完成後，系統在二零零九年四月一日投入運作。系統採用多點定位及廣播式自動相關監察技術，加強監察飛行區內航機升降和車輛進出的情況，以及設置衝突及「跑道入侵」警告功能，提高空管安全和效率。為了發揮系統的最大功能，本處為運作上需要進入或越過現用跑道的車輛裝設應答機，裝設工程在二零零九年年底展開，預定在二零一零年年底竣工。

廣播式自動相關監察系統

民航處採購廣播式自動相關監察顯示系統，以便監察和評估廣播式自動相關監察系統接收西沙群島（屬於內地管理範圍）訊號的覆蓋範圍和位置的準確程度。此外，本處與政府飛行服務隊共同策劃測試，為飛行服務隊的直升機裝設合適的廣播式自動相關監察性能，藉此評估運用這項技術監察低飛飛機的成效。測試計劃現正穩步進行。

Advanced Surface Movement Guidance and Control System

An Advanced Surface Movement Guidance and Control System (A-SMGCS) was put into operational use on April 1, 2009 following satisfactory completion of a 16-month operational evaluation, performance optimisation and user and technical training since November 2008. The A-SMGCS employs both the multilateration and Automatic Dependent Surveillance-Broadcast (ADS-B) technologies for enhanced surveillance of aircraft and vehicle movements on the airfield, and provision of conflict and runway incursion alerting functions for added air traffic control safety and efficiency. In order to achieve the maximum benefits of the system, vehicles with an operational need to enter or cross active runways would be equipped with vehicle locators, installation of which has commenced in late 2009 for completion by the end of 2010.

Automatic Dependent Surveillance - Broadcast

CAD procured an ADS-B display system to facilitate monitoring and evaluation of coverage and position accuracy of Automatic Dependent Surveillance – Broadcast (ADS-B) signals received from Xisha Island which is under the management responsibility of the Mainland. Steady planning progress was also made for a joint trial with Government Flying Service by equipping suitable ADS-B avionics to their helicopters to evaluate the effectiveness of using ADS-B technology for surveillance of low level flying aircraft.



航空交通工程及標準 Air Traffic Engineering and Standards

抵港航機排序系統

研發抵港航機排序系統的目的，旨在提高準時抵港的航機數目，更善用空域，以及為管制人員提供自動化服務。系統通過運作評估和完成優化後，在二零零九年六月二十三日開始試行運作，預定在二零一零年年中啟用。系統功能會在二零一零年年底進一步提升，以在惡劣天氣情況下編定最佳的抵港航機序列。

陸基增強系統

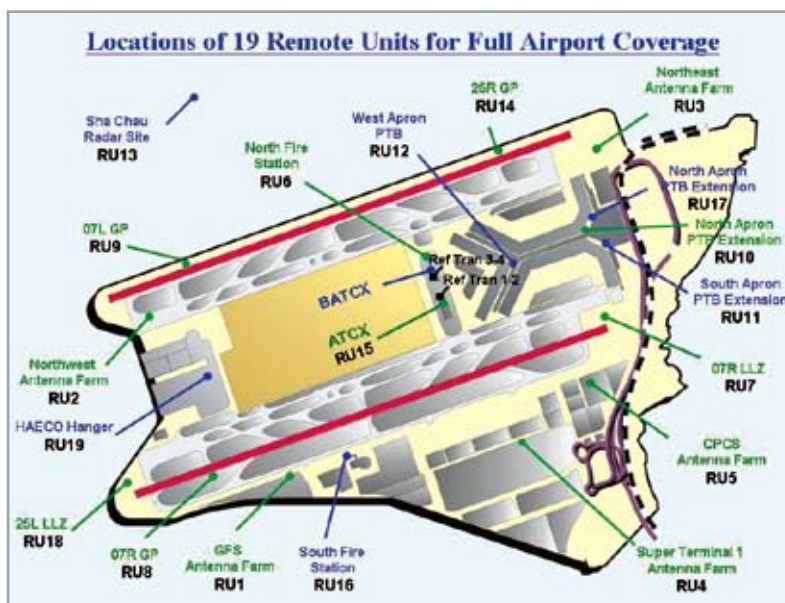
為配合採用基於性能的導航，應付全球對善用空域的需求，本處計劃在香港國際機場建立陸基增強系統，藉此加強全球衛星導航系統的功能，支援系統覆蓋範圍內飛機進場、著陸、起飛和地面運作等各階段程序。本處會根據該計劃研究電離層對陸基增強系統性能的影響。為配合研究，本處會在二零一零年年底或之前裝設監察系統，收集和分析全球衛星導航系統發出的數據。

Arrival Manager System

The Arrival Manager (AMAN) System was developed to help achieving more on-time arrivals, more efficient use of airspace and automated service to controllers. Following successful operational evaluation and system enhancement, the system was put into operational trial since June 23, 2009, and is targeted for operational use in mid 2010. Further upgrade of the system to enable optimisation of aircraft arrival sequencing during adverse weather conditions will be made in the end of 2010.

Ground Based Augmentation System

In support of the implementation of Performance Based Navigation (PBN) to address the global demands on efficient use of airspace capacity, a Ground Based Augmentation System (GBAS) for the HKIA is being planned that augments the Global Navigation Satellite System (GNSS) and supports all phases of approach, landing, departure, and surface operations within its area of coverage. The project will involve a study of ionospheric effect on the performances of GBAS. To facilitate the study, a monitoring system to collect and analyse data from GNSS will be installed by the end of 2010.



十九個改進型地面活動引導和控制系統的位置圖。
Locations of 19 A-SMGCS Multilateration Remote Units.



同事在儀表著陸系統儀器室內工作。
Staff works in the Instrument Landing System equipment room.



下滑道天線為儀表著陸系統的組成部分，它能提供準確的方向指示及下降指引訊號，在正常或即使在惡劣的天氣狀況下，航機亦能安全地在跑道上降落。

The Glide Path antenna is an integral part of the Instrument Landing System installed at the Airport providing precise descent guidance signals for safe landing of aircraft on the runway during all weather conditions.



飛行計劃衝突提示系統

飛行計劃衝突提示系統的設計和研發工作在二零一零年一月順利完成，現正進行全面測試和驗證。系統啟用後，當飛越香港空域的飛機可能出現中期(五至二十分鐘)衝突時，管制人員即可獲得提示，藉此加強空管運作安全。

電子飛行進程單系統

為配合以無紙方式記錄飛行進程，本處在二零一零年二月十日批出電子飛行進程單系統供應及安裝合約。本處會首先在現有控制塔利用系統進行運作評估，所得經驗對協助新空管中心及控制塔順利改以電子方式運作大有幫助。

Flight Plan Conflict Advisory System

The design and development of a Flight Plan Conflict Advisory System (FPCAS) was successfully completed in January 2010 and is now under extensive testing and validation. The system, upon commissioning, will help enhance safety to ATC operations by providing alerts to controllers when medium term (5 to 20 minutes) potential conflicts exist between aircraft flying over the Hong Kong airspace.

Electronic Flight Strip System

To support paperless flight strip operations, a contract for the supply and installation of an Electronic Flight Strip System (EFSS) was awarded on February 10, 2010. This system will initially be used for operational evaluation in existing tower. The operational experience so gained will facilitate a smooth transition to electronic flight strip environment in both new ATC centre and tower operations.

航空交通工程及標準 Air Traffic Engineering and Standards

改善通訊、導航、監察及 航空交通管理系統的維修安排

為加強空中航行服務，本部採用以風險為本的模式，改善通訊、導航、監察及航空交通管理系統的現行維修安排。本處會採用最佳維修安排和電腦化系統，分析現有及新設系統的設備狀況和性能，務求迅速回應系統維修要求，從而提升系統運作效率和服務水平。本處與機電工程署簽訂新的服務水平協議，藉此進一步加強安全管理方面的工作，同時就民航處各場地的電機及機械系統、屋宇設備和電子裝置，訂定積極的維修措施。

協同決策

協同決策是一套制度，通過實時交換運作情報，讓有關各方更能掌握實際情況、簡化工作流程，不論在運作、財政抑或環境方面，都能為航空業各方帶來巨大效益。為配合本港發展和推行協同決策，本處到歐洲多個主要國際航空樞紐實地考察，又在二零零九年九月十四日舉辦協同決策工作坊，吸引了130多名來自不同本地航空機構的代表出席。此外，本處現已與機場管理局、航空公司和地勤服務代理人等主要機場持份者，舉辦專題小組討論。

航空交通管理標準組

為確保本港空中航行服務維持最高安全水平，航空交通管理標準組負責規管空中航行服務的安全。

Enhanced Maintenance on Communications, Navigation, Surveillance and Air Traffic Management Systems

With a view to strengthening the provision of air navigation services, the Division adopts a risk-based approach to enhance the existing maintenance practice on Communications, Navigation, Surveillance and Air Traffic Management (CNS/ATM) Systems. Best maintenance practices and computerised systems will be employed to analyse equipment conditions and system performance of both existing and new CNS/ATM Systems with a view to providing faster response to maintenance issues and hence enhancing operational efficiency and service availability. A new Service Level Agreement was also engaged with EMSD to further strengthen efforts on safety management as well as various proactive maintenance initiatives for electrical and mechanical systems, building services facilities and electronics installation at CAD venues.

Collaborative Decision Making

Collaborative Decision Making (CDM) is a system that will bring significant operational, financial and environmental benefits to all aviation stakeholders through improved situational awareness and streamlined workflows by real-time sharing of operational information. To facilitate the development and implementation of CDM in Hong Kong, the Department conducted a fact finding visit to major international hubs in Europe and organised a CDM workshop in Hong Kong on September 14, 2009, with more than 130 participants from local aviation communities supporting the event. Focus group discussions with major airport stakeholders such as Airport Authority, airlines, ground handling agents are being organised.

AIR TRAFFIC MANAGEMENT STANDARDS OFFICE (ATMSO)

To ensure that the safety of air navigation services (ANS) in Hong Kong is maintained at the highest level possible, the ATMSO has the responsibility to perform safety regulatory functions to oversee provision of ANS.



航空交通管理標準組同事正進行安全監督工作。
Staff from ATMSO conducts safety inspection.

安全監督工作

為持續監察航空安全，航空交通管理標準組共進行42次安全檢查，以及一次空中航行服務提供者審查。檢查範圍包括：航空交通管理工作的運作、程序、培訓和考試；安全管理系統的實施；空管設備/系統；安全事故調查；以及安全建議的跟進行動。經檢查的設施包括航空交通管制中心、控制塔、航空情報中心、備用航空交通管制中心和控制塔、培訓組、雷達模擬系統及控制塔模擬機。

航空交通管理標準組根據既定指引，繼續監察以至參與航空交通意外及嚴重事故調查。所有安全事故的資料和數據，均會收集並儲存在事故報告資料庫系統內，以供進行安全趨勢研究。航空交通安全評核委員會每半年召開會議，檢討航空交通事故調查。委員會成員包括飛行標準及適航部、航空交通管理標準組和航空交通管理部的代表，以及本地主要航空公司和政府飛行服務隊的航空安全代表。此外，航空交通管理標準組負責監察事故後有關調查報告所提出安全建議的執行情況。

為加強規管者與服務提供者的協作和合作，航空交通管理標準組與航空交通管理部、本部工程項目組和技術發展組定期召開會議，藉此密切監察空中航行服務提供者發展安全管理系統的情況。

Safety Oversight Activities

For continuous safety regulatory surveillance, ATMSO conducted a total of 42 safety inspections and 1 audit on the Air Navigation Services Provider (ANSP). The inspections included Air Traffic Management (ATM) activities in operations, procedures, training, examinations; implementation of SMS; ATC equipment/systems; safety occurrences investigations; and follow-up actions on safety recommendations. Facilities inspections were conducted in the Air Traffic Control Centre (ATCC), Control Tower, Aeronautical Information Centre, Backup ATCC & Tower, Training Unit, Radar Simulator and Aerodrome Simulator.

The ATMSO continued to participate in and monitor the investigations of all ATC incidents and occurrences of significant nature in accordance with established procedures. Information and data on these safety occurrences are captured and stored in the Occurrence Report Database (ORDB) system for safety trend studies. Review on the investigations of ATC incidents was conducted half-yearly in the Air Traffic Safety Assessment Committee (ATSAC), which comprised representatives from the Flight Standards and Airworthiness Division, ATMSO, ATMD, flight safety personnel of major local airline operators and the Government Flying Service. Furthermore, the ATMSO monitored the progress of post-incident follow-up actions on the recommendations put forward in the investigation reports.

To enhance collaboration and cooperation between the regulator and service provider, the ATMSO convened regular meetings with ATMD and the Projects and Technical Support Sections of AESD. Through such regular coordination, the ATMSO closely monitors the development of SMS by the ANSP.

航空交通工程及標準 Air Traffic Engineering and Standards

文件編制

航空交通管理標準組定期檢討和更新現有規管文件，確保內容準確、有效和符合現況。年內，該組發出四份《空中航行服務資料通告》，所公布的主要事項包括危險識別方法、事故分類修訂、更改進場管制扇區名稱，以及安全推廣工作。

空管主任執照

航空交通管理標準組一項重要職責是根據國際民航組織《附件1》的標準，規管空管主任執照簽發制度。在本報告年度內，該組共處理12個簽發空管主任執照申請、37個首次簽發空管執照級別申請、161個續發空管執照級別申請、16個首次簽發合格證書申請、191個續發合格證書申請、5個首次簽發空管認可考官證書申請、14個續發空管認可考官證書申請，以及15個英語能力證書申請。

航空交通管理部舉辦的各項空管培訓課程，都須接受規管。二零零九年，兩個根據進場管制培訓修訂計劃新設的空管課程，獲得規管批准。

安全推廣工作

為加強空中航行服務提供者的安全意識，航空交通管理標準組為本部人員舉辦五場簡介會，介紹國際民航組織安全管理系統的適用範疇、國際標準化組織就通訊、導航及監察所訂的相關標準、安全及質素保證管理，以及採用「Bowtie分析方法」(Bowtie Methodology)進行的安全風險管理。二零零九年九月九日，內部電子平台啟用，利便空中航行服務人員查閱安全資訊。

Documentations

The ATMSO conducted regular reviews and updates on existing regulatory documents to ensure that they remain accurate, valid and up-to-date. During the report period, the ATMSO issued four Air Navigation Services Information Notices (ANSIN). These notices focused on hazard identification methods, changes to the classification of incidents, renaming of approach control sectors, and safety promotion activities.

ATC Personnel Licensing

One of the important functions of the ATMSO is to administer the ATC licensing scheme in accordance with the standards in ICAO Annex 1. During the report period, the Office processed 12 applications for the grant of ATC licences, 37 initial award and 161 renewal of ATC ratings, 16 initial award and 191 renewal of Certificates of Competency, five applications for the initial award and 14 renewal of ATC Approved Examiner (AE) Certificates, and 15 applications for English Language Proficiency Certificates.

All training courses conducted by ATMD for acquiring ATC ratings are subject to a regulatory approval process. In 2009, two new ATC courses under the revised scheme on Approach Control training gained regulatory approval.

Safety Promotion Activities

To promote safety awareness within ANSP, the ATMSO conducted five presentations to AESD staff on ICAO SMS Framework and Related ISO Standards, Safety and Quality Management for Communications, Navigation and Surveillance (CNS), and Safety Risk Management using the Bowtie Methodology. In addition, an internal electronic platform was launched on September 9, 2009, facilitating ANS staff to have convenient access to safety information.



國際民航組織全球安全 監察審查計劃

國際民航組織在二零零九年二月二十六日至三月六日到香港實地審查後，在二零零九年十一月發出最後報告。在維持有效的航空安全監督系統方面，香港整體取得94.47%的佳績，足證香港持續維持非常有效的航空安全監督系統。

除了跟進國際民航組織審計小組的建議外，民航處與國際民航組織和航空業各方繼續緊密合作，維持和改善香港航空系統的安全標準，從而保持香港作為區域及國際主要航空樞紐的地位。

資訊科技管理

資訊科技管理組有效實施新的資訊科技措施和落實數碼政府的目標，對各分部的日常業務流暢運作，繼續發揮重要作用。

年內，資訊科技管理組完成兩項大型資訊科技計劃，以加強資訊科技服務和支援：

- (i) 研發和完善電子輪值系統，由二零零九年十一月起供電訊人員試用。該系統設有合乎成本效益的解決方案，把人手作最佳分配。
- (ii) 在二零一零年三月採取積極行動，更換使用多年的核心資訊科技設施/設備，以確保民航處電腦網絡維持高度運作水平。

此外，資訊科技管理組推行一套系統，全日24小時監察多個主要資訊科技應用系統的性能，並加強所有民航處工作站的資訊保安/保護措施。

ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP)

In connection to the safety audit carried out on Hong Kong from February 26 to March 6, 2009, ICAO issued the final audit report in November 2009. Hong Kong achieved an overall score of 94.47% in the effective implementation of a safety oversight system. This shows that we have continued to maintain a highly effective aviation safety oversight system for the civil aviation activities in Hong Kong.

Apart from following up the ICAO audit team's recommendations, CAD will continue to work closely with ICAO and all aviation stakeholders to maintain and improve the aviation safety standards of Hong Kong in order to maintain Hong Kong's position as a leading regional and international aviation hub.

IT MANAGEMENT

The Information Technology Management Unit (ITMU) continued to play a very important role to support day-to-day business operations of various divisions, through effective implementation of new IT initiatives and e-government objectives.

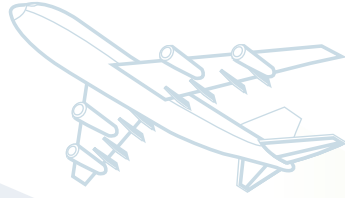
During the year, the ITMU completed two major IT projects for betterment of IT services and support:-

- (i) Development and fine-tuning of an Electronic Rostering System for trial use by Telecommunications Officers since November 2009. This system provides a cost-effective solution to optimise manpower allocation.
- (ii) Proactive replacement of aged core IT facilities/equipment to maintain high serviceability of departmental computer network (CADNET) in March 2010.

ITMU implemented a system for round-the-clock monitoring of performance status of a number of critical IT applications and enhanced information security/protection measures to all CAD workstations.

飛行標準及適航

Flight Standards and Airworthiness



飛行標準及適航部負責簽發航空營運許可證，以及在發出許可證後監察所有持證公司的運作，確保這些公司遵守國際民航組織所訂定的標準和建議措施。本部的其他職責包括簽發航空人員執照、監察在香港登記的飛機的適航標準和維修水平、監督香港航空營運許可證持證公司和飛機維修機構實施安全管理系統的情況、監察輕型飛機和直升機運作、監察外國航空公司在香港國際機場的運作、調查飛機意外和事故，以及分析安全數據。

The Flight Standards and Airworthiness Division is responsible for the issue of Air Operator's Certificate (AOC) and the subsequent monitoring of all AOC holders to ensure their compliance with the Standards and Recommended Practices of the ICAO. Other functions of the Division include personnel licensing, supervision of airworthiness and maintenance standards of aircraft registered in Hong Kong, supervision of the implementation of Safety Management System (SMS) by Hong Kong AOC holders and aircraft maintenance organisations, supervision of light aircraft and helicopter operations, surveillance of foreign airline operators' operations at the Hong Kong International Airport, investigation of aircraft accidents and incidents, and safety data analysis.



飛行標準及適航 Flight Standards and Airworthiness

飛行標準組

FLIGHT STANDARDS OFFICE

簽發和續發航空營運許可證

Issue and Renewal of AOC

截至二零一零年三月三十一日，有九家航空公司持有香港航空營運許可證，計為：

As at March 31, 2010, there were nine Hong Kong AOC holders and they were:

香港華民航空有限公司(華民航空)
 國泰航空有限公司(國泰航空)
 直升機服務(香港)有限公司
 香港航空有限公司(香港航空)
 港龍航空有限公司(港龍航空)
 香港快運航空有限公司(香港快運)
 香港商用飛機有限公司(香港商用飛機)
 空中快線有限公司(空中快線)
 TAG Aviation Asia Limited (TBJ)

AHK Air Hong Kong Limited (AHK)
 Cathay Pacific Airways Limited (CPA)
 Heliservices (Hong Kong) Limited (HEL)
 Hong Kong Airlines Limited (CRK)
 Hong Kong Dragon Airlines Limited (HDA)
 Hong Kong Express Airways Limited (HKE)
 Metrojet Limited (MTJ)
 Sky Shuttle Helicopters Limited (HHK)
 TAG Aviation Asia Limited (TBJ)

年內，本部透過全面的巡查和審查計劃，繼續監察本地航空營運許可證持證公司的安全表現和營運標準。飛行標準組執行了104次飛行檢查，並對航空營運許可證持證公司作出共282次其他巡查，包括外站巡查、檢查運作記錄、視察訓練情況和審批核准考核人員。本部亦按照年檢程序，對本港航空公司所採用的43台飛行模擬機進行評審、視察及重新簽發使用許可。此外，本部負責監察政府飛行服務隊的直升機和定翼機運作。

During the year, the safety performance and operating standards of Hong Kong AOC holders were monitored through a comprehensive programme of inspections and audits. In addition to 104 flight operations inspections, the Flight Standards Office had conducted a total of 282 AOC inspections including station inspections, operational records inspections, training inspections and approval of authorised examiners. The 43 flight simulators used by local airlines were evaluated, inspected and re-approved for use in accordance with the annual inspection procedures. The Division was also tasked with the responsibility of monitoring the helicopter and fixed-wing aircraft operations of the Government Flying Service (GFS).



航空器移交

隨着香港航空業持續增長，本地航空公司紛紛擴充機隊。年內，共有19架航空器新增至香港民用航空器登記冊內，詳情如下：

Delivery of Aircraft

As the Hong Kong aviation industry continued to grow, local airlines expanded their fleets and a total of 19 aircraft were added to the Hong Kong Civil Aircraft Register in the period as follows:

國泰航空 CPA	兩架波音B747型貨機和六架波音B777型 Two Boeing B747 freighters and six Boeing B777	個別私人航空器營運者 Private aircraft operators	一架灣流G450型、 四架灣流G550型和 一架Robinson R44型 One Gulfstream G450, four Gulfstream G550, and one Robinson R44
香港航空 CRK	一架波音B737型貨機 One Boeing B737 freighter		
空中快線 HHK	兩架阿古斯塔威斯特蘭AW139型 Two AgustaWestland AW139		
TBJ	一架龐巴迪BD700 型 One Bombardier BD700	政府飛行服務隊 GFS	一架Moravan Z 242 L型 One Moravan Z 242 L

適航事務組

適航事務組繼續監察所有在香港登記飛機的維修和適航標準。適航事務組的適航主任經驗豐富，負責定期審查香港航空公司在本港、內地和海外的飛行站、定期審查認可的維修機構，以及在香港、內地、非洲、亞洲、澳洲、歐洲和北美洲各地城市檢查飛機，以持續監察航空營運許可證、維修機構的認可，以及為在香港登記的飛機簽發或續發適航證。

適航主任繼續接受有關適航事宜的技術培訓和汲取最新的監管策略資訊。此外，適航主任獲派出席國際研討會、會議和工作組會議，以擴闊視野，並提升有關國際適航標準最新發展的專業和技術知識。年內，適航主任出席多個會議或課程，包括：空中巴士、波音和ARJ 21型飛機的合格審定、飛行試驗和維修審查委員會工作組會議；國際民航組織就基於性能的導航、飛行數據和監察外地航空公司等課題舉行的會議/研討會；意外調查會議；以及各種飛機型號的技術課程。

AIRWORTHINESS OFFICE

The Airworthiness Office monitored the maintenance and airworthiness standards of all Hong Kong registered aircraft. With a team of experienced Airworthiness Officers, the Office carried out routine AOC line station audits, approved maintenance organisation audits, and aircraft surveys locally in Hong Kong as well as other cities in the Mainland, Africa, Asia, Australia, Europe and North America, for the purpose of continual monitoring of AOC, approval of maintenance organisation, and the issue and renewal of Certificates of Airworthiness for Hong Kong registered aircraft.

Airworthiness Officers received technical training and regulatory update on airworthiness issues, and attended international seminars, conferences and working group meetings to widen their exposure and update their professional and technical knowledge on the latest development of the international airworthiness standards. In the report period, Airworthiness Officers had attended the Airbus, Boeing and ARJ 21 working group meetings on Certification, Flight Testing and Maintenance Review Board; the ICAO conference/seminar on Performance Based Navigation, Flight Data and Foreign Operator Surveillance; accident investigation conference as well as various aircraft type technical courses.

飛行標準及適航 Flight Standards and Airworthiness

飛機維修

適航事務組繼續透過機庫檢查、公司運作審查及產品審查，定期監察所有香港認可的飛機維修及飛機部件維修公司。截至二零一零年三月三十一日，共有24家公司獲發香港認可維修機構的資格。適航事務組通過持續審查和定期視察，監察多家主要維修公司，包括香港飛機工程有限公司、香港航空發動機維修服務有限公司及廈門太古飛機工程有限公司。

飛機維修訓練

截至二零一零年三月三十一日，在本港和海外共有五家維修訓練機構獲發《香港航空要求—147》許可證，可以舉辦與維修香港登記飛機有關的基本訓練及飛機型號訓練課程。

Aircraft Maintenance

The Airworthiness Office continued to monitor all Hong Kong approved aircraft and aircraft component maintenance companies regularly through hangar surveys, company audits and product audits. As at March 31, 2010, there were 24 approved maintenance organisations holding Hong Kong approvals. Major maintenance companies, including Hong Kong Aircraft Engineering Company Limited (HAECO), Hong Kong Aero Engine Services Limited (HAESL), and Taikoo (Xiamen) Aircraft Engineering Company Limited (TAECO), are regulated through rolling audits and regular visits.

Aircraft Maintenance Training

As at March 31, 2010, there were a total of five HKAR-147 Aircraft Maintenance Training Organisations located in Hong Kong and overseas which were approved to provide basic and aircraft type training for the maintenance of Hong Kong registered aircraft.

適航事務組統計數字 Airworthiness Office Statistics

(二零零九年四月一日至二零一零年三月三十一日) (between April 1, 2009 and March 31, 2010)

簽發適航證	Certificate of Airworthiness Issued	19
續發適航證	Certificate of Airworthiness Renewed	219
審定重大改裝	Major Modification Approved	14
認可飛機維修機構	Approved Aircraft Maintenance Organisations	24
認可飛機維修訓練機構	Approved Aircraft Maintenance Training Organisations	5
認可設計及製造機構	Approved Design and Manufacturing Organisations	4
簽發飛機維修執照	Aircraft Maintenance Licence (AML) Issued	1 667



適航事務組監察所有在香港登記飛機的維修和適航標準。
Airworthiness Office monitors the maintenance and airworthiness standards of all Hong Kong registered aircraft.



飛行標準組人員到訪航空營運許可證持證公司視察機組人員訓練情況。

Staff of Flight Standards Office inspecting flight crew training of AOC holders.

航空人員執照事務組

空勤人員執照

二零零九至一零年度，執照事務組處理了1 948份有關首次簽發空勤人員執照、執照續期、加簽等級、簽發或註銷執照批註的申請，以及執行了2 213次空勤人員執照考試。這些考試中，有1 131次在香港舉行，其餘1 082次則是由本處人員根據《CAD 509》批准在澳洲阿得雷德飛行學校舉行。年內，執照事務組向香港空勤人員執照或航空交通管制執照持有人/申請人簽發共3 646份體檢合格證明書，並處理了73份海外執照轉換香港執照的申請。

PERSONNEL LICENSING OFFICE

Flight Crew Licensing

During 2009-10, Personnel Licensing Office (PELO) processed 1 948 applications for initial licence issue or renewal, inclusion of ratings and addition or removal of endorsements in flight crew licences. Out of a total of 2 213 CAD flight crew licensing written examinations, 1 131 were held locally in Hong Kong while 1 082 overseas examinations were conducted by CAD at Flight Training Adelaide in Australia under CAD 509 Approval. 3 646 Medical Certificates were issued to Hong Kong flight crew licence or air traffic controller's licence holders/applicants. A total of 73 applications for conversion of a foreign flight crew licence into a Hong Kong licence were handled by PELO.

執照事務組負責處理空勤人員執照的申請。
Personnel Licensing Office handles applications for flight crew licences.



飛行標準及適航 Flight Standards and Airworthiness

飛機維修執照

截至二零一零年三月三十一日，航空人員執照事務組簽發的有效飛機維修執照共992個。年內，該組在民航處以及透過香港飛機工程有限公司設於將軍澳的電腦化考試系統，舉辦了涉及共5 857份試卷的考試。

飛行安全組

安全管理系統

為確保香港航空營運許可證持證公司和飛機維修機構建立有效的安全管理系統，飛行標準及適航部獲分配資源，在二零零九年十月成立飛行安全組。除了有系統地持續監督業界實施的安全管理系統外，飛行安全組亦致力加強監察航空營運許可證持證公司的風險管理能力，以便更有效地調配巡查工作的資源。

安全數據分析

本部根據航空公司和維修機構的事故報告，收集安全數據進行分析，藉此預防飛機意外和事故發生。

Aircraft Maintenance Licensing

As at March 31, 2010, the number of valid AML issued was 992. During the report period, a total of 5 857 examinations were conducted at the CAD and the delegated examination centre, using paperless computerised examination system, at HAECO in Tseung Kwan O.

FLIGHT SAFETY OFFICE

Safety Management System

To ensure implementation of a robust Safety Management System (SMS) by Hong Kong AOC holders and aircraft maintenance organisations, dedicated resources had been allocated to establish the new Flight Safety Office in October 2009. Apart from maintaining a continuous and systematic oversight of the SMS in the industry, the new office also supported the strengthening of risk management approach on the surveillance of AOC holders with a view to allocating the inspectorate resources in a more efficient manner.

Safety Data Analysis

Through the reporting of incidents by airline operators and maintenance organisations, safety data collated from the reports were analysed for the purpose of prevention of accident and incident.



空勤人員執照考試場地。
Venue for conducting flight crew licensing written exam.



年內，飛行標準組執行了104次飛行檢查。
During the year, the Flight Standards Office conducted 104 flight operations inspections.

協調本地空域使用者

為促進航空安全，香港非控制區飛行安全小組繼續定期召開會議，協調香港空域使用者之間的安全事宜。這些本地空域使用者包括定翼機機構和旋翼機機構(政府飛行服務隊、中國人民解放軍駐香港部隊(駐港部隊)、空中快線、直升機服務(香港)有限公司和香港飛行總會)、香港滑翔傘協會，以及個別私人航空器擁有人。

考慮到石崗機場是現時香港唯一可供輕型飛機運作的機場，駐港部隊暫時批准香港飛行總會於週末繼續在該機場進行康樂性質的定翼機和旋翼機飛行活動和訓練。駐港部隊亦允許政府飛行服務隊在該機場進行直升機飛行員訓練。為確保飛行安全，所有使用石崗機場的機構均須與駐港部隊保持緊密聯繫和協調在該機場進行的活動。香港非控制區飛行安全小組在有需要時會參與協調工作。

COORDINATION WITH LOCAL AIRSPACE USERS

To promote flight safety, the Hong Kong Sector Flight Safety Committee comprising local airspace users continued to meet regularly to discuss issues to enhance safety and coordination in the local airspace. These local airspace users include fixed-wing operators and rotary wing operators (GFS, the Hong Kong Garrison of the People's Liberation Army (PLA), HHK, HEL and the Hong Kong Aviation Club (HKAC)) as well as the Hong Kong Paragliding Association and private aircraft owners.

With Shek Kong airfield the only aerodrome available in Hong Kong for light aircraft operations, PLA continued to give temporary permission to HKAC to operate its recreational fixed-wing and rotary wing aircraft flying and training at the airfield during weekends. GFS was also allowed by PLA to conduct training for its helicopter pilots at the airfield. To ensure flight safety, all these Shek Kong airfield users maintained close liaison and coordination with PLA for their operations at the airfield. The Hong Kong Sector Flight Safety Committee assisted in the coordination if required.



民航處人員進行航機檢查。
CAD officers conducting aircraft inspection.



民航處人員巡查直升機營運及機師執照。
CAD officers inspecting helicopter operations and pilot licence.

飛行標準及適航 Flight Standards and Airworthiness

飛機登記

年內共有19架航空器新增至香港民用航空器登記冊內，同期亦有一架空中巴士A320型、兩架空中巴士A330型、五架空中巴士A340型、一架波音B737型、十架波音B747型、一架Robinson R22型和兩架西科斯基S76型飛機被取消有關登記。截至二零一零年三月三十一日，香港民用航空器登記冊內共有220架民用航空器，當中189架由香港航空營運許可證持證公司和政府飛行服務隊所擁有，詳情如下：

AIRCRAFT REGISTER

During the year, a total of 19 aircraft were put on the Hong Kong Civil Aircraft Register. In the same period, one Airbus A320, two Airbus A330, five Airbus A340, one Boeing B737, ten Boeing B747, one Robinson R22 and two Sikorsky S76 aircraft were removed from the Register. As at March 31, 2010, the total number of civil aircraft in the Hong Kong Civil Aircraft Register was 220. Of which 189 were registered under Hong Kong AOC holders and GFS as follows:

型號 Aircraft Type	數目 Number
空中巴士A300型 Airbus A300	8
空中巴士A320型 Airbus A320	9
空中巴士A321型 Airbus A321	6
空中巴士A330型 Airbus A330	46
空中巴士A340型 Airbus A340	11
BAE 4100 BAE 4100	2
波音B737型 Boeing B737	8
波音B747型 Boeing B747	44
波音B777型 Boeing B777	33
龐巴迪BD700型 Bombardier BD700	2
灣流G200型 Gulfstream G200	4
Moravan Z 242 L型 Moravan Z 242 L	1
直升機 Helicopters	15

截至二零一零年三月三十一日，香港民用航空器登記冊內共有220架民用航空器。

As at March 31, 2010, the total number of civil aircraft in the Hong Kong Civil Aircraft Register was 220.





民航航處人員檢查本港航空公司所採用的飛行模擬機。
CAD officers inspecting flight simulators used by local airlines.



意外調查

香港旋達有限公司Robinson R22型直升機

二零零九年五月一日，一架屬香港旋達有限公司的Robinson R22型直升機(登記標誌B-LAT)進場降落位於啟德的香港飛行總會時發生意外。直升機損毀，機上兩名乘客和地面有一人受傷。飛機意外調查初步報告已在二零零九年六月公布，調查工作仍在進行。

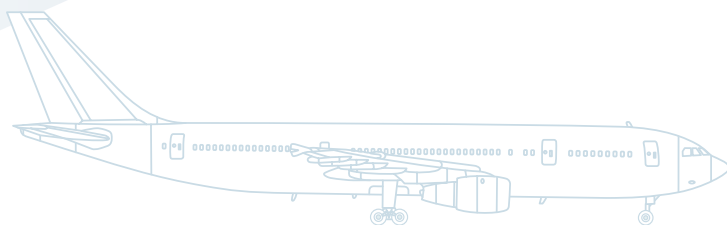
ACCIDENT INVESTIGATION

Hong Kong Rotor Company Limited Robinson R22 Helicopter

On May 1, 2009, a Robinson R22 helicopter of Hong Kong Rotor Company Limited with registration B-LAT had an accident during its approach to the Hong Kong Aviation Club at Kai Tak. The helicopter was damaged. Two persons on board the helicopter and one person on the ground were injured. The Accident Bulletin was published in June 2009. The investigation is on-going.

機場安全標準

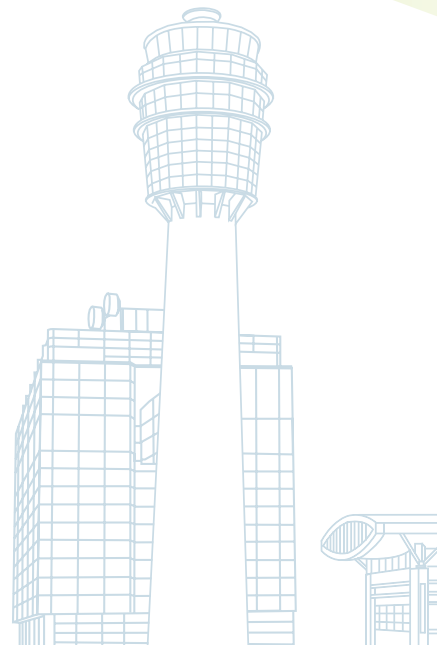
Airport Standards





機場安全標準部負責監管機場安全、航空保安、障礙物管制及空運危險品的工作。透過一個由本部執行的發牌程序，香港機場管理局(機管局)獲授權營運香港國際機場。本部亦負責監察直升機場的安全及保安水平，並肩負協調機場簡化手續的任務。

The Airport Standards Division is responsible for the regulatory functions in respect of airport safety, aviation security, control of obstructions and the safe transport of dangerous goods by air. The Airport Authority Hong Kong (AAHK) is authorised to operate the HKIA through a licensing mechanism administered by the Division. The Division also monitors the safety and security of heliport operations and assumes the role in coordinating airport facilitation.



機場安全標準 Airport Standards

機場安全

簽發機場牌照

機場安全標準部繼續執行對機管局的安全監督，確保該局的表現符合《機場牌照發牌規定文件》的規定。本部根據國際民航組織的最新要求定期更新規定文件，並在年內對規定文件作出兩次修訂。

為確保香港國際機場持續符合機場牌照發牌規定，本部在年內進行14次審計和執行130次巡察，範圍包括飛行區內的臨時及定期維修工程、機場地面狀況、目視助航設備、飛行區內飛機運作所需設施、機管局與地勤服務公司為飛機提供的地面支援服務、安全管理系統的實施、緊急應變計劃，以及機場救援及滅火服務。

為確保香港國際機場在各層面運作皆符合機場牌照既定要求，本部參與機管局對機場特許經營公司進行的審計，並監察機管局對飛機地面事故的調查工作，確保採取適當改善措施，以防同類事故再發生。

年內，機管局進行多項維修及提升工程，以提高機場運作的安全和效率，其中包括四條主要滑行道的新鋪工程。有關工程在二零零九年九月展開，預計在二零一零年七月完竣。

為準備全新的B747-8型貨機在香港國際機場運作，機管局在貨運停機坪一條主要滑行道進行提升工程。工程範圍包括重劃地面標誌，以及遷移相關的航空地面燈。工程在二零零九年十二月展開，在二零一零年三月完竣。

AIRPORT SAFETY

Aerodrome Licensing

The Division continued to exercise safety oversight on the performance of the AAHK to ensure compliance with the aerodrome licensing requirements stipulated in the Aerodrome Licensing Requirements Document. The document was regularly updated by the Division to incorporate the latest ICAO requirements and two amendments were made during the year for such purpose.

To ensure the HKIA's continued compliance with the aerodrome licensing requirements, the Division carried out 14 audits and 130 inspections during the year covering both ad hoc and scheduled airside maintenance works, the condition of airfield pavements, visual aids, airside facilities required for aircraft operations, aircraft ground operations provided by AAHK and relevant ground handling agents, the implementation of Safety Management System (SMS), emergency planning as well as airport rescue and fire fighting services.

To ascertain compliance of the HKIA with the licensing requirements at all levels, the Division also participated in the airfield franchisee audits carried out by the AAHK and exercised oversight on the investigation of aircraft ground incidents conducted by the AAHK to ensure that appropriate remedial measures were taken to prevent recurrence.

To enhance the safety and efficiency of airport operations, various maintenance and upgrading works were undertaken by the AAHK during the year. Such works included the pavement resurfacing project at four major taxiways which commenced in September 2009 and was scheduled for completion by July 2010.

To prepare for the anticipated operation of the new B747-8 freighters at the HKIA, taxiway upgrading works were carried out by the AAHK at the cargo apron. Such works involved the relocation of ground markings and aeronautical ground lights along a major taxiway in the cargo apron. The project commenced in December 2009 and was completed in March 2010.

年內，在二零零九年三月展開的南跑道及相關滑行道地面燈號系統改善工程繼續進行。民航處與機管局進行多次協調會議和定期巡察，藉此密切監察工程進度。整項工程預計在二零一零年五月完竣。

本年度另一項重要的發展是北衛星客運廊的啟用。新客運廊的建造工程在二零零七年三月展開，在二零零九年十二月完竣。工程涉及將六個可供B747型飛機停泊的遠方停機位，改建成一個客運大樓連十個附設登機橋的中小型廊前停機位。機場安全標準部一直密切監察整項工程，除確保施工期間對機場運作的影響減至最低外，亦確保新設施落成後完全符合機場牌照發牌規定。新設施在二零一零年一月啟用後，本部繼續與機管局緊密合作，藉以簡化運作程序，以及提高停機坪營運者的安全意識。

在機場的未來發展方面，本部聯同航空交通管理部參與與機管局主持的委員會或工作小組，就機場中場範圍基建的未來發展、第三條跑道研究和機場2030規劃大綱研究提出意見，以確保這些項目完成後，飛行區的運作繼續保持暢順。本部亦就機管局改善飛行區運作的新措施(例如擴大停機坪安全審查範圍)提出意見。

The enhancement works on the Airfield Ground Lighting (AGL) System for the South Runway and associated taxiways, which commenced in March 2009, continued during the year. The project was closely monitored by the Division through coordination meetings between the CAD and the AAHK as well as through regular inspections. The whole project was expected to be completed by May 2010.

Another major development during the year was the commissioning of the new North Satellite Concourse. Construction works for the Concourse, which involved the conversion of six remote stands that could accommodate up to B747 aircraft into a passenger terminal with ten frontal stands for medium to small sized aircraft served by airbridges, commenced in March 2007 and was completed in December 2009. The Division closely monitored the implementation of this project to ensure that the new facility would be completed with full compliance to the licensing requirements while disruptions to normal airport operations were kept to a minimum during the construction. Following the commissioning and full operation of the new facility in January 2010, the Division continued to work closely with the AAHK to streamline operation and to enhance the safety awareness of the ramp operators.

To ensure smooth aircraft operation for the future airport developments, the Division in collaboration with the Air Traffic Management Division participated in various committees or working groups convened by the AAHK to provide inputs and comments on the future airfield infrastructure development at the mid-field area, the study on the third runway for the HKIA and the Airport Master Plan 2030 study. The Division also provided inputs to the AAHK on their new initiatives to improve airfield operations such as the enhancement of the works scope of AAHK's ramp safety audits.



本部同事在北客運廊進行視察。
Divisional colleagues conducting a site inspection of the North Satellite Concourse.



主要滑行道刨鋪工程。
Major Taxiways Resurfacing Works.

機場安全標準 Airport Standards

二零零九年十一月二十日，機管局舉行大型飛機意外救援演習，以測試意外後進行緊急疏散時，各參與單位的緊急應變計劃是否足夠，以及各方之間的協調。是次演習在機場飛行區西面進行，參與單位包括政府部門、機管局、航空公司和其他機場營運者，動員超過1 200人。

除執行安全監督外，本部亦積極舉辦多個地區研討會和培訓課程，務求讓業界掌握最新的技術知識，與區內其他民航當局交流經驗。本部在二零零九年十一月二日為本地同業舉辦有關機場安全管理系統的培訓課程，有約40人參加。隨後在十一月三至五日，與國際民航組織亞太區辦事處合辦機場發牌地區研討會，有100多名本地及海外同業參加。兩項活動均得到業界鼎力支持，取得豐碩成果。

安全監察

直升機場的運作及發展

本部繼續監察供本地航班使用的直升機場的運作安全，同時就香港會議展覽中心擬建的區內直升機場的規劃和設計，以及跨境直升機場的發展，提出意見。

On November 20, 2009, the AAHK conducted a full-scale aircraft crash exercise to test the adequacy of their emergency plan and the coordination of the participating agencies in the event of evacuation during aircraft accidents. The exercise was conducted at the western airfield of the HKIA. More than 1 200 participants from various organisations including government departments, AAHK, airlines and other airport operating parties took part in this exercise.

In addition to the safety oversight duties, the Division also took a proactive role in organising regional seminars and training courses for the purposes of updating the technical knowledge of the industry and sharing experiences with other civil aviation authorities in the region. On November 2, 2009, a training course on Aerodrome SMS was organised by the Division in which 40 participants attended. On November 3-5, 2009, the Division in conjunction with the ICAO Asia and Pacific Regional Office organised a regional seminar on Aerodrome Certification and attended by over 100 local and overseas participants. Both events were proved to be highly successful.

SAFETY REGULATION

Heliport Operations and Development

The Division continued to monitor the safety of domestic heliport operations and to provide advice on the planning and design of the proposed domestic heliport at the Hong Kong Convention and Exhibition Centre as well as advice on the development of cross-boundary heliports.

本處發出機場高度限制臨時豁免以方便建築工程進行。

A Temporary Exemption from the Airport Height Restrictions was granted to facilitate construction works.





管制障礙物

本部就建築和發展計劃及可行性研究進行審核，並提供意見，確保符合機場高度限制及其他航空安全要求。當中，在香港國際機場範圍以外的主要項目包括港珠澳大橋香港口岸、港珠澳大橋香港接線、數碼地面電視計劃、屯門至赤鱗角連接路、青衣至大嶼山連接路、位於果洲群島海面及南丫島以西海面的風力發電場、十號貨櫃碼頭發展計劃及廣深港高速鐵路。而在香港國際機場範圍內的主要項目包括香港飛機工程有限公司機庫擴建、國泰空運貨站、北衛星客運廊和民航處新總部大樓。

隨着數碼地面電視計劃位於青山和飛鵝山的數碼電視發射站建造工程竣工，本處在十一月進行飛行測試。測試結果確定發射站的天線和構築物對飛機導航儀器沒有影響。由於測試結果令人滿意，本部遂向發展局局長建議就這兩個發射站批出機場高度限制永久豁免。

為確保航空安全不受影響，本部繼續監察各雷射激光、探射燈及煙花表演，包括「幻彩詠香江」燈光匯演、國慶及新年煙花匯演，以及大廈外牆的燈光，尤其有照明的廣告招牌，並提供意見。

年內，本部共批准60宗機場高度限制臨時豁免的申請，以方便有關建築工程進行，以及在機場島附近的海事運作。

在海事處通力協助下，本部防止船隻駛進機場島附近的海上限制區，以保障航機及無線電導航儀器的運作。年內，海事處共提出九宗非法闖入限制區的檢控。

Control of Obstructions

The Division assessed and provided advice to various building and development projects and feasibility studies to ensure compliance with the Airport Height Restrictions (AHR) and other applicable aviation safety requirements. The major projects and studies outside the HKIA assessed included the Hong Kong-Zhuhai-Macao Bridge – Boundary Crossing Facilities, Hong Kong-Zhuhai-Macao Bridge – Hong Kong Link Road, the Digital Terrestrial Television Project, the Tuen Mun-Chek Lap Kok Link, the Tsing Yi-Lantau Link, the wind farms at the Ninepins and the waters west of Lamma Island, the Container Terminal 10 Development Project and the Guangzhou-Shenzhen-Hong Kong Express Rail Link. The major projects within the HKIA assessed included the HAECO hangar expansion, Cathay Pacific Cargo Terminal, North Satellite Concourse and the new CAD Headquarters Building.

Following the completion of the construction work of the new transmitter stations at Castle Peak and Kowloon Peak under the Digital Terrestrial Television Project, a flight check was conducted in November which confirmed that the antennae and structures at both stations had no adverse effect on aircraft navigational aids. With satisfactory result of the confirmation flight check, the Division recommended to the Secretary for Development for the issue of a permanent exemption from the AHR for these stations.

To ensure that aviation safety would not be compromised, the Division continued to monitor and provided advice on the use of laser, search lights and fireworks displays at different shows such as the “Symphony of Lights” show, and the National Day and New Year Fireworks Displays, and other lighting displays at building façades, especially illuminated advertisement signs.

This year, the Division issued 60 temporary AHR exemptions to facilitate construction works in the territory and vessel operations in the vicinity of the airport island.

With the assistance of the Marine Department, the Division continued to ensure the integrity of the Marine Exclusion Zones (MEZs) established in the vicinity of the airport island to safeguard the operation of aircraft and radio navigational aids. During the year, nine prosecutions against illegal entry into the MEZs were instituted by the Marine Department.

機場安全標準 Airport Standards

飛行康樂活動

本部繼續規管飛行康樂活動，包括滑翔傘、氣球、風箏及模型飛機等活動，確保上述活動在符合飛行安全法例的情況下進行，並且不會影響飛機的運作。

飛行禁區

民航處根據<<飛航(飛行禁制)>>令訂立飛行禁區，避免香港迪士尼樂園受到滋擾。本處在年內批出一宗豁免，讓必須在飛行禁區內進行的直升機空中吊運工程得以進行。

運載危險物品

本部的危險品事務組繼續根據國際民航組織和本地法例的規定，監管空運危險品。航空公司必須符合該組訂定的安全標準，才能獲發許可證，運載危險品進出或飛越香港。此外，該組定期和突擊巡查空運貨站、貨運代理人及付運人，藉此持續監察托運危險品的安全水平。年內，本處共處理13宗簽發空運危險品許可證申請，26宗許可證續期申請。截至二零一零年三月底，共有76家航空公司獲准運載危險品進出或飛越香港。

Recreational Aviation Activities

The Division continued to monitor the safety of recreational aviation activities, including paragliding, balloon flights, kite flying and model aircraft flying to ensure that these activities were conducted in compliance with the applicable aviation safety regulations and would not affect civil aircraft operations.

Flight Prohibition Area

A Flight Prohibition Area has been established under the Air Navigation (Flight Prohibition) Order for the purpose of avoiding disturbance to the Hong Kong Disneyland. One exemption was granted to facilitate essential helicopter aerial lifting works to/from the area during the year.

CARRIAGE OF DANGEROUS GOODS

The Dangerous Goods Office of the Division continued to enforce the ICAO and legal requirements on the safe transport of dangerous goods by air. Through a dangerous goods permission system, airlines must satisfy all pertinent safety requirements before they can carry dangerous goods to, from or over Hong Kong. In addition, the Dangerous Goods Office has been monitoring the safety standards of dangerous goods operations at the air cargo terminals, air freight forwarders and air cargo shippers by regular and ad hoc inspections. During the year, 13 new and 26 renewal applications for dangerous goods permissions were processed. At the end of March 2010, a total of 76 airlines were permitted to carry dangerous goods onboard their aircraft flying to, from or over Hong Kong.



民航處安全主任於香港生產力促進局講解危險品空運安全。
A CAD Safety Officer giving a presentation on the safe transport of dangerous goods by air at the Hong Kong Productivity Council.

發布安全要求

危險品事務組繼續透過教育和宣傳活動發布安全要求，提高安全空運危險品的意識。年內，該組為航空業界、政府部門和付運人舉行六場簡報會，以加強各方對危險品的認識，提供國際民航組織最新規定的資料。鑑於隱藏危險品事故有上升趨勢，該組在諮詢業界後發出危險品通告，提醒業界在驗收貨物時加倍小心，並向航空公司、貨運站營運商及貨運物流業界派發新設計的危險品認知海報，協助他們辨認隱藏危險品。



Promulgation of Safety Requirements

The Dangerous Goods Office continued to promulgate safety requirements and promote the safe transport of dangerous goods by air through education and publicity. During the year, six briefings were given to the aviation industry, government department and shippers to promote dangerous goods awareness and provide updates on the latest requirements of the ICAO. In view of the increasing trend of hidden dangerous goods occurrences, the Dangerous Goods Office, after consulting the industry, issued a Dangerous Goods Advisory Circular to remind the industry to exercise extra caution in cargo acceptance. A new Dangerous Goods Awareness Poster was also distributed to airlines, cargo terminal operators and the freight forwarding industry to assist them in the identification of hidden dangerous goods.

新設計的危險品認知海報。

The new Dangerous Goods Awareness Poster.

法例

為使本地兩套相關法例與國際民航組織最新的安全空運危險品規定一致，本處年內進行修例，經修訂的法例在二零一零年一月一日生效。

《危險品(航空托運)(安全)規例》所訂的貨運代理人最新培訓要求在二零零九年七月一日生效，危險品事務組為監察相關要求，年內展開兩輪貨運代理人培訓調查，以確保所有貨運代理人的員工(不論是否直接處理危險品)，均已接受與其職責相符的危險品培訓。

Legislation

During the year, an amendment exercise was conducted to align the two sets of local legislation with the latest requirements of the ICAO for the safe transport of dangerous goods by air. The amendments came into effect on January 1, 2010.

To monitor the new training requirements for freight forwarders under the Dangerous Goods (Consignment by Air) (Safety) Regulations which came into effect on July 1, 2009, the Dangerous Goods Office conducted two rounds of surveys on the training implementation status of the freight forwarders to ensure that staff of freight forwarders, regardless of whether they are involved in the direct processing of dangerous goods, had received dangerous goods training commensurate with their roles and responsibilities.

機場安全標準 Airport Standards



危險品事務組主任以中國代表顧問身分到新西蘭參加國際民航組織危險品專家小組會議。

A Dangerous Goods Officer attending an ICAO Dangerous Goods Panel Working Group meeting in New Zealand.

與國際民航組織和外地航空當局聯繫

為了解危險品要求的最新發展，危險品事務組定期派員參加國際會議和工作坊。年內，該組人員以中國代表團顧問身分，在二零零九年五月到新西蘭參加國際民航組織危險品專家組工作組會議，然後在十月到加拿大參加危險品專家組會議。此外，危險品事務組與澳洲、加拿大、英國、美國及內地的民航當局保持定期聯絡，分享經驗和資訊。

危險品事故

年內發生的危險品事故，主要涉及未經申報的危險品。為免類似事件重演，危險品事務組對所有事故展開調查，並將有用的調查結果向本地航空貨運公司和外國航空當局發布。

航空保安

加強保安措施

自二零零九年十二月二十五日西北航空公司編號253由阿姆斯特丹飛底特律的航機發生企圖恐怖襲擊事件後，美國國土安全全部隨即加強飛往美國客機的保安檢查。為

Liaison with ICAO and Overseas Authorities

The Dangerous Goods Office regularly participated in dangerous goods conferences and workshops to keep track of the international developments. During the year, staff of the Dangerous Goods Office joined the Chinese Delegation, in the capacity of advisors, to attend the ICAO's Dangerous Goods Panel Working Group Meeting held in New Zealand in May 2009 and the Dangerous Goods Panel Meeting held in Canada in October 2009. The Dangerous Goods Office also maintained regular contacts with other civil aviation authorities in Australia, Canada, United Kingdom, United States of America and the Mainland for experience and information sharing.

Dangerous Goods Incidents

The incidents occurred this year were mainly related to undeclared dangerous goods. The Dangerous Goods Office launched investigations into all these incidents with an aim to prevent recurrence. Useful findings were disseminated to local air cargo operators and foreign aviation authorities.

AVIATION SECURITY

Enhanced Security Measures

Since the attempted terrorist attack on the Northwest Airlines flight 253 from Amsterdam to Detroit on December 25, 2009, the US Department of Homeland Security initiated enhanced security measures on all passenger flights bound for destinations in the United States. In response to this,



本部確保機場營運者符合香港航空保安計劃的規定。

The Division ensures the operators of HKIA complied with the requirements in the Hong Kong Aviation Security Programme.

與美國配合，民航處和航空公司制訂相應措施，加強航空公司香港國際機場對飛往美國航機的保安檢查。

為了加強確認在香港國際機場托運的寄艙行李屬於登機的離境旅客，由二零一零年一月二日起，所有經營客運服務的航空公司，必須在旅客登機前核實他們的身分，確保他們就是托運寄艙行李的旅客。

對香港國際機場營運者的保安監察

透過審計及檢查，機場安全標準部確保機管局及香港國際機場營運者，包括租戶禁區營運者、航空公司和航機膳食及物品供應商，符合香港航空保安計劃的規定。

年內，本部根據《航空保安條例》審批八個禁區指定。三個禁區指定主要配合一號客運大樓禁區內的政府部門辦公室、北面離境大堂和寄艙行李篩查室的重新配置工程，另外五個禁區指定是配合亞洲空運中心有限公司、中國飛機服務有限公司、香港空運貨站有限公司、香港飛機工程有限公司和香港商用航空中心有限公司的租戶禁區重新配置工程。本部人員在禁區指定生效前進行視察，確保有足夠的保障措施管制禁區進出。

CAD worked with aircraft operators to facilitate their implementation of enhanced security measures for all passenger flights bound for the United States at the HKIA.

With a view to enhancing the reconciliation of departing passengers and their checked-in hold baggage, with effect from January 2, 2010, all aircraft operators operating passenger services at the HKIA are required to verify the identities of passengers boarding the aircraft to ensure that they are the same persons who have checked-in the hold baggage.

Security Oversight of Operators at HKIA

The Division ensured that AAHK and the operators at the HKIA, including the tenant restricted area operators, aircraft operators and aircraft catering and stores supplies operators, complied with the requirements in the Hong Kong Aviation Security Programme through audits and inspections.

During the year, the Division approved eight designations of restricted area under the Aviation Security Ordinance. Three designations were made to cater for the reconfigurations of Government agencies' offices, North Departure Hall and Hold Baggage Screening Room located within the airport restricted area of Passenger Terminal 1. The other five designations were made for the reconfigurations at tenant restricted areas of Asia Airfreight Terminal Company Limited (AAT), China Aircraft Services Limited (CASL), Hong Kong Air Cargo Terminals Limited (Hactl), Hong Kong Aircraft Engineering Company Limited (HAECO) and Hong Kong Business Aviation Centre Limited (HKBAC). Officers of the Division conducted inspections prior to the commencement of the operations of the designations to ensure that sufficient protection was provided for controlling access to the restricted areas.

機場安全標準 Airport Standards



民航處在香港主辦國際民航組織亞洲太平洋區互助航空保安計劃第六次主導委員會會議。
 CAD hosted the Sixth Steering Committee Meeting of the ICAO Cooperative Aviation Security Programme – Asia Pacific in Hong Kong.

空運貨物保安

自二零零零年三月，香港實行管制代理人制度，以符合國際民航組織的空運貨物保安標準。在此制度下，每一個向民航處登記為管制代理人的貨運代理，必須為空運貨物提供保安管制措施，以及檢查指定類別的貨物。機場安全標準部持續檢查已登記的管制代理人，確保他們遵守規定。管制代理人數目不斷增長，截至二零一零年三月三十一日，共有1 404 個管制代理人在本處登記冊內。

為完善管制代理人制度，本部與空運業界組成工作小組，研究措施加強供應鏈的保安。

難受管束乘客

為針對在民航機上難受管束或擾亂秩序的乘客的行為，香港在二零零五年制訂《航空保安(修訂)條例》，對上述行為施加刑事制裁。在報告期內，根據本條例成功提出檢控的個案共九宗。

Air Cargo Security

Hong Kong has implemented a Regulated Agent Regime (RAR) since March 2000 to comply with the ICAO cargo security standards. Under the RAR, a cargo agent registered as a Regulated Agent with the Department is required to provide security control measures on consignments of air cargo and apply screening on prescribed sources of air cargo. The Division continued to monitor the compliance of the Regulated Agents with the requirements of the RAR through inspections. The number of Regulated Agents has grown steadily and as of March 31, 2010, there were 1 404 Regulated Agents registered with the Department.

With a view to enhancing the RAR, the Division set up a working group which comprised representatives of the air cargo industry to identify measures for securing the supply chain.

Unruly Passengers

To fight against unruly or disruptive behaviour committed on board civil aircraft by passengers, the Aviation Security (Amendment) Ordinance was enacted in 2005 to impose penalties on such offences. During the reporting period, there were nine cases of successful prosecutions under the Ordinance.

簡化手續

機場安全標準部透過參與機場簡化手續委員會，監察《國際民用航空公約》附件9(簡化手續)所訂的標準及建議守則在香港國際機場實施的情況。在報告期內，本部向香港登記航空公司的機組人員發出546張空勤人員證書。

國際事務

國際民航組織亞洲太平洋區互助航空保安計劃

香港自二零零四年起參加國際民航組織亞洲太平洋區互助航空保安計劃。計劃成立的目的，是協助參與計劃成員符合《國際民用航空公約》附件9及附件17所訂的航空保安標準及建議守則，並加強他們的航空保安能力。二零零九年四月，香港接任第六次主導委員會會議主席一職，在香港主辦會議和航空保安研討會。

亞太經濟合作組織

機場安全標準部自二零零零年起代表中國香港參與亞太經濟合作組織運輸工作組航空保安小組。成立航空保安小組的目的，是提高各成員國的航空保安水平。二零零九年七月，本部委派一名代表出席在新加坡舉行的會議。

Facilitation

Through the participation in the Airport Facilitation Committee, the Division monitored the implementation of the Standards and Recommended Practices of the ICAO Annex 9 on Facilitation at the HKIA. During the reporting period, 546 Crew Member Certificates were issued to the crew members of Hong Kong registered aircraft operators.

INTERNATIONAL ACTIVITIES

ICAO Cooperative Aviation Security Programme – Asia Pacific (CASP-AP)

Since 2004, Hong Kong has joined the ICAO CASP-AP which was established by the ICAO. The ICAO CASP-AP aims at assisting States and administrations in the Asia Pacific Region to comply with the ICAO Standards and Recommended Practices for aviation security in Annexes 9 and 17, and enhance their aviation security capabilities. Hong Kong has taken over the Chairmanship of the Sixth Steering Committee Meeting of the Programme, hosted the Meeting and conducted an Aviation Security Seminar in Hong Kong in April 2009.

Asia Pacific Economic Cooperation (APEC)

Since 2000, the Division has represented Hong Kong, China to participate in the Aviation Security Sub-Group (ASG) of the APEC Transportation Working Group which was established with the objective of enhancing the security standards of member economies. An officer from the Division attended the ASG meeting held in Singapore in July 2009.



與國際民航組織亞太辦公室合辦的機場發牌標準的研討會。

ICAO Regional Seminar on Aerodrome Certification organised in conjunction with the ICAO Asia and Pacific Regional Office.

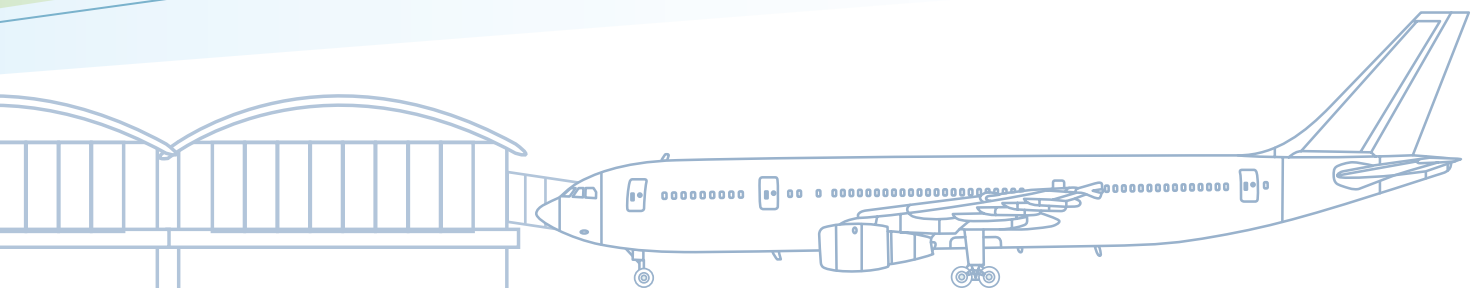
航班事務

Air Services

航班事務部由兩個分組組成，分別是航班事務組和技術行政組。

The Air Services Division is composed of two sections: the Air Services Section and the Technical Administration Section.





航班事務 Air Services

航班事務組負責監察航空公司是否遵守規管定期航班服務的民用航空運輸安排，以及監管不定期航班服務。該組並為運輸及房屋局提供資料，在民用航空運輸談判時參考，以及供空運牌照局考慮本地航空公司的空運牌照申請之用。此外，該組負責檢討民航法例和提出修訂建議，以及與國際組織，特別是國際民航組織和亞太經濟合作組織商討航空事務和活動。

技術行政組則負責制訂和實行噪音消減措施，並監察來往香港國際機場航機的飛行路線，以減低飛機噪音對社區的影響，同時也負責提供航空交通統計數字、統籌部門的工程項目、研究直升機服務需求、促進直升機場的發展，並協調航班時間、分配飛機升降時段及監察航空公司航班升降的正點率。

The Air Services Section monitors compliance by airlines with the air services arrangements which govern scheduled air services and regulates non-scheduled air services. It provides information to the Transport and Housing Bureau for air services negotiations and to the Air Transport Licensing Authority for consideration of licence applications by local airlines. It also reviews and proposes changes to civil aviation legislation and liaises with other international organisations, particularly the ICAO and the APEC on aviation related matters and activities.

The Technical Administration Section is responsible for developing and implementing noise mitigating measures and monitoring flight tracks of aircraft operating to and from the HKIA with a view to minimising the impact of aircraft noise on the local community. It also provides air traffic statistics, coordinates building projects for the Department, assesses the demand for helicopter services and facilitates the development of heliports. In addition, the Section coordinates airlines' schedules, allocates runway slots and monitors time-keeping performance of airlines.

本地航空公司調整服務以配合市場需求。

Local carriers adjusted their services to align with the market demand.



航空交通量在二零一零年開始復甦。
Air traffic saw recovery in 2010.



航空服務

航空交通量增長

雖然航空交通在二零零九年仍然受到環球金融危機的持續影響，航空交通量在二零一零年開始復甦。二零零九至一零年度，香港國際機場的貨運量尤其顯著回升，而客運量及飛機升降量仍然較去年同期為少。貨運量錄得增長，主要由於去年同期基數偏低，以及二零零九至一零年度最後一季的貨運需求激增。貨運量增加4%至360萬公噸。客運量則為4 580萬人次，下跌1%。飛機升降量減少5%至280 218架次。

本地航空公司的服務

年內，國泰航空公司(國泰)繼續接收新的長途客機和貨機，但亦同時停用部份較舊飛機。國泰先後在二零零九年十月和二零一零年三月開辦往返吉達和米蘭的定期客運航班。二零零九年十二月，該公司亦透過與太平洋航空的共用代碼安排，開辦往返南太平洋斐濟納迪的定期客運航班服務。

AIR SERVICES

Air Traffic Growth

Air traffic saw recovery in 2010 despite the continued effect of the global financial crisis felt throughout 2009. The cargo traffic upturn was particularly remarkable and recorded an increase at the Hong Kong International Airport in 2009/10 whereas the passenger traffic and aircraft movements continued to record a year-on-year decrease. The increase in cargo traffic was mainly because of last year's low base and a surge of freight demand in the last quarter of 2009/10. The air cargo throughput increased by 4 per cent to 3.6 million tonnes. The passenger throughput continued to drop by 1 per cent. A total of 45.8 million passengers were handled. Aircraft movements dropped by 5 per cent to a total of 280 218.

Services by Local Carriers

During the year, Cathay Pacific Airways (CPA) continued to take delivery of long haul passenger aircraft and freighters but at the same time retired some of its older aircraft. CPA launched new scheduled passenger services to Jeddah and Milan in October 2009 and March 2010 respectively. In December 2009, it also entered into code sharing arrangements with Air Pacific for scheduled passenger services to the South Pacific destination Nadi, Fiji.



航班事務 Air Services

截至二零一零年三月底，國泰提供往返香港的定期航班服務遍及59個目的地。年內，該公司的機隊數目由125架輕微增至126架，包括31架空中巴士A330-300型、15架空中巴士A340-300型、22架波音B747-400型、33架波音B777型客機(其中包括16架波音B777-300ER型長途客機)，以及25架波音B747-400型貨機。

港龍航空公司(港龍)在年內調整載運量以配合市場需求，並先後停辦往返大連、福岡、桂林、瀋陽和西安的定期客運航班。另一方面，該公司在二零零九年九月開辦往返廣州的定期客運航班服務。

截至二零一零年三月底，港龍定期航班服務遍及26個目的地，包括15個內地城市。該公司的機隊數目為29架，計有九架空中巴士A320-200型、六架空中巴士A321-200型和14架空中巴士A330-300型客機。

香港華民航空有限公司(華民)集中發展亞洲業務。截至二零一零年三月底，華民以八架空中巴士A300-600GF型貨機，經營往返亞洲11個目的地的定期航班服務。

香港航空有限公司(香港航空)接收第一架貨機，並在二零一零年一月開辦往返杭州和胡志明市的定期貨運航班。至於定期客運航班服務方面，香港航空於年內先後停飛往返長沙、布吉和廈門的航線，但在年內把三亞納入航線網絡。截至二零一零年三月底，香港航空的機隊包括兩架波音B737-800型客機和一架波音B737型貨機，經營往返七個目的地的定期航班服務。

香港快運航空有限公司(香港快運)與聯盟公司香港航空繼續重組區內定期客運航班

At the end of March 2010, CPA operated scheduled services to 59 destinations. The fleet of CPA slightly increased from 125 to 126 aircraft during the year, comprising 31 Airbus A330-300s, 15 Airbus A340-300s, 22 Boeing B747-400s, 33 Boeing B777s (including 16 long-haul Boeing B777-300ERs) and 25 Boeing B747-400 freighters.

The Hong Kong Dragon Airlines Limited (HDA) adjusted its capacity to align with the market demand. During the report period, HDA suspended its scheduled passenger services to Dalian, Fukuoka, Guilin, Shenyang and Xian. On the other hand, the airline commenced new scheduled passenger services to Guangzhou in September 2009.

At the end of March 2010, HDA operated scheduled services to 26 destinations, including 15 cities in the Mainland with a fleet of 29 passenger aircraft, comprising nine Airbus A320-200s, six Airbus A321-200s and 14 Airbus A330-300s.

AHK Air Hong Kong Limited (AHK) focused on developing its services in Asia. At the end of March 2010, AHK operated scheduled services to 11 destinations in Asia with eight Airbus A300-600GF freighters.

Hong Kong Airlines Limited (CRK) took delivery of its first freighter and commenced scheduled all-cargo services to Hangzhou and Ho Chi Minh City in January 2010. With regard to its scheduled passenger services, CRK suspended services to Changsha, Phuket and Xiamen but added Sanya to its network during the year. At the end of March 2010, CRK operated scheduled services to seven destinations with two Boeing B737-800 passenger aircraft and one B737 freighter.

Hong Kong Express Airways Limited (HKE) continued to restructure its regional scheduled passenger services with its alliance airline CRK and



超過90家航空公司提供往來香港的定期航班服務。
More than 90 airlines provide scheduled services to and from Hong Kong.

服務。該公司在年內先後開辦往返長沙和海口的航線，亦同時取消往返曼谷、杭州、昆明、南寧、三亞和廈門的航線。截至二零一零年三月底，香港快運的機隊包括六架波音B737-800型飛機，定期航班服務遍及11個目的地。

香港商用飛機有限公司以四架灣流G200型、兩架灣流G450型和一架灣流G550型飛機，經營來往亞洲多個目的地的不定期客運航班。

空中快線直升機有限公司以一架西科斯基S76型直升機和兩架阿古斯塔威斯特蘭AW139型直升機，提供來往香港與澳門之間及本地不定期客運服務。

直升機服務(香港)有限公司繼續以一架麥唐納道格拉斯MD500E型、一架歐洲直升機公司AS355N型及四架Aerospatiale SA315B型直升機，在本地提供客運包機及進行空中作業服務。

commenced services to Changsha and Haikou but suspended services to Bangkok, Hangzhou, Kunming, Nanning, Sanya and Xiamen during the report period. At the end of March 2010, HKE operated scheduled services to 11 destinations with six Boeing B737-800 aircraft.

Metrojet Limited operated four Gulfstream G200, two Gulfstream G450 and one Gulfstream G550 aircraft for non-scheduled passenger carriage to destinations in Asia.

Sky Shuttle Helicopters Limited continued to operate non-scheduled services between Hong Kong and Macao and local flights for passenger carriage with one Sikorsky S76 and two AgustaWestland AW139 helicopters.

Heliservices (Hong Kong) Limited continued to operate one McDonnell Douglas MD500E, one Eurocopter AS355N and four Aerospatiale SA315B helicopters for local passenger charters and aerial work.

航班事務 Air Services

TAG Aviation Asia Limited在二零零九年四月取得航空營運許可證，並以一架龐巴迪BD700型飛機經營區內不定期客運服務。

非本地航空公司的服務

二零零九年九月，翠鳥航空公司開辦孟買與香港之間的航班服務。太平洋航空在二零零九年十二月開辦往來納迪與香港的航班服務。達美航空公司與美國西北航空公司合併後，在二零一零年一月接辦後者在香港的定期航班服務。虎航和四川航空公司在二零一零年二月分別開辦往來新加坡與香港和往來重慶/成都與香港的航班服務。飛龍航空公司在二零零九年十月開辦往來克拉克與香港的航班服務，不過，該服務在二零一零年一月停辦。

定期貨運航班服務方面，Cargolux Italia和Deccan Cargo & Express Logistics在二零零九年六月開辦服務；AeroLogic和D.E.T.A. Air在二零零九年七月開辦服務；Cargitalia、翡翠國際貨運航空公司和TNT Airways在二零零九年九月開辦服務；以及德國貨運航空公司在二零零九年十一月開辦服務。揚子江快運航空公司亦在二零零九年十二月重新開辦服務。

本處年內共處理1 035宗涉及修訂來往香港客運和貨運定期航班服務的運價申請。

The Department in the year processed 1 035 tariff filing for carriage of passengers and cargo on scheduled services to and from Hong Kong.

TAG Aviation Asia Limited obtained its Air Operator's Certificate in April 2009 and commenced its operation with one Bombardier BD700 aircraft for regional non-scheduled passenger carriage.

Services by Non-Hong Kong Carriers

Kingfisher Airlines launched its services between Mumbai and Hong Kong in September 2009. In December 2009, Air Pacific launched its services between Nadi and Hong Kong. In January 2010, Delta Air Lines took over Northwest Airlines' scheduled services in Hong Kong after the two airlines had merged. In February 2010, Tiger Airways and Sichuan Airlines commenced services between Singapore and Hong Kong and between Chongqing / Chengdu and Hong Kong respectively. Zest Airways commenced services between Clark and Hong Kong in October 2009 but suspended the services in January 2010.

For scheduled all-cargo services, Cargolux Italia and Deccan Cargo & Express Logistics commenced services in June 2009; AeroLogic and D.E.T.A. Air in July 2009; Cargitalia, Jade Cargo International and TNT Airways in September 2009; and ACG Air Cargo in November 2009. In December 2009, Yangtze River Express Airlines resumed its services.





年內，有兩家航空公司停辦往來香港的定期航班服務。銀河國際貨運航空公司在二零零九年九月停辦定期貨運航班。俄羅斯國際航空貨運公司在二零零九年十二月停辦往來香港與莫斯科的定期貨運航班服務，而該服務由俄羅斯國際航空公司接辦。

截至二零一零年三月底，提供定期往來香港航班服務的航空公司，總數為94家，服務的目的地總數，維持約150個。有關目的地的變動詳見附錄甲。

年內，本處合共簽發132張經營許可證予航空公司，以供營辦往來香港的定期航班服務，並處理共3 402宗更改定期航班服務的申請，以及簽發1 555張經營不定期來往香港航班服務的許可證。

運價

年內，本處共處理1 035宗涉及修訂來往香港客運和貨運定期航班服務的運價申請(不包括燃油附加費的申請)。客運票價雖有輕微調整，但大致保持穩定。

年內，本處批准航空公司繼續收取客運和貨運燃油附加費，以彌補部分因油價波動而增加的營運成本。二零零九年十月開始，審批客運燃油附加費的次數由每兩個月一次增至每月一次。年內，本處共處理1 122宗燃油附加費的申請，並在本處網站公布核准的燃油附加費。

In the year, two airlines suspended their scheduled services to and from Hong Kong. Grandstar Cargo International Airlines suspended its scheduled all-cargo services in September 2009. In December 2009, Aeroflot Cargo Airlines suspended its scheduled all-cargo services between Moscow and Hong Kong, which were taken over by Aeroflot Russian International Airlines.

By the end of March 2010, the number of scheduled airlines serving Hong Kong was 94. The total number of destinations served by scheduled services to and from Hong Kong remained at around 150. Details of the changes in these destinations are given in Appendix A.

During the year, the Department issued 132 operating permits to airlines for operation of scheduled services to Hong Kong and processed 3 402 applications for changes to the schedules. A total of 1 555 permits were also issued for the operation of non-scheduled services to and from Hong Kong.

TARIFFS

In the year, the Department processed 1 035 tariff filings (filings concerning fuel surcharges not included) for carriage of passengers and cargo on scheduled services to and from Hong Kong. Notwithstanding some minor adjustments, the passenger fares remained steady over the period.

Airlines were allowed to continue levying passenger and cargo fuel surcharges to partially recover the increase in operational costs due to fluctuations in aviation fuel prices. The passenger fuel surcharges have been reviewed more frequently on a monthly basis instead of bi-monthly basis since October 2009. In the year, the Department processed 1 122 filings on adjustment of fuel surcharges. The approved fuel surcharges were published in the Department's website.

航班事務 Air Services

國際民航組織的活動

為保持香港作為國際和區域航空中心的地位，以及方便履行國際民航組織區域航行服務所定職責和遵行《基本法》規定，本處繼續積極參與國際民航組織的活動。年內，本處代表以中華人民共和國代表團成員身分，出席八次只限國家參加的國際民航組織會議，並以「中國香港」的名義，參加37次並非以國家為單位的國際民航組織會議。以上45次會議的詳情見附錄乙。此外，本處與國際民航組織往來的函件共有336份，主要就民航技術事宜提供意見及資料。

為加強與國際民航組織的聯繫，本處自二零零五年五月開始借調一名人員到中國常駐國際民航組織理事會代表處工作。

亞太經濟合作組織的活動

本處繼續以「中國香港」的名義參與亞太經濟合作組織的活動。年內，本處代表參加該組織的會議兩次，詳情見附錄丙。本處亦因應25項亞太經濟合作組織的要求，提供民航技術事宜的意見及資料。

飛機噪音管理

本處關注飛機噪音對航道下和附近居民的影響，並致力執行一系列噪音消減措施，以減低飛機噪音對市民的影響。

其中一項措施是，在符合風向及安全的情況下，午夜十二時至早上七時飛抵香港國際機場的航機須從機場西南面經海上降落。

ACTIVITIES OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

To maintain the status of Hong Kong as a centre of international and regional civil aviation and to facilitate the discharge of its responsibilities as prescribed under the regional air navigation services of ICAO as well as in accordance with the provisions in the Basic Law, the Department continued to participate actively in the activities of ICAO. During the year, representatives of the Department attended eight ICAO meetings which were limited to States as part of the delegation of the People's Republic of China, and 37 ICAO meetings which were not so limited, using the name "Hong Kong, China". Details of the above 45 meetings are provided in Appendix B. The Department also exchanged 336 letters with ICAO. The majority of these letters involved comments and information on technical matters related to civil aviation.

To strengthen the liaison with ICAO, an arrangement has been made since May 2005 for an officer of the Department to be seconded to the Office of the Representative of China on the Council of ICAO.

ACTIVITIES OF ASIA PACIFIC ECONOMIC COOPERATION

The Department continued to participate in the activities of APEC using the name "Hong Kong, China". During the year, representatives of the Department attended two APEC meetings and details of these meetings are given in Appendix C. The Department also handled 25 requests relating to APEC, which involved provision of comments and information on technical matters related to civil aviation.

AIRCRAFT NOISE MANAGEMENT

The Department is mindful of the impact of aircraft noise on residents under and in the vicinity of the flight paths and has continued its effort to limit the impact by means of a series of noise mitigating measures.

One of the mitigating measures requires aircraft arriving at the HKIA between midnight and 7 a.m. to land from the southwest over water, subject to acceptable wind direction and safety consideration. This measure aims to

這項措施旨在減少飛越沙田、荃灣、葵涌及青衣等人口稠密地區的航機數目。年內，有90.7%在這時段抵港的航機能夠實行這項措施。另一項噪音消減措施是，在符合運作及安全的情況下，晚上十一時至早上七時向東北起飛的航機，須經西博寮海峽離港。這項措施旨在減少離港航機對九龍及港島北地區的噪音影響。年內，有高達99.4% 在上述時段離港的航機能夠實行這項措施。

此外，晚上十一時至早上七時飛越將軍澳、西貢和馬鞍山從東北進場的航機中，有91.9% 能夠採用持續降落模式運作。採用這種降落模式的航機會由較高的高度開始下降，並在開始進場時使用較低動力和產生較少阻力的狀況飛行，以減少途經這些地區時所產生的噪音。

本處一直利用飛機噪音及航跡監察電腦系統，全日24小時監察飛機航道附近地區的噪音情況。該系統由16個噪音監察器組成。本處利用該系統編製飛機噪音統計數據和調查飛機噪音投訴。

reduce the number of aircraft overflying populated areas such as Sha Tin, Tsuen Wan, Kwai Chung and Tsing Yi. During the year, this mitigating measure achieved a compliance rate of 90.7 per cent. Another mitigating measure requires aircraft taking off to the northeast between 11 p.m. and 7 a.m. to depart via the West Lamma Channel, subject to acceptable operational and safety considerations. This measure aims to keep areas in Kowloon and the northern Hong Kong Island away from the noise impact of departing aircraft. During the year, this mitigating measure achieved a high compliance rate of 99.4 per cent.

Furthermore, of those aircraft which overflew Tseung Kwan O, Sai Kung and Ma On Shan on approach to the HKIA from the northeast between 11 p.m. and 7 a.m., 91.9 per cent were able to adopt the Continuous Descent Approach (CDA) procedures. Aircraft on CDA procedures would fly at higher altitudes and in a lower power and lower drag configuration during the commencement of the approach which as a result, reduce aircraft noise impact in these areas.

The Department has been monitoring aircraft noise in the vicinity of the flight paths round the clock with the aid of a computer-based Aircraft Noise and Flight Track Monitoring System. The system comprises 16 noise monitoring terminals and enables the compilation of statistics on aircraft noise and investigation of aircraft noise complaints.



左圖：本處人員正收集飛機噪音數據。

右圖：噪音監察器。

Left: An officer collecting aircraft noise data.

Right: An aircraft noise monitor.

航班事務 Air Services

為協助公眾了解本處處理飛機噪音的工作，本處設有投訴熱線，與受飛機噪音影響的居民保持溝通，並在本處網站發布噪音消減措施及噪音數據。本處人員也出席區議會會議，並與有關居民團體保持密切聯絡，講解本處消滅飛機噪音的工作。

年內，本處共接獲1 012宗飛機噪音投訴。本處以持平態度調查所有投訴，並向投訴人交代調查結果。

航班協調

航班協調員根據《國際航空運輸協會全球航班協調指南》，以中立、公開及公平方式，分配機場航班升降時段予所有本地及外地航空公司，務求善用機場的有限資源。香港機場航班協調辦公室在二零零八年四月成立，並在同年七月六日接任為香港國際機場的航班協調員。由前航班協調員提供的過渡協助，亦在二零零九年七月五日結束。

年內，香港機場航班協調辦公室繼續根據《國際航空運輸協會全球航班協調指南》，採用中立、公開及公平的協調機制。展望未來，香港機場航班協調辦公室會致力維持和改善協調程序的透明度。

In order to facilitate the general public in understanding the Department's work on aircraft noise issues, the Department continued to communicate with residents affected by aircraft noise through the Department's complaint hotline, and to disseminate the mitigating measures and noise data in the Department's website. Staff of the Department also attended District Council meetings and maintained close contact with concerned resident groups, to explain the Department's aircraft noise mitigating efforts.

During the year, the Department received 1 012 complaints against aircraft noise. All the complaints were investigated impartially, and the complainants were replied with investigation findings.

SCHEDULE COORDINATION

To comply with the International Air Transport Association (IATA) Worldwide Scheduling Guidelines (WSG) and to ensure the efficient utilisation of scarce airport resources, Schedule Coordinators aim at allocating arrival and departure slots at an airport, to all local and overseas aircraft operators, in a neutral, transparent and non-discriminatory manner. The Hong Kong Schedule Coordination Office (HKSCO) was established in April 2008 and took over the role of Schedule Coordinator for the HKIA on July 6, 2008. Back up support provided by the previous Schedule Coordinator for HKIA was ended on July 5, 2009.

During the year, the HKSCO continued to adopt a neutral, transparent and non-discriminatory schedule coordination mechanism in accordance with the IATA WSG. In the future, the HKSCO will remain committed to maintaining and enhancing the transparency of the schedule coordination process.

航班協調辦公室採用中立、公開及公平方式，分配機場航班升降時段予所有本地及外地航空公司。

The Schedule Coordination Office allocates arrival and departure slots to all local and overseas aircraft operators in a neutral, transparent and non-discriminatory manner.





本處繼續監察擴建港澳碼頭現有跨境直升機場的計劃。

The Department continued to monitor the project of expanding the existing cross-boundary heliport at the Hong Kong – Macao Ferry Terminal.

直升機場的發展

本處繼續監察擴建港澳碼頭現有跨境直升機場的計劃。空中快線有限公司經公開招標程序獲批為期18年的直升機場租約，擴建計劃隨後在二零零七年展開。計劃分為兩期，第一期工程包括興建新升降坪及支援設施，已在二零零九年三月完成。第二期工程包括更換舊有升降坪及建造升降坪連接道，亦已在二零零九年十月完成。全部工程完成後，直升機場的容量增加80%，每年可處理的直升機升降約55 200架次。

至於跨境直升機服務的長遠發展，當局已在啟德發展區預留土地，用以興建另一跨境直升機場。本處就直升機場的規劃與其他政府部門保持緊密聯繫。

本地商業直升機服務方面，一家商業直升機公司獲准與政府共用位於前灣仔公眾貨物裝卸區的臨時政府直升機坪，以提供本地直升機服務。該直升機公司在二零零九年七月開始在臨時政府直升機坪營運。香港會議展覽中心附近擬建的永久政府直升機坪，在二零一零年一月展開工程，約24個月內建成，供與本地商業直升機公司共用。

HELIPORT DEVELOPMENT

The Department continued to monitor the project of expanding the existing cross-boundary heliport at the Hong Kong – Macao Ferry Terminal. The expansion project commenced in 2007 when an 18-year lease was granted to the Sky Shuttle Helicopters Limited after an open tender exercise. Expansion works on the heliport had been carried out in two Phases. Phase one works, which consisted of the construction of a new helipad and its supporting facilities, was completed in March 2009. Phase two works, which involved the replacement of the old helipad and the provision of helipad connecting links, was completed in October 2009. Upon completion of the works, the capacity of the heliport has been increased by 80% to accommodate about 55 200 helicopter movements every year.

For the long-term development of cross-boundary helicopter services, land provision has been made within the Kai Tak Development Area for construction of another cross-boundary heliport. The Department maintained close liaison with other Government departments in planning of the heliport.

For domestic commercial helicopter services, a commercial helicopter operator was allowed to share-use the temporary government helipad at the former Wan Chai Public Cargo Working Area for provision of domestic helicopter services. The helicopter operator commenced its operations at the temporary government helipad in July 2009. A proposed permanent government helipad near the Hong Kong Convention and Exhibition Centre, which will be share-used by domestic commercial helicopter operations, is being built. The construction works commenced in January 2010 for completion in about 24 months.

航班事務 Air Services

附錄甲

截至二零一零年三月來往香港的定期航班服務的目的地變動情況(與二零零九年三月比較)

(甲) 新增航點

新航點	經營者
1. 雅典	漢莎貨運航空公司
2. 巴格達	AeroLogic
3. 貝魯特	盧森堡國際貨運航空公司
4. 辛辛那提	波拉航空貨運公司
5. 呼和浩特	中國南方航空公司
6. 加爾各答	Deccan Cargo & Express Logistics
7. 列日	TNT Airways
8. 納迪	太平洋航空
9. 湛江	中國南方航空公司

(乙) 刪減航點

刪除航點	前經營者
1. 阿布扎比	盧森堡國際貨運航空公司
2. 達沃	宿霧太平洋航空公司
3. 底特律	美國西北航空公司
4. 印第安納波利斯	聯邦快遞
5. 小松	盧森堡國際貨運航空公司
6. 克拉斯諾亞爾斯基	AirBridge Cargo Airlines
7. 維也納	盧森堡國際貨運航空公司
8. 威爾明頓	波拉航空貨運公司
9. 銀川	中國南方航空公司

APPENDIX A

Changes in Destinations Served by Scheduled Services to and from Hong Kong as at March 2010 (compared with March 2009)

(a) Additions

New Points	Operated By
1. Athens	Lufthansa Cargo AG
2. Baghdad	AeroLogic
3. Beirut	Cargolux Airlines International
4. Cincinnati	Polar Air Cargo Worldwide
5. Hohhot	China Southern Airlines
6. Kolkata	Deccan Cargo & Express Logistics
7. Liège	TNT Airways
8. Nadi	Air Pacific
9. Zhanjiang	China Southern Airlines

(b) Deletions

Deleted Points	Previously Operated By
1. Abu Dhabi	Cargolux Airlines International
2. Davao	Cebu Pacific Air
3. Detroit	Northwest Airlines
4. Indianapolis	Federal Express
5. Komatsu	Cargolux Airlines International
6. Krasnojarsk	AirBridge Cargo Airlines
7. Vienna	Cargolux Airlines International
8. Wilmington	Polar Air Cargo Worldwide
9. Yinchuan	China Southern Airlines

附錄乙

民航處代表在二零零九年四月至二零一零年三月出席的國際民航組織會議

會議名稱	地點	日期
國際民航組織航空法律會議	韓國首爾	二零零九年三月三十日至四月二日
航空保安專家組第20次會議	加拿大蒙特利爾	二零零九年三月三十日至四月三日
亞太地區跑道安全計劃研討會	泰國曼谷	二零零九年四月七日至九日
西太平洋及南中國海縮小垂直間隔標準詳審工作小組第六次會議	泰國曼谷	二零零九年四月七日至九日
外交會議以便通過(1)《關於因涉及航空器的非法干擾行為而導致對第三方造成損害的賠償的公約》；和(2)《關於航空器對第三方造成損害的賠償的公約》	加拿大蒙特利爾	二零零九年四月二十日至五月二日
亞太地區互助航空保安計劃主導委員會第六次會議	中國香港	二零零九年四月二十一日至二十二日
亞太地區發展航空保安工作計劃研討會	中國香港	二零零九年四月二十三日至二十四日
互助發展運作安全和持續適航計劃北亞區主導委員會第九次會議	韓國首爾	二零零九年四月二十七日至二十九日
亞太地區航行規劃和實施小組轄下的航空電訊網實施協調小組第四次會議	新加坡	二零零九年五月四日至八日
2009年危險品專家組工作組會議	新西蘭奧克蘭	二零零九年五月四日至八日
第9次東南亞未來航空導航系統實施小組及第16次東南亞航空交通管制協調小組聯合會議	泰國曼谷	二零零九年五月十一日至十五日
廣播式自動相關監察系統研究及實施專責小組第八次會議及專題研討會	越南河內	二零零九年五月十八日至二十二日
亞太地區航行規劃和實施小組轄下通訊/導航/監察及氣象分組的飛行氣象情報管理小組第七次會議	泰國曼谷	二零零九年六月二日至四日
防止傳染病經航空交通散播合作安排計劃主導委員會第三次會議	中國澳門	二零零九年六月十二日
東南亞區航空安全小組第二次會議	泰國曼谷	二零零九年六月十五日至十九日
亞太地區航行規劃和實施小組轄下航空交通服務、航空情報服務和搜尋與援救分組第19次會議	泰國曼谷	二零零九年六月二十二日至二十六日
基於性能導航專責小組第五次會議	泰國曼谷	二零零九年七月十五日至十七日
亞太地區航行規劃和實施小組轄下通訊/導航/監察及氣象分組第13次會議	泰國曼谷	二零零九年七月二十日至二十四日
測試導航和監察設施及確認飛行程序研討會	泰國曼谷	二零零九年八月五日至七日
體檢員航空醫學研討會	泰國曼谷	二零零九年九月一日至二日
亞太地區航行規劃和實施小組第20次會議	泰國曼谷	二零零九年九月七日至十一日
法律委員會第34屆會議	加拿大蒙特利爾	二零零九年九月九日至十七日
航空電訊網實施協調小組工作組第六次會議	泰國華欣	二零零九年九月二十二日至二十五日
危險品專家組第22次會議	加拿大蒙特利爾	二零零九年十月五日至十六日

航班事務 Air Services

附錄乙 (續)

會議名稱	地點	日期
亞太地區民航局局長第46次會議	日本大阪	二零零九年十月十二日至十六日
機場發牌地區研討會	中國香港	二零零九年十一月三日至五日
基於性能導航運作核准會議	美國洛杉磯	二零零九年十一月十七日至十九日
亞太地區飛行計劃及航空交通服務訊息 實施專責小組第二次會議	泰國曼谷	二零零九年十一月十七日至二十日
亞洲區航空安全小組 — 意外事故調查和報告第一次會議	泰國曼谷	二零零九年十一月二十三日至二十四日
亞太地區航行規劃和實施小組轄下通訊/ 導航/ 監察及氣象分組的氣象/ 航空交通管理專責 小組第一次會議	泰國曼谷	二零零九年十二月二日至四日
互助發展運作安全和持續適航計劃東南亞區 主導委員會第11次會議	馬來西亞吉隆坡	二零零九年十二月八日至九日
東南亞航道檢討專責小組第一次會議	泰國曼谷	二零零九年十二月八日至十一日
國際電信聯盟世界無線電通訊會議地區籌備小組 第一次會議暨航空通訊專家組F分組第21次會議	泰國曼谷	二零零九年十二月八日至十八日
廣播式自動相關監察系統東南亞分區實施 工作小組第五次會議	印尼雅加達	二零一零年一月二十一日至二十二日
航空電訊網實施協調小組工作組第七次會議	泰國曼谷	二零一零年一月二十五日至二十九日
航空環境保護委員會第八次會議	加拿大蒙特利爾	二零一零年二月一日至十二日
實施基於性能導航研討會	中國香港	二零一零年二月一日至二日
基於性能導航專責小組第六次會議	中國香港	二零一零年二月三日至五日
航空器運作研討會	泰國曼谷	二零一零年二月二十三日至二十五日
亞洲區航空安全小組第3次會議暨東南亞區 航空安全小組第11次會議	泰國曼谷	二零一零年三月十六日至十九日
持續降落運作簡報會	泰國曼谷	二零一零年三月二十二日
東南亞航道檢討專責小組第二次會議	泰國曼谷	二零一零年三月二十二日至二十六日
航空保安專家組第21次會議	加拿大蒙特利爾	二零一零年三月二十二日至二十六日
亞太地區航行規劃和實施小組轄下通訊/ 導航/ 氣象分組的飛行氣象情報管理小組第八次會議	泰國曼谷	二零一零年三月二十三日至二十五日
2010年高級別安全會議	加拿大蒙特利爾	二零一零年三月二十九日至四月一日

Appendix B

ICAO Conferences and Meetings Attended by Representatives from the Department between April 2009 and March 2010

Name of Conference or Meeting	Venue	Dates
ICAO Legal Conference	Seoul, Republic of Korea	March 30 - April 2, 2009
20th Meeting of Aviation Security Panel	Montréal, Canada	March 30 - April 3, 2009
Asia Pacific Runway Safety Programme Seminar	Bangkok, Thailand	April 7 - 9, 2009
6th Meeting of the Western Pacific / South China Sea Reduced Vertical Separation Minima Scrutiny Working Group	Bangkok, Thailand	April 7 - 9, 2009
Diplomatic Conference to adopt 1) Convention on Compensation for Damage to Third Parties, Resulting from Acts of Unlawful Interference Involving Aircraft; and 2) Convention on Compensation for Damage Caused by Aircraft to Third Parties	Montréal, Canada	April 20 - May 2, 2009
6th Steering Committee Meeting of the Cooperative Aviation Security Programme - Asia Pacific	Hong Kong, China	April 21 - 22, 2009
Aviation Security Seminar on the Development of an Asia-Pacific Regional Work Programme	Hong Kong, China	April 23 - 24, 2009
9th Meeting of Cooperative Development of Operational Safety and Continuing Airworthiness Programme - North Asia Project Steering Committee	Seoul, Republic of Korea	April 27 - 29, 2009
4th Meeting of Aeronautical Telecommunication Network Implementation Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Singapore	May 4 - 8, 2009
Dangerous Goods Panel Working Group Meeting 2009	Auckland, New Zealand	May 4 - 8, 2009
Combined Meetings of 9th Future Air Navigation System Implementation Team - South-East Asia and 16th Meeting of the South-East Asia Air Traffic Services Coordination Group	Bangkok, Thailand	May 11 - 15, 2009
8th Meeting of Automatic Dependent Surveillance-Broadcast Study and Implementation Task Force and Seminar	Hanoi, Viet Nam	May 18 - 22, 2009
7th Meeting of Asia/Pacific Operational Meteorology Management Task Force of the Communications/Navigation/ Surveillance and Meteorology Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	June 2 - 4, 2009
3rd Steering Committee Meeting of the Cooperative Arrangement for Preventing the Spread of Communicable Disease through Air Travel	Macao, China	June 12, 2009
2nd Meeting of South-East Asia Regional Aviation Safety Team	Bangkok, Thailand	June 15 - 19, 2009
19th Meeting of the Air Traffic Services, Aeronautical Information Services, Search and Rescue Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	June 22 - 26, 2009
5th Meeting of the Performance Based Navigation Task Force	Bangkok, Thailand	July 15 - 17, 2009
13th Meeting of the Communications/Navigation/ Surveillance and Meteorology Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	July 20 - 24, 2009
Seminar on Testing of Navigation and Surveillance Facilities and Validation of Flight Procedure	Bangkok, Thailand	August 5 - 7, 2009

航班事務 Air Services

Appendix B (continued)

Name of Conference or Meeting	Venue	Dates
Aviation Medicine Workshop for Medical Examiners	Bangkok, Thailand	September 1 - 2, 2009
20th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	September 7 - 11, 2009
34th Session of the Legal Committee	Montréal, Canada	September 9 - 17, 2009
6th Working Group Meeting of Aeronautical Telecommunication Network Implementation Coordination Group Working Group	Hua Hin, Thailand	September 22 - 25, 2009
22nd Meeting of Dangerous Goods Panel	Montréal, Canada	October 5 - 16, 2009
46th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	Osaka, Japan	October 12 - 16, 2009
Regional Seminar on Aerodrome Certification	Hong Kong, China	November 3 - 5, 2009
Performance Based Navigation Operational Approval Meeting	Los Angeles, USA	November 17 - 19, 2009
2nd Meeting of Asia / Pacific Flight Plan and Air Traffic Service Message Implementation Task Force	Bangkok, Thailand	November 17 - 20, 2009
1st Meeting of Asia Regional Aviation Safety Team – Accident / Incident Investigation and Reporting	Bangkok, Thailand	November 23 - 24, 2009
1st Meeting of Asia/Pacific Meteorology / Air Traffic Management Task Force of the Communications/Navigation/Surveillance and Meteorology Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	December 2 - 4, 2009
11th Steering Committee Meeting of Cooperative Development of Operational Safety and Continuing Airworthiness Programme - Southeast Asia	Kuala Lumpur, Malaysia	December 8 - 9, 2009
1st Meeting of the Southeast Asia Route Review Task Force	Bangkok, Thailand	December 8 - 11, 2009
1st Regional Preparatory Group Meeting for International Telecommunication Union World Radiocommunication Conference and 21st Meeting of Aeronautical Communication Panel Working Group F	Bangkok, Thailand	December 8 - 18, 2009
5th Meeting of Southeast Asia Sub-Regional Automatic Dependent Surveillance-Broadcast Implementation Working Group	Jakarta, Indonesia	January 21 - 22, 2010
7th Working Group Meeting of Aeronautical Telecommunication Network Implementation Coordination Group Working Group	Bangkok, Thailand	January 25 - 29, 2010
8th Meeting of the Committee on Aviation Environmental Protection	Montréal, Canada	February 1 - 12, 2010
Performance Based Navigation Implementation Seminar	Hong Kong, China	February 1 - 2, 2010
6th Meeting of the Performance Based Navigation Task Force	Hong Kong, China	February 3 - 5, 2010
Aircraft Operations Seminar	Bangkok, Thailand	February 23 - 25, 2010
3rd Meeting of Asia Regional Aviation Safety Team and 11th meeting of Southeast Asia Regional Aviation Safety Team	Bangkok, Thailand	March 16 - 19, 2010
Continuous Descent Operations Briefing	Bangkok, Thailand	March 22, 2010
2nd Meeting of the Southeast Asia Route Review Task Force	Bangkok, Thailand	March 22 - 26, 2010
21st Meeting of Aviation Security Panel	Montréal, Canada	March 22 - 26, 2010
8th Meeting of Asia/Pacific Operational Meteorology Management Task Force of the Communications/Navigation/Surveillance and Meteorology Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	March 23 - 25, 2010
High Level Safety Conference 2010	Montréal, Canada	March 29 - April 1, 2010

附錄丙

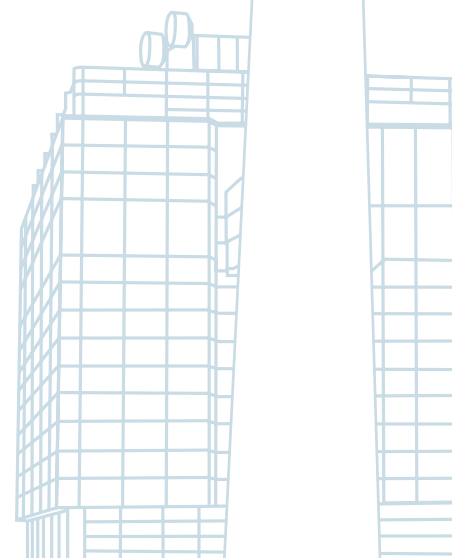
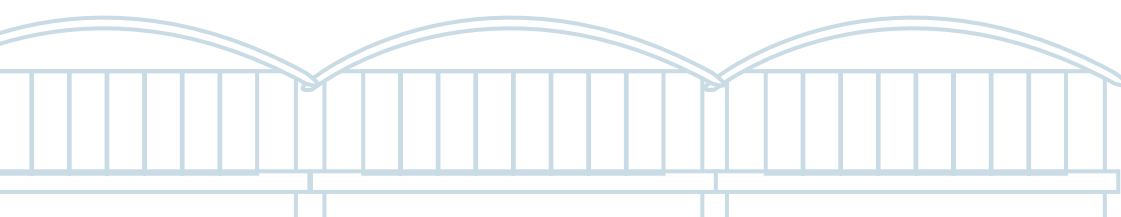
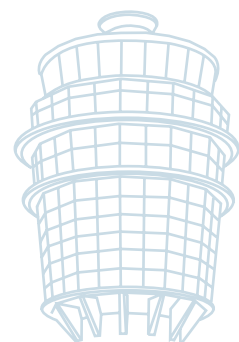
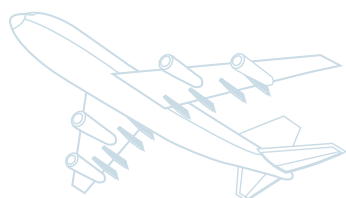
民航處代表在二零零九年四月至二零一零年三月出席的亞太區經濟合作組織會議

會議名稱	地點	日期
航空安全專家小組新航空技術研討會II	泰國曼谷	二零零九年六月十七日至十九日
運輸工作組第32次會議	新加坡	二零零九年七月二十七日至三十日

Appendix C

APEC Conferences and Meetings attended by representatives from the Department between April 2009 and March 2010

Name of Conference or Meeting	Venue	Dates
Aviation Safety Expert Subgroup New Aviation Technologies Workshop II	Bangkok, Thailand	June 17 - 19, 2009
32nd Transportation Working Group Meeting	Singapore	July 27 - 30, 2009



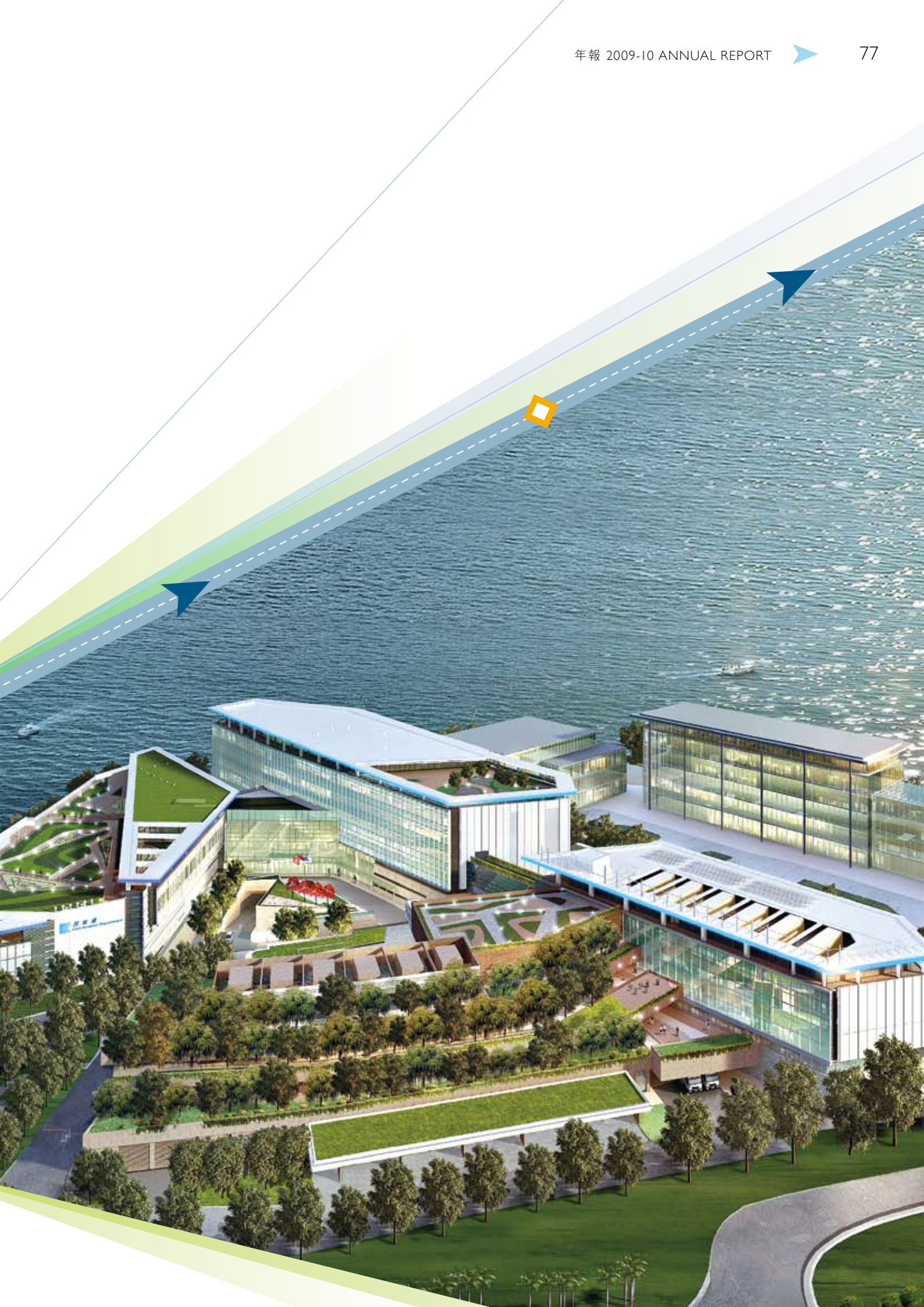
民航處計劃

The Civil Aviation Department Project

行政長官在二零零六至零七年度《施政綱領》中提出更換航空交通管制(空管)系統，及在機場島興建一座民航處新總部，以鞏固香港在地區性航空服務的領導地位，讓航空業得以持續發展。本處因應落實此項綱領，正式啟動了上述計劃。

In order to reinforce Hong Kong's leading position in regional aviation services and sustain the long-term growth of the industry, the Chief Executive announced in the 2006-07 Policy Agenda an initiative to replace the air traffic control (ATC) system and develop a new CAD Headquarters on the Airport Island. The Civil Aviation Department Project (the CAD Project) was initiated to implement the commitment.





民航處計劃 The Civil Aviation Department Project

計劃目標為更換現有空管系統，以應付航空交通量的預計增長，並且興建民航處新總部，以容納新空管中心及本處各功能分部於同一屋簷下，以便更有效地運用資源和提升效率。

民航處計劃工作組及 民航處新總部計劃督導委員會

為確保計劃可依時順利進行，本處成立民航處計劃工作組。該組由一位民航處助理處長領導，共有42名專責組員，包括一名由建築署借調的高級建築師。

為了監督計劃的執行及進展，本處亦成立民航處新總部計劃督導委員會，成員包括各分部高層管理人員。督導委員會轄下一共設立了16個不同功能的專責小組，以制定計劃各方面的策略和要求。

The CAD Project aims to replace the existing ATC system in order to handle the projected growth in air traffic while at the same time develop a new CAD Headquarters to accommodate the new ATC Centre and all CAD functional divisions under one roof to optimise resource utilisation and enhance efficiency.

CAD Project Team and the Steering Committee of the New CAD Headquarters Project (SCNCP)

To ensure the smooth and timely implementation of the project, a CAD Project Team with 42 officers, including a Senior Architect seconded from the Architectural Services Department, was established under the leadership of an Assistant Director-General of Civil Aviation.

A Steering Committee of the New CAD Headquarters Project (SCNCP), comprising representatives from senior management of CAD divisions, was formed to oversee the execution of project activities and its progress. Under the ambit of the SCNCP, 16 different functional task forces were established to formulate strategies and requirements for various aspects of the project.

工作組、各專責小組和分部代表於2010年3月在未來新總部的建築工地大合照。

Photo of the Project Team, Task Forces and Divisions' representatives taken at the construction site of the new Headquarters in March 2010.





畫家筆下的民航處新總部大堂。

An artist's impression of the lobby of the new CAD Headquarters.

發展民航處新總部

機場管理局董事會撥出位於港龍/ 中大廈以北，東輝路兩旁，佔地共約 29 800 平方米的土地，作為興建民航處新總部選址。

新總部建築工程以「設計及建造」方式進行，優點在於初期地面工程和各階段的詳細內部設計工作可同步進行，從而加快工程進度。

新總部的建築樓面面積約為 65 000 平方米，淨作業樓面面積約為 22 660 平方米，其中約 11 000 平方米會用作新空管中心及相關設施，3 300 平方米用作行政及規管辦公室，8 400 平方米用作其他設施。新設施包括中央考試中心、飛機意外調查設施、多用途會議廳、教育徑及圖書館暨資源中心。

Development of the New CAD Headquarters

A site north of the Dragonair House/CNAC Building on both sides of Tung Fai Road with a combined site area of approximately 29 800 m² was allocated by the Board of Directors of the Airport Authority Hong Kong (AAHK) for the construction of the new CAD Headquarters.

A design-and-build (D & B) approach is adopted for the construction of the new CAD Headquarters. Such an approach will have a merit by overlapping the initial ground works and detailed internal design stages, thus enhancing the efficiency of the construction programme.

The new CAD Headquarters will have a construction floor area in the order of 65 000 m² providing a total net floor area of approximately 22 660 m². Of the 22 660 m², about 11 000 m² will be assigned for the new Air Traffic Control centre (ATCC) and its associated facilities, 3 300 m² for administration and regulatory offices and 8 400 m² for other facilities. New facilities will include centralised examination centre, aircraft accident investigation facilities, multi-purpose auditorium, education path and a library-cum-resource centre.

民航處計劃 The Civil Aviation Department Project



參與籌備奠基典禮及策劃民航處新總部計劃的同事大合照。

A group photo of colleagues involved in the preparation of the Ceremony and/or the planning of the New CAD Headquarters Project.

新總部由三幅用地組成：東輝路以西的設施大樓(用地A)、東輝路以東的空管中心主大樓和辦公及培訓主大樓(用地B)，以及空管中心大樓以北的天線場。

本處以可持續發展、環保及教育為新總部主要設計主題。各個分部集中於同一地點辦公，可精簡行政及文書支援，提高生產力。大樓設計有足夠空間及彈性，供日後擴展，對應付業界服務需求的長遠增長非常重要。

新總部達到香港建築環境評估法的最高環保驗證標準，即鉑金級別，設有多項環保設施/裝置，又預留大範圍闢建綠化屋頂及園景平台。

The new headquarters will comprise three sites: the Facilities Building will be located to the west of Tung Fai Road (Site-A), the ATCC Building and the Office and Training Building will be located to the east of Tung Fai Road (Site-B), and the Antenna Farm will be located to the north of the ATCC Building.

Sustainability, environmental friendliness, and educational are the main design themes. The co-location of the various divisions will enhance productivity by streamlining administration and clerical support. Adequate space and flexibility for future expansion which are vital to sustain the long-term growth in service demand from the industry are also incorporated into the building design.

Under the Building Environmental Assessment Method in Hong Kong (HK-BEAM), the new headquarters will be certified with the highest platinum rating. It will have environmental-friendly facilities/installations, and a large portion of the site area will be reserved for green roofs and landscaped terraces.

培訓設施方面，新總部設有講堂、工作室、考試室、多用途演講廳及會議室，可支援各式各樣的會議、研討會及培訓課程。此外，教育徑內有導賞展覽廳、空管中心展覽廊及機場看台，專為提高公眾對航空的興趣而設。圖書館暨資源中心亦可讓民航處與業界伙伴及其他政府機構交流資訊及資源。

計劃進展

計劃雖然規模龐大而複雜，但得到民航處全體人員和決策局全力支持，再加上督導委員會領導有方，工作組又同心協力，計劃進展平穩。

With training facilities such as lecture rooms, workshops, examination rooms, multi-purpose auditorium and conference rooms, the new headquarters will be able to support a wide range of conferences, seminars and training courses. An education path consisting of a tour presentation and exhibition area, the ATCC viewing gallery, and an airport viewing deck is specially designed to promote aviation interest among the general public. The library-cum-resource centre will also allow CAD to share information and resources with the industry partners and government counterparts.

Project Progress

With the full support from the entire department and the policy bureau and through the capable steer of the SCNCP and the concerted effort of the Project Team, the project had been making steady progress despite its scale and complexity.



民航處新總部的建築工地。

Construction site of the new
CAD Headquarters.

民航處計劃 The Civil Aviation Department Project

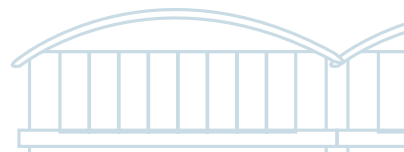


政務司司長唐英年、運輸及房屋局局長鄭汝樺及處長羅崇文在民航處新總部奠基典禮上與其他主禮嘉賓主持祝酒儀式。

The Chief Secretary for Administration, Mr Henry Tang; Secretary for Transport and Housing, Ms Eva Cheng; and Director-General of Civil Aviation, Mr Norman Lo, join other officiating guests to propose a toast at the Foundation Stone Laying Ceremony of the new CAD Headquarters.

二零零九年五月二十日，香港寶嘉有限公司獲批「設計及建造」合約，並於同日接收工地。建築署、民航處及承建商其後並肩合作，草擬大樓的建築設計圖則及作出定稿。地盤工程如期進行，二零零九年第四季為大樓計劃首個重要階段。二零零九年十一月二十七日，政務司司長唐英年先生及民航處處長羅崇文先生為新總部奠基石揭幕，逾300名嘉賓及業界伙伴出席該典禮。

The D & B contract was awarded to Dragages Hong Kong Limited on May 20, 2009, and the site was taken over by the contractor on the same day. Thereafter, effective coordination was maintained among Architectural Services Department, Civil Aviation Department and the contractor to prepare and finalise the preliminary architectural layout plan for the building. On-site works had also proceeded as scheduled and the first important milestone of this building project was marked in the 4th quarter of 2009. As witnessed by more than 300 guests and industry partners, the Honourable Henry Tang, Chief Secretary for Administration, accompanied by Mr Norman Lo, Director-General of Civil Aviation, unveiled the commemorative foundation stone of the new CAD Headquarters on November 27, 2009.



根據建築時間表，整個新總部將於二零一二年第三季落成。至於空管中心大樓及相關設施，二零一二年第一季可供安裝和測試新空管系統，以及培訓相關人員。新空管中心預計在二零一三年年底前啟用。

更換航空交通管制系統

新空管系統共涉及14個主要系統、三個訓練設施和各種輔助部件及支援系統。新系統將會是一個最先進的系統，安全功能和運作效率方面均有所提升。設計方面亦同時兼顧了系統擴展、互通能力、人類工程學、安全管理和環保因素等不同範疇。新系統將能夠處理預期計至二零二五年在香港飛行情報區內的航班流量。

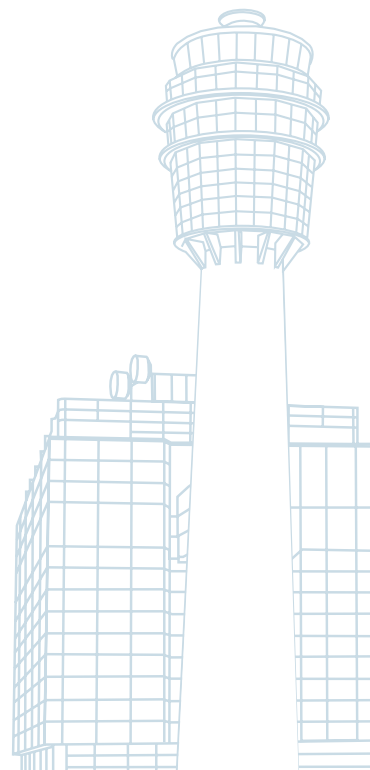
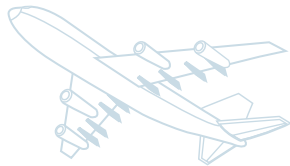
年內，新系統採購工作與新總部興建工程同步進行。二零一零年一月，控制塔模擬機首份合約批出。本處現正評審航空交通管理系統及主幹網絡標書，其餘項目會在二零一零至二零一一年分階段招標。

According to the construction schedule, the entire new headquarters will be completed in the 3rd quarter of 2012. For the ATCC building and related facilities, they will be ready in the 1st quarter of 2012 for the installation and testing of the replacement ATC systems and training of staff concerned. The new ATCC is planned to be commissioned by end 2013.

Replacement of ATC System

The replacement ATC system involves a total of 14 major systems, three training facilities and various ancillary components and sub-systems. When commissioned, the new system will be one of the most advanced systems with enhanced safety features and operational efficiency. System expandability, inter-operability, ergonomics, safety management and environmental issues were also taken into consideration in the design. It will be able to handle the projected traffic movements operating in the Hong Kong Flight Information Region up to year 2025.

During the year, the procurement of new systems was progressing simultaneously with the construction of the new CAD Headquarters. The first contract for the Control Tower Simulator was awarded in January 2010. In the meantime, the tender bids for the Air Traffic Management System and Communications Backbone were being evaluated. The rest of the tenders would be rolled out in phases in 2010-2011.



財務 Finance

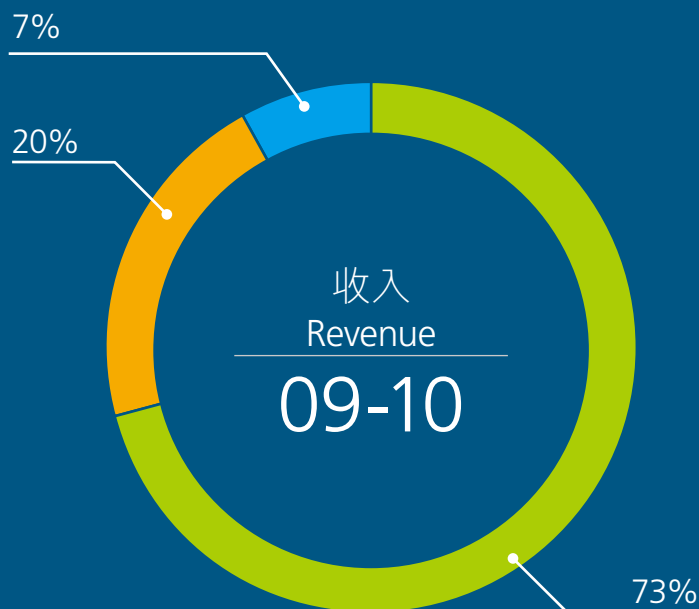
本處收入與開支

Departmental Revenue and Expenditure

本處收入主要源自提供航空交通服務、過境導航服務及簽發牌照予本地航空公司、空勤人員、飛機維修機構、飛機工程師及香港國際機場。二零零九年至二零一零年度，本處的總收入達9.01億元，同期總經營支出包括政府其他部門提供服務的成本為9.65億元。年內資本開支達4 000萬元。主要項目包括衛星通訊、導航及監察/航空交通管理系統，以及更換航空交通管制系統。本處向來謹慎理財及在精簡的架構下仍維持有效率的運作。

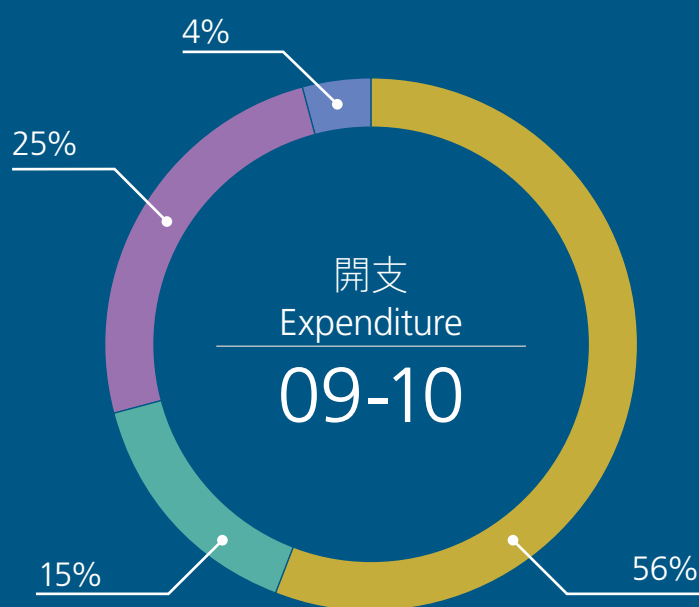
The revenue of the Department is mainly derived from the provision of air traffic services, en-route navigation services and licensing of local airlines, aircrews, maintenance organisations, aeronautical engineers and the Hong Kong International Airport. Total revenue in 2009-2010 amounted to \$901 million. Total operating expenditure including costs of services provided by other government departments for the same period amounted to \$965 million. Capital expenditure during the year amounted to \$40 million, major items included Satellite-based Communications, Navigation and Surveillance/Air Traffic Management Systems and Replacement of Air Traffic Control System. The Department exercises prudence in financial management and operates in a lean but efficient manner.





收入分析
Analysis of Revenue
(2009-10)

	百萬元\$(M)
航空交通 Air Traffic Services	660
過境導航 En-route Navigation Services	180
其他 Licence and Other Fees	61
	901



開支分析
Analysis of Expenditure
(2009-10)

	百萬元\$(M)
員工支出 Staff	539
經營及行政支出 General Expenses	242
折舊 Depreciation	144
維修 Maintenance	40
	965



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