

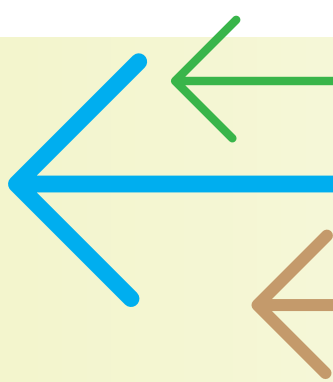


香港民航處

Civil Aviation Department Hong Kong



二零零七至零八年度報告 Annual Report 2007-2008



## 我們的理想

致力於安全及有效的航空系統

## 我們的使命

- 奠定香港為頂尖航空中心的地位
- 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，提供航班資料服務及警報服務
- 在飛機出現緊急情況及發生意外時，協調搜索和救援行動
- 制定及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
- 確保在香港認可飛機維修機構符合國際標準
- 確保在香港註冊的空勤人員和飛機維修工程師符合國際標準
- 監察航空公司有否遵守雙邊民用航空運輸協定
- 發展有效措施以減少飛機噪音對社區的影響

## 我們的信念

- 安全至上
- 專業精神
- 講求效率
- 嚴守標準
- 誠信可靠

## Our Vision

*Committed to a safe and efficient air transport system*

## Our Mission

- *Positioning Hong Kong as a leading centre of aviation*
- *Maintaining safe, orderly and expeditious flow of air traffic*
- *Providing flight 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*
- *Setting and enforcing aerodrome safety and aviation security standards*
- *Ensuring compliance of established airworthiness and flight operations standards by Hong Kong registered aircraft and locally based airlines*
- *Ensuring Hong Kong approved aircraft maintenance organisations comply with international standards*
- *Ensuring Hong Kong licensed flight crew and aircraft maintenance engineer meet international standards*
- *Monitoring compliance by airlines with bi-lateral Air Services Agreements*
- *Developing workable measures to minimise the impact of aircraft noise on local communities*

## Our Values

- *Utmost concern for safety*
- *Professionalism*
- *Efficiency and effectiveness*
- *Compliance with standards*
- *Integrity*

# 目錄

## CONTENTS

1	處長報告 <b>DIRECTOR-GENERAL'S REVIEW</b>	2
2	組織圖 <b>ORGANISATION CHART</b>	7
3	大事紀要 <b>CALENDAR OF EVENTS</b>	8
4	航空交通統計 <b>AIR TRAFFIC STATISTICS</b>	12
5	航空交通管理 <b>AIR TRAFFIC MANAGEMENT</b>	16
6	工程及系統 <b>ENGINEERING AND SYSTEMS</b>	24
7	飛行標準及適航 <b>FLIGHT STANDARDS AND AIRWORTHINESS</b>	32
8	機場安全標準 <b>AIRPORT STANDARDS</b>	42
9	航班事務 <b>AIR SERVICES</b>	52
10	民航處計劃 <b>THE CIVIL AVIATION DEPARTMENT PROJECT</b>	66
11	財務 <b>FINANCE</b>	72

# 處長報告 DIRECTOR- GENERAL'S REVIEW



我很高興向各位匯報民航處作為航空監管者和空中交通管制服務提供者，在二零零七/零八年度繼續取得進一步成功。民航處致力提供一個安全和高效率的空運系統。

我們成功通過了國際民用航空組織(ICAO)於二零零八年一月進行的安全及保安審計，表現出色，審計員對香港航空保安系統的水平給予極高評價。此外，民航處負責提供的航行資料服務在二零零七年十一月取得國際標準化組織(ISO)9001品質管理體系標準認證。

在二零零七/零八年度內，本地航空交通數字繼續顯著增長。年內在香港國際機場升降的航班多達299 617架次，較去年上升了6%。飛越香港飛行情報區的航班數量則達到112 435架次，較去年上升了11%。香港國際機場的旅客總數上升至4 743萬，較去年上升了8%，而貨運量則上升了7%至381萬噸。

我們已作好準備和部署應付這些交通量的增長。民航處實施了「縮小跑道最低間隔標準」，把降落航機之間的距離減少至最低限度的四海里。我們也增聘人手提供必要的支援，以進一步增加跑道容量。

在技術方面，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，以及空中交通服務設施間數據通訊已正式推出，用量亦日見增加。

I am very pleased to report that the Civil Aviation Department enjoyed further success in 2007-08, both as an aviation regulator and a provider of air traffic control services. We are committed to a safe and efficient air transport system.

We passed the International Civil Aviation Organization (ICAO) Safety and Security Audit conducted in January 2008 with flying colours. The auditors acknowledged the high standard of the aviation security system in Hong Kong. The Aeronautical Information Service undertaken by the department was also awarded ISO 9001 accreditation for the Quality Management System in November 2007.

The annual air traffic figures continued to grow significantly. The number of aircraft movements at the Hong Kong International Airport (HKIA) was 299 617, an increase of 6% over 2006-07. The number of flights overflying the Hong Kong Flight Information Region reached 112 435, up 11% over the previous year. Air passenger numbers at the HKIA rose to 47.43 million, representing an 8% increase over 2006-07, while cargo throughput grew by 7% to 3.81 million tonnes.

We are well equipped to deal with such traffic increases. The department has implemented Reduced Vertical Separation Minima and reduced the final approach spacing to a minimum of four nautical miles between landing aircraft. We are also recruiting additional staff to provide the necessary resources to further increase runway capacity.

On the technical front, Digital-Automatic Terminal Information Service (D-ATIS), Digital-Meteorological Information for Aircraft in Flight (D-VOLMET) service, and Pre-Departure Clearance (PDC) delivery via datalink, and the Air Traffic Services Inter-facility Data Communication (AIDC) were put into operational use.

年內，我們繼續與中國民航局及澳門民航局緊密地合作，就優化珠三角區空域的使用情況和航空交通管理協調整體及長遠的安排。

二零零七年十月所公佈的跑道容量已遞增至每小時55架次。我們有信心能於二零一五年達到每小時處理68架次的目標。

民航處不斷努力改進服務和提高效率。我們已經著手發展民航基礎建設的設施。立法會的財委會在二零零七年五月通過了更換航空交通管制系統和在機場島興建新民航處總部撥款的申請。民航處已成立了一個計劃小組和督導委員會負責監督計劃的執行和進展。

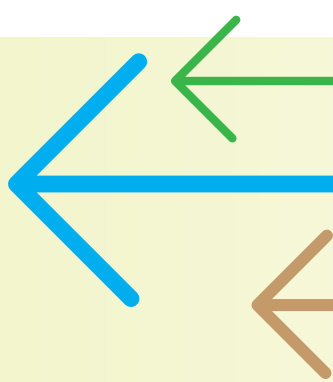
航空是充滿新機遇的高投資行業。所有香港主要航空公司繼續積極擴展業務及機隊。國泰航空有限公司增購了13架飛機，並增加前往多個目的地的定期客運及貨運航班。港龍航空有限公司增購了兩架飛機以進一步擴大服務網絡。香港快運航空有限公司亦增購了三架飛機，香港華民航空有限公司也接收了兩架貨機。香港國際機場的二號客運大樓和香港商用航空中心的二號飛機庫分別在二零零七年六月和九月開幕。這些商業投資和承諾反映了業界對香港航空業發展的信心。

We continued to work closely with the General Administration of Civil Aviation of China and the Macao Civil Aviation Authority to map out holistic and long-term solutions to optimise airspace management within the Pearl River Delta region during the year. The declared runway capacity was progressively increased to 55 movements per hour in October 2007. We are confident that the department can achieve the target of handling 68 flights per hour by 2015.

The department was constantly looking for ways to improve services and efficiency. Actions were in hand to develop the civil aviation infrastructural facilities. Funding approval was received from the Finance Committee of the Legislative Council in May 2007 for replacing the Air Traffic Control System and building a new CAD Headquarters on the Airport Island. A CAD Project Team and a Steering Committee for the New CAD Headquarters Project were formed to oversee the execution of project activities and its progress.

Aviation is a high stakes industry with new opportunities. All major Hong Kong airline operators continued to expand their business operations and service networks with enlarged fleets. Cathay Pacific Airways acquired 13 aircraft and increased the frequency of its scheduled passenger and cargo services to a number of destinations. Hong Kong Dragon Airlines Limited took delivery of two aircraft to strengthen its service network. Hong Kong Express Airways Limited added three aircraft to its fleet and Air Hong Kong Limited also received two freighters. Terminal 2 of the HKIA and Hangar 2 of Hong Kong Business Aviation Centre opened in June and September 2007 respectively. These business investment and commitment no doubt reflect the confidence in the growth of the Hong Kong aviation industry.





為鞏固香港在民航界的領導地位，我們協助了多項主要航空盛事，例如在二零零七年九月舉行的亞洲國際航空展覽會暨論壇，包括協調空中巴士A380型飛機在維多利亞港上空進行精采的飛行示範。

民航處也為奧林匹克運動會及殘疾人奧林匹克運動會的馬術項目提供全力支持。本處積極參與民政事務局及奧運馬術公司的各個督導委員會和工作小組，就促進處理參與二零零七年八月「好運北京—香港回歸十周年盃」和二零零八年舉行的奧運及殘奧馬術項目的參加者及參賽馬匹進出香港國際機場的安排提供專業的意見。

To strengthen Hong Kong's leading position in the aviation sector, we made facilitation to major aviation events such as Asian Aerospace International Expo and Congress in September 2007 which included a splendid demo flight of Airbus A380 in Victoria Harbour.

The department also gave full support for the Olympic and Paralympic Equestrian Events. CAD actively participated in the steering committees and various working groups established by the Home Affairs Bureau and the Equestrian Company and provided expert advice on developing arrangements to facilitate the handling of the participants and competition horses to the "Good Luck Beijing - HKSAR 10th Anniversary Cup Eventing Competition" in August 2007 and the Olympic and Paralympic Equestrian Events in 2008 through the HKIA.

最後，我希望就所有同事在過去一年的努力、專業精神和成就表達我的謝意。感謝業界夥伴慷慨的合作和無價的貢獻，使香港的民航業得以持續發展。

展望未來，民航處將繼續努力與業界一同維護香港作為國際和地區航空中心和通往內地門戶樞紐的地位。



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 achievements during the year. My thanks also to our industry partners for their unstinting co-operation and invaluable contribution to sustain the growth and development in the civil aviation market in Hong Kong.

Looking ahead, the department will continue to strive to work with the industry to maintain Hong Kong's status as an international and regional aviation centre and one of the gateway hubs of the Mainland.

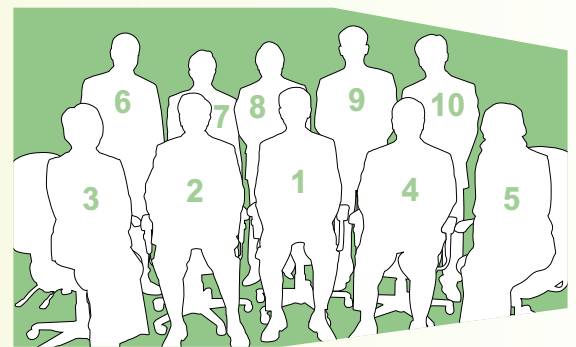
A handwritten signature in black ink, reading "Norman Lo".

Mr Norman Lo Shung-man, JP  
**Director-General of Civil Aviation**





1. 羅崇文太平紳士     **Mr Norman Lo Shung-man, JP**  
民航處處長             Director-General of Civil Aviation
2. 梁汝強太平紳士     **Mr Leung Yu-keung, JP**  
民航處副處長         Deputy Director-General of Civil Aviation
3. 張吳曼娥女士         **Mrs Helen Cheung Ng Man-ngo**  
署理總庫務會計師     Acting Chief Treasury Accountant
4. 郭桂源太平紳士     **Mr Stephen Kwok Kwai-yuen, JP**  
助理處長  
(航班事務)             Assistant Director-General  
(Air Services)
5. 林偉珊女士             **Miss Priscilla Lam Wai-shan**  
署理助理處長  
(計劃)                 Acting Assistant Director-General  
(Project)
6. 周禮強先生             **Mr Albert Chow Lai-keung**  
部門秘書                 Departmental Secretary
7. 譚禮漢太平紳士     **Mr Anthony Tam Lai-hon, JP**  
助理處長  
(機場標準)             Assistant Director-General  
(Airport Standards)



8. 伍崇正太平紳士     **Mr Colman Ng Shung-ching, JP**  
助理處長  
(航空交通管理)         Assistant Director-General  
(Air Traffic Management)
9. 王炳輝先生             **Mr Wong Ping Fai**  
署理助理處長  
(工程及系統)             Acting Assistant Director-General  
(Engineering & Systems)
10. 劉道全太平紳士     **Mr John Lau To-chuen, JP**  
助理處長  
(飛行標準)             Assistant Director-General  
(Flight Standards)



# 組織圖

# ORGANISATION CHART

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

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

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

航空交通管理部  
助理處長(航空交通管理) 伍崇正太平紳士  
Air Traffic Management Division  
Assistant Director-General  
(Air Traffic Management)  
Mr Colman Ng Shung-ching, JP

工程及系統部  
署理助理處長(工程及系統) 王炳輝先生  
Engineering & Systems Division  
Acting Assistant Director-General  
(Engineering & Systems)  
Mr Wong Ping Fai

財務部  
署理總庫務會計師 張吳曼娥女士  
Finance Division  
Acting Chief Treasury Accountant  
Mrs Helen Cheung Ng Man-ngo

飛行標準及適航部  
助理處長(飛行標準) 劉道全太平紳士  
Flight Standards & Airworthiness Division  
Assistant Director-General  
(Flight Standards)  
Mr John Lau To-chuen, JP

機場安全標準部  
助理處長(機場標準) 譚禮漢太平紳士  
Airport Standards Division  
Assistant Director-General  
(Airport Standards)  
Mr Anthony Tam Lai-hon, JP

民航處計劃組  
署理助理處長(計劃) 林偉珊女士  
CAD Project Team  
Acting Assistant Director-General (Project)  
Miss Priscilla Lam Wai-shan

行政部  
部門秘書 周禮強先生  
Administration Division  
Departmental Secretary  
Mr Albert Chow Lai-keung

\* 意外調查部  
副總意外調查主任  
\* Accident Investigation Division  
Deputy Chief Inspector of Accidents

## 意外調查

\* 民航處處長亦是總意外調查主任。  
意外調查部只在有需要時才運作，  
屆時會從其他分部抽調經特別訓練  
人員作支援。

## Accident Investigation

\* The Director-General of Civil Aviation is also Chief Inspector of Accidents. The Accident Investigation Division is mobilised only when required by drawing specially trained staff from other Divisions.

# 大事紀要 CALENDAR OF EVENTS

## 2007

五月十一日 May 11

立法會財務委員會批准撥款15.65億元，作為更換航空交通管制系統之用。

The Finance Committee of Legislative Council approved a sum of \$1,565 millions for replacing the air traffic control systems of the Civil Aviation Department.



五月二十八日至六月一日 May 28 - June 1

民航處主辦第二屆國際民用航空組織亞洲及太平洋區航空電訊網實施協調工作組會議。

CAD hosted the Second ICAO Aeronautical Telecommunication Network Implementation Co-ordination Group Meeting for Asia and Pacific Region.

七月九日 July 9

批出抵港航班管理系統合約。

Contract for provision of an Arrival Manager System was awarded.



八月二十三至二十四日 August 23-24

民航處獲得國際民用航空組織支持，主辦「推行多機組駕駛員執照地區研討會」。

CAD, in close consultation with the ICAO, hosted a Regional Symposium on the Implementation of Multi-Crew Pilot Licence.



八月三十至三十一日 August 30-31

民航處主辦國際民航組織的「預防傳染病經航空交通散播合作計劃」的第一次督導委員會會議。

CAD hosted the First Steering Committee Meeting of the ICAO Cooperative Arrangement for Preventing the Spread of Communicable Diseases.

九月三至六日 September 3-6

二零零七年亞洲航空國際展覽及會議在香港舉行，包括一項在香港國際機場舉行的飛機展覽。一架空中巴士A380型飛機在九月二日來港參與該飛機展覽。

The Asian Aerospace International Expo and Congress 2007 was held in Hong Kong. As part of this event, there was a static display of aircraft at the Hong Kong International Airport (HKIA). An Airbus A380 aircraft arrived at the HKIA on September 2 to participate in the display.



九月十八至廿八日 September 18-28

民航處處長和五名同事以中國代表團成員身份，出席加拿大蒙特利爾國際民航組織總部舉行的國際民航組織大會第36屆會議。

DGCA and five colleagues attended the 36th Session of the ICAO Assembly as members of the Chinese Delegation in ICAO Headquarters, Montreal, Canada.



十月二日 October 2

航空交通管理部重整架構，分為四組：航空交通事務及人事、訓練及安全、程序及評估和技術及發展。

Reorganisation of the Air Traffic Management Division into 4 Sections: Operations and Personnel, Training and Safety, Procedure and Evaluation and Technical and Development.

十月八至九日 October 8-9

獲國際民航組織協助，民航處在香港舉辦亞太區意外調查工作坊。

With the support of the International Civil Aviation Organization, CAD hosted an ICAO Regional Aircraft Accident Investigation Workshop in Hong Kong.

十月二十八日 October 28

香港國際機場採用雙跑道運作，跑道容量由每小時54班遞增至55班。

The declared runway capacity for dual runway operations increased from 54 to 55 movements per hour.

十一月二十一日 November 21

中國內地空域實施縮小垂直間隔，在8 900米與12 500米之間的高度層內，飛機之間的垂直間隔由600米減至300米，空域容量因而大幅提高。為配合內地改善空域容量的措施，香港的空管程序作出相應變動，航空交通管制員亦完成相關培訓。

Reduced Vertical Separation Minima was implemented in the Mainland China. The vertical separation for aircraft flying within Mainland airspace between 8 900 metres and 12 500 metres was reduced from 600 metres to 300 metres. As a result, the airspace capacity in the Mainland was considerably increased. With a view to supporting the Mainland's initiative to improve airspace capacity, Hong Kong ATC completed the corresponding changes in procedures and training for air traffic controllers.

十一月二十三日 November 23

本年度的飛機意外救援演習在消防分局附近的停機位進行，目的是測試利用消防局的掩蔽地方作救護分流站之用。

The annual aircraft crash and rescue exercise took place at an aircraft parking stand near the Sub Fire Station to test the use of the sheltered area of the fire station as a trial triage point.

十一月二十六日 November 26

航空交通管理部的航空情報服務取得國際標準化組織 (ISO) 9001 品質管理體系標準認證。

The Air Traffic Management Division acquired ISO 9001 accreditation for the Quality Management System on Aeronautical Information Services.



十二月六日 December 6

臨時停機坪改善工程竣工，使有關機位可停泊如B777-300型長度的飛機。

The Temporary Parking Apron upgrading works was completed enabling the concerned parking stands to accommodate up to B777-300 aircraft.

十二月二十一日 December 21

實施新空管程序，縮減著陸飛機之間的最後進場間距，航機相距可低至四海里。新程序實施後，航空交通管制人員可為航機編排更緊密、更有效的最後進場序列，提升跑道容量。

ATC procedures designed to reduce the final approach spacing to a minimum of 4NM between landing aircraft was first introduced. The new procedures enable air traffic controllers to sequence aircraft on final approach in a tighter and more efficient manner to enhance runway capacity.

## 2008

一月十一日 January 11

立法會財務委員會批准撥款19.97億元用以在機場島興建民航處新總部大樓。

The Finance Committee of Legislative Council approved a sum of \$1,997 millions for construction of the new Civil Aviation Department Headquarters at the Airport Island.

一月十五日 January 15

南貨運停機坪擴建工程竣工，全數13個分期落成的貨機停機位在民航處批核發牌後開始運作。

The South Cargo Apron Extension was completed. All 13 new cargo aircraft parking stands, commissioned in phases, were put into operations after licensing certification by CAD.

一月十四至二十三日 January 14-23

國際民航組織在香港進行保安審計。

ICAO conducted security audit on Hong Kong.

三月十四日 March 14

批出新航空交通管制雷達模擬系統合約。

Contract for provision of a New Air Traffic Control Radar Simulator was awarded.





# 航空交通統計

## AIR TRAFFIC STATISTICS

過往五年國際民航交通概況

### Five-Year Civil International Air Traffic

(二零零三年四月至二零零八年三月)(April 2003 – March 2008)

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	升降百分比 % Change	人次 Number	升降百分比 % Change	公噸 Tonnes	升降百分比 % Change
2003-2004	190 301	-10%	26 991 480	-19%	2 737 376	8%
2004-2005	242 421	27%	37 431 980	39%	3 142 751	15%
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%

過往五年航空交通管理部處理的航班總數

### Five-Year Total Flights Handled by the Air Traffic Management Division

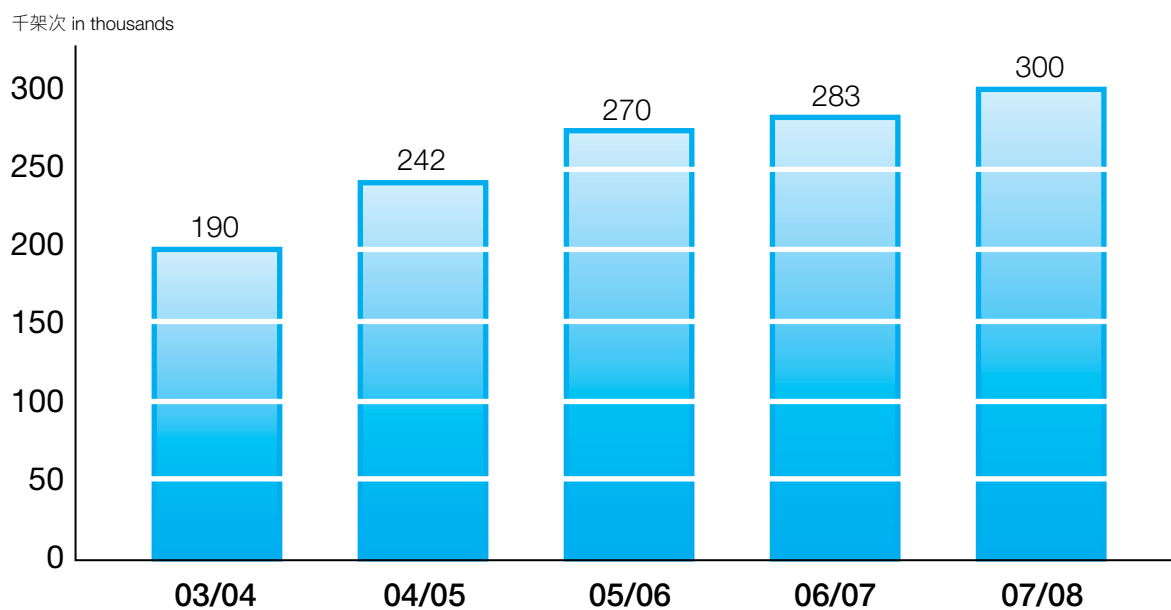
(二零零三年四月至二零零八年三月)(April 2003 – March 2008)

財政年度 Fiscal Year	航班總數* Flights Handled*	升降百分比 % Change
2003-2004	292 412	-9%
2004-2005	371 452	27%
2005-2006	411 208	11%
2006-2007	437 805	6%
2007-2008	461 693	5%

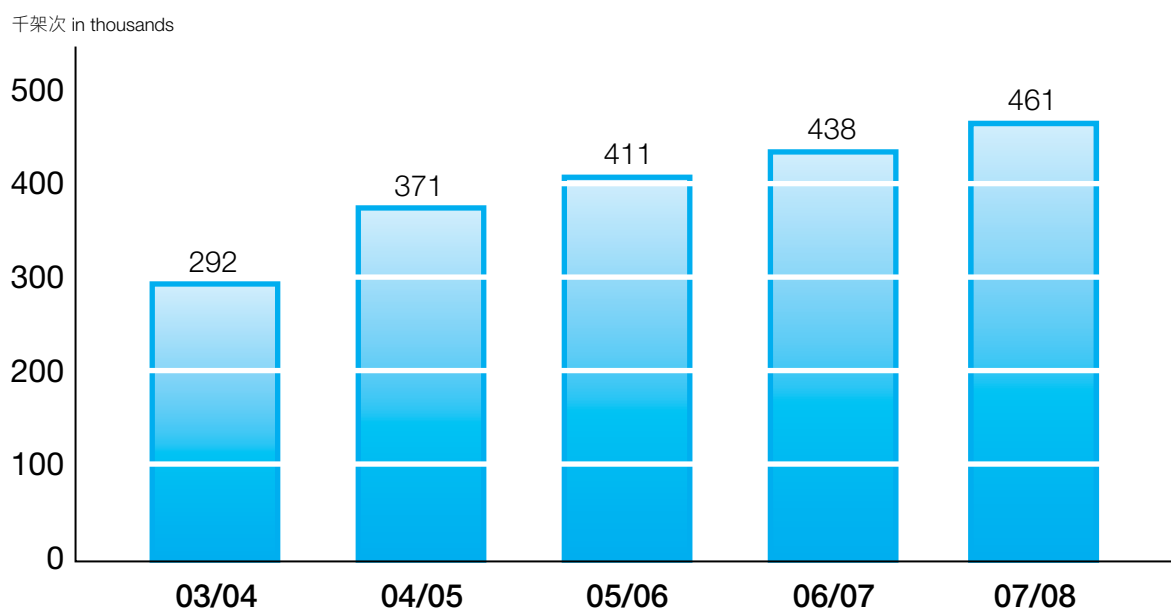
\*註釋：「航班總數」包括在香港國際機場升降的國際及本地航班、飛越香港飛行情報區的航班及進出澳門國際機場的航班。以上航班皆由航空交通管理部處理。

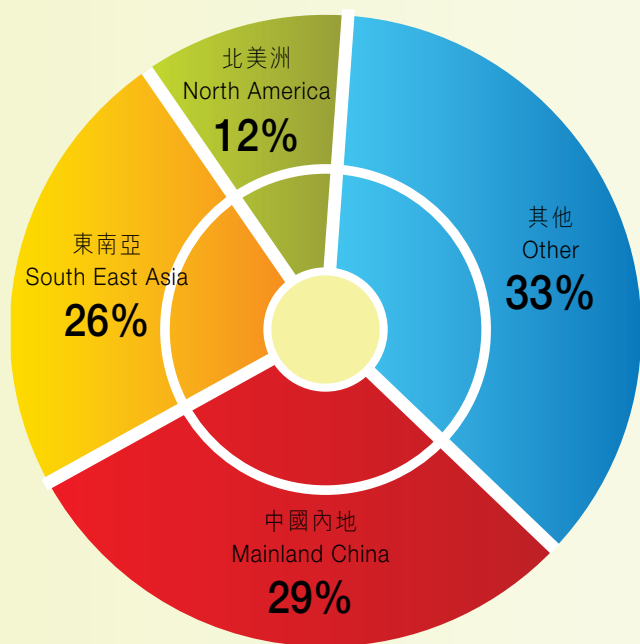
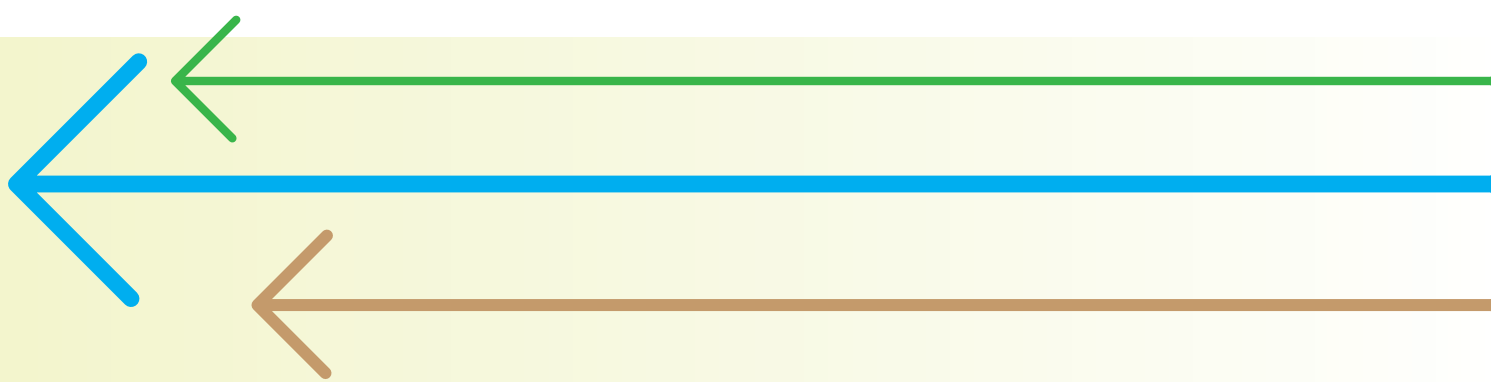
Notes: "Flights Handled" include international and local aircraft movements at the Hong Kong International Airport, flights overflying the Hong Kong Flight Information Region and flights flying into and out of the Macau International Airport handled by the Air Traffic Management Division.

### 香港國際機場過往五年航機升降次數 Five-Year Aircraft Movement at the Hong Kong International Airport



### 過往五年航空交通管理部處理的航班總數 Five-Year Total Flights Handled by the Air Traffic Management Division





**乘客主要增長**  
**Major Passenger Growth**

(二零零七 / 零八年度) (2007/08)

總增長(人次) Total increase

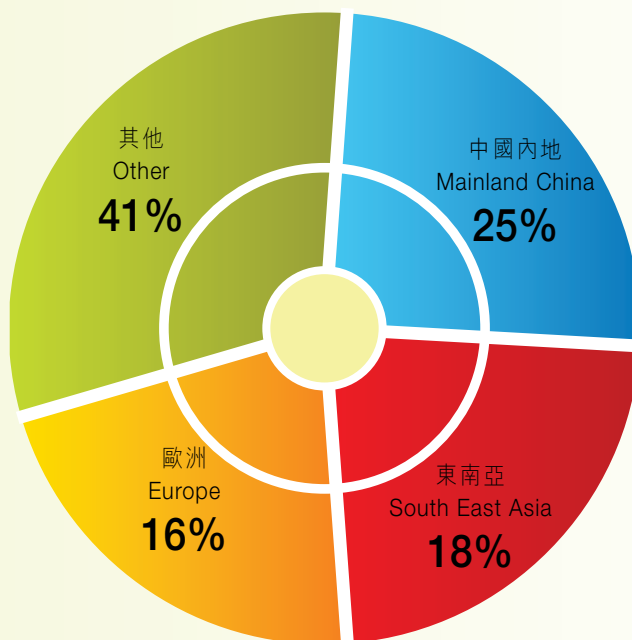
**3 568 923**

**貨運主要增長**  
**Major Cargo Growth**

(二零零七 / 零八年度) (2007/08)

總增長(公噸) Total increase (tonnes)

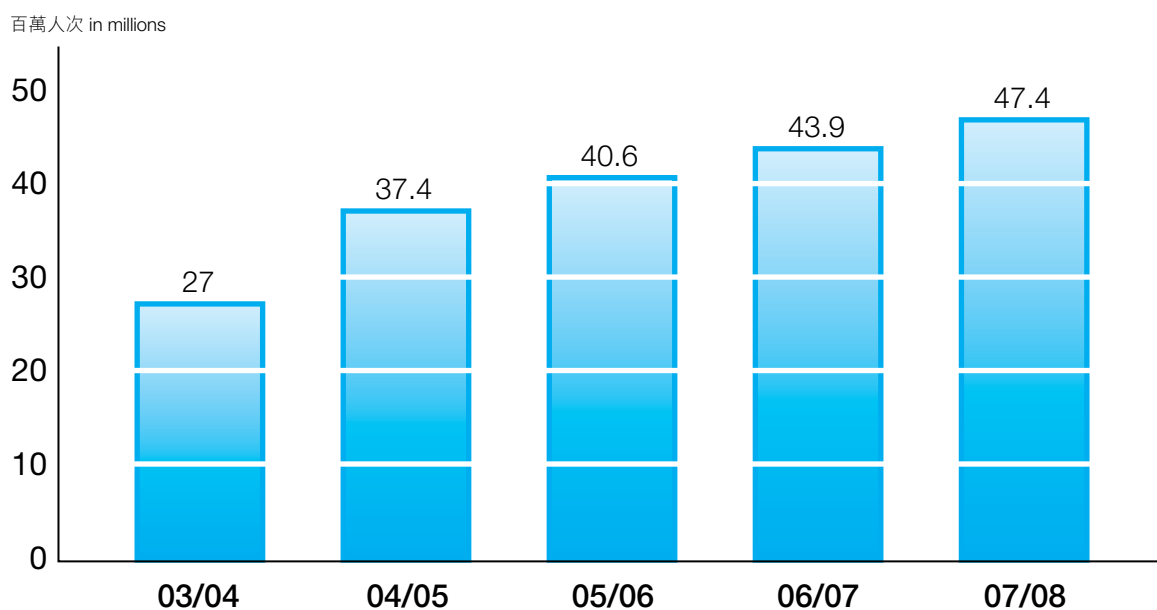
**233 696**





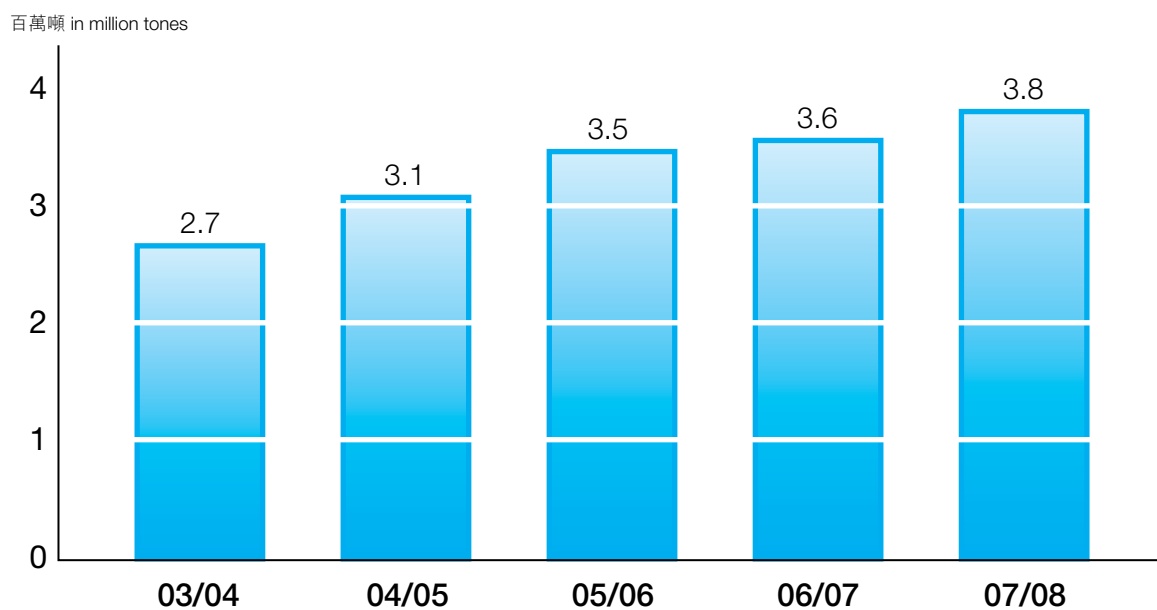
### 香港國際機場過往五年客運量

### Five-Year Passenger Traffic at the Hong Kong International Airport



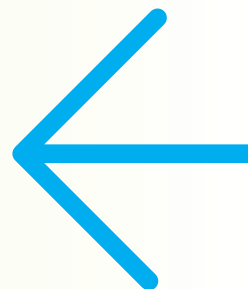
### 香港國際機場過往五年貨運量

### Five-Year Cargo Traffic at the Hong Kong International Airport



# 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，提供空中交通管理(空管)、航行情報及飛機事故警報服務。

The Air Traffic Management Division (ATMD) is responsible for the provision of air traffic management (ATM) service, aeronautical information service and alerting service within the Hong Kong Flight Information Region (FIR) as assigned by the International Civil Aviation Organization (ICAO).





## 航空交通運作

年內，本部共處理了300 677架次在香港國際機場升降的國際及本地航班，並為112 435架次飛越香港飛行情報區，以及48 581架次進出澳門國際機場的航班提供空管服務。與上一年度比較，在香港國際機場升降及飛越香港的航班分別增加2.7%和11%。航空交通量上升，是由於區內經濟活動，帶動航空客運及貨運量增長。

## 跑道升降容量

香港國際機場採用雙跑道運作，跑道容量自二零零七年十月二十八日起遞增至每小時55班。

## AIR TRAFFIC OPERATIONS

During the year, the Division handled a total of 300 677 international and local aircraft movements at the Hong Kong International Airport (HKIA). In addition, the Division handled 112 435 flights overflying the Hong Kong FIR and 48 581 flights into and out of the Macao International Airport. Compared to the previous year, the number of aircraft movements at the HKIA and overflights increased by 2.7 per cent and 11 per cent respectively. The overall increase in air traffic was due to the growth in passenger traffic and air cargo as a result of economic activities in the region.

## Runway capacity

The declared runway capacity was progressively increased to 55 movements per hour on dual runway operations since October 28, 2007.



跑道容量自二零零七年十月二十八日起遞增至每小時55班。

The declared runway capacity was progressively increased to 55 movements per hour on dual runway operations since October 28, 2007.

### 空管主任執照考試和覆核

為維持高水平的空管，本部的訓練及安全組會就空管主任的各類執照進行考核及每年覆核。就塔台管制、進場管制和區域管制這三個組別進行的考試及覆核共有249次。

此外，本部亦有向考核合格的人員授發助理管制員證書、氣象觀察證書、導師證書和搜索及拯救證書。

### 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

見習航空交通管制主任(見習空管主任)由入職，訓練至可全面執行各項空管工作，過程漫長。每個階段的訓練需要周詳規劃，以令見習空管主任可達致各階段的表現基準。見習空管主任如要符合獲發執照的條件，首先須接受理論訓練，然後在模擬器接受實習，最後才可在導師的監督下，處理「現場」航空交通。由於本地就業市場欠缺符合相關資歷的人才，一般而言，民航處會在本地招聘見習空管主任，經過專門培訓後，再晉升為空管主任。

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程序必須要有效地管理。合資格人選須參加三項甄選程序——首先是才能測驗的筆試，接着是面試，最後再在評估中心進行團體活動，接受認知能力及性格評估。

### Annual Examinations and Revalidations on ATCO Ratings

To ensure a high degree of ATC standard, the Training and Safety Section of the Division carries out licensing examinations and annual renewal checks on ratings held by Air Traffic Control Officers (ATCO). A total of 249 practical examinations were carried out in the three streams of Aerodrome Control, Approach Control and Area Control.

In addition, the Division also issues Assistant Controller Certificates, Meteorological Observer Certificates, Instructor Certificate, Search and Rescue Certificates to officers after attaining their respective qualifications.

### RECRUITMENT AND TRAINING OF AIR TRAFFIC CONTROL STAFF

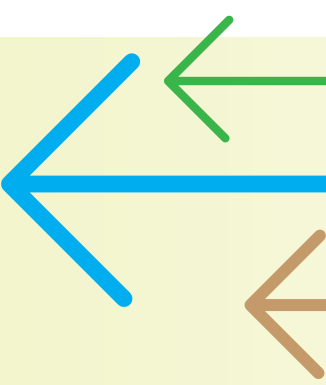
#### Recruitment of Student Air Traffic Control Officer

The training of a Student Air Traffic Controller from entry to attaining full performance status is a lengthy process requiring a carefully staged programme to meet each performance benchmark. To fulfil the licensing requirement, a candidate must first receive training in theory then practice in the simulator before progressing to the handling of 'live' traffic under the supervision of an instructor. As qualified ATCO human resources are not readily available in the local job market, they are normally recruited locally as Student Air Traffic Control Officers (SATCOs) to receive the specialised training up to the required professional standard.

Recruitment and training of ATC staff have to be effectively managed to meet anticipated traffic growth and medium to long term manpower succession requirements. Qualified candidates go through three screening processes - an initial written aptitude test, an interview followed by a group exercise in the Assessment Centre where candidates will undergo cognitive tests and personality assessments.



本處於2008教育及職業博覽設置的攤位。  
CAD staff were on hand to share their working experience to the visitors at the Education and Careers Expo 2008.



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「2008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。

截至二零零八年三月三十一日，在職的空管主任及航空交通事務員分別為238人及102人。

### 空管培訓

職員培訓向來是本部的重點任務。年內，本部舉辦多項指導班及在職訓練活動。除了已計劃的內部空管培訓和有關飛機緊急事故的複訓課程外，本部與民航訓練中心及中國民用航空局(中國民航局)轄下空中交通管理局合辦課程。

培訓一名見習空管主任成為全資格的管制員，以擔任二級空管主任職位，通常大約需時五年。其間該名人員須取得多項不同範疇的空管資歷。此外，我們須為在職空管主任編排定期複訓，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。年內，本處舉辦了19項不同專業範疇的空管培訓課程及兩項空管複訓課程，共有263名人員參加。受訓人員取得多項專業資格，其中18名獲頒發空管執照。此外，2名見習空管主任接受基礎飛行訓練，9名參加海外航空交通管制課程，兩項培訓均有助事業發展。此類海外培訓活動可讓受訓人員增進航空知識，豐富有關空管運作的閱歷。

### 民航訓練中心提供的培訓

本部與民航訓練中心合辦兩項課程：「航空交通管理概論」及「航空交通管制單位對飛機緊急事故之應變」課程。課程深受歡迎，學員包括航空相關界別的從業員及對航空有興趣的市民。

### 為中國民航局轄下空中交通管理局舉辦課程

本部亦為中國民航局東北空中交通管理局12名空管督導主任舉辦了一項「航空交通督導主任課程」。

With the objective of introducing the profession to the public and potential job applicants, CAD participated in the Education and Career Expo 2008, held career talks in universities and conducted regular students visits to our ATC facilities throughout the year.

As of March 31, 2008, the strength of Air Traffic Control Officers and Air Traffic Flight Services Officer was 238 and 102 respectively.

### ATC Training

Staff development continued to be one of the major tasks for the Division. Courses of instruction and on-the-job training activities had been intensive all through the year. Apart from the programmed in-house ATC training and refresher courses on aircraft emergency situations, the Division also conducted courses in conjunction with the Civil Aviation Training Centre and Air Traffic Management Bureau of Civil Aviation Administration of China (CAAC).



航空交通管制中心每天二十四小時運作。  
The ATCC operates round-the-clock.

Training of a SATCO to become a fully qualified controller at the rank of ATCO II normally takes around five years where the individual would have to acquire qualifications in various ATC disciplines. In addition, periodic refresher training has to be programmed for qualified ATCOs to ensure that their competency in responding to unusual circumstances, such as poor weather operations and aircraft emergencies is maintained. During the year, a total of 19 ATC training courses on various disciplines of the profession and two refresher training courses were conducted for 263 officers, leading to the issue of 18 ATC ratings and the attainment of other professional qualifications. As part of their career development, two SATCOs were provided with General Flying Progress Test (GFPT) flying training and nine SATCOs with overseas courses on air traffic control. These overseas training activities enhanced their aviation knowledge and broadened their exposure to ATC operations.



航空控制塔台  
The Air Traffic Control Tower

## 新航空交通管理程序

### 中國內地空域實施縮小垂直間隔

二零零七年十一月，中國內地空域實施縮小垂直間隔，務求提高空域容量，以應付增加的航空交通需求。新的間隔標準縮小飛機之間所需的垂直間距，因而增加航空交通管制可分配的飛行高度層數目。為配合上述變動，本部實施新的航空交通管制程序，並為航空交通管制人員提供所需的熟習訓練。新程序在安全快捷的情況下順利實施。

### *Training offered by Civil Aviation Training Centre*

The Division has organised in conjunction with the Civil Aviation Training Centre to run two courses - "Introduction to Air Traffic Management" and "Response to Aircraft Emergencies by Air Traffic Control Units". These courses were well received by personnel engaged in the aviation-related industries and interested public.

### *Training provided to Air Traffic Management Bureau of CAAC*

The Division also conducted an "Air Traffic Control Supervisor Course" for 12 ATC supervisors from Northeast Air Traffic Management Bureau of CAAC.

## NEW AIR TRAFFIC CONTROL PROCEDURES

### *Implementation of Reduced Vertical Separation Minima (RVSM) in Mainland Chinese Airspace*

With a view to improving airspace capacity to accommodate the increased demand in air travel, China implemented RVSM within the Mainland airspace in November 2007. The new separation standards reduced the vertical spacing required between aircraft and therefore increased the number of flight level available for assignment by air traffic control. In order to cater for the change, the Division implemented new air traffic control procedures and provided necessary familiarisation training to air traffic controllers. Transition to the new procedures was conducted in a safe and efficient manner.



著陸飛機之最後進場間距減至最低四海里。

*The final approach spacing between landing aircraft reduces to a minimum of 4NM.*

### 縮減最後進場間距

為了應付不斷增加的航空交通需求及充分利用跑道容量，本部在二零零七年年底採用一套新程序，縮減着陸飛機之間的最後進場間距，航機相距可低至四海里。新程序實施後，航空交通管制人員在符合飛行安全的情況下，可為航機編排更緊密的最後進場序列。

### 安全及質素保證管理

為確保航空交通管制安全和提升航空交通服務質素，本部根據國際民航組織標準及民航處的監管規定，在航空交通服務的質素保證，以及安全管理系統的發展方面，與飛行標準及適航部航空交通管理標準組緊密合作。在引進任何新的航空交通服務系統和程序，或落實重大變動前，本部會主動作出安全管理，進行安全評估及採取相應的風險緩解措施。此外，本部亦會定期進行內部審計，監察和評估航空交通服務系統及運作的安全程度。本部持續為員工提供安全管理系統訓練，讓他們對安全管理加深認識，並充分掌握安全管理系統的操作技巧。本部一向致力達到最高質素標準，我們努力成果之一是於二零零七年十一月，本部的航行情報服務取得國際標準化組織 (ISO) 9001 品質管理體系標準認證。

### Reduction of Final Approach Spacing

In order to meet the growing traffic demand and capitalise on the available runway capacity to the fullest extent, the Division adopted a new set of procedures toward end 2007 to reduce the final approach spacing to a minimum of 4NM between landing aircraft. The new procedures enable air traffic controllers to sequence aircraft on final approach in a tighter and more compact manner, commensurate with flight safety.

### SAFETY AND QUALITY

The Division endeavours to ensure Air Traffic Control safety and enhance quality in the provision of air traffic services (ATS). In this respect, the Division works closely with the Air Traffic Management Standards Office (ATMSO) in the Flight Standards and Airworthiness Division in ATS quality assurance, development and maintenance of the Safety Management System (SMS) in compliance with ICAO standards and CAD regulatory requirements. Proactive safety management such as safety assessments and subsequent implementation of risk mitigating measures are put in place before introducing any new or significant changes to ATS systems and procedures. In addition, regular internal audits are carried out to monitor and assess ATS systems and operations safety levels. On-going SMS training is provided to staff to enhance their understanding in safety management and skills in performing SMS related activities. As part of the continual efforts in pursuing highest quality standards, the Aeronautical Information Service undertaken by the Division acquired ISO 9001 accreditation for the Quality Management System in November 2007.



航行情報服務中心的服務包括為香港飛行情報區內航班提供航空資料。  
*The scope of AIC services includes the provision of Aeronautical Information Services within the Hong Kong Flight Information Region.*



## 珠江三角洲(珠三角)地區航空交通管理計劃

年內，香港民航處、中國民用航空局與澳門民航局組成的三方工作小組舉行兩次會議，以完善珠三角航空交通管理綜合計劃。計劃目的在於改善珠三角地區的空域規劃和航空交通管理，已在本年度提交內地有關當局最後審批，結果預期在二零零八年公布。如獲內地有關當局最後批准，該計劃會分階段實施，確保珠三角地區直至二零二零年的航空交通的持續增長。

## 海外空管會議和研討會

年內，本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和其他航空機關主辦的會議和研討會。

## 電訊服務

關於固定航空通訊服務，本部電訊組年內處理的電報量達28 129 834個，較上一年度增加10.5%。

航空氣象廣播服務方面，電訊組年內為航機提供合共212 345次氣象報告，較上一年度增加0.9%。



航空電訊網中心  
Aeronautical Network Centre

## 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 twice during the year to fine tune the Integrated PRD Air Traffic Management Plan (the Plan), which aimed to improve the airspace organisation and air traffic management of the PRD Area. The Plan was submitted to the relevant Mainland Authorities for final vetting within the year and feedback is expected in 2008. Subject to final endorsement by relevant Mainland Authorities, the Plan will be implemented in phases to ensure sustainable air traffic growth within the PRD region up to 2020.

## 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 and other aviation authorities.

## TELECOMMUNICATIONS SERVICES

On Aeronautical Fixed Service, the number of messages handled by the Telecommunications Unit of the Division during the year reached a total of 28 129 834, representing a 10.5 percent increase over last year.

On Aeronautical Broadcast Service, a total of 212 345 weather messages were provided to aircraft in flight during the year. The amount was 0.9 percent more than that of the previous year.

# 工程及系統

# ENGINEERING AND SYSTEMS

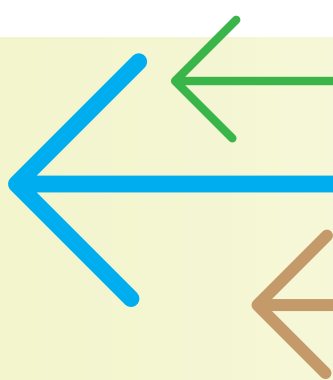


工程及系統部負責設計、規劃、統籌和提供香港航空交通管制(空管)系統、雷達、導航儀器和通訊等設備。為進一步提升部門的運作效率和協同效益，新的航空交通工程及標準部將於二零零八年四月一日成立。這分部由不同界別的同事組成，包括本部的電子工程師及資訊科技專才、航空交通管理部的航空交通管制人員及飛行標準及適航部轄下航空交通管理標準組的監管人員。

The Engineering and Systems Division is responsible for the design, planning, coordination, and provision of air traffic control (ATC) systems, radar, navigational aids, and communications facilities for Hong Kong ATC operations. With an initiative to further enhance operation efficiency and create synergy within the Department, a new Air Traffic Engineering and Standards Division is to be established on April 1, 2008. It will consolidate various disciplines of experts including electronic engineers and information technology (IT) professionals from the Division, ATC operations officers from the Air Traffic Management Division (ATMD), and the ATM regulators from the Air Traffic Management Standards Office of Flight Standards and Airworthiness Division.







年內，本部繼續致力維持高水平的服務、穩定可靠的空管系統，以支援各項空中交通服務。現時的空管系統於一九九七年驗收，其可用期將在二零一二年屆滿。鑑於系統相當複雜，本部已開始制訂更換計劃，務求新系統能適時投入服務。有關項目於二零零七年五月十一日獲立法會財務委員會通過撥款，相關系統整體設計、詳細運作要求及新空管系統招標文件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進展順利，六個系統構件已投入運作，另外六個正進行測試，以評估相關運作效益。為應付區內航空交通增加的需求，新的系統構件如廣播式自動相關監察、電子飛行進程單和S模式監察等技術，亦在積極籌劃之中。

本部繼續推廣及推行嶄新資訊科技的應用，提升電腦網絡基建和設施，以配合本處和政府服務電子化的目標。

## 航空交通管制系統的發展

### 更換航空交通管制雷達模擬系統

更換新航空交通管制雷達模擬系統的合約已於二零零八年三月十四日批予獲選的供應商。新系統可提升模擬雷達運作的處理能力，其先進功能將適時應付空管人員的訓練需要。新模擬系統預計可在二零零八年十二月投入運作。

### 航空無線電通訊技術工作組成立十週年

鑑於時有機師報告指甚高頻無線電通訊頻道受無線電干擾，一個由本港及內地專家組成的航空通訊專家組早於一九九七年成立，處理有關問題。專家組經過多年來努力，通訊受干擾的情況已大有改善，每年接報數目亦由一九九八年時超過六百五十宗，減少至二零零七年的九十宗。為表揚專家組過去多年達致的工作成果，專家組於二零零七年十一月二十九日在香港慶祝成立十週年。民航處處長於儀式中擔任主禮嘉賓，出席嘉賓包括中國民用航空總局空中交通管理局副局長、中國信息產業部無線電管理局副局長及中國人民解放軍電磁頻譜管理委員會辦公室參謀。

During the year, the Division continued its efforts in maintaining a high standard, stable, and reliable ATC system to support air traffic services. The existing ATC system, commissioned in 1997, would reach the end of its usable life around 2012. Given the complexity of the system, the Division had initiated an action plan for a timely replacement. With the funding approval received from the Finance Committee of the Legislative Council on May 11, 2007 for the required replacement exercise, detailed design of the system architecture, refinement of operational requirements, and preparation of tender documents for acquisition of the new ATC system were progressing well.

The Satellite-based Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Systems Project continued to progress in a satisfactory manner, with six system elements now in operational use and six on trials to assess their operational benefits. To cope with the rapid air traffic growth in the region, trials and implementation of new CNS/ATM system elements like Automatic Dependent Surveillance-Broadcast (ADS-B), Electronic Flight Progress Strips, Mode S Surveillance etc, were actively 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 the e-government objectives.

## AIR TRAFFIC CONTROL SYSTEMS DEVELOPMENT

### Replacement of ATC Radar Simulator

A contract was awarded to the selected supplier on March 14, 2008 for provision of a replacement ATC radar simulator that is to provide high simulation capacity and enhanced functionalities as required for up-to-date training of air traffic controllers. The new simulator would be ready for service in December 2008.

### 10th Anniversary of Technical Working Group on Aeronautical Radio Communications

Since 1997, a dedicated Technical Working Group (TWG) comprising members of Hong Kong and Mainland ATC and Telecommunications Authorities had been set up to tackle the harmful radio frequency interference (RFI) experienced on the air-ground VHF radio communication channels as reported by the pilots. The situation had improved significantly with annual interference incidents/reports decreasing from over 650 reports in 1998 to less than 90 reports in 2007. In recognition of its fruitful achievements, a commemoration for 10th anniversary of the TWG was held in Hong Kong on November 29, 2007. The event was officiated by the Director-General of Civil Aviation, and attended by the Deputy Director-General of Air Traffic Management Bureau, Civil Aviation Administration of China, Deputy Director-General of Radio Regulatory Department, Ministry of Information Industry, and Staff Officer of Radio Frequency Spectrum Management Commission of People's Liberation Army from the Mainland.



香港與內地航空通信專家組成立十週年紀念儀式於2007年11月29日在香港舉行。

The Commemoration Event for the 10th Anniversary of Technical Working Group on Aeronautical Radio Communications was held in Hong Kong on November 29, 2007.

### 提升話音記錄系統

二零零七年六月本分部為已使用超過十年的話音記錄系統進行提升工程。舊系統已由一個高容量的先進記憶儀器取代。系統經過提升後，其耐用性、維修保養及可靠程度各方面都得到進一步加強。

### 空管系統的安全及風險評估

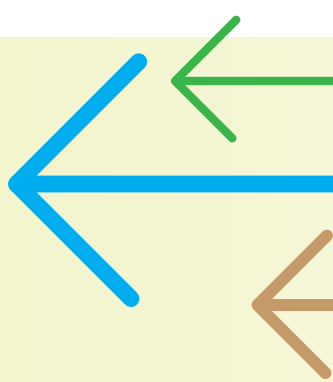
本處對各個空管系統的安全及風險評估，均會作出定期檢討。為符合國際民用航空組織(國際民航組織)的安全管理要求，本分部已就空管系統、重要的屋宇設施及由承辦商提供的相關儀器維修保養服務，制訂了一套安全管理系統的推行計劃。

### Upgrading of Voice Recording System

The Voice Recording System had been in service for over 10 years and was successfully upgraded in June 2007 by using a high-capacity state-of-the-art storage system. With such equipment upgrade, the availability, maintainability, and reliability of the system were considerably enhanced.

### Safety and Risk Assessment on Hong Kong ATC Systems

Regular reviews were conducted with respect to safety and risk assessments on different Hong Kong ATC systems. To meet the ICAO safety requirements, the Division had formulated a structural plan to implement safety management system (SMS) for ATC systems, critical building services facilities and relevant equipment maintenance services provided by contractors.



### 更換航空交通管制系統

現有空管系統的處理能力與功能均無法應付預期中的航空交通增長需求及航空業的發展，為保持香港作為區內航空交通樞紐的地位，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。二零零七年五月十一日，立法會財務委員會通過撥款予民航處更換現有的空管系統，預算成本為15.65億元。為進行系統設計及作詳細規劃，本處年內曾派員到海外的航空交通管制中心及塔台實地考察、進行市場調查、並邀請有關儀器供應商來港作示範。就空管系統的更換，制訂運作要求及系統規格的準備工作已經展開，預計各空管系統的招標工作會於二零零九年首季至二零一零年首季內分階段進行。



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

### 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衛星通訊、導航及監察/航空交通管理系統所訂的全球和地域實施計劃，本處繼續研究系統的最新發展，並詳細測試系統每個構件。有關系統的技術和運作測試均進展順利，部分技術成熟的系統構件經已投入服務，以便早日發揮系統的功能，提升和優化香港空管服務的水平。

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、香港與曼谷之間的主幹航空電訊網，以及與三亞的空中交通服務設施間數據通訊已投入運作，用量亦日見增加。現時，每月平均有約40 000次要求提供數據化自動航站情報服務 / 數據化遠航氣象情報服務；平均每日有206架次離港班機使用飛前放行指示數據鏈路服務，約佔香港國際機場每日離港航班數目的49%。

### 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 aviation hub, it was considered necessary to plan for a replacement ATC system with high 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. On May 11, 2007, funding approval was received from the Finance Committee of Legislative Council for the CAD to replace the existing ATC system at an estimated cost of \$1 565 million. To facilitate system design and project planning, fact-finding visits to overseas ATC centres and towers, market survey, and equipment demonstrations by potential suppliers were conducted during the year. Preparation of the operational requirements and system specifications were underway. It is expected that tender invitation for the various replacement systems would be carried out in phases between first quarter of 2009 and first quarter of 2010.

### 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 investigations on various elements of the CNS/ATM systems continued. Satisfactory progress was achieved on relevant technical and operational trials. Mature system elements were put into operational use to reap the benefits of early CNS/ATM applications, which enhanced and upgraded the ATC service of Hong Kong.

So far the Digital-Automatic Terminal Information Service (D-ATIS), Digital-Meteorological Information for Aircraft in Flight (D-VOLMET) service, Pre-Departure Clearance (PDC) delivery via datalink, the ATN backbone connecting Hong Kong with Bangkok, and the Air Traffic Services Inter-facility Data Communication (AIDC) with Sanya were put into operational use. These new services continued to gain popularity with a monthly average of 40 000 requests for the D-ATIS/D-VOLMET services, and a daily average of 206 departing aircraft using the PDC service via datalink, representing approximately 49 per cent of the daily departure traffic from the Hong Kong International Airport (HKIA).

### Aeronautical Telecommunication Network and ATS Message Handling System

In the revised ICAO Asia-Pacific Regional Plan, States in the Region should implement Aeronautical Telecommunication Network (ATN) and ATS Message Handling System (AMHS) by 2009. Hong Kong, being one of the ATN/AMHS backbone sites in the Region, mounted an open tender on March 7, 2008 to acquire a high capacity AMHS for trials and operations with the neighbouring ATC authorities including Beijing, Tokyo, Taipei, Bangkok, Manila, and Macao etc.

### 航空電訊網及航空交通服務訊息處理系統

按照國際民航組織的亞太地區修訂計劃，區內國家須在二零零九年年末前建立航空電訊網及航空交通服務訊息處理系統。香港作為區內一個航空電訊網 / 航空交通服務訊息處理中樞，須購置一部高效能航空交通服務訊息處理系統，以配合與北京、東京、台北、曼谷、馬尼拉和澳門等鄰近地區的空管單位作進一步測試和運作。新系統的招標程序已於二零零八年三月七日展開。

### 先進場面活動引導和控制系統

由於先進場面活動引導和控制系統在香港國際機場的初步測試結果理想，本分部已進一步擴展有關系統，並連接機場其他系統，當中包括場面活動雷達、二次監察雷達和飛行區地面燈號系統。新系統可對機場內活動的飛機及配備了特別裝置的車輛作全天候安全監察，提供更準確的位置、防碰撞提示和闖入跑道的預警功能。系統現正進行優化，預計可於二零零八年下半年進行運作測試。

### 廣播式自動相關監察

為評估廣播式自動相關監察訊號在香港地理環境下的覆蓋情況和性能，本分部特別在大帽山安裝一台廣播式自動相關監察儀器，有關技術測試已於二零零七年四月至六月間進行，結果令人滿意。本處現正與政府飛行服務隊研究將這種技術應用於監察在本港低空飛行的直升機。



在大帽山所安裝的廣播式自動相關監察儀器測試系統的天線組件。  
ADS-B Trial System at Tai Mo Shan.



位於小磨刀多普勒甚高頻全向無線電信標及測距儀。  
Doppler Very High Frequency Omni-directional Radio Range and Distance Measuring Equipment (DVOR/DME) System at Siu Mo To.

### Advanced Surface Movement Guidance and Control System

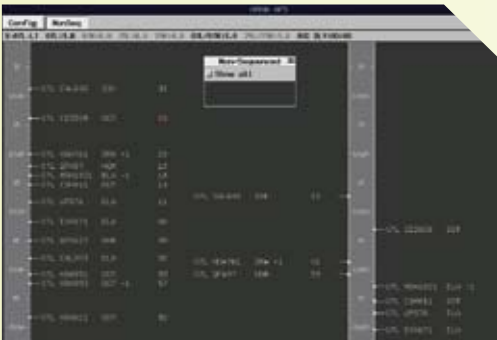
Following the satisfactory results obtained from the evaluation of an Advanced Surface Movement Guidance and Control System (A-SMGCS) on the prime surveillance area of HKIA, the Department had expanded and integrated the system with other existing airport facilities including the Surface Movement Radar, Secondary Surveillance Radar, and Airfield Ground Lighting System. The new system could provide all-weather surveillance of aircraft and specially equipped vehicles operating at HKIA with more accurate positions, conflict detection, and runway incursion alerting functions. The system was currently under site optimisation and would be put into operational trial in second half of 2008.

### Automatic Dependent Surveillance - Broadcast (ADS-B)

Technical trials using a standalone ADS-B equipment at Tai Mo Shan were conducted with targets of opportunity between April to June 2007 to evaluate the ADS-B signal coverage and its performance in Hong Kong geographical environment. With the satisfactory results, study was being made with Government Flying Service in the application of ADS-B technology for surveillance of helicopter movements at low level.

### 抵港航班管理系統

在抵港航班管理系統的公開招標程序完成後，系統合約已於二零零七年七月九日批予獲選的供應商。基本系統已於二零零七年底驗收，運作評估亦已於二零零八年一月四日開始。該系統可向空管人員提供抵港航班序列提示，讓他們能更有效地利用本港空域，減少抵港航班的整體延誤情況。系統的優化工作正在進行中，並預期於二零零八年七月完成。



抵港航班管理系統。  
Arrival Manager System.

### Arrival Manager System

Following an open tender exercise, a contract for the supply and installation of an Arrival Manager System was awarded to the selected supplier on July 9, 2007. A basic system was delivered in late 2007 and made ready for operational evaluation on January 4, 2008. The system could offer sequencing advice to the air traffic controllers to facilitate their efficient use of the Hong Kong airspace and reduce overall delay of arrival aircraft. Further optimisation and enhancements of the system were progressing well and expected for completion in July 2008.

### Performance Based Navigation

The study and design of Area Navigation (RNAV) Non-Precision Approach (NPA) procedures were completed in September 2007, with flight check scheduled for April 2008 to validate these new Performance Based Navigation (PBN) procedures. The next phase of the PBN study would focus on the use of Ground-based Augmentation System to support the Satellite Landing System for Category I operation at the HKIA.





### 基於性能的導航

區域導航及非精密進場程序的研究和設計已於二零零七年九月完成，飛行校驗亦已安排於二零零八年四月進行。下一階段的研究工作將集中如何運用陸基增強系統及其相關技術，並利用有關技術在香港國際機場提供第一類著陸要求的運作。

### 資訊科技的應用

年內，數個有助本處運作流暢的資訊科技項目已投入應用，包括電子試卷、電子值班記錄資料庫和航班流量顯示系統。本分部年內亦優化了多個資訊科技系統，包括部門圖書館系統及管制代理人資料庫等。另外，亦正為新空管系統建立一個中央資料庫，以儲存航班數據及其他空管運作資訊，供各分部作共享、分析和統計匯報之用。

民航處電腦網絡(CADNET)及電子辦公室設施繼續不斷改善，包括提升伺服器、添置資訊科技儀器、使用高速線路連接至政府主幹網絡等。本分部亦優化了民航處的內部電郵(Lotus Notes)伺服器，提升其處理速度及容量，而有關改良(包括對機密電郵系統)亦增加了系統復原功能，可在有需要時使用。二零零七年十一月，民航處電腦網絡亦進行了一次資訊科技保安風險評估，結果令人滿意，再次確認本處電腦網絡安全可靠。

### IT APPLICATIONS

During the year, several new IT applications to facilitate the operations of the Department had been implemented. These included Electronic Test Paper, e-Watch Keeping Log Database, and Flight Movement Display System. Enhancements to the existing IT applications e.g. Library System and Regulated Agents Database, etc, were also completed in the year. A centralised database is being built with the new ATC systems to store the flight data and other operational information for sharing, analysis, and statistics reporting.

Ongoing enhancements were made on the departmental computer network (CADNET) and e-office facilities, including computer server upgrade, extra equipment provision, and the use of higher speed links to the government backbone network (GNET). The Lotus Notes mail servers of CAD were also upgraded with a high speed and large capacity platform whereas the departmental e-mail system (including the Confidential Mail System) was constructed in a resilient configuration to facilitate disaster recovery if needed. An IT security risk assessment on CAD network was conducted in November 2007 which once again confirmed that the CADNET was secure and safe.



# 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用航空組織（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、監察輕型飛機和直升機運作、規管航空交通服務，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 International Civil Aviation Organization (ICAO). Other functions of the Division include personnel licensing, supervision of airworthiness and maintenance standards of aircraft registered in Hong Kong, supervision of light aircraft and helicopter operations, regulation of the provision of air traffic services, investigation of aircraft accidents and incidents, and safety data analysis.





## 飛行標準組

### 簽發和續發航空營運許可證

截至二零零八年三月三十一日，有九家航空公司持有香港航空營運許可證，包括：

- 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
- 空中快線
- 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)
- 甘泉航空有限公司 (甘泉航空)

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的持證公司的安全表現和營運標準。當中，飛行標準組執行了153次飛行檢查，並對航空營運許可證的持證公司作出了合共265次的其他巡查(包括外站巡查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27台飛行模擬器進行了評審、視察及重新簽發使用許可。此外，本部亦兼負監察政府飛行服務隊的直升機和定翼機運作的職責。而年內，為確保使用香港國際機場的外國航空公司均能符合國際標準，本部進行了37次個別的停機坪巡查。

### 航空器移交

隨著香港航空業的快速發展，本地航空公司繼續擴充其機隊。年內，合共有25架航空器被新增至香港民用航空器登記冊內，詳情如下：

## FLIGHT STANDARDS OFFICE

### Issue and Renewal of AOC

As at March 31, 2008, there were nine Hong Kong AOC holders and they were:

- Air Hong Kong Limited (AHK)
- Cathay Pacific Airways Limited (CPA)
- Heliservices (Hong Kong) Limited (HEL)
- Heli Express Limited (HEXP)
- Hong Kong Airlines Limited (HKA)
- Hong Kong Dragon Airlines Limited (HDA)
- Hong Kong Express Airways Limited (HKE)
- Metrojet Limited (Metrojet)
- Oasis Hong Kong Airlines Limited (OHKA)

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 153 flight operations inspections, the Flight Standards Office had conducted a total of 265 AOC inspections including station inspections and approval of authorised examiners. The 27 flight simulators used by these 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). Furthermore, to ensure compliance with international standards by all airline operators at the Hong Kong International Airport (HKIA), the Division conducted 37 separate ramp inspections on foreign airline operators during the year.

### Delivery of Aircraft

As the Hong Kong aviation industry continued to grow rapidly, local airlines expanded their fleets and a total of 25 aircraft were added to the Hong Kong Civil Aircraft Register in the period as follow:

航空公司	類型	Airlines	Aircraft Type
國泰	三架空中巴士A330、三架波音B747(其中一架為貨機)和七架波音B777	CPA	3 Airbus A330, 3 Boeing B747 (one of which was freighter) and 7 Boeing B777
香港航空	兩架波音B737	HKA	2 Boeing B737
港龍航空	兩架波音B747F	HDA	2 Boeing B747F
香港快運	三架波音B737	HKE	3 Boeing B737
香港商用飛機	一架灣流G200	Metrojet	1 Gulfstream G200
甘泉航空	兩架波音B747	OHKA	2 Boeing B747
個別私人航空器營運者	一架灣流G550及一架歐洲直升機公司EC135型直升機	Private aircraft operators	1 Gulfstream G550 and 1 Eurocopter EC135 helicopter



航空營運督察審視本地航空公司的飛行模擬器。  
A Flight Operations Inspector inspecting a flight simulator used by one of the local airlines.

### 工作組

為確保有效施行國際民航組織的安全標準，本處負責領導飛行工作時間限制工作組、酒精及藥物工作組和宇宙輻射及航空委員會的工作。當中，飛行工作時間限制工作組繼續與業界商討有關飛行工作的時間限制事宜，酒精及藥物工作組則繼續努力草擬防止濫用精神科物質的工作守則以便業界可以遵循，而宇宙輻射及航空委員會則繼續透過監測計劃、監察機組人員所面對的宇宙輻射劑量。



適航主任為航機進行檢查。  
An Airworthiness Officer conducting aircraft inspection.

### Working Groups

To ensure effective implementation of ICAO safety standards, the Flight Time Limitation Working Group (FTLWG), the Alcohol and Drugs Working Group (ADWG) and the Cosmic Radiation and Aviation Committee (CRAC) are formed under the chairmanship of CAD. While the FTLWG continued to work with the industry on matters relating to flight time limitation, ADWG has been focusing in the development of the Codes of Practice for the industry regarding the prevention of the use of psychoactive substances, and the programme to monitor the exposure to cosmic radiation by crew members has been under constant review by CRAC.

### 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, Asia, Middle East, Australia, New Zealand, Europe and North America, for the purpose of continual validation 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 and Boeing working group meetings on Certification and Maintenance Review Board; ARJ 21 working group meetings on Certification, Flight Testing and Maintenance Review Board; the ICAO Noise Certification Workshop as well as various aircraft type technical, human factors and safety management courses.

## 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水平。由經驗豐富的適航主任所組成的適航事務組，工作範圍包括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、亞洲、中東、澳洲、紐西蘭、歐洲和北美洲各地城市檢查飛機。上述工作的目的是為求適航事務組能履行航空營運許可證內的持續認可、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的有關職責。

適航主任繼續接受適航事宜的相關技術培訓和吸取最新的監管策略資訊。此外，適航主任亦獲派出席國際研討會、會議和工作組會議，以擴闊適航主任的國際視野並了解適航標準的最新發展。報告年內，適航主任出席了空中巴士和波音飛機的審定和維修審查委員會工作組會議，ARJ21飛機的審定、試飛和維修審查委員會工作組會議，國際民航組織飛機噪音工作坊，以及飛機型號、人為因素和安全管理的課程。

## 飛機維修

適航事務組透過機庫檢查、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。截至二零零八年三月三十一日，共有30家公司獲發香港認可維修機構的資格。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等主要維修公司，均受適航事務組監察，當中包括持續審查和定期視察。

年內，適航事務組亦有舉辦與飛機維修有關的課程。二零零七年六月，適航事務組舉辦為期兩星期的香港適航事務課程，並邀請英國民航局的客席講者作講解。上述課程獲業界熱烈參與，參加者包括維修工程師、技術服務專家、維修管制員、經理、品質監控人員等。

## 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, 2008, there were 30 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.

The Airworthiness Office also conducted maintenance related courses during the year. A two-week Hong Kong Airworthiness Course hosted by the Division in June 2007 with guest speakers from the United Kingdom Civil Aviation Authority (UKCAA), received overwhelming attendance from the industry, including maintenance engineers, technical services experts, maintenance controllers, managers, quality monitoring personnel, etc.



適航事務組定期監察所有香港認可的飛機維修及飛機部件維修公司。  
The Airworthiness Office regularly monitors all Hong Kong approved aircraft and aircraft component maintenance companies.



### 飛機維修訓練

截至二零零八年三月三十一日，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。該五家機構均獲准舉辦跟維修在香港登記的飛機有關的基本訓練課程及飛機型號訓練課程。

### 適航事務組統計數字

(由二零零七年四月一日至二零零八年三月三十一日)

	數目
簽發適航證	25
續發適航證	199
審定重大改裝	17
認可飛機維修機構	30
認可飛機維修訓練機構	5
認可設計及製造機構	2
簽發飛機維修執照	1 348

### 航空人員執照事務組

#### 飛行員執照

為配合國際民航組織於二零零八年三月五日起實施的航空人員語言能力標準要求，航空人員執照事務組於年內簽發了3 623份語言能力批注。而執照事務組在另一方面亦處理了1 896份有關簽發飛行員或機組人員執照、飛機型號和特殊批注的申領與及執行了4 464份飛行員執照考試。這些考試中，有3 897次考試在香港舉行，其餘的567次則是由本處人員前往位於澳洲的阿得雷德飛行學校，親自監考該校根據《CAD 509》批准文件所舉行的飛行員執照考試。執照事務組另共簽發了3 659份體檢合格證明書。執照事務組亦於年內處理了430個以轉換海外執照形式申請簽發的香港執照。

#### 飛機維修執照

截至二零零八年三月三十一日，航空人員執照事務組簽發的有效執照共有1 348個。年內，航空人員執照事務組透過香港飛機工程有限公司位於將軍澳的電腦化考試系統，舉辦了合共7 219份試卷的考試。

### 協調本地空域使用者

為促進航空安全，香港分區飛行安全委員會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

### Aircraft Maintenance Training

As at March 31, 2008, 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.

### Airworthiness Office Statistics

(between April 1, 2007 to March 31, 2008)

	Number
Certificate of Airworthiness Issued	25
Certificate of Airworthiness Renewed	199
Major Modification Approved	17
Approved Aircraft Maintenance Organisations	30
Approved Aircraft Maintenance Training Organisations	5
Approved Design and Manufacturing Organisations	2
Aircraft Maintenance Licence (AML) Issued	1 348

## PERSONNEL LICENSING OFFICE

### Flight Crew Licensing

In connection with the implementation of the ICAO Language Proficiency Requirements on March 5, 2008, Personnel Licensing Office (PLO) issued 3 623 Language Proficiency Endorsements in addition to the processing of 1 896 applications for initial licence issue or renewal, inclusion of ratings and addition or removal of endorsements in flight crew licences. A total of 4 464 CAD flight crew licensing written examinations were conducted with 3 897 held locally in Hong Kong while the remaining 567 were overseas examinations invigilated by CAD at Flight Training Adelaide in Australia under CAD 509 Approval. 3 659 Medical Certificates were issued to Hong Kong flight crew licence or air traffic controller's licence holders/applicants. PLO also processed during the year 430 applications for conversion of a foreign flight crew licence into a Hong Kong licence.

### Aircraft Maintenance Licensing

As at March 31, 2008, the number of valid AML issued was 1 348. During the report period, a total of 7 219 examinations were conducted at the delegated examination centre, using paperless computerised examination system, at HAECO in Tseung Kwan O.

## 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), HEL, HEXP and the Hong Kong Aviation Club (HKAC)) as well as the Hong Kong Paragliding Association and private aircraft owners.

港部隊(駐港部隊)、直升機服務(香港)有限公司、空中快線和香港飛行總會)、香港滑翔傘會以及個別私人航空器擁有人。

體諒到石崗機場是現時香港唯一可供輕型飛機運作之場地的原故，駐港部隊暫時批准香港飛行總會於周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。香港分區飛行安全委員會在有需要時會參與協調工作。

## 飛機登記

年內共有25架航空器被新增至香港民用航空器登記冊內，而同期亦有一架Cessna 172型、一架龐巴迪CRJ-700型及三架Embraer ERJ-170型飛機被取消有關登記。截至二零零八年三月三十一日，香港民用航空器登記冊內共有224架民用航空器。當中200架由香港航空營運許可證的持證公司和政府飛行服務隊所擁有，而它們的分類如下：

類型	數目
空中巴士A300型	8
空中巴士A320型	10
空中巴士A321型	6
空中巴士A330型	46
空中巴士A340型	18
波音B737型	12
波音B747型	55
波音B777型	24
BAe4100型	2
灣流G200型	3
灣流G450型	1
灣流G550型	1
直升機	14

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.

## AIRCRAFT REGISTER

During the year, a total of 25 aircraft were put on the Hong Kong Civil Aircraft Register. In the same period, one Cessna 172, one Bombardier CRJ-700 and three Embraer ERJ-170 aircraft were removed from the Register. As at March 31, 2008, the total number of civil aircraft in the Hong Kong Civil Aircraft Register was 224. Of which 200 were registered under Hong Kong AOC holders and GFS as follows:

Aircraft Type	Number
Airbus A300	8
Airbus A320	10
Airbus A321	6
Airbus A330	46
Airbus A340	18
Boeing B737	12
Boeing B747	55
Boeing B777	24
BAe4100	2
Gulfstream G200	3
Gulfstream G450	1
Gulfstream G550	1
Helicopters	14



香港登記的民用航空器已增至224個。

The number of civil aircraft registered in Hong Kong has increased to 224.



## 航空交通管理標準組

航空交通管理標準組是本處安全監察及制衡機制中的主要部分，負責規管和審視航空交通管理運作，確保航空交通服務維持於最高安全水平。

航空交通管理標準組出版《CAD 670》文件（航空交通管理服務的安全要求），以更有系統地規管航空交通服務。在報告期內，該組繼續確保航空交通提供者，即本處航空交通管理部有切實遵行《CAD 670》文件所載的要求。在安全要求方面，該組亦發出了新的促進安全規定及修訂了航空交通管制主任的發牌政策。

### 安全監督工作

為求航空交通管理部根據安全管理系統中的準則進行內部安全審計，並作為該分部安全及質保計劃的一部分，航空交通管理標準組在本報告年度對不同的航空交通管理運作範疇及設施進行了55次檢查；當中包括航空交通管制中心、控制塔台、培訓組、航空情報中心、雷達模擬系統及控制塔台模擬系統。有關航空交通管制人員執照方面，該組亦就航空交通管制等級考試進行定期覆檢，確保航空交通管理部所提供的考試符合監管要求。

航空交通管理標準組同時亦根據《CAD 636》文件內調查航空交通事故的指引，監察以至參與航空交通事故調查。另外，該組亦負責監察事故後有關調查報告提出的安全建議的執行情況。為確保調查的客觀性和全面性，航空交通安全評核委員會會每半年召開會議，對調查報告中有關航空交通管制和飛行運作方面提供專業意見。該委員會成員包括本地主要的航空公司和政府飛行服務隊的航空安全代表。

為著促進監察機構與航空交通服務提供者之間的合作和協調，航空交通管理標準組會定期與航空交通管理部舉行航空交通管理標準協調會議，加強溝通。藉著這個會議，航空交通管理標準主任便更能緊密監察該分部之安全管理系統的發展和推行情況。

### 文件編制

航空交通管理標準組繼續就現行的規管安全文件作出定期檢討。報告年內，航空交通管理標準組發出了第二版的航空交通管制認可考官守則《CAD 620》以及向航空交通管理部發出了八

## AIR TRAFFIC MANAGEMENT STANDARDS OFFICE (ATMSO)

As part of the CAD check and balance mechanism, the ATMSO continued with its safety regulatory functions to oversee air traffic management (ATM) operations to ensure that the safety of ATM services is maintained at the highest level possible.

The ATM Services Safety Requirements (CAD 670) had been issued to aim at achieving a structured and rational approach to safety regulation of ATM services. Throughout the report year, the ATMSO continued to focus on overseeing the implementation of CAD 670 and compliance with the requirements therein by the ATM services provider, viz. the Air Traffic Management Division (ATMD) of CAD. In terms of safety regulatory requirements, new provisions relating to safety promotion and air traffic controller licensing were formulated.

### Safety Oversight Activities

As part of its safety oversight activities, the ATMSO carried out during the report period a total of 55 inspections on ATM operations and on the various facilities including the Air Traffic Control Centre, Aerodrome Control Tower, the Training Unit, Aeronautical Information Centre, Radar Simulator and Control Tower Simulator to ensure that ATMD administered their internal safety audits as part of their safety and quality assurance programme; and that these audits were conducted in accordance with the Safety Management Systems (SMS) principles. In relation to air traffic controller licensing, the ATMSO carried out regular oversight on Air Traffic Control (ATC) rating examinations to ensure that they were conducted in compliance with the regulatory requirements.

The ATMSO participated in and monitored the investigations of all air traffic control incidents in accordance with established procedures of the Guidance for Air Traffic Incident Investigation (CAD 636). Furthermore, the ATMSO also monitored the progress of post-incident follow-up actions as per recommended in the investigation reports. To ensure the objectivity and comprehensiveness of these investigations, the Air Traffic Safety Assessment Committee (ATSAC), which comprised representatives from the ATMSO, ATMD, flight safety personnel of major local airline operators and the Government Flying Service, met half-yearly to review the investigations of ATC incidents with inputs from both ATC and pilots.

With a view to enhancing collaboration and cooperation between regulator and the service provider, the ATMSO convened regular meetings with the ATMD through the ATM Standards Coordination Meetings. Through this meeting, the development and implementation of SMS in ATMD could also be closely monitored by ATMSO.

### Documentations

The ATMSO continued to carry out periodic reviews on the existing safety regulatory documents. In the report period, the ATMSO had issued the second version of the ATC Approved Examiner Handbook (CAD 620) and

份航空交通管理資料通告。這些通告的主要內容包括加強航空交通安全的條文、修訂航空交通管制主任執照申請程序、新的航空交通管制主任發牌政策和航空交通管制培訓的相關要求。

also a total of eight Air Traffic Management Information Notices (ATMIN) to the ATMD. The subjects of these ATMIN focused mainly on safety promotion, revised procedures for application of ATC license, new ATCO licensing policy and the corresponding requirements on ATC training.



航空交通管理標準組負責規管和審視航空交通管理運作  
The Air Traffic Management Standards Office oversees air traffic management operations.

### 航空交通管制主任執照

航空交通管理標準組根據國際民航組織《附件1》的標準和建議，規管航空交通管制主任執照簽發制度。在本報告年度內，該組處理共七個簽發航空交通管制主任執照的申請、73個首次申領航空交通管制等級的申請和要求首發或續發合格證書的申請。二零零七年四月，航空交通管制組與航空交通管理部合辦了一次航空交通管制認可考官的訓練課程。

為遵從國際民航組織於二零零八年三月五日實施的航空交通管制員語言能力規定，航空交通管理部在29位資深航空交通管制主任完成訓練課程後，確認他們具有語言水平考核員資格。此外，共有181位航空交通管制員於年內完成測試，並全體達到國際民航組織訂定的語言能力要求。

### 意外調查

#### Topjet Aviation有限公司Robinson R44型直升機

二零零五年六月十一日，Topjet Aviation有限公司一架登記標誌為B-HJS的Robinson R44型直升機，於西貢北丫起飛時發生意外。直升機墜毀，機上三名乘員受傷。飛機意外調查報告，於二零零七年二月公布。

### ATC Personnel Licensing

The ATMSO administered the ATC licensing scheme in accordance with the standards of ICAO Annex 1. During the report period, ATMSO processed seven applications for the grant of ATC licences, 73 applications for the initial award of ATC ratings, as well as applications for the issue/renewal of Certificates of Competency. In April 2007, an ATC Approved Examiner Training Course was conducted jointly with the ATMD.

To comply with the ICAO standards on language proficiency for air traffic controllers by March 5, 2008, the ATMSO endorsed 29 senior ATCO to become Approved Language Proficiency Assessors to conduct language proficiency assessments after they had completed the required training on language proficiency assessment. A total of 181 operational air traffic controllers underwent the language proficiency assessment test and met the minimum standards set by the ICAO.

### ACCIDENT INVESTIGATION

#### Topjet Aviation Limited Robinson R44 Helicopter

On June 11, 2005, a Robinson R44 helicopter of Topjet Aviation Limited with registration B-HJS had an accident when it lifted off at Pak A, Sai Kung. The helicopter was destroyed. Three persons on board the helicopter were injured. The investigation report was published in February 2007.

## 安全數據分析

本部與各航空公司、維修機構和航空交通服務提供者保持緊密聯繫，跟進涉及在香港登記的飛機的事件。年內，本部詳盡地調查和分析了486宗個案。

## 國際民航組織亞太區意外調查工作坊

獲國際民航組織協助，本部於二零零七年十月在香港舉辦亞太區意外調查工作坊。舉辦是次工作坊的目的，是要推動區內意外調查的合作，通過培訓提升調查質素，以及介紹意外調查工作及技巧的最新發展。在這兩天的工作坊，有來自12個不同國家/政府/國際組織逾57名代表出席，包括國際民航組織、澳洲、中國、法國、日本、南韓、新加坡、斯里蘭卡，以及美國聯邦航空管理局和國家運輸安全局。參與者對工作坊所覆蓋的範圍及資料很滿意，這些寶貴資料為區內國家/政府提供非常有用的飛機意外調查指引。



意外調查工作坊有逾57名代表出席。  
The Regional Accident Investigation Workshop was well attended by over 57 participants.

## 國際民航組織全球安全監督審核計劃

國際民航組織大會第35屆會議於二零零四年舉行，其後國際民航組織決定放棄原有按個別附件進行的安全監督審核方式，改為採用全面的系統安全監督審核方法。因應這新要求，本部成立一個由本處領導，並有各分部代表和香港天文台代表的工作小組，專責準備和統籌與國際民航組織安全監督審核相關的工作。在本報告年度內，工作小組定期召開會議，以便跟進準備工作的進度。

## SAFETY DATA ANALYSIS

The Division maintained close liaison with airline operators, maintenance organisations and ATM services provider regarding occurrences involving Hong Kong registered aircraft. During the year, 486 occurrences and incidents were thoroughly investigated and analysed.

## ICAO REGIONAL AIRCRAFT ACCIDENT INVESTIGATION WORKSHOP

With the support of ICAO, the Division hosted in October 2007 a Regional Accident Investigation Workshop in Hong Kong. The key objective of the workshop was to promote a regional co-operation in accident investigation, explore the ideas of improving the quality of investigation through training and/or participation in the workshop, as well as updates on the latest development of the accident investigations and techniques. This two-day workshop was well attended by over 57 participants from 12 different States/Administrations/international organisations, including ICAO, Australia, Mainland China, France, Japan, Republic of Korea, Singapore, Sri Lanka, and USA (FAA and NTSB). The workshop with its comprehensive coverage on the topics of accident investigation and valuable information on best practices provided very useful guidance to States/Administrations in the region in respect of aircraft accident investigation.

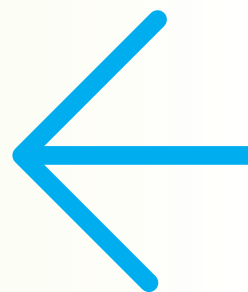


## ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME

After the 35th Session of the ICAO Assembly in 2004, ICAO replaced the Annex-by-Annex approach with a comprehensive systems approach for the conduct of safety oversight audits. In response to this new approach, a working group led by CAD and comprised of representatives from different CAD divisions as well as the Hong Kong Observatory, was established to coordinate the preparation work for the ICAO universal safety oversight audit. During the report period, working group meetings were held to review the progress of the preparatory works.

# 機場安全標準

## AIRPORT STANDARDS



機場安全標準部的職責範圍包括機場安全、航空保安、障礙物管制及空運危險品的監管工作。通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 Hong Kong International Airport (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

### 簽發機場牌照

本部繼續執行對機管局的安全監督，以確保該局的表現符合機場牌照的規定。此規定刊載在《機場牌照發牌規定文件》，並根據國際民用航空組織的最新要求定期作出更新。在二零零七年中，本部就該組織新發出的機場要求對該文件作了一次主要修改。年內，本部經常巡察及定期審計機場地面狀態、目視助航設備、飛行區內飛機運作所需設施的狀況和機管局與地勤服務公司為飛機提供的地勤運作，以確保該局的表現繼續符合機場牌照發牌規定。本部亦派員巡察香港國際機場飛行區內的臨時及定期維修工程，又監察飛行區內的改善及擴建工程項目的進行，包括從規劃、設計直至工程完成的各個階段。

一如以往，機管局在本年內進行了一系列的維修及提升工程，以提高機場運作的安全和效率。其中一項主要工程是在二零零七年九月至二零零八年四月進行的南跑道刨鋪工程，藉以維護該跑道的廓線。為了更有效率地安排離境飛機包括最大型的A380空中巴士使用南跑道起飛，機管局於二零零七年五月在該跑道西端興建了一條引入式滑行道。此外，為南跑道增建兩條快速出口滑行道以減少降落飛機佔用跑道時間的提升工程，亦已於二零零六年十二月展開，預計於二零零八年七月完工。本部與機管局緊密合作，以分階段型式把現時與南跑道相連的一些快速滑行道更改名稱，以便為這兩條新滑行道於竣工後可順暢地加入運作作好準備。



機場安全主任正在一個飛機停機位量度機位闊度。  
*Airport Safety Officers conducting site measurement of aircraft parking stand.*

## 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 (ALRD). The ALRD was updated by the Division periodically in accordance with the latest International Civil Aviation Organization (ICAO) requirements. In mid 2007, a major amendment to the ALRD was made in response to new aerodrome requirements issued by ICAO. To ensure HKIA's continued compliance with the aerodrome licensing requirements, frequent inspections and audits on the conditions of airfield pavements, visual aids, airside facilities required for aircraft operations as well as aircraft ground operations provided by AAHK and relevant ground handling agents were conducted during the year. The Division also inspected ad hoc and scheduled airside maintenance works and monitored improvement and expansion works at the HKIA from their planning and design stages until their completion.

Similar to previous years, a series of maintenance and upgrading works were undertaken by the AAHK during the year to enhance the safety and efficiency of airport operations. One such works was the resurfacing of the South Runway between September 2007 and April 2008 for maintenance of the runway profile. To enhance the sequencing of departure aircraft with size up to the A380 from the South Runway, an additional lead-in taxiway at the western end of the runway was constructed and was put into operation in May 2007. Furthermore, with a view to reducing the runway occupancy time of landing aircraft, the construction works for two additional rapid exit taxiways from the South Runway commenced in December 2006 and were scheduled for completion in July 2008. The Division had worked closely with the AAHK in revising in phases the numbering of some of the existing taxiways associated with the South Runway to prepare for the smooth incorporation of these two new taxiways into the system upon their completion.

Other major airport developments on the south side of the airfield included the South Cargo Apron Extension and the Business Aviation Centre (BAC) apron expansion. Works for the former commenced in June 2006 and was completed in January 2008 with 13 new cargo aircraft parking stands being put into operations in phases since late August 2007. Two new taxilanes were constructed as part of the project and they were also commissioned in August and November 2007 respectively. As regards the BAC apron expansion project, the works commenced in November 2007. Under the first phase of this project, the taxilane extension together with four new stands would be completed in August 2008. When the whole project is completed by end 2008, the expanded BAC apron will be able to provide a total of seven new stands for medium to small sized aircraft.

On the eastern side, the most important development was the new North Satellite Concourse. Construction works for the new Concourse commenced in March 2007 and involved the conversion of six existing stands that can accommodate up to B747 aircraft into a remote passenger terminal with 10 aircraft stands for medium to small sized aircraft to be served by airbridges. The project was scheduled to complete by end 2009.

在飛行區南面的其他主要機場發展項目包括南貨運停機坪擴建工程和商用航空中心的停機坪擴建工程。南貨運停機坪擴建工程於二零零六年六月展開，並於二零零八年一月全部竣工，十三個新貨機機位由二零零七年八月開始分期啟用。在此工程項目中的兩條新滑行道，亦分別於二零零七年八月及十一月啟用。商用航空中心的停機坪擴建工程於二零零七年十一月展開，其伸延的內滑行道及前期工程的四個新機位預期在二零零八年八月竣工。整項工程在二零零八年底完工後，商用航空中心停機坪將增加七個可供中小型飛機停泊的機位。

在飛行區東面最重要的發展是興建新的北衛星客運廊。該項工程於二零零七年三月展開，工程包括將六個現時的大型機位改建成一個遠端客運樓及10個連接飛機橋並可供中小型飛機停泊的機位，工程預計在二零零九年尾完成。

至於機場的未來發展方面，本部聯同航空交通管理部，一同向機管局就機場中場發展的事宜提出意見，以確保此項目在工程進行時，飛行區的運作仍能保持暢順。本部亦對機管局一些改善飛行區運作的一些新措施提出意見，包括在停機位新增地勤設備區及回應業界的求而考慮引進的流動飛機發動機清洗系統等。

年內，本部對機管局進行了14次審計及執行了132次巡察，當中包括飛行區運作，有關飛機運作的機場改善工程、飛行區維修項目、機場工作人員的培訓、安全管理體系的實施及執行救援服務等。為確保香港國際機場在各層面運作上皆符合機場牌照的發牌要求，本部參與機管局對機場特許經營公司所作出的審計。本部亦監察機管局對飛機地面事故的調查工作，確保有關公司採取適當改善措施，以防止同類事故再發生。在監察香港國際機場在貫徹執行安全管理體系方面，本部持續與有關單位評核可接受的安全水平，並繼續監察安全管理體系的執行與提升。



機場安全主任在事故現場調查一宗機場地面事故。  
Airport Safety Officer investigating an airport ground incident on site.



機場安全主任巡察地勤人員進行綁繫登機橋演習。  
Airport Safety Officers inspecting an airbridge tie-down drill conducted by ground handling operators.

As regards future airport developments, the Division in collaboration with ATMD provided comments to the AAHK on their plans to develop the mid-field area of the HKIA to ensure smooth aircraft operation during the development stages. The Division also provided comments to the AAHK on their new initiatives to improve airfield operations such as the new markings on frontal stands for servicing equipment and, in response to the request from the industry, the new mobile aircraft engine wash equipment being considered for use at the HKIA in future.

During the year, the Division carried out 14 audits and 132 inspections covering AAHK's airfield operations, enhancement works related to aircraft operations, airside maintenance activities, staff training, implementation of Safety Management System (SMS) and airport rescue and fire fighting (RFF) services. To ascertain compliance of the HKIA with the licensing requirements at all levels, the Division participated in the airfield franchisee audits convened by the AAHK. The Division also exercised oversight on the investigation of aircraft ground incidents conducted by the AAHK to ensure that appropriate remedial measures were taken to prevent recurrence. As part of the effort for monitoring the continuous implementation of the SMS at the HKIA, the Division continued to review the Acceptable Level of Safety with relevant parties and would continue to monitor the implementation and enhancement of the airport-wide SMS.

本年度的飛機意外救援演習於二零零七年十一月廿三日在消防分局附近的停機位進行，目的是測試利用消防局的掩蔽地方作救護分流站之用。另外，一輛新的喉泡車於二零零七年十一月送交機場消防隊，經測試後已於二零零八年一月投入服務。



於飛機意外救援演習中，設立在消防分局的救護分流站。  
*Triage Point at Sub Fire Station during Annual Aircraft Crash and Rescue Exercise.*

## 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，包括半島酒店直升機場的運作，以及對供本地航班使用的直升機場及跨境直升機場的策劃與發展提出意見。

### 管制障礙物

本部繼續審核各建築和發展計劃及可行性研究，並提供意見，確保各項目符合航空安全要求。涉及的主要項目包括港珠澳大橋香港口岸、數碼地面電視計劃、屯門-赤鱗角幹線、屯門至大嶼山幹線、青衣-大嶼山幹線、位於大欖的流動無線電話機台、位於果洲群島海面及南丫島以西海面的風力發電場等。而在香港國際機場內的主要項目則包括DHL中亞區樞紐中心擴建、香港飛機工程有限公司機庫擴建、商用航空中心機庫擴建、香港飛機服務有限公司機庫車間、北衛星客運廊及航天城萬豪酒店等。

數碼地面電視計劃中位於慈雲山的數碼電視發射站於九月竣工後，本處隨即進行飛行測試。在確定飛機導航儀器不受該發射站的新天線和有關建築物影響後，本部向發展局局長建議批出機場高度限制永久豁免。有關的豁免於二零零七年十一月二十八日生效。

An annual aircraft crash and rescue exercise was conducted on November 23, 2007 at an aircraft parking stand near the Sub Fire Station to test the use of the sheltered area of the fire station as a trial triage point. A new Crash Foam Tender was delivered to the Airport Fire Contingent in November 2007 and was launched into service in January 2008 after a series of trial runs and live tests.

## SAFETY REGULATION

### *Heliport Operations and Development*

The Division continued to monitor the safety of domestic heliport operations including the Peninsula Hotel Heliport and to provide advice on the planning and development of domestic and cross-boundary heliports.

### *Control of Obstructions*

The Division continued to assess and provide inputs to various building and development projects and feasibility studies to ensure compliance with aviation safety requirements. The major projects and studies outside the HKIA included the Hong Kong-Zhuhai-Macao Bridge Boundary Crossing Facilities, the Digital Terrestrial Television Project, the Tuen Mun - Chek Lap Kok Link, the link options between Tuen Mun and Lantau, the Tsing Yi - Lantau Link, the mobile phone base station at Tai Lam and the wind farms at Ninepins and waters west of Lamma Island. The major projects within the HKIA included the DHL Central Asia Hub expansion, the Hong Kong Aircraft Engineering Company Limited (HAECO) hangar expansion, the Business Aviation Centre maintenance hangar expansion, the CASL hangar-workshop, the North Satellite Concourse and the Skycity Marriott Hotel.

Construction work of the new transmitter station at Temple Hill under the Digital Terrestrial Television Project was completed in September and it was followed by a flight check which confirmed that the antennas and structures at the station had no effect on aircraft navigational aids. With satisfactory result of the confirmation flight check, the Division put forward a recommendation to the Secretary for Development who subsequently granted a permanent exemption from the Airport Height Restrictions (AHR) to Television Broadcasts Limited for the station on November 28, 2007.

In the light of the Division's advice, the Secretary for Development also granted a permanent exemption from the AHR in November 2007 for Hong Kong CSL Limited's construction of a mobile phone base station in order to improve the mobile phone service at the Tai Lam Country Park.

The Division examined the use of laser, search lights and fireworks displays at shows of different scales that were staged at different places, including new scenarios for the "Symphony of Lights" show, the 10th Anniversary of the Establishment of the Hong Kong Special Administrative Region, National Day and New Year Fireworks Displays, as well as other lighting displays at building facades in Hong Kong to ensure that aviation safety would not be compromised.



另外，發展局局長經考慮本部建議後，亦同時於二零零七年十一月批出另一宗機場高度限制的永久豁免，以便香港流動通訊有限公司興建新的流動電話基台，藉以改善大欖郊野公園附近流動電話網絡的覆蓋範圍。

本部繼續考核本港不同地點舉行的各大小型雷射激光、探射燈及煙花表演，包括「幻彩詠香江」燈光匯演的新編排，香港特別行政區回歸十週年、國慶及新年煙花匯演，以及大廈外牆的燈光，以確保航空安全不受影響。

本部於年內共批准52宗機場高度限制短暫豁免的申請，以方便有關建築工程的進行和在機場附近航行船隻的運作。

在海事處通力協助下，本部確保船隻不駛進機場附近的海上限制區，以保障航機及無線電導航儀器的運作。年內，海事處共發出了兩宗非法闖入限制區的檢控。

### 一般飛行活動

本部執行對一般飛行活動的規管，包括繼續監察滑翔傘、降落傘、氣球、風箏及模型飛機等活動的飛行安全，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。

經過詳細評估和實地視察，本部於二零零七年八月，簽發一項豁免予香港機械模型會，容許該會重量超過七千克而不超過二十千克的模型飛機，在該會位於元朗大棠的模型飛機飛行場地飛行。本部亦就警務處調查一宗於二零零八年一月發生的模型直升機意外提供意見。

本處亦於二零零七年十二月，簽發一項豁免，以便一架無人駕駛的無線電控制飛船，可於沙田馬場進行拍攝工作。本部曾多次視察，以確保飛船的運作符合本處的有關規定。

During the year, the Division issued 52 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, two prosecutions against illegal entry into the MEZs were instituted by the Marine Department.

### General Aviation Activities

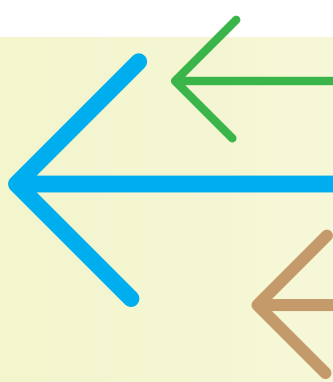
The Division continued to monitor the safety of general aviation activities, including paragliding, parachuting, balloon flights, kite flying and model aircraft flying to ensure that these activities were conducted in compliance with applicable aviation safety regulations and would not affect civil aircraft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

After a detailed assessment and site inspections by the Division, an exemption was granted to the Hong Kong Model Engineering Club in August 2007 for flying of model aircraft weighing more than 7 kg and up to 20 kg in the Club's model aircraft flying site at Tai Tong, Yuen Long. The Division also provided advice to the Hong Kong Police Force on the investigation into an accident involving a model helicopter that happened in January 2008.

An exemption was also granted by the Department in December 2007 to an operator for operation of a remote controlled pilotless airship at Shatin Racecourse for filming purposes. Inspections of the site were made to ensure that conditions and requirements of the operation were complied with.



機場標準部人員視察無人駕駛無線電控制飛船的操作。  
Staff of the Airport Standards Division observed the operation of a remote controlled pilotless airship.



## 飛行禁區

為免香港迪士尼樂園受到飛機噪音及視覺滋擾，透過《飛航(飛行禁制)令》訂立的飛行禁區經已實施。年內，本處共批出八宗豁免，讓必須於飛行禁區內進行的直升機運作，如空中吊重等，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標準及本地法例的規定監管空運危險品。航空公司必需符合本部危險品事務組所訂定的安全標準，才能獲發許可證運載危險品進出或飛越香港。此外，該組繼續定期和突擊巡查空運貨站，貨運代理及危險品托運人以監察其安全水平。年內，共有六間航空公司獲批新的空運危險品許可證。連同32個獲續期的申請，至二零零八年三月底共有63間航空公司可運載危險品進出或飛越香港。

為協助提升本港和國內航空公司、貨運代理人及付貨人的空運危險品操作水平，危險品事務組在二零零七年十二月十三日參加了由中國民航、中國東方航空、中國南方航空、國泰航空和港龍航空在廣州合辦的大中華危險品聯絡會議，又在二零零七年十二月二十九日參加了由中國電子工業標準化技術協會及中國資訊產業部在深圳主辦的鋰離子電池安全標準研討會，並在會上介紹了有關監管空運電池方面的工作。兩個會議共有超過150個位業界人士出席。



新設於香港國際機場二號客運大樓的危險品及違禁品展覽亭。  
*New display booth for Dangerous Goods and Restricted Articles at the Hong Kong International Airport Terminal 2.*

為瞭解危險品空運要求的最新發展，本部定期派員參加國際空運危險品會議和工作坊，並與澳洲、加拿大、英國、美國及內地的民航局保持緊密的聯絡。在二零零七年十一月，危險品事務組曾派員以中國代表團顧問的身份到加拿大參加國際民航組織危險品專家小組會議。而危險品事務組亦透過教育和宣傳活動，提高本地安全空運危險品的意識。

## Flight Prohibition Area

For the purpose of avoiding aircraft noise and visual disturbance to the Hong Kong Disneyland, a Prohibition Area has been established under the Air Navigation (Flight Prohibition) Order. During the year, eight exemptions were granted to facilitate the operation of essential helicopter flights within the Prohibition Area such as for aerial lifting works to/from the area.

## 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 requirements before they can carry dangerous goods to, from or over Hong Kong. In addition, the Dangerous Goods Office continued to monitor 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, six new and 32 renewal applications for dangerous goods permissions were processed. At the end of March 2008, 63 airlines were permitted to carry dangerous goods onboard their aircraft flying to, from or over Hong Kong.

To enhance cooperation on dangerous goods operating standards among the major airline carriers, freight forwarders and shippers in Hong Kong and the Mainland, the Dangerous Goods Office participated in a Greater China Dangerous Goods Liaison Meeting jointly organised by Air China, China Eastern Airlines, China Southern Airlines, Cathay Pacific Airways and Hong Kong Dragon Airlines in Guangzhou on December 13, 2007. The Dangerous Goods Office also gave a presentation on the safe transport of battery by air at a Symposium on the Safety Standards of Lithium-ion Batteries organised by the China Electronics Standardization Association and the Ministry of Information Industry in Shenzhen on December 29, 2007. More than 150 participants from various organizations participated in these two events.

To keep track of the international developments, the Dangerous Goods Office participated regularly in dangerous goods related conferences and workshops. In November 2007, the Office attended ICAO's Dangerous Goods Panel Working Group Meeting in Canada as advisors to the Chinese delegation. The Dangerous Goods Office also maintained regular work contacts with other civil aviation authorities in Australia, Canada, the United Kingdom, the United States of America and the Mainland. Locally, the Dangerous Goods Office continued to promote the safe transport of dangerous goods by air through education and publicity.

A number of incidents that occurred during the year were related to undeclared or damaged dangerous goods. One such incident involved an explosion of a compressed gas cylinder at an overseas air cargo warehouse, which resulted in minor injury of one personnel. The Dangerous Goods Office launched investigations into these incidents with an aim to prevent recurrence of similar incidents. Useful findings from these investigations were disseminated to the local air cargo industry and other aviation authorities for experience sharing.

年內，發生了數宗未申報危險品或危險品損毀的事故，其中包括一宗壓縮氣瓶在外地空運貨站發生爆炸引至一名工作人員受輕傷。危險品事務組對這些事故均作出調查並致力防止類似事故再發生，並將調查結果向本地空運業界和其他航空當局發布以作參考。

## 航空保安

### 加強保安措施

因應液體、凝膠和噴霧類物品製成的爆炸品對航空界構成的威脅，國際民用航空組織於二零零六年十二月一日發出指引，要求所有旅客隨身攜帶之液體、凝膠和噴霧類物品必須盛載於不超過100毫升的容器內，並所有容器均應儲存於一個容量不超過一公升，可重複密封的透明塑膠袋內。本處於二零零七年三月二十一日在香港國際機場實施該項加強保安措施。年內，本部繼續密切監察措施的實施情況，並與機管局聯繫，商討優化措施及方便旅客的方法。

### 對香港國際機場營運者的保安監察

本部透過審計及檢查，確保機管局及其他在香港國際機場的營運者，包括租戶禁區營運人，航空公司及航膳營運人，符合香港航空保安計劃的要求。

年內，本部根據航空保安條例批准了五個指定禁區。這些禁區是為配合商用航空中心第二個飛機庫及DHL中亞區樞紐中心擴建部份的啟用，及因應機場客運大樓，香港空運貨站及亞洲空運中心運作改動而需更改禁區的範圍。本部人員於指定禁區生效前均詳細檢查，確保營運者有足夠保安措施。

### 航空保安訓練計劃

國際民用航空組織《附件十七》推出的一項新標準，要求締約國為所有參與或負責實施航空保安計劃內措施的人員制訂及實施一個培訓計劃，目的是確保所有人員接受適當的訓練及採用統一水準的保安措施。年內，為符合該標準，經諮詢業界後，本處制訂了一個航空保安培訓計劃。此計劃在二零零七年底獲航空保安委員會批准，並在二零零八年二月向業界發布，本部人員持續監察業界執行該計劃的情況。

## AVIATION SECURITY

### Enhanced Security Measures

In recognition of the threat to aviation posed by liquid, aerosol and gel based explosives, ICAO issued guidelines on December 1, 2006 which require that all liquids, aerosols and gels in cabin baggage must be placed in containers with a capacity not greater than 100 millilitres, and that all containers must be put inside a re-sealable plastic bag with maximum capacity of one litre. CAD implemented this enhanced security measure at the HKIA on March 21, 2007. During the year, the Division continued to closely monitor the implementation of the measure and liaise with the AAHK on ways to improve the implementation and facilitate the passengers.

### Security Oversight of Operators at HKIA

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

During the reporting period, the Division approved five designations of the restricted area under the Aviation Security Ordinance. The designations were made to cater for the commissioning of the second hangar of the Business Aviation Centre (BAC), extension of the DHL Central Asia Hub and changes in restricted areas in the Passenger Terminal Building, Hact1 and Asia Airfreight Terminal due to operational requirements. Officers of the Division conducted inspections to ensure the operators provided sufficient security measures to protect the restricted areas before the designations took effect.

### Civil Aviation Security Training Programme

ICAO introduced a new standard in Annex 17 which requires each Contracting State to develop and implement a training programme for personnel of all entities involved with or responsible for the implementation of various aspects of the civil aviation security programme. The objective of the training programme is to ensure suitably trained personnel can apply a standardised level of preventive aviation security measures. During the year, CAD developed a Civil Aviation Security Training Programme after consultation with the industry. The programme was endorsed by the Aviation Security Committee in end 2007 and promulgated to the industry in February 2008. The Division has been monitoring the industry's compliance with the requirements in the Programme.

### Unruly Passengers

The Aviation Security (Amendment) Ordinance was enacted in 2005 to impose criminal sanctions against unruly or disruptive behaviour offences committed on board civil aircraft and extend Hong Kong's jurisdiction over unruly or disruptive behaviour offences committed outside Hong Kong. During the year there were nine cases of successful prosecution against such offences under the Ordinance.

### 難受管束乘客

香港於二零零五年制訂航空保安〔修訂〕條例，就在民航飛機上難受管束或擾亂秩序行為施加刑事制裁，及擴大香港的司法管轄範圍。年內，於該修訂條例下有九宗成功檢控個案。

### 空運貨物保安

為符合國際民用航空組織的空運貨物保安標準，香港自二零零零年三月開始實施一套管制代理人制度。該制度要求在民航處登記為管制代理人的貨運代理，需要為空運貨物提供保安管制措施及檢查指定類別的貨物。年內，本部繼續透過檢查，確保管制代理人符合制度的要求。至二零零八年三月三十一日止，共有1 321貨運代理登記為管制代理人。

### 國際民用航空組織普遍保安審計計劃

國際民用航空組織於二零零二年成立普遍保安審計計劃，該計劃的目的是透過向締約國進行定期的審計，評定國際民用航空組織航空保安標準的實施情況，以促進全球航空保安。

國際民用航空組織鑑於香港國際機場處理極大量乘客及貨物，及香港在國際航空界的重要性，在二零零八年一月十四日至二十三日在香港進行了保安審計。本部為配合這次審計，協調機管局、機場保安公司、警務處及其他在機場營運的機構，使審計順利進行。國際民用航空組織的報告認為香港具有極高航空保安水平及擁有一個完善的航空保安系統，民航處並有一隊高度專業，及與機管局、執法機關、航空公司及其他機構有良好工作關係的隊伍。

### 亞洲國際航空展覽會暨論壇

第十四屆亞洲國際航空展覽會暨論壇於二零零七年九月三日至六日在香港舉行。該盛事的焦點是在機場禁區內展覽的一架A380空中巴士。本部與籌辦人、機管局和商用航空中心，制訂一套符合保安要求的進出管制安排，方便11 000訪客經商用航空中心進入機場禁區的展覽場。

### Air Cargo Security

To comply with the cargo security standards, Hong Kong has implemented the Regulated Agent Regime (RAR) since March 2000. The RAR requires that a cargo agent that is registered as a Regulated Agent with the Department to provide security control measures on consignments of air cargo and apply screening on prescribed sources of air cargo. During the year, the Division continued to monitor the compliance of the Regulated Agents with the requirements of the RAR through inspections. As of March 31, 2008, there were 1 321 Regulated Agents registered with the Department.

### ICAO Universal Security Audit Programme

The Universal Security Audit Programme (USAP) was established by ICAO in 2002 with the objective of promoting global aviation security through the auditing of States on a regular basis to determine the status of implementation of ICAO Standards in aviation security. In recognition of the significant volume of passenger and cargo traffic through HKIA and the importance of Hong Kong in international civil aviation, ICAO carried out a security audit on Hong Kong from January 14 to 23, 2008. The Division coordinated with AAHK, Aviation Security Company Ltd., Hong Kong Police Force and other operators at the HKIA to facilitate the conduct of the audit. The audit report concluded that Hong Kong was found to have a high standard of aviation security, and a well-developed aviation security system supported by a team of highly qualified staff within the CAD who maintained a good working relationship with the various stakeholders at the HKIA including the AAHK, the law enforcement agencies, aircraft operators and other entities.

### Asian Aerospace International Expo and Congress

The 14th Asian Aerospace International Expo and Congress was held for the first time in Hong Kong successfully on September 3-6, 2007. The highlight of the event was the static display of an A380 aircraft in the airport restricted area. The Division worked with the organiser, AAHK and BAC to develop access control arrangements which were in compliance with the security requirements to facilitate the 11 000 visitors to get access to the display area through BAC.



第十四屆亞洲國際航空展覽會其中一個展覽攤位。 -  
An exhibition booth of the 14th Asian Aerospace International Expo. -

## 二零零八年奧運馬術比賽

本部參與民政事務局及馬術公司所設立的不同委員會和工作小組，提供意見，以制訂方便處理參與二零零七年八月在香港舉行的「好運北京—香港回歸十周年盃馬術比賽」，及在二零零八年奧運及傷殘奧運馬術比賽的人員及馬匹進出香港國際機場的安排。

## 簡化手續

透過參與機場簡化手續委員會，本部監察國際民用航空公約《附件九〔簡化手續〕》內的標準及建議措施在香港國際機場的實施情況。年內，本部發出了3 065張空勤人員證書與本地航空公司的空勤人員。

本處於二零零七年八月三十至三十一日，在香港國際金融中心二期為國際民用航空組織主辦該組織的「預防傳染病經航空交通散播合作計劃」的第一次主督委員會會議。一連兩日的會議為航空專家及醫療專家提供一個平台，交流彼此預防傳染病經航空交通散播指引時的經驗，並探討有效的預防措施。會議共有六十位來自二十五個機構的代表出席，當中包括民航管理局、國際民用航空組織、世界衛生組織、國際航空運輸協會及國際機場協會。



國際民用航空組織「預防傳染病經航空交通散播合作計劃」第一次主督委員會會議。

First Steering Committee Meeting of the ICAO Cooperative Arrangement for Preventing the Spread of Communicable Diseases.



參加馬術賽的馬匹抵達香港國際機場後被帶上運輸車輛，前往沙田賽地的新馬廄。  
International horses arrive at Hong Kong International Airport before being shipped to the new stables in the Sha Tin venue.

## 2008 Olympic Equestrian Events

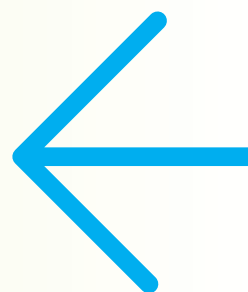
The Division participated in the various Committees and Working Groups established by the Home Affairs Bureau and the Equestrian Company and provided advice to develop arrangements to facilitate the handling of the participants and competition horses to the “Good Luck Beijing - HKSAR 10th Anniversary Cup Eventing Competition” held in August 2007 and the Olympic and Paralympic Equestrian Events in 2008 through the HKIA.

## Facilitation

The Division monitored the implementation of the Standards and Recommended Practices of the ICAO Annex 9 on Facilitation at the HKIA through the participation in the Airport Facilitation Committee. The Division issued 3 065 Crew Member Certificates to the crew members of local aircraft operators during the year.

CAD hosted the First Steering Committee Meeting of the ICAO Cooperative Arrangement for Preventing the Spread of Communicable Diseases on August 30 and 31, 2007 at Two International Finance Centre. The two-day meeting provided a forum for aviation and medical experts to share experience in the implementation of the ICAO guidelines for preventing the spread of communicable disease through air travel and identify effective preventive measures. The meeting was attended by about 60 delegates from 25 organisations, including civil aviation administrations, ICAO, World Health Organization, International Air Transport Association and Airports Council International.

# 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。

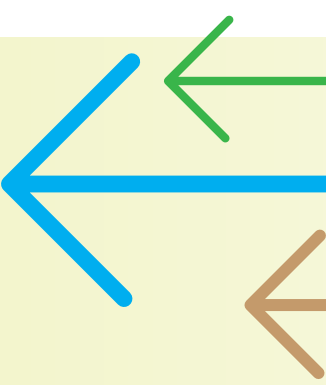
航班事務組負責監察航空公司是否遵守民用航空運輸協定，定期航班服務的安排及監管不定期航班服務。該組並為運輸及房屋局提供資料，在民用航空運輸談判時參考，以及供空運牌照局考慮本地航空公司的空運牌照申請之用。此外，該組負責檢討民航法例和提出修訂建議，以及與國際組織，特別是國際民用航空組織(國際民航組織)和亞太經濟合作組織聯絡航空事務和有關活動。

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

The Air Services Section monitors compliance by airlines with Air Services Agreements and other arrangements which govern scheduled air services. It regulates non scheduled air services and 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 International Civil Aviation Organization (ICAO) and the Asia Pacific Economic Co operation (APEC) on aviation related matters and activities.







技術行政組則負責制訂和實施噪音消減措施，並監察來往香港國際機場航機的噪音及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的統計數字、統籌部門的工程項目、研究直升機服務需求及促進直升機場的發展，並監察飛機起降時段的分配及航空公司航班起降的正點率。

## 航空服務

### 航空交通量增長

香港航空交通在二零零七/零八年度持續增長。增長主要來自中國內地、東南亞及北美洲的旅客，佔總增幅的67%。香港國際機場的客運量比去年同期上升8%，達4 743萬人次。香港國際機場的貨運量持續增長，達381萬公噸，增幅7%，當中以往來中國內地、東南亞及歐洲的貨運增長最為顯著。飛機升降量亦增加6%，達299 617架次。

### 本地航空公司的服務

年內，國泰航空公司(國泰)開始擴充長途機隊並在二零零七年十月接收首架波音B777-300ER型新飛機。隨着長途機隊的擴充，國泰先後增加定期長途客運航班服務的班次，涉及的航點包括悉尼、三藩市、紐約、奧克蘭、多倫多及溫哥華。國泰並在二零零八年三月開辦往返河內和達卡的定期貨運航班，以及增加往返達拉斯和亞特蘭大的定期貨運航班班次。二零零八年三月，國泰開始與芬蘭航空公司經營往返赫爾辛基及歐洲其他航點的代號共享航班。國泰亦透過增加定期航班服務的班次和與其全資附屬公司港龍航空公司的代號共享安排，加強往返印度及日本的服務。

截至二零零八年三月底，國泰提供往返香港的定期航班服務遍及56個目的地。年內，該公司的機隊數目由103架增至115架，包括30架空中巴士A330-300型、15架空中巴士A340-300型、三架空中巴士A340-600型、24架波音B747-400型、24架波音B777型客機(其中包括七架波音B777-300ER型新客機)，以及七架波音B747-200型、六架波音B747-400型和六架波音747-400BCF型貨機。

港龍航空公司(港龍)在二零零七年十月開辦往返福岡的定期客運航班，並先後在二零零七年十月及十二月恢復往返仙台和加德滿都的定期客運航班服務。港龍亦增加往返釜山的定期客運航班。但往返東京的定期客運航班在二零零七年十月停辦。

The Technical Administration Section is responsible for developing and implementing noise mitigating measures and monitoring flight tracks of aircraft operating to and from the Hong Kong International Airport (HKIA) with a view to minimising the impact of aircraft noise on local communities. It also provides air traffic statistics, coordinates building projects for the Department, examines the demand for helicopter services and to facilitate the development of heliports. In addition, the Section monitors the allocation of runway slots and time-keeping performance of airlines.

## AIR SERVICES

### Air Traffic Growth

Air traffic at Hong Kong International Airport continued to rise in 2007/08. Regions with strongest growth in passenger traffic were Mainland China, South East Asia and North America accounting for 67 per cent of the total increase. The passenger throughput rose by 8% year-on-year. A total of 47.43 million passengers were handled.

Air cargo throughput continued to grow by 7 per cent to 3.8 million tonnes, the majority of the growth in cargo traffic was from Mainland China, South East Asia and Europe.

Aircraft movements also rose by 6 per cent to a total of 299 617.



航空交通量持續穩定增長。 -  
Air traffic continues to grow steadily. -

### Services by Local Carriers

During the year, Cathay Pacific Airways (CPA) started to take delivery of its first Boeing 777-300ER aircraft in October 2007. With the expansion of its "Extended Range" fleet, CPA increased the frequency of its long haul scheduled passenger services to Sydney, San Francisco, New York, Auckland, Toronto and Vancouver. CPA also commenced scheduled all-cargo services to Hanoi and Dhaka in March 2008 and increased the frequency of its



截至二零零八年三月底，港龍定期航班服務遍及30個目的地，包括19個內地城市。年內，該公司的機隊數目由36架增至40架，計有10架空中巴士A320-200型、六架空中巴士A321-200型、16架空中巴士A330-300型客機，以及一架波音B747-200型，三架波音B747-300型和四架波音B747-400BCF型貨機。

香港華民航空有限公司(華民)集中發展亞洲業務，並先後在二零零七年五月、八月及二零零八年一月增設航點至上海、北京和馬尼拉。截至二零零八年三月底，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。

scheduled all-cargo services to Dallas and Atlanta. In March 2008, it commenced its code-share services with Finnair to Helsinki and other destinations in Europe. CPA also enhanced its regional services to India and Japan by increasing frequency of services and code-share arrangements with Hong Kong Dragon Airlines, its wholly owned subsidiary.

At the end of March 2008, the number of destinations served by CPA's scheduled services from Hong Kong was 56. The fleet of CPA increased from 103 to 115 aircraft during the year, comprising 30 Airbus A330-300s, 15 Airbus A340-300s, three Airbus A340-600s, 24 Boeing B747-400s, 24 Boeing B777s (including seven new Boeing 777-300ERs), seven Boeing B747-200 freighters, six Boeing B747-400 freighters and six Boeing B747-400BCF freighters.



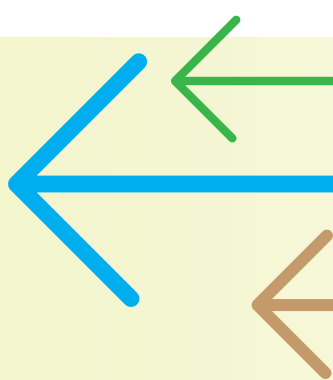
各主要航空營運商積極擴充機隊，拓展業務及服務網絡。 -  
Major airline operators expand their business operations and service networks with enlarged fleets. -

香港航空有限公司(香港航空)先後在二零零七年四月、七月、八月、十二月和二零零八年三月開辦往返河內、南昌、胡志明市、合肥和杭州的定期客運航班服務。年內，香港航空繼續經常提供不定期航班服務，往返亞洲多個目的地。截至二零零八年三月底，香港航空的機隊包括八架波音B737-800型飛機，經營往返15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)繼續擴展其區內的定期客運航班服務。香港快運先後在二零零七年四月、七月、和九月開辦往返西安、貴陽和曼谷的定期客運航班。其後在二零零七年十一月開辦往返仰光和吉隆坡、及在十二月開辦往返加

The Hong Kong Dragon Airlines Limited (HDA) launched scheduled passenger air services to Fukuoka in October 2007, and resumed scheduled passenger services to Sendai and Kathmandu in October and December 2007 respectively. HDA also increased its scheduled passenger services to Busan. However, the airline suspended its scheduled passenger services to Tokyo in October 2007.

At the end of March 2008, HDA operated scheduled services to 30 destinations, including 19 cities in the Mainland. During the year, its fleet increased from 36 to 40, comprising 10 Airbus A320-200s, six Airbus A321-200s, 16 Airbus A330-300s, one Boeing B747-200 freighter, three Boeing B747-300 freighters and four Boeing B747-400BCF freighters.



德滿都的定期客運航班服務。年內，香港快運已完成更換的機隊中的Embraer型飛機。截至二零零八年三月底，香港快運的機隊包括四架波音B737-800型飛機，定期航班服務遍及10個目的地。該公司亦經常經營不定期航班服務，往來亞洲多個目的地。

甘泉香港航空有限公司提供定期航班服務往返倫敦格域機場和溫哥華。後者是該公司於二零零七年六月新增的航點。截至二零零八年三月底，該公司以四架波音B747-400型飛機經營航班服務。

空中快線以兩架西科斯基S76型直升機，提供來往香港與澳門之間的客運包機服務，以及在本地提供客運包機服務。

香港商用飛機有限公司的機隊於年內增加至三架灣流G200型、一架灣流G450型和一架灣流G550型飛機，該公司主要經營來往亞洲多個目的地的客運包機服務。

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型及三架Aerospatiale SA315B型直升機，在本地提供客運包機及進行空中作業服務。

### 非本地航空公司的服務

東星航空公司和皇家約旦航空公司先後在二零零七年十一月及二零零八年三月開辦武漢與香港之間及安曼和曼谷與香港之間的定期客運航班服務。二零零七年十二月，俄羅斯全祿航空公司開辦莫斯科 - 香港 - 悉尼航線的定期客運航班服務，但該航線在二零零八年三月停辦。定期貨運航班服務方面，揚子江快運航空公司在二零零七年四月開辦青島和杭州與香港之間的服務；同年五月，中國國際貨運航空公司接辦中國國際航空公司往返北京與香港之間的定期貨運航班服務；六月，捷達貨運航空公司開辦新加坡航線；九月，中國貨運航空公司和Thai Global Airlines分別開辦往返上海與香港和曼谷與香港的貨運航班服務。埃塞俄比亞航空公司除原有的定期客運航班外，在二零零八年一月增辦阿的斯阿貝巴與香港之間的貨運航班服務。

年內，有兩家航空公司停辦定期航班服務：二零零七年六月，海灣航空公司停辦往返巴林、曼谷與香港的客運服務；十二月，Ocean Airlines停辦米蘭與香港之間的貨運服務。二零零七年十月，四川航空公司停辦成都、重慶與香港之間的客運服務，然而，該服務在二零零八年三月恢復。

AHK Air Hong Kong Limited (AHK) focused on developing its services in Asia and added Shanghai, Beijing and Manila to its network in May, August 2007 and January 2008 respectively. By the end of the year, AHK operated scheduled services to 11 destinations in Asia with eight Airbus A300-600GF freighters.

Hong Kong Airlines Limited (CRK) commenced scheduled passenger services to Hanoi, Nanchang, Ho Chi Minh City, Hefei and Hangzhou in April, July, August, December 2007 and March 2008 respectively. During the year, CRK continued to provide frequent non-scheduled air services to destinations in Asia. At the end of March 2008, CRK operated scheduled services to 15 destinations with eight Boeing B737-800 aircraft.

Hong Kong Express Airways Limited (HKE) continued to develop regional scheduled passenger services and commenced services to Xi'an in April 2007; Guiyang in July; Bangkok in September 2007; Yangon and Kuala Lumpur in November 2007; and Kathmandu in December 2007. During the year, it replaced its fleet of Embraer aircraft. At the end of March 2008, the number of destinations served by HKE's scheduled services was 10. Its fleet comprised four Boeing B737-800 aircraft. HKE also operated frequent non-scheduled air services to destinations in Asia.

Oasis Hong Kong Airlines Limited (OHK) operated to London Gatwick Airport and Vancouver, the latter being added to its network since June 2007. At the end of March 2008, OHK operated four Boeing 747-400 aircraft.

Heli Express Limited continued to operate non-scheduled services between Hong Kong and Macau and local flights for passenger charters with two Sikorsky S76 helicopters.

Metrojet Limited expanded its fleet to three Gulfstream G200, one Gulfstream G450 and one Gulfstream G550 aircraft and operated non-scheduled passenger services to destinations in Asia.

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

### Services by Non-Hong Kong Carriers

East Star Airlines and Royal Jordanian commenced scheduled passenger services between Wuhan and Hong Kong in November 2007 and between Amman, Bangkok and Hong Kong in January 2008 respectively. Transaero Airlines also launched its scheduled passenger services on the route Moscow - Hong Kong - Sydney in December 2007. However, this service was suspended in March 2008. For scheduled all-cargo services, Yangtze River Express Airlines commenced services between Qingdao, Hangzhou and Hong Kong in April 2007. In May, Air China Cargo took over the all-cargo operations between Beijing and Hong Kong from Air China. Jett8 Airlines Cargo launched services between Singapore and Hong

截至二零零八年三月底，提供定期往來香港航班服務的航空公司，總數增至85家。年內，定期航班服務的目的地，新增八個航點，但另有八個停辦。故至三月底，航點總數維持146個。有關目的地的變動詳見附錄甲。

年內，本處合共簽發147張經營許可證予以香港以外地方為基地的航空公司，以供營辦往來香港的定期航班服務，並處理共1 826宗更改定期航班服務的申請，以及簽發2 143張經營不定期來往香港航班服務的許可證。

Time	Flight	From	Hall	Status
09:00	10:20 KA 873	Shanghai	B	Est at 10:00
	10:20 MU 501	Shanghai	A	Est at 10:28
09:55	10:20 MU 765	Nanjing	A	Est at 10:06
10:24	10:25 3K 691	Singapore	A	Est at 10:19
10:44	10:25 UA 896	Singapore	B	Est at 10:14
10:15	10:30 LH 738	Frankfurt	A	Est at 10:46
10:16	NZ 4638			
10:13	10:35 CZ 3075	Wuhan	A	Est at 10:45
10:10	10:35 MU 593	Hangzhou	A	Est at 10:50
10:57	10:40 CX 471	Taipei	B	Est at 10:34
10:25	10:45 CI 641	Taipei	A	Est at 10:47
10:17	10:45 CX 912	Manila	B	Est at 10:24
10:29	10:50 KA 153	Bangalore	B	Est at 10:55
10:35	10:50 MU 2901	Wuxi	A	Est at 10:39
10:11	10:50 MU 715	Ningbo	A	Est at 10:55
10:05	10:55 BR 865	Taipei	B	Est at 10:57
10:00	10:55 KE 603	Seoul/ICN	A	Est at 11:00
10:01	11:00 KA 871	Shanghai	B	Est at 10:32
10:05	11:05 AK 076	Kuala Lumpur	A	Est at 10:54
10:05	11:05 KA 825	Chengdu	B	Est at 11:11
10:00	CA 8503			
10:00	11:05 KA 863	Nanjing	B	Est at 10:49
10:00	11:05 MU 5025	Jinan	A	Est at 11:04
10:00	11:10 CX 403	Taipei	B	
10:00	11:15 CX 682	Mumbai	B	Est at 11:27
10:00	11:15 KA 831	Shanghai	B	Est at 11:11
10:00	11:20 CZ 381	Xiamen	A	
10:00	11:20 MU 701	Shanghai	A	Est at 12:30
10:00	11:20 UO 305	Beijing	A	Est at 11:30

## 運價

年內，本處共處理了808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。客運票價雖有輕微調整，但大致保持穩定。

油價自二零零四年五月起急升，備受航空業關注。年內，本處批准58家航空公司的申請，向乘客收取燃油附加費(每程/每張機票為61港元至508港元不等)，以彌補部分未能預見的新增燃油成本。貨運方面，本處也批准約60家航空公司徵收不高於每千克7.20港元(長途)或每千克3.60港元(短途)的燃油附加費。

Kong in June. In September 2007, China Cargo Airlines started new services between Shanghai and Hong Kong, and Thai Global Airlines between Bangkok and Hong Kong. In addition to passenger services, Ethiopian Airlines started all-cargo services between Addis Ababa and Hong Kong in January 2008.

In the year, Gulf Air suspended its scheduled passenger services between Bahrain, Bangkok and Hong Kong in June 2007. Sichuan Airlines suspended scheduled passenger services between Chengdu, Chongqing and Hong Kong in October 2007 but resumed the services in March 2008. In December 2007, Ocean Airlines suspended its all-cargo services to Hong Kong.

The number of scheduled airlines serving Hong Kong increased to 85 by the end of March 2008. As for the destinations served by the scheduled services from Hong Kong, eight new points were added. On the other hand, services to eight points were terminated, the total number of destinations served therefore remained at 146 by the end of March 2008. Details of the changes in these destinations are given in Appendix A.

During the year, the Department issued 147 operating permits to airlines based outside Hong Kong for operation of scheduled services to Hong Kong and processed 1 826 applications for changes to the schedules. A total of 2 143 permits were also issued for the operation of non-scheduled services to and from Hong Kong.

## TARIFFS

In the year, the Department processed 808 tariff filings 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.

The surge of oil prices since May 2004 became a major concern to the airline industry. In order to cover part of the unforeseen increase in fuel cost, 58 airlines were approved to collect a passenger fuel surcharge ranging from HK\$61 to HK\$508 per flight sector/coupon. On the cargo side, approvals were given to about 60 airlines to levy a fuel surcharge up to a maximum level of HK\$7.20/kg for long haul services and HK\$3.60/kg for short haul 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的職責和遵行《基本法》的規定，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的身分，出席五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31次非以國家為單位的國際民航組織會議。以上36次會議的詳情見附錄乙。本處亦與國際民航組織往來的函件共有344份，主要是就民航技術事宜提供意見及資料。

為了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。

## 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 five ICAO meetings which were limited to States as part of the delegation of the People's Republic of China, and 31 ICAO meetings which were not so limited, using the name "Hong Kong, China". Details of the above 36 meetings are provided in Appendix B. The Department also exchanged 344 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.



處長率領代表團到西安出席亞洲及太平洋區民航局長第四十四次會議。

DGCA led a delegation to attend the 44th Conference of Directors General of Civil Aviation, Asia and Pacific Regions in Xian.

## 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，本處代表參加了三次該組織的會議，詳情見附錄丙。本處亦合共因應24項亞太經濟合作組織的要求，提供民航的技術事宜的意見及資料。

## 飛機噪音管理

本處繼續致力減少飛機噪音對航道之下或附近居民的影響，為此本處實施了一系列噪音消減措施。其中一項措施，是在風向適合及安全的情況下，午夜十二時至早上七時抵港的航機須要從西南方經海上降落。這措施旨在減少航機在晚間飛越人口稠密的地區如沙田、荃灣、深井及青龍頭等。年內有86%在這時段抵港的航機能夠實行這項措施。另一項飛機噪音消減措施，是晚上十一時至早上七時向東北方起飛的航機，須經西博寮海峽離港。這措施旨在使紅磡、北角、筲箕灣及柴灣等地區免受離港航機的噪音影響。年內逾99%在上述時段內離港的航機能夠實行這項措施。上述措施的成效顯示，只有少數航機因運作和安全理由，需要在深夜時份飛經人口稠密的地方。



本處人員正在收集飛機噪音數據。  
An officer collecting aircraft noise data.

## ACTIVITIES OF ASIA PACIFIC ECONOMIC CO-OPERATION

The Department continued to participate in the activities of APEC using the name "Hong Kong, China". During the year, representatives of the Department attended three APEC meetings and details of these meetings are given in Appendix C. The Department also handled 24 requests relating to APEC, which involved provision of comments and information on technical matters related to civil aviation.

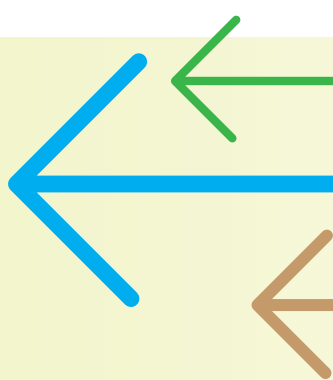
## AIRCRAFT NOISE MANAGEMENT

The Department continued its effort in minimising the impact of aircraft noise on residents living under or in the vicinity of flight paths by the implementation of a series of noise mitigating measures. One of the mitigating measures required aircraft arriving between midnight and 7 a.m. to land from the southwest over water, subject to acceptable wind directions and safety consideration. This measure aims to reduce the number of aircraft overflying populated areas like Sha Tin, Tsuen Wan, Sham Tseng and Tsing Lung Tau. During the year, this mitigating measure achieved a compliance rate of 86 per cent. Another mitigating measure required aircraft taking off to the northeast between 11 p.m. and 7 a.m. to depart via the West Lamma Channel. This measure aims to keep areas like Hung Hom, North Point, Shau Kei Wan and Chai Wan away from the noise impact of departing aircraft. During the year, this mitigating measure achieved a compliance rate of over 99 per cent. These high achievement rates indicated that only a small number of aircraft were required to overfly the populated areas during the small hours due to operational and safety considerations.

In addition, of those aircraft arriving at the HKIA from the northeast between 11 p.m. and 7 a.m., 82.3 per cent were able to adopt the Continuous Descent Approach (CDA) procedures. Aircraft on CDA procedures would fly higher and in a lower power and drag configuration during the commencement of the approach which as a result reduce aircraft noise impact in areas such as Sai Kung, Tseung Kwan O and Ma On Shan.

Measures to control the impact of aircraft noise are closely monitored with the aid of a computer-based aircraft noise and flight track monitoring system. The system comprised 16 noise monitoring terminals installed in the vicinity of the landing and take-off flight paths of the HKIA. During the year, the Department replaced eight sets of aged noise monitoring terminal equipment by new units in order to enhance the effectiveness and efficiency of the system.

During the year, the Department received 349 complaints against aircraft noise. All the complaints were investigated impartially, and the complainants were replied with investigation findings.



此外，在晚上十一時至早上七時從東北方抵港的航機中，82.3%的航機能採用持續降落模式運作，由較高的高度開始下降，並在開始進場時，使用較低的動力和採用較少阻力的狀況飛行，以減少途經西貢、將軍澳和馬鞍山等地區時所產生的噪音。

本處利用一套飛機噪音及航跡監察電腦系統，密切監察飛機噪音消減措施的執行情況。該系統由16個設於香港國際機場各條升降航道附近的噪音監察器所組成。年內，本處更換了八套已使用多年的監察器，以提高該系統的效率 and 成效。

年內，本處共接獲349宗飛機噪音投訴。本處以持平的態度處理所有投訴，並向投訴人詳細交代調查的結果。

為便利公眾瞭解本處就飛機噪音所做的各項工作，本處設有投訴熱線，與受飛機噪音影響的市民保持溝通，並利用本處的網頁，發佈飛機噪音消減措施的資料及噪音數據。本處職員也有出席區議會會議及與區內居民會面，講解本處在減少飛機噪音所作的努力。

## 直升機場的發展

為促進香港跨境直升機服務的發展，民航處通過公開招標，落實擴建港澳碼頭現有跨境直升機場的計劃。標書已於二零零七年一月批與港聯直升機(香港)有限公司，為期十八年的擴建及營運合約於二零零七年七月一日開展，工程預期於二零零九年中旬竣工。在跨境直升機服務的長遠發展方面，政府於啟德發展區已預留土地，以供發展另一跨境直升機場之用。

就建議把會議展覽中心附近的擬建政府直升機坪開放予商業直升機使用的技術可行性研究已於二零零七年尾完成。該研究報告亦就共用提議作出最適合的直升機坪整體佈局設計。

In order to facilitate the general public in understanding the Department's work on aircraft noise, 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 met local communities to explain the Department's aircraft noise mitigation initiatives.

## HELIPORT DEVELOPMENT

To facilitate the development of cross-boundary helicopter services in Hong Kong, the Department has been taking forward the project to expand the existing cross-boundary heliport at the Macau Ferry Terminal through an open tender exercise. The tender was awarded to the Heli Express Limited in January 2007. A 18-year Lease for the expansion and operations of the heliport commenced on July 1, 2007 and the expansion work is scheduled for completion in mid 2009. Regarding the long-term development of cross-boundary helicopter services, land provision has been made within the Kai Tak Development Area for another cross-boundary heliport.

A technical feasibility study for the proposed share-use of the government heliport near the Hong Kong Convention and Exhibition Centre with domestic commercial helicopter operations was completed in end 2007. The study proposed the best share-use layout of the government heliport.



港澳碼頭現有的跨境直升機場。 -  
The cross-boundary heliport at the Macau Ferry Terminal. -

## 附錄甲

截至二零零八年三月來往香港的定期航班服務所遍及的目的地改變情況（與二零零七年三月比較）

## APPENDIX A

Changes in Destinations Served by Scheduled Services to and from Hong Kong as at March 2008 (compared with March 2007)

### (甲) 新增航點

### (a) Additions

新航點	New Points	經營者	Operated By
1. 安曼	Amman	皇家約旦航空公司	Royal Jordanian
2. 開羅	Cairo	漢莎貨運航空公司	Lufthansa Cargo AG
3. 新山	Johor Bahru	金鵬航空公司	Transmile Air Services
4. 萊比錫	Leipzig	漢莎貨運航空公司	Lufthansa Cargo AG
5. 莫斯科 - 多莫傑多沃	Moscow Domodedovo	AirBridge Cargo Airlines	AirBridge Cargo Airlines
6. 仙台	Sendai	港龍航空公司	Hong Kong Dragon Airlines
7. 仰光	Yangon	香港快運航空公司	Hong Kong Express Airways
8. 銀川	Yinchuan	中國南方航空公司	China Southern Airlines

### (乙) 刪減航點

### (b) Deletions

刪除航點	Deleted Points	前經營者	Previously Operated By
1. 雅典	Athens	漢莎貨運航空公司	Lufthansa Cargo AG
2. 波士頓	Boston	聯合航空公司	United Airlines
3. 大庸（張家界）	Dayong	中國南方航空公司	China Southern Airlines
4. 丹佛	Denver	聯合航空公司	United Airlines
5. 哈巴羅夫斯克	Khabarovsk	AirBridge Cargo Airlines	AirBridge Cargo Airlines
6. 拉合爾	Lahore	Ocean Airlines	Ocean Airlines
7. 德黑蘭	Tehran	盧森堡國際貨運航空公司	Cargolux Airlines International
8. 屯溪（黃山）	Tunxi	中國東方航空公司	China Eastern Airlines

## 附錄乙

民航處代表於二零零七年四月至二零零八年三月出席的國際民航組織會議

會議名稱	地點	日期
廣播式自動相關監察系統研究及實施專責小組第六次會議及專題研討會	韓國首爾	二零零七年四月二十三日至二十七日
危險品的航空安全運輸專家組工作小組會議	美國孟菲斯	二零零七年四月三十日至五月四日
第二次航空語言專題討論會	加拿大蒙特利爾	二零零七年五月七日至九日
安全管理系統地區研討會 — 航空交通管理的改變管理	泰國曼谷	二零零七年五月十日至十一日
航空通信專家組第一次會議	加拿大蒙特利爾	二零零七年五月十日至十八日
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二次會議	中國香港	二零零七年五月二十八日至六月一日
第六次東南亞未來航空導航系統實施小組、第14次東南亞航空交通管制協調小組聯合會議	越南河內	二零零七年五月二十八日至六月一日
亞太太平洋地區空域安全監察諮詢小組第七次會議	泰國曼谷	二零零七年六月四日至八日
亞太地區航行規劃和實施小組轄下的飛行氣象情報管理小組第五次會議	泰國曼谷	二零零七年六月六日至八日
西太平洋及南中國海縮小垂直間隔標準詳審工作小組第二次會議	泰國曼谷	二零零七年六月十二日至十五日
互助發展運作安全和持續適航計劃北亞區主導委員會第七次會議	中國西安	二零零七年六月十九日至二十一日
1952年羅馬公約現代化特別小組第六次會議	加拿大蒙特利爾	二零零七年六月二十六日至二十九日
亞太太平洋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17次會議	泰國曼谷	二零零七年七月二日至六日
亞太太平洋地區航行規劃和實施小組轄下通訊、導航、監視及氣象分組第11次會議	泰國曼谷	二零零七年七月十六日至二十日
檢討航空導航不足專責小組第三次會議	泰國曼谷	二零零七年七月二十三日至二十四日
縮小垂直間隔標準實施專責小組第31次會議	泰國曼谷	二零零七年七月三十一日至八月三日
亞太地區互助航空保安計劃主導委員會第四次會議	柬埔寨金邊	二零零七年八月二十一日至二十二日
亞太地區多機組駕駛員執照實施討論會	中國香港	二零零七年八月二十三日至二十四日
防止傳染病經航空交通散播合作安排計劃主導委員會第一次會議	中國香港	二零零七年八月三十日至三十一日
亞太太平洋地區航行規劃和實施小組第18次會議	泰國曼谷	二零零七年九月三日至七日
基於性能導航專題研討會	泰國曼谷	二零零七年九月十一日至十四日
縮小垂直間隔標準實施專責小組第32次會議	中國北京	二零零七年九月十八日至二十一日
國際民用航空組織第36屆大會	加拿大蒙特利爾	二零零七年九月十八日至二十八日

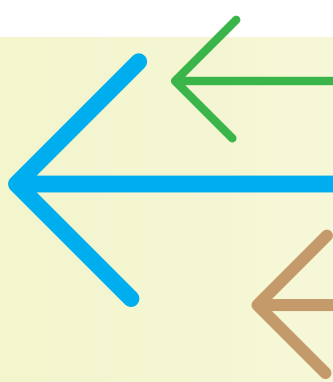


會議名稱	地點	日期
航空電訊網實施協調小組工作組第二次會議	泰國曼谷	二零零七年九月十九日至二十一日
亞太地區民航局局長第44次會議	中國西安	二零零七年十月二十二日至二十六日
西太平洋及南中國海縮小垂直間隔標準詳審工作小組第三次會議	泰國曼谷	二零零七年十月三十日至十一月二日
危險品的航空安全運輸專家組第21次會議	加拿大蒙特利爾	二零零七年十一月五日至十六日
互助發展運作安全和持續適航計劃東南亞區航空安全小組第八次會議	泰國曼谷	二零零七年十一月十二日至十四日
基於性能導航專題研討會	埃及開羅	二零零七年十一月十二日至十五日
互助發展運作安全和持續適航計劃東南亞區主導委員會第九次會議	寮國永珍	二零零七年十二月十一日至十三日
基於性能導航專責小組第一次會議	泰國曼谷	二零零八年一月九日至十一日
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三次會議	泰國清邁	二零零八年一月二十四日至二十五日
西太平洋及南中國海縮小垂直間隔標準詳審工作小組第四次會議	泰國曼谷	二零零八年二月二十六日至二十九日
所需導航性能東南亞區實施專責小組第二次會議	新加坡	二零零八年三月四日至七日
亞太地區航行規劃和實施小組轄下的飛行氣象情報管理小組第六次會議	泰國曼谷	二零零八年三月二十六日至二十八日
預防機場地面意外專題討論會	泰國曼谷	二零零八年三月二十七日至二十八日

## 附錄丙

民航處代表於二零零七年四月至二零零八年三月出席的亞太經濟合作組織會議

會議名稱	地點	日期
全球衛星導航系統實施小組第11次會議	日本東京	二零零七年六月二十五日至二十八日
運輸工作小組第29次會議	台北	二零零七年七月九日至十三日
管制飛機排放物措施策略專題討論會	新加坡	二零零七年八月十日至十一日



## Appendix B

ICAO Conferences and Meetings Attended by Representatives from the Department between April 2007 and March 2008

Name of Conference or Meeting	Venue	Dates
6th Meeting of Automatic Dependent Surveillance-Broadcast Study and Implementation Task Force and Seminar	Seoul, Republic of Korea	April 23 - 27, 2007
Dangerous Goods Panel Working Group Meeting	Memphis, USA	April 30 - May 4, 2007
2nd Aviation Language Symposium	Montréal, Canada	May 7 - 9, 2007
Regional Seminar on Safety Management Systems - Managing Change in Air Traffic Management	Bangkok, Thailand	May 10 - 11, 2007
1st Meeting of Aeronautical Communications Panel	Montréal, Canada	May 10 - 18, 2007
2nd Meeting of Aeronautical Telecommunication Network Implementation Coordination Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Hong Kong, China	May 28 - June 1, 2007
Combined Meetings of 6th Future Air Navigation System Implementation Team - South-East Asia and 14th Meeting of the South-East Asia Air Traffic Services Coordination Group	Hanoi, Viet Nam	May 28 - June 1, 2007
7th Meeting of the Regional Airspace Safety Monitoring Advisory Group	Bangkok, Thailand	June 4 - 8, 2007
5th 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 6 - 8, 2007
2nd Meeting of the Western Pacific / South China Sea Reduced Vertical Separation Minima Scrutiny Working Group	Bangkok, Thailand	June 12 - 15, 2007
7th Meeting of Cooperative Development of Operational Safety and Continuing Airworthiness Programme - North Asia Project Steering Committee	Xi'an, China	June 19 - 21, 2007
6th Meeting of the Special Group on the Modernisation of the Rome Convention of 1952	Montréal, Canada	June 26 - 29, 2007
17th 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	July 2 - 6, 2007
11th Meeting of the Communications/Navigation/ Surveillance and Meteorology Sub-Group of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	July 16 - 20, 2007
3rd Meeting of Deficiency Review Task Force	Bangkok, Thailand	July 23 - 24, 2007
31st Meeting of the Reduced Vertical Separation Minima Implementation Task Force	Bangkok, Thailand	July 31 - August 3, 2007
4th Steering Committee Meeting of Cooperative Aviation Security Programme - Asia/Pacific	Phnom Penh, Cambodia	August 21 - 22, 2007
Regional Symposium on the Implementation of Multi-Crew Licence	Hong Kong, China	August 23 - 24, 2007
1st Steering Committee Meeting of the Cooperative Arrangement for Preventing the Spread of Communicable Disease through Air Travel	Hong Kong, China	August 30 - 31, 2007
18th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	September 3 - 7, 2007

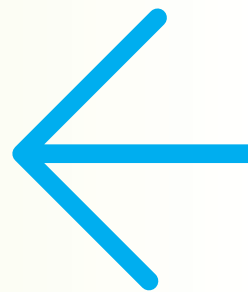
Name of Conference or Meeting	Venue	Dates
Introduction to Performance Based Navigation Seminar	Bangkok, Thailand	September 11 - 14, 2007
32nd Meeting of the Reduced Vertical Separation Minima Implementation Task Force	Beijing, China	September 18 - 21, 2007
36th Session of the Assembly	Montréal, Canada	September 18 - 28, 2007
2nd Meeting of Aeronautical Telecommunication Network Implementation Coordination Group Working Group	Bangkok, Thailand	September 19 - 21, 2007
44th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	Xi'an, China	October 22 - 26, 2007
3rd Meeting of the Western Pacific / South China Sea Reduced Vertical Separation Minima Scrutiny Working Group	Bangkok, Thailand	October 30 - November 2, 2007
21st Meeting of Dangerous Goods Panel	Montréal, Canada	November 5 - 16, 2007
8th Meeting of Cooperative Development of Operational Safety and Continuing Airworthiness Programme - Southeast Asia Regional Aviation Safety Team	Bangkok, Thailand	November 12 - 14, 2007
Introduction to Performance Based Navigation Seminar	Cairo, Egypt	November 12 - 15, 2007
9th Steering Committee Meeting of Cooperative Development of Operational Safety and Continuing Airworthiness Programme - Southeast Asia	Vientiane, Lao	December 11 - 13, 2007
1st Meeting of the Performance Based Navigation Task Force	Bangkok, Thailand	January 9 - 11, 2008
3rd Meeting of Aeronautical Telecommunication Network Implementation Coordination Group Working Group	Chiang Mai, Thailand	January 24 - 25, 2008
4th Meeting of the Western Pacific / South China Sea Reduced Vertical Separation Minima Scrutiny Working Group	Bangkok, Thailand	February 26 - 29, 2008
2nd Meeting of the Required Navigation Performance Implementation Task Force for South-East Asia	Singapore	March 4 - 7, 2008
6th 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 26 - 28, 2008
Ground Accident Prevention Seminar	Bangkok, Thailand	March 27 - 28, 2008

## Appendix C

APEC Conferences and Meetings attended by Representatives from the Department between April 2007 and March 2008

Name of Conference or Meeting	Venue	Dates
11th Meeting of the Global Navigation Satellite Systems Implementation Team	Tokyo, Japan	June 25 - 28, 2007
29th Transportation Working Group Meeting	Taipei	July 9 - 13, 2007
Strategic Seminar on Measures to Manage Aviation Emission	Singapore	August 10 - 11, 2007

# 民航處計劃 THE CIVIL AVIATION DEPARTMENT PROJECT

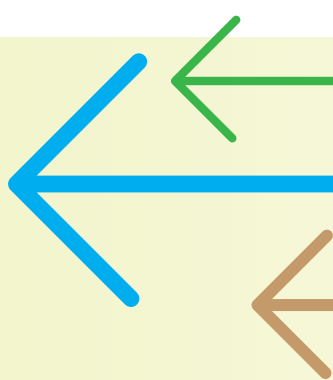


行政長官在二零零六/零七年度的施政綱領中提出更換航空交通管制(空管)系統及在機場島上興建一座新民航處總部，以鞏固香港在地區性航空服務的領導地位，讓航空業得以持續發展。本處因應落實此項綱領，正式啟動了上述計劃。

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 Project) was initiated to implement the commitment.







計劃目標為更換現有的空管系統以應付航空交通量的預計增長，與興建一座新的民航處總部大樓以容納一所新空管中心和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。

### 民航處計劃工作組和 民航處計劃督導委員會

為確保計劃可依時順利進行，本處成立了一個民航處新總部計劃工作組。該組由一位民航處助理處長領導，有四十二名專責組員，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其進展，本處亦成立了一個由高層管理人員組成的民航處新總部計劃督導委員會，定期舉行會議聽取工作組的匯報。在督導委員會核下共設立了十四個不同功能的專責小組，以制定計劃內各方面的策略和要求，這些小組包括：計劃協調；設計和基礎設施；環境和協同作用；保安和安全；資訊科技和先進技術的應用；空管的工作環境；空管系統和設施；空管培訓和人力資源計劃；會議，培訓設施和辦公地方；過渡和搬遷安排；行政和人員編制；空域管理和飛行程序；意外事故調查；和資源分配。專責小組的建議在督導委員會的定期會議上討論，通過後便引入為新大樓的設計要求。

The 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 building 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 for 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, 14 different functional task forces were established to formulate strategies and requirements for various aspects of the project. These task forces included project coordination; design and infrastructure; environment and synergy; security and safety; IT and application of advanced technology; ATC working environment; ATC system and facilities; ATC training and manpower plan; conference, training facilities and accommodation; transition and relocation arrangements; administration and staff establishment; airspace management and flight procedures; accident investigation; and resource allocation. The recommendations of the task forces were deliberated at the regular meetings of the SCNCP and adopted as user requirements of the project.



督導委員會和計劃工作組成員在民航處長帶領下視察新總部大樓選址（背景）。 -  
Led by DGCA, members of the SCNCP and the Project Team visited the site of the New CAD Headquarters (background). -



處長和運輸及房屋局代表參與督導委員會會議。 -  
DGCA and representatives from the Transport and Housing Bureau attending the SCNCP meeting. -

## 計劃進展

雖然計劃的規模龐大及複雜，工作組在督導委員會領導下不斷的努力並獲得整個部門和決策局的全力支持，取得良好的進展。在報告年內，計劃的所有重要里程碑均如期達標。

## 財務安排

立法會財務委員會於二零零七年五月通過批出一筆15.65億元的資金作為更換空管系統之用，興建新總部大樓所需約19.97億元亦於二零零八年一月獲得該會通過撥款。

## 發展新民航處總部

機場管理局董事會已於二零零七年七月撥出一幅位於機場島東南，港龍/中航大廈以北，東輝路兩旁，佔地約共29 800平方米的土地，作為新民航處總部的選址。施工前的初期工程，包括土地勘測、交通影響評估、初步環境審查、地形測量和樹木調查等，已於二零零七年八月完成。

## 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 good progress despite its scale and complexity. During the reporting year, all critical milestones were achieved as scheduled.

## FUNDING

A sum of HK\$1,565 million was approved by the Legislative Council's Finance Committee in May 2007 for the replacement ATC system and an estimated cost of HK\$1,997 million was also endorsed for the construction of the new CAD Headquarters in January 2008.

## DEVELOPMENT OF THE NEW CAD HEADQUARTERS

A site north of the Dragonair House/CNAC Building on both sides of the Tung Fai Road with a combined site area of approximately 29 800 square metres was allocated by the Board of Directors of the Airport Authority Hong Kong (AAHK) in July 2007. On-site pre-construction works including ground investigation, traffic impact assessment, preliminary environmental review, topographic survey and tree survey were completed in August 2007.

依照產業處的面積分配機制，所有各分部的運作和共用設施需求已於二零零七年十月編製完畢，並獲產業檢審委員會通過。新總部大樓的淨作業樓面總面積約為22 660平方米。基於選址受機場高度規限，發展空間有一定限制，所以在編製樓面面積時已審慎考慮，在確保符合運作要求之餘，亦充分顧及到未來擴充的靈活性。

大樓建築工程將以設計及建造的方式進行，大樓辦公室和各項特別設施，包括空管中心及相關設施、多用途會堂、教育徑、圖書館和資源中心等的具体建築和屋宇裝備要求，已於二零零八年一月草擬完成，並將加入建築工程合約內。

Preparation of schedule of accommodation as required by the Government Property Agency, which set out the floor area requirement of different divisions and common facilities, was completed in October 2007 and a total net operating floor area of approximately 22 660 square metres was endorsed by the Property Vetting Committee. Taking into account the limitations in future expansion due to airport height restrictions of the site, prudent considerations were exercised in the process to ensure operational requirements were met with flexibility for future expansion and development of the department.

A design-and-build approach was adopted for the construction of the building. Drafting of architectural and building services requirements for specific facilities and offices including the ATC centre and its associated facilities, multi-purpose auditorium, education path, library and resource centre etc. proceeded in parallel with the preparation of schedule of accommodation and were completed in January 2008. These requirements would be incorporated into the building construction tender.



新民航處總部選址。 -  
Location of new CAD Headquarters. -



## 更換航空交通管制系統

新空管系統共涉及十四個主要系統、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計至二零二五年在香港飛行情報區內的航班流量。

新系統的操作要求和技術規格正在草擬中。為確保新空管系統將屬最先進系統，專責小組曾派員到廣州、荷蘭馬城(歐洲導航安全組織)、倫敦和墨爾本的航空管制中心實地考察，以掌握空管技術的最新發展，並借鑑其成功過渡的策略和經驗。

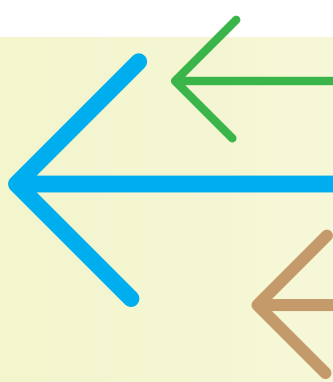
## REPLACEMENT OF ATC SYSTEM

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 system 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.

Drafting of operational requirements and technical specifications for the new system was well under way. Operational and technical visits to ATC centres in Guangzhou, Maastricht in Holland (Euro Control), London and Melbourne were conducted to share their expertise in the design of modern ATC systems and experience in successful transition to new ATC centres.



選址鳥瞰圖。  
Aerial view of the site.



# 財務 FINANCE

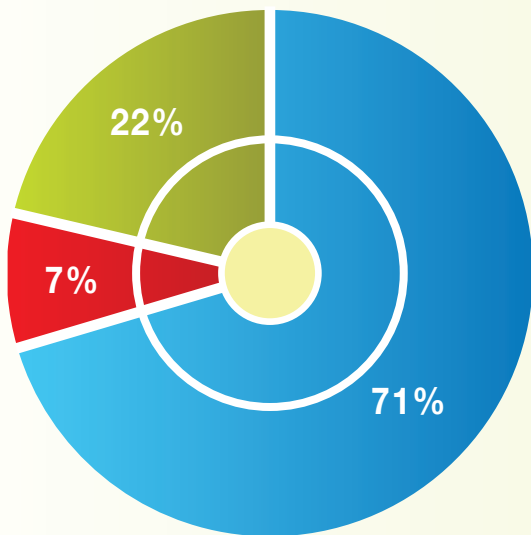
## 本處收入與開支

本處年內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。二零零七年至二零零八年度，本處的總收入達9.18億元，同期總經營支出包括政府其他部門提供服務的成本為8.81億元。年內資本開支達2,200萬元。主要項目包括更換東龍洲多普勒甚高頻全向無線電信標及測距設備，以及衛星通訊、導航及監察/航空交通管理系統。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。

## DEPARTMENTAL REVENUE AND EXPENDITURE

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 2007-2008 amounted to \$918 million. Total operating expenditure including costs of services provided by other government departments for the same period amounted to \$881 million. Capital expenditure during the year amounted to \$22 million, major items included Replacement of Doppler VHF Omni-Directional Radio Range and Distance Measuring Equipment on Tung Lung Island and Satellite-based Communications, Navigation and Surveillance/Air Traffic Management Systems. The Department has been operating under prudent accounting principles and in a lean but efficient manner.





### 收入分析 Analysis of Revenue (2007-2008)

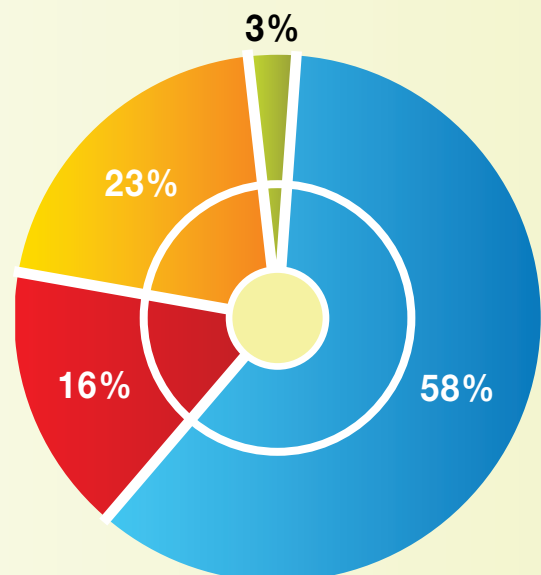
百萬元\$(M)

航空交通 Air Traffic Services	649
過境導航 En-route Navigation Services	201
其他 Licence and Other Fees	68
<b>Total</b>	<b>918</b>

### 開支分析 Analysis of Expenditure (2007-2008)

百萬元\$(M)

員工支出 Staff	507
經營及行政支出 General Expenses	205
折舊 Depreciation	142
維修 Maintenance	27
<b>Total</b>	<b>881</b>





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