民航處
CIVIL AVIATION DEPARTMENT

Annual Report 年報
2014-2015

致力保障
航空安全

Maintaining Safety in Aviation

我們的理想 Our Vision

致力於安全、有效率及可持續發展的航空運輸系統

Committed to a Safe, Efficient and Sustainable Air Transport System

我們的使命 Our Mission

- 奠定香港作為國際及區域頂尖航空中心的地位
- 維持有效法律制度，以實施根據適用國際民航公約制訂的相關條文
- 借助先進航空導航系統科技，推動航空業發展
- 確保建立、達到和維持航空導航服務高水平的安全標準
- 在香港飛行情報區內維持既安全、快捷，又秩序井然的航空交通
- 確保在香港飛行情報區內提供精準及快捷的航空資訊服務和適時及高效的警報服務
- 確保香港搜救區內飛機出現緊急情況和發生意外時，適當協調搜索和救援行動
- 制訂和貫徹執行機場安全及航空保安標準
- 確保香港註冊的飛機和以香港為基地的航空公司符合既定的適航及運作標準
- 確保香港認可的飛機維修機構符合國際標準
- 確保香港註冊的空勤人員和飛機維修工程師符合國際標準
- 制定策略並積極採取措施，確保所有航機運作符合相關可承受的安全水平，盡量減低航空安全風險
- 監察航空公司有否遵守雙邊民用航空運輸協定
- 制定有效措施以減少飛機噪音對社區的影響
- 透過協調及綜合系統法，推廣及管理航空安全
- 以公正持平方式進行意外調查，確定肇事原因及實況，以保障人命安全和防止同類意外再次

- Positioning Hong Kong as a leading centre of international and regional aviation
- Maintaining an effective legal system for the implementation of relevant provisions under applicable civil aviation related international conventions
- Facilitating the growth of aviation through the application of leading edge technology in Air Navigation Systems
- Ensuring that a high standard of safety in the provision of air navigation services is established, achieved and maintained
- Maintaining a safe, orderly and expeditious flow of air traffic within the Hong Kong Flight Information Region
- Ensuring that an accurate and efficient aeronautical information service and a timely and effective alerting service within the Hong Kong Flight Information Region are provided
- Ensuring proper coordination of search and rescue operation in the event of aircraft emergencies and accidents within the Hong Kong Search and Rescue Region
- Setting and enforcing aerodrome safety and aviation security standards
- Ensuring compliance with established airworthiness and flight operations standards by Hong Kong registered aircraft and locally based airlines
- Ensuring compliance with international standards by Hong Kong approved aircraft maintenance organisations
- Ensuring compliance with international standards by Hong Kong licensed flight crew and aircraft maintenance engineers
- Developing strategies and implementing proactive measures to minimise safety risks to aviation by ensuring that all operations are conducted in conformity with the respective acceptable levels of safety
- Monitoring compliance by airlines with bi-lateral Air Services Agreements
- Developing workable measures to minimise the impact of aircraft noise on local communities
- Promoting and managing aviation safety through a coordinated and integrated systems approach
- Conducting fair and impartial accident investigations to determine the circumstances and causes of accidents with a view to the preservation of life and avoidance of accidents in the future

我們的信念 Our Values

- 安全可靠
- 快捷高效
- 嚴守標準
- 專業誠信
- 團隊精神
- 持續發展

- Safety and security
- Efficiency and effectiveness
- Compliance with standards
- Professionalism and integrity
- Teamwork
- Sustainable development

目錄
Contents

處長報告
Director-General's Review

羅崇文太平紳士，
AE, Médaille de l'Aéronautique
民航處處長

Mr Norman Shung-man LO,
JP, AE, Médaille de l'Aéronautique
Director-General of Civil Aviation

英國前首相邱吉爾曾經說過「欲求進，須求變。欲求完美，則須不斷求變」。本處同人秉持相同態度，於二零一四至一五年度迎接了不少改變，無懼挑戰，克服萬難，繼續精益求精、力臻完美，竭力為市民大眾提供安全、有效率及可持續發展的航空運輸系統。

Former British Prime Minister Sir Winston Churchill once said, "To improve is to change; to be perfect is to change often." My colleagues and I, sharing the same spirit, overcame many changes and took on many challenges in the year 2014-15. We have served with zeal and commitment in ensuring a safe, efficient and sustainable air transport system.

鑑於航空業的安全標準及營運需求不斷提升，本處於二零一四年四月一日成立了航班事務及安全管理部。該新分部將原有的航班事務部與原屬其他分部的航空交通管理標準組和培訓及發展組合併，負責監察航空公司的空運服務、就本地航空公司的空運牌照申請及民用航空運輸談判向有關當局提供資料、處理有關民航的立法事宜、編訂航空交通統計數字、制定和實施航空安全管理政策、為飛機意外及嚴重事故的調查工作提供行政支援，以及監管香港的空中導航服務。

在此之前，原屬舊有航班事務部的航班協調辦公室和負責監察飛機噪音的小組，已先後於過去兩年撥歸航空交通管理部和機場安全標準部。完成上述一系列重組工作後，不同的航空專業可以產生更大的協同效應，讓本處加強協調工作，更妥善地執行各項安全標準，並推廣安全管理和培訓，以及預防意外/ 事故發生。本處其他分部(即機場安全標準部、航空交通管理部、飛行標準及適航部和航空交通工程服務部)也能更為專注於其核心職能，繼續監管航空安全和提供空中導航服務。

除了成立新分部，本處更換航空交通管制(空管)系統的工作也進行得如火如荼。現時的空管系統於一九九八年香港國際機場啟用時投入運作，至今已使用超過15年。為應付未來的航空交通需求，本處會更換現有的系統。整個新空管系統分由八份主要合約落實，當中七份合約的工作已經大致如期完成。餘下的航空交通管理系統正進行最後階段的系統驗收測試。待完成系統整合、試行運作，並為工程和空管人員提供足夠的技術和操作培訓後，新的航空交通管制中心預計可於二零一六年投入服務。

In view of the ever increasing demand of the aviation industry in terms of safety standards and capacity, the former Air Services Division was re-structured and re-named Air Services and Safety Management Division on 1 April 2014. The re-structuring involved the amalgamation of the Air Traffic Management Standards Office and the Training and Development Office into the new Division, which is now responsible for monitoring air services provided by airlines, providing information to relevant authorities regarding air transport licence applications by local airlines and for air services negotiations, handling civil aviation legislative matters, producing air traffic statistics, developing and implementing safety policies to promote and enhance safety in the aviation system, providing administrative support to the investigation of aircraft accidents and serious incidents, and regulating Hong Kong's air navigation services.

Prior to this, the Schedule Coordination Office and the team responsible for aircraft noise monitoring of the former Air Services Division were transferred to the Air Traffic Management Division and the Airport Standards Division respectively in the past two years. This series of re-structuring helped to create more synergy amongst the aviation disciplines and enabled CAD to implement safety standards and promote safety management, training and accident/ incident prevention in a more coordinated manner. At the same time, other CAD divisions, namely the Airport Standards Division, the Air Traffic Management Division, the Flight Standards and Airworthiness Division and the Air Traffic Engineering Services Division, can place more focus on their core functions as safety regulators and an air navigation services provider.

Apart from establishing a new division, the replacement of the air traffic control (ATC) systems is also in full swing. In order to meet the future air traffic demand, the existing ATC systems will be replaced as they have been in use for over 15 years since the opening of Hong Kong International Airport (HKIA) in 1998. The new ATC systems are implemented through eight major system contracts, of which seven have been substantially completed as scheduled. The remaining Air Traffic Management System is undergoing the final stage of system acceptance tests. Upon the successful completion of system integration, trial runs, as well as adequate technical and operational training for the engineering and ATC staff, the new Air Traffic Control Centre is planned to commence operation in 2016.

眾所周知，香港國際機場是全球最繁忙的客運和貨運機場之一。年內，在香港國際機場升降和飛越香港的航班數目持續攀升：航班升降量較去年上升約5%至395 997架次、客運量上升約7%至6 426萬人次，貨運量則增加約5%至440萬公噸。進一步優化飛行程序，並在部分航線引進縮小縱向間隔標準之後，香港國際機場雙跑道的最高容量，已於年內遞增至每小時67架次。香港國際機場更於二零一五年二月十四日，錄得一共1 179架次的年度單日航班升降新紀錄。

要鞏固香港作為國際及區域航空樞紐的地位，我們必須未雨綢繆。二零一五年一月，我陪同運輸及房屋局局長前往北京拜會國家民航局的官員，討論珠江三角洲(珠三角)空域議題和簡介香港機場三跑道系統計劃工作的進展。國家民航局表示十分關注香港航空業的發展，更支持香港發展三跑道系統，並鼓勵內地空管部門與香港保持溝通和合作。本處會繼續透過三方工作組平台推動珠三角空域優化計劃內的各項措施，例如在香港與廣州飛行情報區之間再增加空管移交點，以及優化珠三角地區機場離場航班放行機制。

除了硬件，為應付不斷增加的航空交通需求和各種新挑戰，監管機構和航空業界都需要新的安全管理策略。本處根據國際民用航空組織(國際民航組織)最新的標準和指引，完成了安全方案的檢討和更新工作，於二零一四年十月推出《香港安全方案2014-17》，並已上載到本處網頁。新方案除了詳述香港現行的航空安全監督架構外，還闡述了落實安全方案的相關策略，以期提高安全意識，並促進跨專業範疇(包括持份者、服務提供者、本地與國際航空業界伙伴)的合作關係。

為達到提高安全水平的共同目標，本處與各界伙伴必須加強合作。為此，本處一直不遺餘力，舉辦大大小小的國際會議和研討會。年內，於民航處總部舉行的大型活動包括：亞太地區民航局局長第51次會議、亞太地區航行規劃和實施小組航空交通管理分組第二次會議、亞太地區航空保安協調論壇第二次會議、亞太地區區域航空安全小組第四次會議、國際民航組織亞太地區航空安全小組轄下意外調查小組第二次會議、國際民航組織民航局局長課程/工作坊等。未來，本處會繼續善用總部的會議設施，積極舉辦推廣航空安全、促進資訊交流和提供培訓研習的活動。

As we all know, HKIA is one of the world's busiest passenger and cargo airports. The number of aircraft movements at HKIA and overflights continued to increase in the year. It handled 395 997 flight movements, 64.3 million passenger throughput and 4.4 million tonnes of cargo throughput, representing a year-on-year increase of about 5%, 7% and 5% respectively. Further enhancements to flight procedures and the introduction of reduced longitudinal separation standards on some routes enabled the handling capacity for the two runways at HKIA to be increased to a maximum of 67 movements per hour within the year. On 14 February 2015, a total of 1 179 flight movements were handled at HKIA, setting a new single day record during the year.

To maintain our status as an international and regional aviation hub, we need to prepare for the future. In January 2015, I accompanied the Secretary for Transport and Housing to visit the Civil Aviation Administration of China (CAAC) in Beijing. We discussed issues related to the Pearl River Delta (PRD) airspace with the CAAC and briefed them on the progress of the Three-Runway System (3RS) project of HKIA. The CAAC expressed keen interest in the development of aviation in Hong Kong, and was supportive of the development of the 3RS. The CAAC also encouraged the air traffic control authorities of the Mainland to maintain liaison and cooperation with that of Hong Kong. Furthermore, CAD will continue to pursue via the Tripartite Working Group platform various enhancement measures in the PRD Air Traffic Management Plan, such as the establishment of more new transfer points between the Hong Kong and Guangzhou Flight Information Regions, and further enhancement to departure release mechanism for airports in the PRD Region.

Hardware aside, it is equally important for the regulatory authority and aviation industry to implement new safety management strategies to cope with the growing traffic demand and new challenges. By referring to the International Civil Aviation Organization (ICAO)'s latest requirements and guidance, CAD completed the review and updating of the State Safety Programme (SSP) document for Hong Kong, and published the "Hong Kong Safety Programme 2014-17" in October 2014. It has also been uploaded to CAD's website. This newly updated SSP document not only describes the safety oversight framework currently in place in Hong Kong, but also sets out the strategies which Hong Kong has adopted for the implementation of the SSP. It helps to promote safety awareness and to foster safety partnership across disciplines, including the stakeholders, service providers, industry partners and the international aviation community.

To achieve our common goal of safety improvement, CAD, together with the aviation industry, must collaborate and work more closely together. To this end, CAD has been actively organising international conferences and meetings of various scales. During the year, major events held at CAD Headquarters included the 51st Conference of Directors General of Civil Aviation, Asia and Pacific Regions; Second Meeting of the Air Traffic Management Sub-group of the Asia Pacific Air Navigation Planning and Implementation Regional Group; Second Regional Aviation Security Coordination Forum; Fourth Meeting of the Regional Aviation Safety Group, Asia and Pacific Regions; ICAO Asia Pacific Regional Aviation Safety Team – Second Meeting of the Asia Pacific Accident Investigation Group; ICAO Director General Course/Workshop, etc. In future, we will continue to make good use of the conference facilities at our Headquarters and to organise safety promotion, information sharing and training events.

最後，行政長官在二零一四年《施政報告》中提到，為本地和區內航空業界培養人才，促進交流，並致力提升航空運輸的安全水平和效率，政府會研究成立民航訓練學院。可行性研究已於二零一四年六月展開，預計於二零一五年完成。研究範圍包括：評估本港和區內／主要經濟體系的航空業現時和未來的人手情況及培訓需求；成立民航訓練學院的可行性及相關事宜，例如學院的規模、所提供培訓的類型和水平、師資，以及與持份者(包括現有培訓機構)的相互合作等。待可行性研究完成後，政府會考慮和跟進研究結果。

總括而言，二零一四至一五年度對民航處來說是充滿挑戰的一年。飛機起飛和着陸一般都會逆風而行，民航處人員與飛機為伴，同樣敢於迎難而上。肩負着保障航空安全的重責，我們定必克盡己任，勵精圖強，不斷改進我們的航空運輸系統，以鞏固香港作為國際及區域航空中心的地位。

民航處處長
羅崇文

Last but not least, the Chief Executive announced in his Policy Address 2014 that the Government would consider the feasibility of setting up a civil aviation training institute to develop human capital for both the local and regional aviation industries, promote exchanges and enhance the safety and efficiency of air services. A feasibility study has commenced in June 2014 and is targeted for completion in 2015. The scope includes an assessment of the current and future manpower situation in Hong Kong's aviation industry and in the region/key economies, vis-à-vis the demand for training; and the feasibility of establishing a civil aviation training institute in Hong Kong and related issues, such as the scale of the institute, types and level of training to be offered, trainers, and interaction and collaboration with the stakeholders (including those existing training institutes). The Government will review and follow up on the findings of the consultancy study as appropriate.

In summing up, it was indeed a very challenging year for CAD in 2014/15. Like aircraft which normally take off and land into the wind, CAD colleagues will take on the challenges ahead bravely. As we are tasked with the mission to safeguard aviation safety, we will continue our drive and efforts to achieve excellence and work solidly for the improvement of our air transport system, and to maintain our status as an international and regional aviation hub.

Mr Norman Shung-man LO
Director-General of Civil Aviation

圖片攝於民航處總部航空交通管制中心。

The photo was taken at the Air Traffic Control Centre at the CAD Headquarters.

左起 From left

1 總庫務會計師
Chief Treasury Accountant

黃俊光先生
Mr Wong Chun-kwong

2 助理處長（航空交通管理）
Assistant Director-General (Air Traffic Management)

李國柱先生
Mr Raymond Li Kwok-chu

3 助理處長（機場標準）
Assistant Director-General (Airport Standards)

林偉珊女士
Miss Priscilla Lam Wai-shan

4 民航處副處長
Deputy Director-General of Civil Aviation

李天柱太平紳士
Mr Simon Li Tin-chui, JP

5 民航處處長
Director-General of Civil Aviation

羅崇文太平紳士 AE
Mr Norman Lo Shung-man, JP, AE

6 助理處長（航班事務及安全管理）
Assistant Director-General (Air Services and Safety Management)

廖志勇機長
Captain Victor Liu Chi-yung

7 助理處長（飛行標準）
Assistant Director-General (Flight Standards)

曾煜本先生
Mr Tsang Yuk-poon

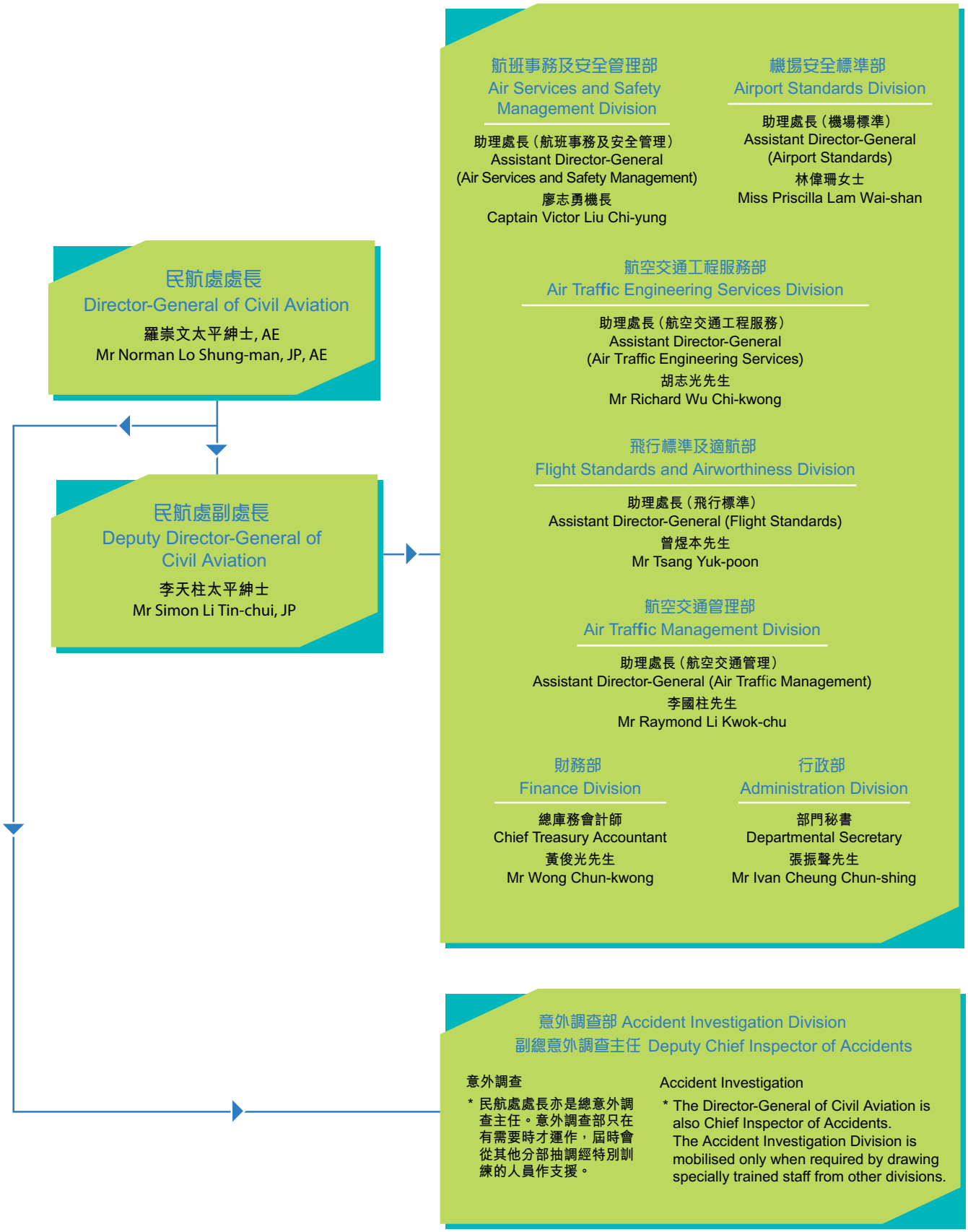
8 助理處長（航空交通工程服務）
Assistant Director-General (Air Traffic Engineering Services)

胡志光先生
Mr Richard Wu Chi-kwong

9 部門秘書
Departmental Secretary

張振聲先生
Mr Ivan Cheung Chun-shing

組織圖
Organisation Chart



大事紀要
Calendar of Events

2014

四月一日
1 April

航班事務部改組為航班事務及安全管理部，以便更有效率地實施航空安全措施。

The former Air Services Division was restructured and renamed Air Services and Safety Management Division to enable a more effective implementation of the aviation safety initiatives.

四月二十三日
23 April

民航處獲僱員再培訓局嘉許為「人才企業」。

CAD was accredited as "Manpower Developer" by Employees Retraining Board.

四月二十二至二十五日
22 - 25 April

國際民用航空組織(國際民航組織)廣播式自動相關監察研討會及廣播式自動相關監察系統研究和實施專責小組第13次會議在民航處總部順利舉行。

The International Civil Aviation Organization (ICAO) Automatic Dependent Surveillance – Broadcast (ADS-B) seminar and the Thirteenth Meeting of ADS-B Study and Implementation Task Force were successfully held at the CAD Headquarters.

五月二十九日
29 May

優化了其中一條主要抵港航線，及新增多個外圍空中等候區域供前往澳門國際機場的航班使用。

Enhancement to one of the major arrival routes to Hong Kong International Airport (HKIA) was introduced and additional peripheral airborne holding areas for traffic operating to Macao International Airport were established.

七月八及九日
8 & 9 July

民航處與國家民航局中南地區管理局、中南地區空中交通管理局及解放軍廣州軍區空軍司令部舉行會議，討論珠三角空域管理的相關議題。

CAD had a meeting with the Central & Southern Regional Administration (C&SR Administration) of Civil Aviation Administration of China (CAAC), the Middle &South Regional Air Traffic Management Bureau (M&SR ATMB) and People's Liberation Army Guangzhou Air Command to discuss issues related to the Pearl River Delta airspace management.

八月十二日
12 August

民航處與深圳空中交通管理站、深圳市交通委員會及深圳市機場股份有限公司會面，就香港、深圳兩地機場的未來發展交換意見。

CAD had a meeting with Shenzhen Air Traffic Management Unit, Transport Commission of Shenzhen Municipality (TCSM) and Shenzhen Airport Company Limited to exchange views on the future development of Hong Kong and Shenzhen airports.

九月四日
4 September

民航處在中華電力有限公司舉辦的環保節能機構嘉許計劃中獲「金獎」。

CAD received Gold Award in the CLP Power Hong Kong Limited's Green Plus Recognition Award Programme.

九月二十二日
22 September

香港與曼谷的航空交通服務訊息處理系統和航空電訊網投入運作。

The Air Traffic Services Message Handling System and Aeronautical Telecommunication Network circuit between Hong Kong and Bangkok was put into operation.

十一月二十五日
25 November

香港民航處與歐洲航空安全局簽署《航空產品的型號合格認可的工作安排》。

The Working Arrangement between the Hong Kong Civil Aviation Department and the European Aviation Safety Agency (EASA) on validation of certificates for civil aeronautical products, parts and appliances was signed with EASA.

十月三十日
30 October

香港民航處與美國聯邦航空局簽署《美國航空產品的型號合格認可和持續適航的工作程序》。

The Working Procedure for the Type Validation and Continued Airworthiness of U.S. Aeronautical Products was signed with the U.S. Federal Aviation Administration.

2015

十月三十一日
31 October

根據國際民航組織最新的安全管理標準和指引公布《香港安全方案2014-17》。該方案詳述香港現行的航空安全監督架構及落實安全方案的相關策略。

"Hong Kong Safety Programme 2014-17" was published with reference to the latest ICAO's requirements and guidance. It describes the Hong Kong safety oversight framework and sets out the strategies for the implementation of State Safety Programme.

一月七日
7 January

民航處處長陪同運輸及房屋局局長前往北京拜會國家民航局，討論珠三角空域議題和簡介香港機場三跑道系統計劃工作的進展。

The Director-General of Civil Aviation accompanied the Secretary for Transport and Housing to visit the CAAC in Beijing and discussed issues related to PRD airspace as well as introduced the progress of the Three-Runway System project of HKIA.

二月十四日
14 February

香港國際機場錄得1 179架次航機升降，創單日航班升降數目新紀錄。

A new single day record of 1 179 flight movements was set at HKIA.

二月十三日
13 February

民航處與國家民航局中南地區管理局、中南地區空中交通管理局、深圳市交通委員會及深圳市機場股份有限公司舉行會議，就珠三角空域，及香港與深圳的機場未來發展等相關議題交換意見。

CAD had a meeting with C&SR Administration, M&SR ATMB, TCSM and Shenzhen Airport Company Limited to exchange views on issues related to PRD airspace and the future development of Hong Kong and Shenzhen airports.

三月二十九日
29 March

香港國際機場雙跑道的運作容量增至每小時 67架次。

The declared runway capacity for dual runway operations at HKIA increased to 67 movements per hour.

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

(二零一零年四月至二零一五年三月)(April 2010 — March 2015)

	飛機升降次數 Aircraft Movement		乘客* Passenger		商業貨物 Commercial Cargo	
財政年度 Fiscal Year	升降次數 Movement	升跌百分比 % Change	人次 Number	升跌百分比 % Change	公噸 Tonnes	升跌百分比 % Change
2010-2011	316 354	13%	50 298 535	10%	4 167 549	17%
2011-2012	339 133	7%	53 859 537	7%	3 923 295	-6%
2012-2013	355 008	5%	56 425 252	5%	4 039 873	3%
2013-2014	377 478	6%	60 085 950	6%	4 176 970	3%
2014–2015	**395 997**	**5%**	**64 264 961**	**7%**	**4 405 028**	**5%**

** 乘客人次包括轉機，但不包括過境乘客。*

** Passengers include transfer, but exclude transit passengers.*

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

(二零一零年四月至二零一五年三月)(April 2010 — March 2015)

財政年度 Fiscal Year	航班總數* Flights Handled*	升跌百分比(比上年) % Change (from last year)
2010-2011	485 153	14%
2011-2012	531 438	10%
2012-2013	563 642	6%
2013-2014	602 392	7%
2014–2015	**631 383**	**5%**

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

(1) 在香港國際機場升降的國際及本地航班；

(2) 所有飛越香港飛行情報區而不在本港升降的航班；

(3) 由航空交通管理部處理進出澳門國際機場的航班。

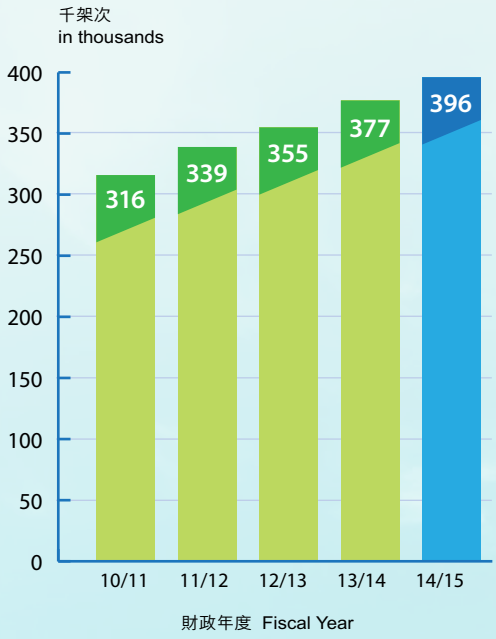
** [Flights Handled] is the total number of aircraft handled by the Air Traffic Management Division of CAD in the year. It includes:*

(1) international and local aircraft movements at the Hong Kong International Airport;

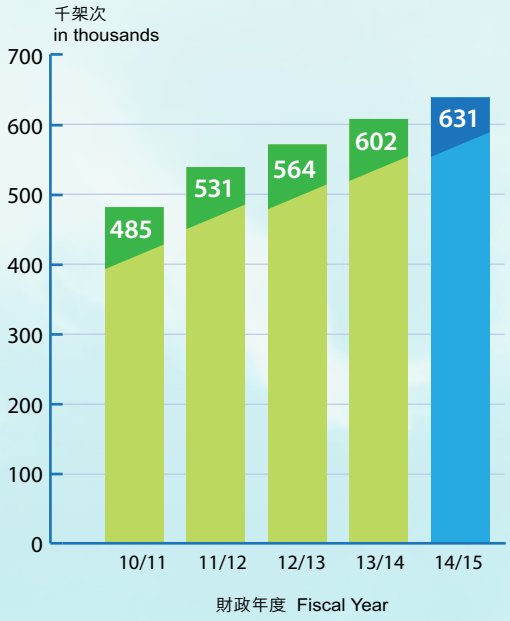
(2) flights transiting the Hong Kong Flight Information Region not landing Hong Kong;

(3) flights landing and departing Macao International Airport handled by the Air Traffic Management Division.

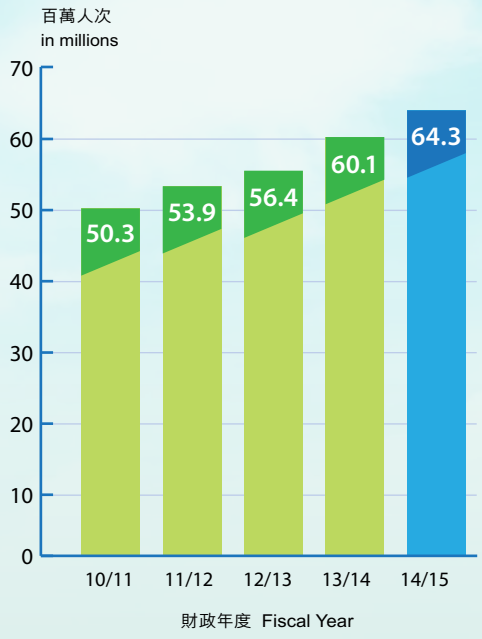
香港國際機場過往五年航機升降次數
Five-Year Aircraft Movement at the Hong Kong International Airport



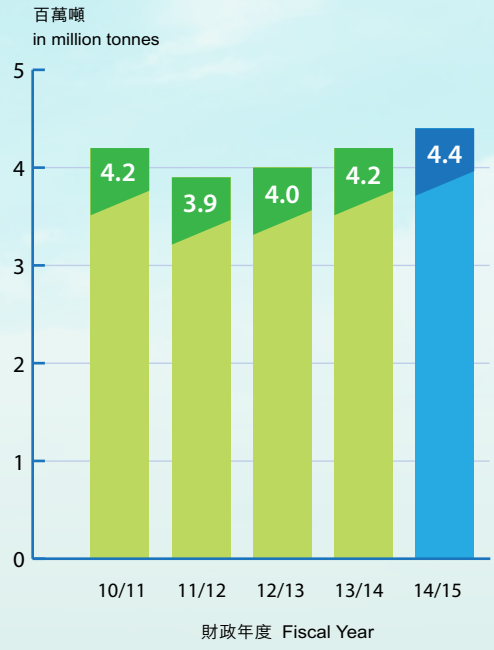
過往五年航空交通管理部處理的航班總數
Five-Year Total Flights Handled by the Air Traffic Management Division



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為在香港飛行情報區內航行的民航機提供空中導航服務，當中包括航空交通服務，通訊、導航及監察，以及搜索和救援。為了維持香港飛行情報區的航空交通運作暢順，本部也負責培訓空管人員，提供航空電訊服務，協調航班和設計航空交通管制(空管)程序。

The Air Traffic Management Division (ATMD) is responsible for the provision of air navigation services to civil aircraft operating within the Hong Kong Flight Information Region (HKFIR). The services include air traffic services, communications, navigation and surveillance as well as search and rescue. In order to maintain a smooth operation of air traffic operating in the HKFIR, ATMD is also responsible for the training of air traffic control personnel, provision of aeronautical telecommunication services, flight schedule coordination and the design of air traffic control procedures.

控制塔台為進出香港國際機場的航機提供空管服務。

The Air Traffic Control Tower provides air traffic control services to aircraft operating at Hong Kong International Airport.

航空交通運作

在本財政年度內，航空交通管理部處理了397 235架次在香港國際機場升降的國際及本地航班，並為234 148架次飛越香港飛行情報區的航班(當中包括53 320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的航班數目增加4.9%，而飛越香港的航班數目則增加4.6%。

跑道升降容量

通過進一步優化飛行程序，並在部分航線引進縮小縱向間隔標準之後，香港國際機場雙跑道的最高容量，已於年內遞增至每小時67架次。香港國際機場更於二零一五年二月十四日，錄得一共1 179架次的年度單日航班升降新紀錄。

AIR TRAFFIC OPERATIONS

During the financial year, ATMD handled 397 235 international and local aircraft movements at Hong Kong International Airport (HKIA). In addition, the Division handled 234 148 flights overflying the HKFIR (including 53 320 flights into and out of Macao International Airport). Compared with the previous year, the number of aircraft movements at HKIA and overflights increased by 4.9% and 4.6% respectively.

Runway Capacity

Further enhancements to flight procedures and the introduction of reduced longitudinal separation standards on some routes enabled the handling capacity for the two runways at HKIA to be increased to a maximum of 67 movements per hour within the year. On 14 February 2015, a total of 1 179 flight movements were handled at HKIA setting a new single day record during the year.

航空交通管制主任執照考試和覆核

為維持空管運作的應有表現和安全標準，本部的訓練及安全組為航空交通管制主任(空管主任)安排各類考試。年內，就塔台管制、進場管制和區域管制三個空管組別共舉行了228次考試。此外，本部也向經考核及格的人員頒發助理管制員證書、空管氣象記錄員證書、在職培訓導師證書和流量管制證書。

招聘和培訓空管人員

招聘和培訓見習空管主任

招聘和培訓見習空管主任的工作必須審慎規劃和管理，以配合預期的航空交通增長和人手需求。由於本地就業市場欠缺具備所需資歷的空管主任，民航處通常會招聘見習空管主任，經過專門培訓後，再擢升成為空管主任。

在招聘見習空管主任期間，合資格的申請人必須通過一系列測試，包括才能測驗筆試、工作性格測驗和面試。合格者繼而會在評估中心接受更深入的認知能力測試和性格評估。

Examinations and Revalidations of Air Traffic Control Officer Ratings

The Training and Safety Section of ATMD carried out practical examinations on Air Traffic Control Officers (ATCOs) to ensure that the required performance and safety standards in air traffic control (ATC) operations are maintained. In the year, 228 practical examinations were conducted in the three ATC streams – Aerodrome Control, Approach Control and Area Control. In addition, ATMD also issued Assistant Controller Certificates, ATC Meteorological Reporter Certificates, On-the-job Instructor Certificates and Flow Control Certificates to officers who had attained these qualifications.

RECRUITMENT AND TRAINING OF ATC STAFF

Recruitment and Training of Student ATCOs

The recruitment and training of ATC staff has to be carefully planned and managed to meet anticipated air traffic growth and manpower needs. As qualified ATCOs are not readily available in the local job market, individuals are normally recruited as Student Air Traffic Control Officers (SATCOs). After specialised training, they will progress from SATCOs to ATCOs.

During the recruitment of SATCOs, eligible candidates will go through a series of written aptitude test, occupational personality questionnaire and interview. Further in-depth assessment on cognitive ability and personality traits will be conducted in the Assessment Centre for candidates who pass the previous tests.

航空交通管制大樓內的航空交通管制中心。
The Air Traffic Control Centre at the Air Traffic Control Complex.

航空交通管制大樓內的航空交通管制中心。
The Air Traffic Control Centre at the Air Traffic Control Complex.

見習空管主任的培訓計劃規劃周詳，務使受訓學員的表現能達到既定的進展基準。培訓計劃由不同階段的訓練單元組成，以確保學員充分掌握所學技能後，才開始接受另一單元的培訓。各個訓練單元均包括課堂學習、利用空管雷達模擬器或塔台模擬機進行模擬訓練，以及於工作崗位接受在職培訓。受訓人員必須通過考核，才會獲准獨立工作。培訓見習空管主任成為合資格的管制員，以擔任二級空管主任職位，一般需時五至六年左右。

除本地培訓外，見習空管主任也會到海外修讀基本空管課程，內容廣泛，包括空管程序、氣象、雷達操作、飛行原理等航空知識，以擴闊他們在空管運作方面的閱歷。預計部分表現理想的新入職見習空管主任，將在下一個財政年度獲派修讀海外課程。

截至二零一五年三月三十一日，空管主任的編制有291人，為空管主任提供支援的航空交通事務員則有118人。

The training programme of SATCOs is carefully designed and arranged to meet the established performance development benchmarks. It comprises staged training modules to ensure adequate consolidation before the next module. Each training module includes classroom lectures, practical training in the ATC Radar Simulator or Aerodrome Simulator, and on-the-job training at operational positions. After passing the validation check, the officer will be allowed to operate independently. The training of a SATCO to become a fully qualified controller at the rank of ATCO II normally takes around five to six years.

Apart from local training, SATCOs also attend overseas basic ATC courses, a wide coverage of aviation topics including ATC procedures, meteorology, radar operations and principles of flight will be introduced to broaden their exposure to various aspects of ATC operations. Subject to performance, it is expected that some recently recruited SATCOs will attend overseas training in the next financial year.

As at 31 March 2015, the ATCO and Air Traffic Flight Services Officer (supporting staff to ATCO) establishment numbered at 291 and 118 respectively.

其他職級的空管培訓

提供空管專業培訓是航空交通管理部的重點任務之一。本部在年內持續舉辦多項培訓課程和在職培訓活動。

年內，本部舉辦了37項專業培訓課程，受訓人員從中取得多項專業資格，獲發49項空管執照。此外，又為226名區域及進場管制員舉辦監察管制複修課程，以備他們在面對突發情況時，例如航機遇到惡劣天氣或其他緊急事故等，也能應付裕如。本部還挑選了多名資深的空管主任接受不同範疇的進階培訓，包括安全管理系統、新式飛機操作、飛機意外調查、安全審計、飛行程序設計、教學技巧和人力資源管理等方面，開拓他們的眼界，使他們勝任更專門的職務，以及承擔管理和督導責任。

其他培訓

除了安排內部空管培訓課程外，本部也與香港民航訓練中心定期合辦航空交通管理概論課程，讓業界伙伴和市民更深入了解空管工作。課程舉辦經年，一直深受歡迎。

ATC Training for Other Ranks

One of ATMD's major tasks is the provision of professional ATC training. Training courses and on-the-job training activities were conducted regularly throughout the year.

During the year, 37 professional ATC training courses were conducted, leading to the issuance of 49 ATC ratings and the attainment of various professional ATC qualifications. Surveillance control refresher training was conducted for 226 Area and Approach Control personnel. The refresher training aims to ensure controllers' competency in responding to unusual circumstances, such as poor weather operations and aircraft emergencies. In addition, senior ATCOs were selected to attend advanced training in Safety Management Systems, Operations of Modern Aircraft, Aircraft Accident Investigation, Safety Audits, Flight Procedures Design, Instructional Techniques and Human Resources Management, etc., to broaden their horizons, and enable them to undertake more specialised duties as well as taking on management and supervisory responsibilities.

Other Training Offered

Apart from the in-house ATC training courses, ATMD also conducted an Air Traffic Management Introductory Course in conjunction with the Hong Kong Civil Aviation Training Centre for industry partners and the public to have a better appreciation of air traffic management functions. The course is conducted regularly and has been well received.

新空管／ 飛行程序

年內，本部改進了三條主要抵港航線的其中之一，提升航機的操作效率，改善航機下降程序，使空管人員能夠更有效率地把來自不同方向的航班匯合排序，並在香港國際機場抵港航班頻繁的情況下，確保雙跑道能夠持續地高效運作。

此外，民航處又修訂了於消減噪音時段採用的持續降落模式進場程序，以切合各新機種飛機的高效能飛行特性。

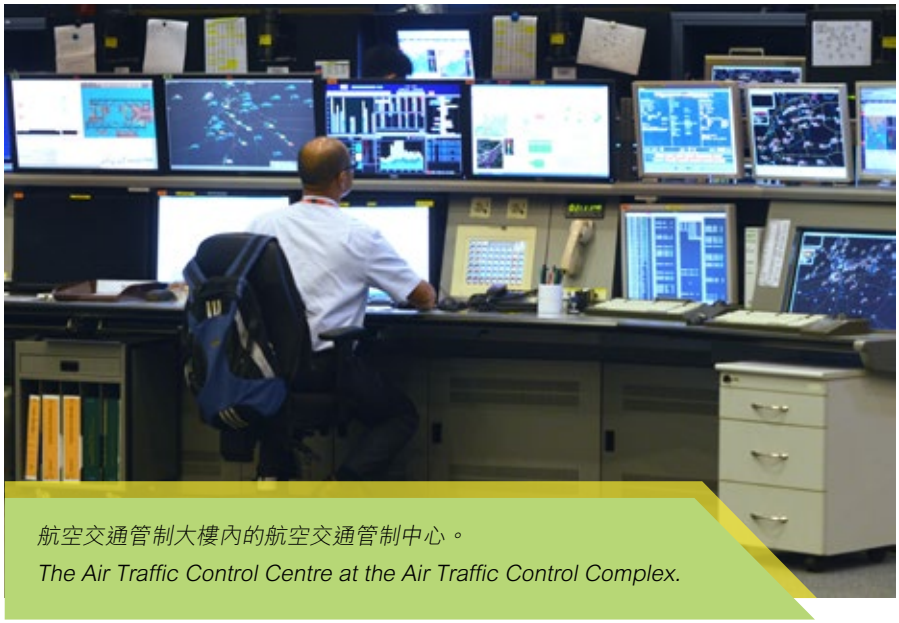
飛越香港飛行情報區前往澳門國際機場的航班不斷增加，民航處因而新增多個外圍空中等候區域，以減輕香港西南方繁忙空域的擠塞問題，同時又可提高對前往深圳國際機場航班的處理能力。

NEW ATC / FLIGHT PROCEDURES

During the year, ATMD has enhanced one of the 3 major arrival routes to Hong Kong International Airport (HKIA) in terms of improved aircraft operating efficiency, a more manageable flight profile for air traffic controllers to integrate with arrivals coming from other directions, and improved the sustainability of a high arrival rate at HKIA under the dual runaway system.

In addition, Continuous Descent Approach procedures, which are utilised during noise mitigation periods, were revised to suit the efficient flight characteristics of newer aircraft types.

With the increasing volume of air traffic operating to Macao International Airport through the Hong Kong Flight Information Region, additional outer holding areas were established to reduce congestion in the busy airspace to the south west of Hong Kong. Such measure could also enhance the handling capacity for flights operating to Shenzhen International Airport.



航空交通管制大樓內的航空交通管制中心。
The Air Traffic Control Centre at the Air Traffic Control Complex.

珠江三角洲(珠三角)地區航空交通管理計劃

為了全面落實珠三角空域優化計劃內的優化措施，民航處繼續與相關單位緊密聯繫。年內，民航處先後與國家民航局中南地區管理局、中南地區空中交通管理局、解放軍廣州軍區空軍司令部(廣州空軍)及深圳市交通委員會等單位會面，討論珠三角空域管理的相關議題，以及就香港、深圳兩地機場的未來發展交換意見。二零一五年一月，民航處處長更陪同運輸及房屋局局長前往北京拜會國家民航局，討論珠三角空域議題和簡介香港機場三跑道系統計劃工作的進展。國家民航局表示十分關注香港航空業的發展，更支持香港發展三跑道系統，並鼓勵內地空管部門與香港保持溝通和合作。

民航處會繼續透過三方工作組平台推動珠三角空域優化計劃內的各項措施，例如在香港與廣州飛行情報區之間再增加空管移交點，以及優化珠三角地區機場離場航班放行機制。

電訊服務

本部航空通訊組年內處理的資訊量顯著增長，其中通過固定航空通訊服務處理的訊息達45 991 779個，較上一年度增加達11%。至於航空氣象廣播服務，年內為航機提供氣象報告合共337 583次，數字與上年度相若。

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

With the aim of full implementation of the enhancement measures as stipulated in the Pearl River Delta (PRD) Air Traffic Management (ATM) Plan, CAD maintained close liaison with various relevant parties. In the year, meetings were held with Mainland parties such as the Central & Southern Regional Administration (C&SR Administration) of the Civil Aviation Administration of China (CAAC), the Middle & South Regional Air Traffic Management Bureau (M&SR ATMB), People's Liberation Army Guangzhou Air Command (GAC) and Transport Commission of Shenzhen Municipality to discuss the issues related to PRD airspace management, as well as the future development of Hong Kong and Shenzhen airports. In January 2015, the Director-General of Civil Aviation accompanied the Secretary for Transport and Housing to visit the CAAC in Beijing and discussed issues related to PRD airspace as well as introduced the progress of the Three-Runway System (3RS) project of Hong Kong International Airport (HKIA). The CAAC expressed keen interest in the development of aviation in Hong Kong, and was supportive of the development of the 3RS. The CAAC also encouraged the air traffic control authorities of Mainland to maintain liaison and cooperation with that of Hong Kong.

CAD will continue to pursue via the Tripartite Working Group platform various enhancement measures in the PRD ATM Plan, such as the establishment of more new transfer points between Hong Kong and Guangzhou FIRs, and further enhancement to departure release mechanism for airports in the PRD Region.

TELECOMMUNICATIONS SERVICES

The total number of messages handled by the Telecommunications Unit of the Division increased considerably in the year. On Aeronautical Fixed Service, 45 991 779 messages were handled, representing an increase of 11% as compared with last year. On Aeronautical Broadcast Service, the total number of weather messages broadcast to aircraft in flight amounted to 337 583, which was similar to that of last year.

航班時刻分配

按照國際航空運輸協會發布的《世界航班時刻準則》，香港機場航班協調辦公室以公平、中立、高透明度的方式分配機場航班時刻，以確保高效地使用現有的機場基礎設施。年內，於香港國際機場運作的航空公司及其他飛機營運者獲分配總共406 298個航班時刻，達到機場實際最高容量的96.7%。香港機場航班協調辦公室所處理的航班時刻申請數量，較去年同期增加接近20%。

安全管理系統

航空交通管理部繼續致力妥善推行安全管理系統，以期全面提升航空安全表現。為此，本部根據國際民用航空組織(國際民航組織)的條文

SLOT ALLOCATION

In accordance with the International Air Transport Association's Worldwide Slot Guidelines, the Hong Kong Schedule Coordination Office (HKSCO) managed slot allocation in a neutral, transparent and fair manner with a view to ensuring the efficient utilisation of existing airport infrastructure. During the year, airlines and other aircraft operators at HKIA were allocated a total of 406 298 slots, reaching 96.7% of the airport maximum practical capacity. The number of slot applications processed by HKSCO also increased by nearly 20% compared with the same period last year.

SAFETY MANAGEMENT SYSTEM (SMS)

ATMD continued putting in substantial efforts to enhance the overall aeronautical safety performance through effective implementation of its SMS. This is accomplished by proactive application of safety risk management and safety assurance in compliance with the provisions of the International Civil

和民航處的監管規定，積極推行安全風險管理和安全保證。在航空交通管理系統、儀器和程序作出重大變動前，本部會先評估安全風險和採取緩解措施。

為監察與衡量安全績效表現，本部每季編製安全績效目標報告和安全績效指標報告，並呈交航空交通管理標準組審閱。此外，為確保安全管理系統不斷改進，年內本部就各個主要職能範疇進行了四次內部安全審查。本部又繼續支援航空交通管理標準組，協助執行航空安全的監管工作。

此外，本部繼續為員工提供合適的安全管理系統培訓，推廣重視安全的文化。除空管的基本培訓和複訓單元外，本部還推行了規劃周全的安全管理系統培訓計劃，向所有空管人員灌輸安全管理概念。

飛航搜索和救援(搜救)服務

本部與區域搜救機關和國際搜救機關保持密切聯繫，並繼續參加本地和國際搜救會議及研討會，又不時派員參與機場和飛機緊急事故演習。

海外航空會議和研討會

年內，航空交通管理部繼續積極參與旨在促進亞太區以至全球航空交通管理發展的會議和研討會。當中大部分會議和研討會由國際民航組織、民用空中航行服務組織和其他航空機關舉辦。

Aviation Organization (ICAO) and regulatory requirement of the department. Safety risk assessment is conducted and mitigation processes are introduced before any significant changes to the air traffic management systems, equipment and procedures can be implemented.

Reports on Safety Performance Targets and Safety Performance Indicators were compiled and submitted to the Air Traffic Management Standards Office (ATMSO) on a quarterly basis for safety performance monitoring and measurement. To ensure the continuous improvement in safety performance, four internal audits were conducted in the year on different key functional areas of ATMD. In the meantime, the Division continued to provide necessary support to the ATMSO in facilitating regulatory oversight activities.

Besides, ATMD maintained its efforts to provide staff with appropriate SMS training in order to promote safety culture. A structured SMS training programme has been put in place to supplement the basic and recurrent air traffic control training modules in order to instil the concept of safety management to all air traffic control personnel.

AERONAUTICAL SEARCH AND RESCUE (SAR) SERVICES

ATMD maintained close liaison with regional and international SAR authorities and continued to participate in local and international aeronautical SAR meetings and seminars. ATMD also attended airport and aircraft emergency drills.

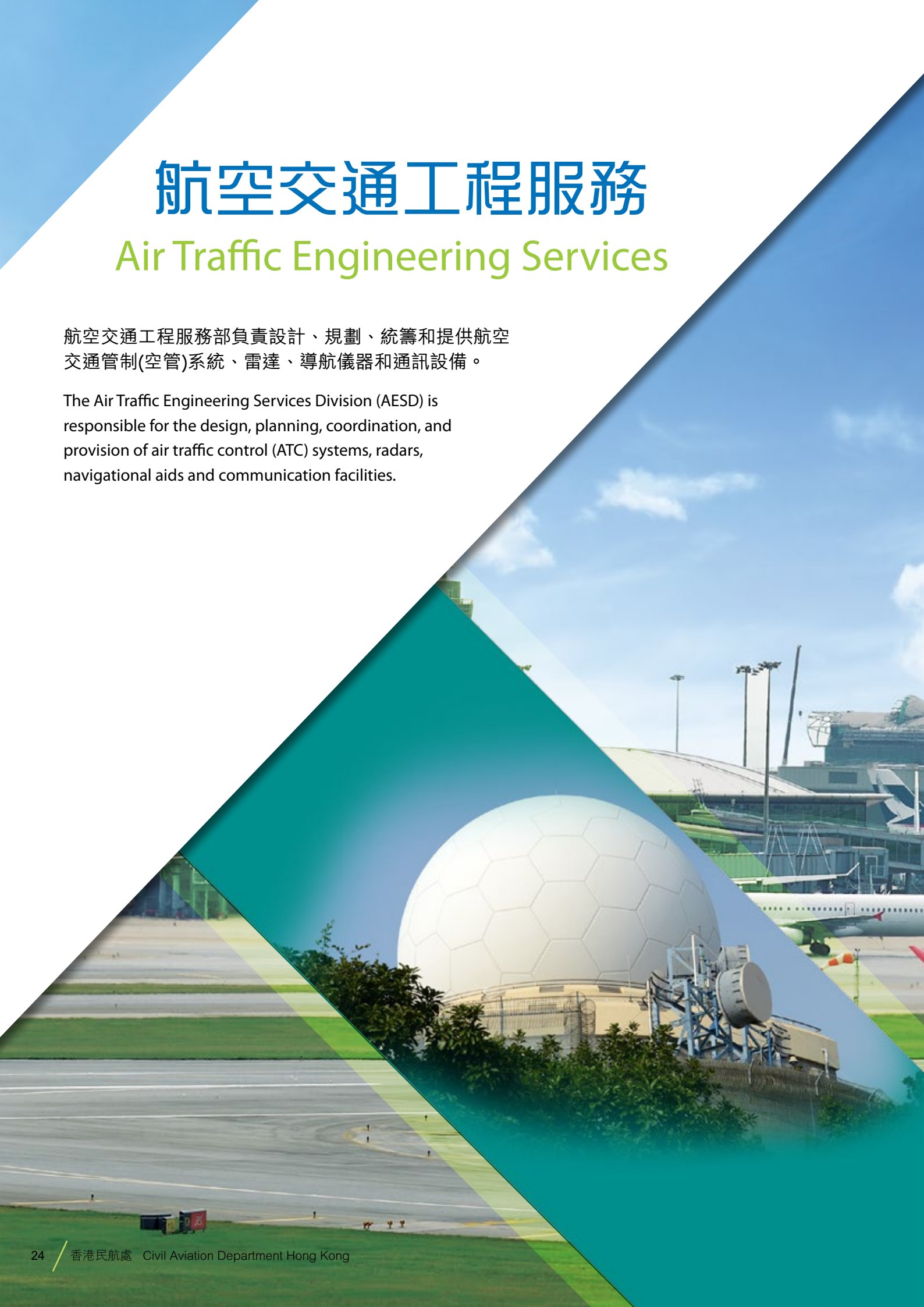
OVERSEAS AERONAUTICAL MEETINGS AND CONFERENCES

During the year, ATMD continued to actively participate in meetings, seminars and conferences which promoted the development of air traffic management in the region and globally. Most of the meetings and seminars were organised by the ICAO, Civil Air Navigation Services Organisation and other aviation authorities.

航空交通工程服務
Air Traffic Engineering Services

航空交通工程服務部負責設計、規劃、統籌和提供航空交通管制(空管)系統、雷達、導航儀器和通訊設備。

The Air Traffic Engineering Services Division (AESD) is responsible for the design, planning, coordination, and provision of air traffic control (ATC) systems, radars, navigational aids and communication facilities.



更換空管系統

現時的空管系統於一九九八年香港國際機場啟用時投入運作，至今已使用超過15年。為應付未來的航空交通需求，本處於二零零七年獲立法會撥款15.65億元更換現有的空管系統。整個新空管系統分作八份主要合約實施，當中七份合約的工作已大致如期完成。餘下的航空交通管理(航管)系統正進行最後階段的系統驗收測試。新系統須通過一連串嚴格測試，並須根據既定的國際航空安全管理標準及程序通過評審，確保運作安全、穩定可靠。待完成系統整合、試行運作，並為工程和空管人員提供足夠的技術和操作培訓後，新的航空交通管制中心(新空管中心)預計可於二零一六年投入服務。

國際民用航空組織提出的航空系統組塊升級

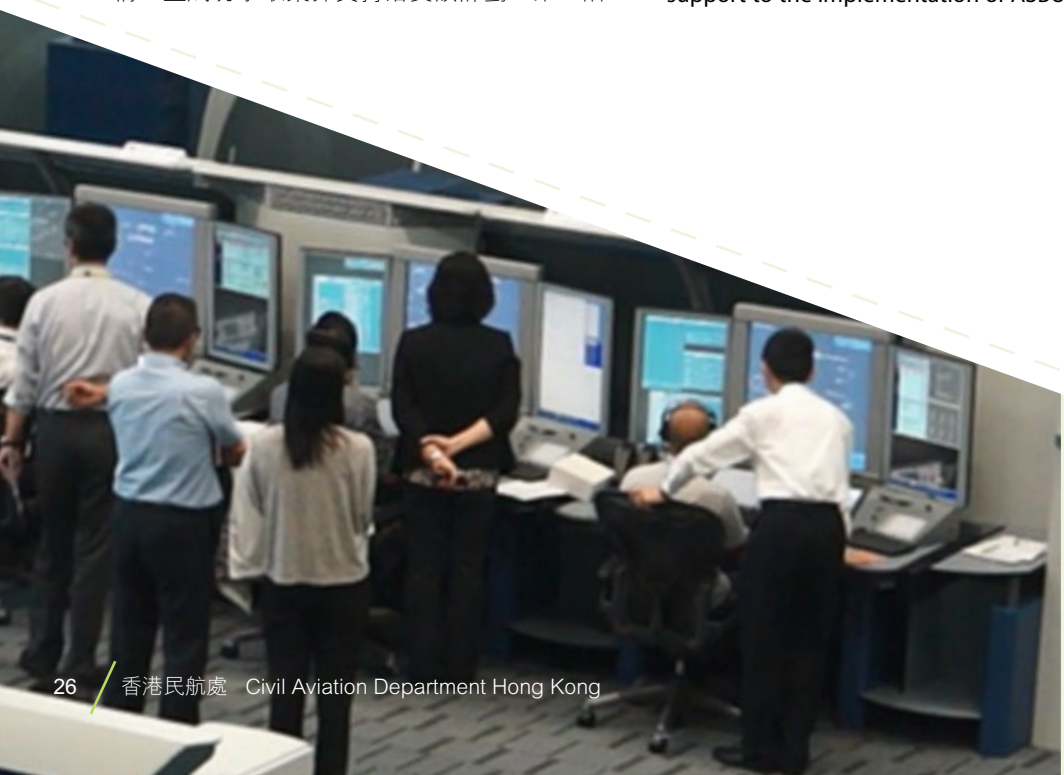
民航處按照國際民用航空組織(國際民航組織)所提出的航空系統組塊升級框架，並參考《亞太區無縫航空交通管理計劃書》訂明的優先次序，與業界共同制定策略，分階段在香港實施各個升級項目。本處自二零一三年開始舉辦簡報會，向業界介紹航空系統組塊升級計劃的詳情，並成功爭取業界支持落實該計劃。第一階

Replacement of ATC Systems

The existing ATC systems have been in use for over 15 years since the opening of Hong Kong International Airport (HKIA) in 1998. To meet the future air traffic demand, the Legislative Council approved a provision of $1.565 billion in 2007 for the replacement of the existing ATC systems. The new ATC systems are implemented through eight major system contracts, of which seven have been substantially completed as scheduled. The remaining Air Traffic Management System (ATMS) is undergoing the final stage of system acceptance tests. To ensure safety, reliability and stability, the new systems have to undergo a series of stringent tests and satisfy assessments in accordance with the established international aviation safety management standards and procedures. Upon the successful completion of system integration, trial runs, as well as adequate technical and operational training for the engineering and ATC staff, the new Air Traffic Control Centre (new ATCC) is planned to commence operation in 2016.

The International Civil Aviation Organization (ICAO) Aviation System Block Upgrades

In accordance with ICAO's Aviation System Block Upgrades (ASBU) framework and after taking into consideration the priorities stipulated in the Seamless Air Traffic Management Plan for the Asia and Pacific region, CAD collaborated successfully with the aviation industry to develop strategies for phased implementation of ASBU modules in Hong Kong. Since 2013, CAD organised briefings to the industry on the details of ASBU, and solicited the industry's support to the implementation of ASBU. An implementation plan for the first



新航管系統實地驗收測試於二零一四年第三季開始。

The Site Acceptance Test of the new ATMS commenced in the third quarter of 2014.

段升級的實施計劃書已經制定，並於二零一四年提交予國際民航組織。民航處年內繼續按照計劃書，進行相關的航空系統組塊升級工作。

phase of ASBU was formulated and submitted to ICAO in 2014. Throughout the year, CAD continued working on the relevant ASBU modules according to the implementation plan.

持續發展安全管理系統，以提供穩妥的通訊、導航及監察服務和重要的屋宇設施

年內，本部致力推廣安全意識，繼續舉辦安全訓練和推廣活動，並全力配合航空交通管理標準組對衞星通訊、導航及監察/ 航空交通管理系統、外站運作，以及技術安全事故報告和調查程序所進行的審計和視察。為達到持續改善安全管理系統整體表現的目標，本部定期進行內部審計和視察，並繼續推行在職培訓，使相關同事成為認可審計人員，積極參與內部審計和視察工作。

為空管系統定期分析安全數據和密切監察安全趨勢，是安全管理系統得以發揮成效的重要元素。年內，本部與空管系統維修服務機構共同研究安全趨勢。除了對現有通訊、導航及監察/ 航空交通管理系統的安全表現指標和目標進行定期安全趨勢檢視，以及按照檢視結果制訂有效的風險緩解措施之外，本部更把制訂現有安全表現指標和目標的程序擴展至即將投入服務的新空管系統，為日後制訂新空管系統的安全表現指標和目標，奠定良好的基礎。為加強同事對航空交通管理系統的軟件安全評估及風險管理的認識，本部於二零一五年三月安排海外專家到本處，為同事提供相關培訓。

Ongoing Development of the Safety Management System in Support of the Provision of Safe Communications, Navigation, Surveillance and Critical Building Services

Throughout the year, AESD maintained its momentum in safety promotion, and continued to organise safety training and promotion activities. Besides, the division provided full support to the Air Traffic Management Standards Office's (ATMSO) audits and inspections on the satellite-based Communications, Navigation, Surveillance/Air Traffic Management (ATM) systems, outstation operations, and technical safety occurrence reporting and investigation process. To achieve continuous improvement of the overall performance of the Safety Management System (SMS), regular internal audits or inspections were conducted. Relevant colleagues continued to take part in on-the-job training to become approved auditors, who provided active support to the internal audit and inspection work.

Regular analysis of safety data and close monitoring of safety trend are integral activities of an effective SMS. In this year, AESD conducted safety trend study in conjunction with the ATC system maintenance service providers. In addition to the regular reviews of the safety trend of Safety Performance Indicators/ Target (SPIs/SPT) for the existing Communications, Navigation, Surveillance/ ATM systems and formulating effective risk mitigating measures in accordance with the review results, the development procedures of the existing SPIs/SPT were extended as a basis for formulation of new SPIs/SPT for the new ATC systems. Furthermore, in March 2015, AESD arranged an overseas expert to provide training at the CAD headquarters to better colleagues' understanding of ATM software safety assessment and risk management.

二零一五年三月民航處舉辦了航空交通管理軟件安全評估課程，加強員工對這專業領域的認識。

In March 2015, CAD conducted ATM Software Safety Assessment Course to better colleagues' understanding in this specialised domain.

衞星通訊、導航及監察/航空交通管理系統

為遵從國際民航組織的全球空中航行計劃，民航處已開發、使用並提供以下八項與衞星通訊、導航及監察/ 航空交通管理相關的系統和服務：

(一)飛前放行指示雙向數據鏈路系統

截至二零一五年三月底，使用飛前放行指示雙向數據鏈路服務的航空公司增至73家，使用率達80%，使空管人員與飛行員之間的通訊效率獲進一步提升。

SATELLITE-BASED CNS/ATM SYSTEMS

To comply with the ICAO Global Air Navigation Plan, CAD developed and implemented eight CNS/ATM systems and services as highlighted below:

(i) Pre-Departure Clearance Two-way Datalink System

The utilisation rate of the Pre-Departure Clearance Two-way Datalink Service was up to 80% and the number of participating airlines increased to 73 as at the end of March 2015, enhancing the efficient communication between ATC staff and pilots.

(二)航空電訊網、航空交通服務訊息處理系統、航空交通服務設施間數據通訊

香港與曼谷就兩地之間的航空電訊網和航空交通服務訊息處理系統進行了連串測試，結果令人滿意。該電訊網和訊息處理系統已於二零一四年九月投入運作，提升了兩地航空交通服務訊息交換的效率。香港將繼續按照國際民航組織亞太地區航空電訊網和航空交通服務訊息處理系統實施計劃，與其他地區進行測試。

此外，本部利用航空固定電訊網，與三亞和台北實施了24小時航空交通服務設施間數據通訊，以加強飛行安全，並提升與毗鄰空管中心的通訊運作效率。本部已與其他地區展開初步商討，研究早日實施航空交通服務設施間數據通訊的安排。

(三)先進場面活動引導和控制系統

鑑於機場環境和建築物時有變動，本部安排了供應商全面檢視先進場面活動引導和控制系統訊號的可靠度和覆蓋範圍。根據檢視報告的建議，我們正與供應商和香港機場管理局安排於興建中的中場客運廊增設外站單元機組，以增強系統訊號在機場範圍的覆蓋能力。

(四)廣播式自動相關監察系統

為配合國際民航組織於亞太地區實施廣播式自動相關監察的計劃，八個廣播式自動相關監察地面站已於二零一三年第四季投入服務，負責監察香港飛行情報區(包括低空飛行範圍)內裝有廣播式自動相關監察設備的航班。此外，民航處運用自行開發的廣播式自動相關監察數據分析系統，對超過50萬班航機上的航空電子設備進行性能監察和分析，以加強香港飛行情報區內的飛行安全。民航處現正聯同國際民航組

(ii) Aeronautical Telecommunication Network, Air Traffic Service Message Handling System and Air Traffic Service Inter-facility Data Communication

Upon satisfactory completion of a series of tests between Hong Kong and Bangkok, the new Aeronautical Telecommunication Network (ATN) and Air Traffic Services Message Handling System (AMHS) circuit between Hong Kong and Bangkok was put into operational use in September 2014, increasing effectiveness in air traffic service message exchange between the two places. Further testing with other states will be conducted in accordance with the ICAO Asia-Pacific Regional ATN and AMHS Implementation Plan.

The Air Traffic Service Inter-facility Data Communication (AIDC) over Aeronautical Fixed Telecommunication Network with Sanya and Taipei was put into 24-hour operation to enhance flight safety and operational efficiency in communication with adjacent ATC centres. AESD has also commenced early coordination with other states for the implementation of AIDC.

(iii) Advanced Surface Movement Guidance and Control System

To cater for the on-going changes of the airport environment and buildings, AESD has engaged an equipment supplier to conduct a comprehensive signal integrity and coverage study of the Advanced Surface Movement Guidance and Control System (A-SMGCS). In accordance with the recommendations of the study report, arrangement is underway with the supplier and Airport Authority Hong Kong for provision of additional A-SMGCS Remote Units at the Midfield Passenger Concourse being constructed to enhance the signal coverage performance at HKIA.

(iv) Automatic Dependent Surveillance-Broadcast System

To align with ICAO's Regional Plan for implementing Automatic Dependent Surveillance–Broadcast (ADS-B), eight ADS-B ground stations have been in service since the fourth quarter of 2013. The ground station system provides ADS-B surveillance within the Hong Kong Flight Information Region (HK FIR), including low level coverage. In addition, with the use of an in-house ADS-B data analysis system, CAD has monitored and analysed the avionics

織區域辦事處及亞太地區其他國家，共同建立數據庫，以供各方共享及加深了解曾經出現於亞太地區有關廣播式自動相關監察系統機載問題的資料。

國際民航組織廣播式自動相關監察研討會及廣播式自動相關監察系統研究和實施專責小組第13次會議，於二零一四年四月二十二至二十五日，在民航處總部順利舉行。研討會吸引了超過150名海外及本地業界代表參與，由監管機構、飛機製造商、空域使用者、設備供應商和空中航行服務提供單位的專家，交流廣播式自動相關監察的運作知識及經驗。民航處的專家代表中國香港參加了小組會議，與亞太地區其他國家的代表，討論廣播式自動相關監察的實施事宜，以及檢討過往的會議成果。國際民航組織對民航處主辦會議的安排，表示讚賞和感謝。

(五)抵港航機排序系統

本部使用抵港航機排序系統，以提升航班準時抵港率，善用空域，並為空管人員提供自動化的服務。隨着操作經驗不斷累積，我們在年內專注改進系統功能，以配合不斷增加的航空交通流量。

performance of more than 500 000 flights to enhance flight safety within the HK FIR. CAD has been working closely with ICAO Regional Sub-office and other Asia Pacific States on establishing an Asia Pacific Regional ADS-B Avionics Problem Report Database for sharing and better understanding of ADS-B avionics problems.

The ICAO ADS-B seminar and the Thirteenth Meeting of ADS-B Study and Implementation Task Force (ADS-B SITF/13) were successfully held at the CAD Headquarters on 22 - 25 April 2014. The seminar, attracting attendance of more than 150 overseas and local participants from the industry, provided a platform for information and experience sharing on the operational use of ADS-B among experts from regulators, airframe manufacturers, airspace users, equipment suppliers and Air Navigation Service Providers. CAD experts also attended the ADS-B SITF/13 as delegates of Hong Kong China and discussed with other Asia Pacific States the implementation of ADS-B as well as reviewing outcomes of previous meetings. The ICAO expressed its appreciation and gratitude to CAD for hosting the ADS-B SITF/13.

(v) Arrival Manager System

The Arrival Manager (AMAN) System was used to achieve a higher on-time arrival rate, more efficient use of airspace and to provide automated service to controllers. With more operational experience gained, efforts were focused on fine-tuning the system during the year so as to cope with the ever increasing air traffic growth.

國際民航組織廣播式自動相關監察研討會及廣播式自動相關監察系統研究和實施專責小組第13次會議，於二零一四年四月二十二至二十五日，在民航處總部舉行。

The ICAO ADS-B Seminar and the Thirteenth Meeting of ADS-B Study and Implementation Task Force were held at the CAD Headquarters on 22 - 25 April 2014.

(六)陸基增強系統

為使飛機進場和着陸程序更為精確，民航處正就機場安裝陸基增強系統，進行初步的選址研究。本部結合了本處和地政總署設於全港各處的全球衞星導航系統監測站所收集到的實時數據，設立全港衞星數據庫。此外，本部自二零一三年起使用電離層閃爍監測系統，並通過國際民航組織電離層研究專責小組，與周邊地區合作，共同研究亞太地區上空的電離層，對陸基增強系統性能可能產生的影響。

(七)電子飛行進程單系統

年內，電子飛行進程單系統運作暢順，有助空管人員日後在新空管中心順利過渡至以無紙方式進行空管運作。此外，綜合資訊顯示系統已經啟用。該系統可以集中顯示來自多個單位的運作資料，進一步提升控制塔的運作效率。

(八)機場協同決策

本部在二零一三年推出桌面版及手機版的機場協同決策互聯網平台。該平台一直獲業界大力支持，為日後於本港以至亞太地區進一步發展和推行協同決策機制，奠定穩固基礎。下一階段將由香港機場管理局進一步提升和擴大該平台的功能，讓機場各持份者交換航班資料，並掌握更多重要的實時訊息，從而根據資料作出穩妥周全的知情決策。

(vi) Ground-Based Augmentation System

To augment the precision of aircraft approach and landing operations, CAD has been conducting a preliminary siting study for installing a Ground-Based Augmentation System (GBAS) at HKIA. A territory-wide satellite database was established by combining the real time data collected by CAD's and Lands Department's Global Navigation Satellite System Monitoring Stations located around the territory. Moreover, CAD has commenced using an Ionospheric Scintillation System since 2013, which enabled the collaboration with neighbouring areas through the ICAO Ionospheric Studies Task Force on studying possible ionospheric effect on GBAS performance in the Asia and Pacific region.

(vii) Electronic Flight Strip System

Satisfactory operation of the Electronic Flight Strip System (EFSS) in the past year prepared tower controllers for a smooth transition to paperless operations at the new ATCC. Integrated Display Units were put into operation to integrate and display operational information from multiple sources to greatly enhance tower operational efficiency.

(viii) Airport Collaborative Decision Making

AESD successfully launched the Airport Collaborative Decision Making (CDM) platform in both desktop and mobile versions on the Internet in 2013 with very encouraging feedback and support. The platform provided an important basis for further development and implementation of a local and regional CDM mechanism. In the next stage of development, Hong Kong Airport Authority will further enhance and extend the functions of the platform by enabling airport stakeholders to exchange flight data and acquire more real-time key messages for making informed decisions.

二零一四年九月十六日，民航處同事接受數碼電台訪問，介紹於民航處總部大樓所推行的環保節能措施。

CAD officer attended an interview at the Digital Broadcasting Corporation on 16 September 2014 for sharing green measures at the CAD Headquarters.

提升環保意識

民航處一直致力推行環保節能措施以保護環境，其中包括於民航處總部大樓安裝各種環保裝置。本部自二零一四年年初起，一直積極參與中華電力有限公司舉辦的環保節能機構嘉許計劃。該計劃是個甚受歡迎的平台，供參與者推介其實踐成功的環保措施。二零一四年九月，民航處獲頒「銀行/ 辦公室」組別中最高榮譽的「金獎」，成為首個參與該計劃並獲頒最高殊榮獎項的政府部門。這個獎項不僅為民航處帶來極大的鼓舞，而且提供了難得的機會，讓民航處與其他組別「金獎」得獎者接受電台訪問，向市民介紹本處的環保新猷。

Environmental Awareness Promotion

All along, CAD has strived to implement green measures in our office to protect the environment, including introducing various environmental friendly installations to the CAD Headquarters. Since early 2014, AESD has actively participated in the CLP Power Hong Kong Limited's Green Plus Recognition Award Programme, which was a popular platform for sharing the best green practices. CAD was awarded the top honour "Gold Award" under the "Bank & Office" category in September 2014. CAD was the first government department to participate in this programme and to receive the top award. The "Gold Award" not only brought significant encouragement to CAD but also offered an opportunity for CAD to attend a radio interview with Gold Awardees from other groups to publicise our environmental-friendly initiatives.

資訊科技管理

通過妥善實施各項新的資訊科技措施和「電子政府」策略，資訊科技管理組繼續支援各分部的日常運作。年內，資訊科技管理組完成了三項大型資訊科技項目，以加強資訊科技服務和支援：

IT MANAGEMENT

The Information Technology Management Unit (ITMU) continued to support day-to-day operations of various divisions through the effective implementation of new IT initiatives and the e-Government strategy. During the year, three major IT projects were completed for the betterment of IT service and support:

獎座頂端填滿青草的星星，象徵「金獎」得獎者實現的環保成果。

The big star at the top tip of the trophy is filled with green grass to symbolise environmental friendliness achieved by the Gold Awardees.

(一)開發和採用流動應用程式，為民航處舉辦的國際及本地航空會議(例如亞洲及太平洋區民航局局長第51次會議)的參與者提供電子流動訊息，包括最新的會議議程、討論文件及通告等，方便參與者溝通和討論。

(二)為提升資訊科技保安和加強保障資料，資訊科技管理組設計和開發了一個安全的互聯網訊息網站，為航空交通管制人員提供平台，在非辦公時間分享資訊。此外，政府資訊科技總監辦公室對本處的資訊科技基礎設施進行了網絡安全評估，結果令人滿意。

(三)為確保民航處和其他決策局及部門之間的訊息交流暢通無阻，資訊科技管理組年內提升了部門的入門網站，使民航處與其他決策局及部門之間的資訊科技系統及服務保持相互兼容。民航處為航空業界所提供的資訊服務也因而變得更為安全穩妥。

(i) A mobile application was developed and implemented to disseminate electronic mobile information, including up-to-date agenda, conference papers, announcements, etc. , to participants of international and local aviation conferences and meetings hosted by CAD (e.g. the 51st Conference of Directors General of Civil Aviation, Asia and Pacific Regions), so as to facilitate effective and timely communication and discussion.

(ii) To enhance IT security and data protection, ITMU designed and developed a secure internet website to provide a platform for air traffic control officers to share information during non-office hours. In the year under review, the OGCIO conducted a cyber security assessment on the IT infrastructure of the department with satisfactory outcomes.

(iii) To ensure smooth information exchange between CAD and other government bureaux and departments, ITMU upgraded the CAD departmental portal for maintaining interoperability between the IT systems and services of CAD and other government bureaux and departments. The robustness of the information services provided by CAD to the aviation industry was also enhanced as a result.

資訊科技管理組同事測試流動應用程式。
ITMU colleagues conduct acceptance tests for the mobile application.

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運輸企業經營許可證(航空經營許可證)，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空勤人員和飛機維修執照，監察在香港登記的飛機的適航標準和維修水平，巡查飛機維修機構，監督輕型飛機和直升機的運作，以及監察外地航空公司在香港國際機場的運作。

The Flight Standards and Airworthiness Division is responsible for the grant 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 the issue of flight crew and aircraft maintenance licences, monitoring of airworthiness and maintenance standards of aircraft registered in Hong Kong, inspection of aircraft maintenance organisations, supervision of light aircraft and helicopter operations, and oversight of foreign airline operators at Hong Kong International Airport (HKIA).


PZ

飛行標準組

簽發和續發航空經營許可證

截至二零一五年三月三十一日，獲民航處簽發航空經營許可證的本地公司有十家，計為：

FLIGHT STANDARDS OFFICE

Issue and Renewal of AOC

As of 31 March 2015, there were ten Hong Kong AOC holders, namely:

香港華民航空有限公司(華民航空)	AHK Air Hong Kong Limited (AHK)
國泰航空有限公司(國泰航空)	Cathay Pacific Airways Limited (CPA)
直升機服務(香港)有限公司(直升機服務)	Heliservices (Hong Kong) Limited (HLS)
香港航空有限公司(香港航空)	Hong Kong Airlines Limited (CRK)
香港航空公務機管理有限公司(香港商務航空)	Hong Kong Airlines Corporate Jet Management Limited (HKJ)
港龍航空有限公司(港龍航空)	Hong Kong Dragon Airlines Limited (HDA)
香港快運航空有限公司(香港快運)	Hong Kong Express Airways Limited (HKE)
美捷香港商用飛機有限公司(香港商用飛機)	Metrojet Limited (MTJ)
空中快線直升機有限公司(空中快線)	Sky Shuttle Helicopters Limited (EMU)
TAG Aviation Asia Limited(TBJ)	TAG Aviation Asia Limited (TBJ)

年內，本部通過全面巡查和審查，繼續監察本地航空經營許可證持證公司的安全表現和營運水平。飛行標準組巡查人員執行了117次飛行和機艙安全檢查，並對航空經營許可證持證公司作出共375次其他巡查，包括外站巡查、停機坪巡查、檢查運作記錄、視察訓練情況和審批核准考核人員。本部也按照檢查程序，評審和視察本港航空公司所使用的46台位於海外和香港的飛行模擬器，並重新簽發使用許可。此外，本部又負責監察政府飛行服務隊直升機和定翼機的運作情況。

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 117 flight operations and cabin safety inspections, the Inspectorate staff of the Flight Standards Office conducted 375 other inspections on the AOC holders, including station inspections, ramp inspections, operational record inspections, training inspections and approval of authorised examiners. Forty-six flight simulators located worldwide and in Hong Kong and used by local airlines were evaluated, inspected and reapproved for use in accordance with the inspection procedures. The division was also tasked with the responsibility of monitoring helicopter and fixed-wing aircraft operations of the Government Flying Service (GFS).

模擬飛行訓練設備
Flight simulation training device

安全監督

本部繼續對香港的航空經營許可證持證公司實施安全監察計劃。計劃的主要目的，是利用風險管理模式編排和統籌各項審查工作。

另外，本部年內接獲航空業界936份強制呈報事故報告，並與各航空公司、維修機構、機場經營人和航空交通服務機構保持緊密聯繫，調查和跟進所有強制呈報的事故，務求改善航空安全，防止同類事故再次發生。

交付航空器

香港航空業持續增長，本地航空公司紛紛擴充機隊。年內，香港民用航空器登記冊共新增了30架航空器，其中屬於香港航空經營許可證持證公司旗下飛機的詳情如下：

Safety Oversight

FSAD continued to implement the surveillance programme for the safety oversight of Hong Kong AOC holders. The key purpose of the programme is to apply a risk management approach to the schedule and coordination of inspection activities.

Also, a total of 936 Mandatory Occurrence Reports (MOR) from the industry were received during the year. Through close liaison with airline operators, maintenance organisations, aerodrome operator and air traffic service provider, all MORs were investigated for the purpose of enhancing aviation safety and preventing recurrence.

Delivery of Aircraft

As the Hong Kong aviation industry continued to grow, local airlines expanded their fleets and 30 aircraft were added to the Hong Kong Civil Aircraft Register in the period. The following are added under Hong Kong AOC holders:

華民航空 AHK	兩架空中巴士A300型貨機 Two Airbus 300 freighter
國泰航空 CPA	五架空中巴士A330型和十一架波音B777型客機 Five Airbus 330 and eleven Boeing 777
香港快運 HKE	五架空中巴士A320型客機 Five Airbus 320
港龍航空 HDA	一架空中巴士A321型客機 One Airbus 321
香港航空 CRK	一架空中巴士A320型客機 One Airbus 320
直升機服務 HLS	一架MD900型直升機 One MD900 helicopter
TBJ TBJ	一架灣流G450型客機 One Gulfstream G450

適航事務組

適航事務組監察所有在香港登記的飛機的維修和適航標準。適航事務組的適航主任經驗豐富，定期審查本港航空公司的飛行站，又定期審查認可的維修和設計/ 生產機構，以及在香港、內地、中東、印度、亞洲其他地方、歐洲和北美洲各地城市檢查飛機，以持續監察航空經營許可證持證公司、批核認可的維修和設計/ 生產機構，以及為在香港登記的飛機簽發或續發適航證。

飛機維修

適航事務組繼續通過機庫檢查、公司運作審查和產品審查，定期監察所有香港認可的飛機維修和飛機部件維修機構。截至二零一五年三月三十一日，共有32家公司取得香港認可維修機構的資格。適航事務組藉持續審查和定期視察，監察多家主要維修公司，包括香港飛機工程有限公司、香港航空發動機維修服務有限公司和廈門太古飛機工程有限公司。

飛機維修訓練

截至二零一五年三月三十一日，本港和內地共有五家維修訓練機構獲發《香港航空要求—147》許可證，可以就維修香港登記的飛機舉辦基本和指定飛機機種的維修訓練課程。

AIRWORTHINESS OFFICE

The Airworthiness Office monitors the maintenance and airworthiness standards of all Hong Kong registered aircraft. With a team of experienced Airworthiness Officers, the office carries out regular AOC line station audits, approved maintenance and design/production organisation audits, and aircraft surveys locally in Hong Kong as well as in cities in the Mainland, Middle East, India, other parts of Asia, Europe and North America, for the purpose of continual monitoring of AOC holders, approval of maintenance and design/production organisations, and the issue and renewal of Certificates of Airworthiness for Hong Kong registered aircraft.

Aircraft Maintenance

The Airworthiness Office continued to monitor all Hong Kong approved aircraft and aircraft component maintenance organisations regularly through hangar surveys, company audits and product audits. As of 31 March 2015, there were 32 approvedmaintenance organisations in Hong Kong. Major maintenance companies, including Hong Kong Aircraft Engineering Company Limited (HAECO), Hong Kong Aero Engine Services Limited, and Taikoo (Xiamen) Aircraft Engineering Company Limited, are regulated through rolling audits and regular visits.

Aircraft Maintenance Training

As of 31 March 2015, there were five HKAR-147 Aircraft Maintenance Training Organisations located in Hong Kong and the Mainland which were approved to provide basic and specific aircraft type training for the maintenance of Hong Kong registered aircraft.

空勤人員執照
Flight crew licences

飛機和相關產品/ 零件的設計與生產

截至二零一五年三月三十一日，共有11家設計和生產機構獲發《香港航空要求—21》許可證，可以審定飛機相關產品/ 零件，包括這些產品/ 零件的設計和生產。

Design and Production of Aircraft and Related Products/Parts

As of 31 March 2015, 11 HKAR-21 Design and Production Organisations were approved to provide certification of aircraft related products/parts including their design and production.

適航事務組統計數字

(二零一四年四月一日至二零一五年三月三十一日)

Airworthiness Office Statistics

(between 1 April 2014 and 31 March 2015)

航空人員執照事務組

空勤人員執照

二零一四至一五年度，航空人員執照事務組(執照事務組)共處理了2 714份申請，當中包括首次簽發和續期簽發空勤人員執照、審定可駕駛的飛機型號和儀表飛行等級、英語能力認證和轉換海外執照為香港執照。為配合業界對海外培訓和考試的需求，民航處審批核准了澳洲、英國和新西蘭的飛行培訓機構。年內，執照事務組共批閱了4 039份空勤人員執照筆試試卷。此外，又向香港空勤人員執照或航空交通管制執照持有人/ 申請人簽發共5 009份體檢合格證明書。

PERSONNEL LICENSING OFFICE

Flight Crew Licensing

During 2014-15, the Personnel Licensing Office (PELO) processed 2 714 applications, including initial grant and renewal of flight crew licences, aircraft and instrument ratings, language proficiency endorsements and conversion of foreign flight crew licences into Hong Kong licences. To meet industry demand for conducting overseas training and examinations, CAD approved Flying Training Organisations in Australia, the United Kingdom and New Zealand. During the year, PELO processed 4 039 CAD flight crew licensing written examinations. In addition, 5 009 medical certificates were issued to holders/applicants of Hong Kong flight crew licence or air traffic controller's licence.

飛機維修執照

截至二零一五年三月三十一日，執照事務組共處理了833份首次簽發飛機維修執照、執照續期和加簽可維修飛機機種的申請。年內，該組和香港飛機工程有限公司設於將軍澳的認可考試中心，舉辦了涉及共3 656份飛機維修執照試卷的考試。

協調本地空域使用者

為加強航空安全，由本地空域使用者組成的香港非控制區飛行安全小組繼續定期召開會議，協調香港空域的安全事宜。這些本地空域使用者包括使用定翼機和旋翼機的機構(政府飛行服務隊、中國人民解放軍駐香港部隊、空中快線、直升機服務和香港飛行總會)、香港滑翔傘協會，以及私人飛機擁有人。

飛機登記

年內，香港民用航空器登記冊共新增了30架航空器，同期另有七架波音B747型飛機、三架龐巴迪CL 605型飛機、兩架灣流G550型飛機、一架CAP 10B型飛機、一架T67M-MKII型飛機、一架AS 355N型直升機、一架EC 120B型直升機和兩架SA 315B型直升機取消登記。截至二零一五年三月三十一日，香港民用航空器登記冊一共登記了303架民用飛機，當中264架由香港的航空經營許可證持證公司和政府飛行服務隊擁有，詳情如下：

Aircraft Maintenance Licensing

As of 31 March 2015, PELO processed 833 applications for initial issue and renewal of aircraft maintenance licences, and endorsement of additional aircraft types in such licences. During the report period, 3 656 examination papers regarding aircraft maintenance licencing were processed by PELO and the authorised examination centre at HAECO in Tseung Kwan O.

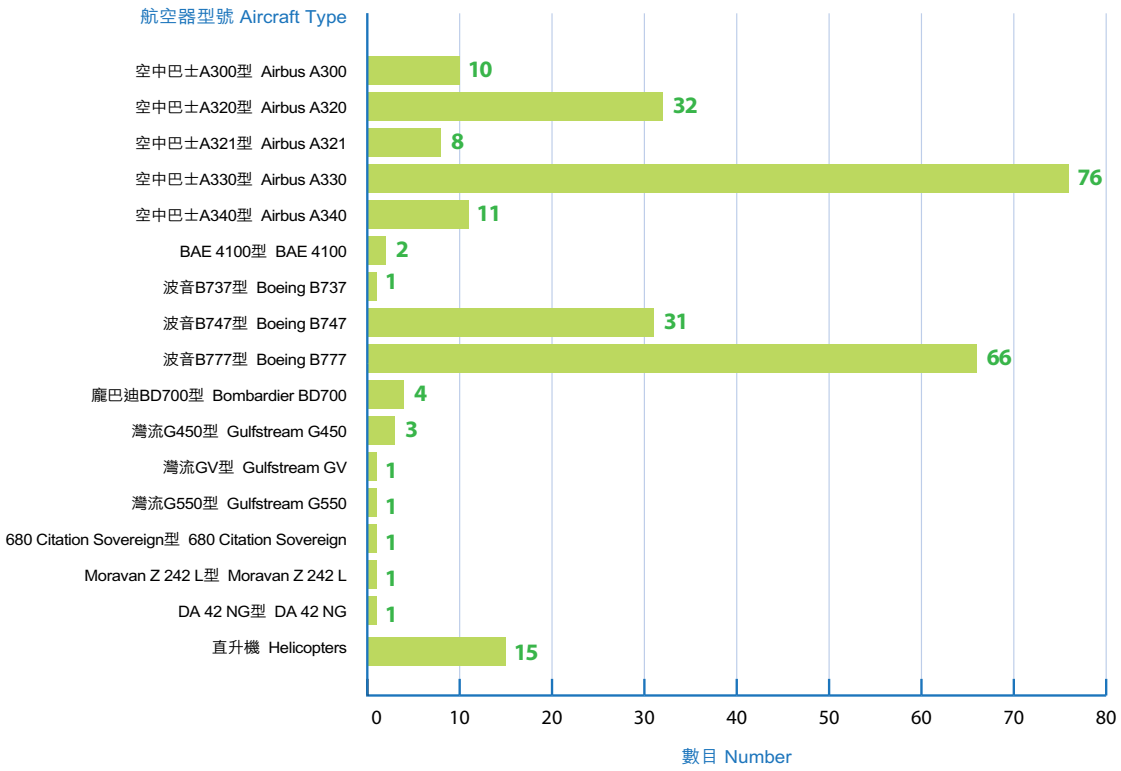
COORDINATION WITH LOCAL AIRSPACE USERS

To promote flight safety, the Hong Kong Sector Flight Safety Committee comprising local airspace users continued to meet regularly to coordinate safety issues in the local airspace. These local airspace users include fixed wing operators and rotary wing operators (GFS, Hong Kong Garrison of the People's Liberation Army, EMU, HLS and Hong Kong Aviation Club), Hong Kong Paragliding Association and private aircraft owners.

AIRCRAFT REGISTER

During the year, 30 aircraft were put on the Hong Kong Civil Aircraft Register. In the same period, seven Boeing 747, three Bombardier CL605, two Gulfstream G550, one CAP 10B, one T67M-MKII, one AS 355N helicopter, one EC 120B helicopter, and two SA 315B helicopters were removed from the Register. As of 31 March 2015, the total number of civil aircraft in the Hong Kong Civil Aircraft Register was 303, of which 264 were registered under Hong Kong AOC holders and the GFS as follows:

適航事務組人員到飛機部件維修機構進行產品審查
Airworthiness Officer conducts product audits at an approved aircraft component maintenance organisations in Hong Kong.



持續訓練巡查人員

為確保巡查人員的專業知識和能力與時並進，本部安排同事接受各項飛行運作和適航事宜的訓練，範疇包括個別型號飛機的設計、飛行模擬器評審、各式運作的審批、審查技巧，以至安全管理訓練。此外，他們也參與國際和地區會議、研討會和工作組會議，與國際專家交流，分享經驗和良好的作業方式。這些國際會議包括國際民航組織就以下議題所舉行的會議/ 研討會：全球安全監督審計計劃持續監察模式、全球衞星導航系統、性能導航、廣播式自動相關監察、安全運作和持續適航合作發展，以及疲勞風險管理系統。此外，本部人員又參加了國際航空運輸協會的航空燃料論壇、新飛機機種的合格審定和維修審查委員會的會議，以及與各地民航當局的會議等。

CONTINUOUS TRAINING FOR INSPECTING STAFF

To maintain the technical knowledge and competence of inspecting officers in pace with the latest aviation development, the division arranged a wide spectrum of training for them on flight operations and airworthiness matters. These included training in the design of specific types of aircraft, simulator evaluation, operational approvals, auditing techniques as well as safety management. In addition, the officers participated in international and regional conferences, seminars and working group meetings to exchange and share experiences and best practices with international experts. These international events included ICAO conferences/seminars on the implementation of the Universal Safety Oversight Audit Programme Continuous Monitoring Approach, Global Navigation Satellite System, Performance-based Navigation, Automatic Dependent Surveillance-Broadcast, Cooperative Development of Operational Safety and Continuing Airworthiness, and Fatigue Risk Management Systems; International Air Transport Association's Aviation Fuel Forum; Certification and Maintenance Review Board of some new aircraft types and meetings with various aviation authorities.

機場安全標準
Airport Standards

機場安全標準部負責監管機場安全、航空保安、障礙物管制和空運危險品的工作。本部也負責促進直升機場的發展，監察直升機場的運作安全和保安水平，制定和執行飛機噪音消減措施，並肩負協調機場簡化手續的任務。

The Airport Standards Division (APSD) 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 division also facilitates the development of heliports, monitors the safety and security of heliport operations, develops and implements noise mitigating measures and assumes the role in coordinating airport facilitation.

機場安全

簽發機場牌照

香港機場管理局(機管局)獲民航處簽發機場牌照，營運香港國際機場。機場安全標準部繼續執行對機管局的安全監督，以確保該局的表現符合《機場牌照發牌規定文件》的規定。

為確保機場持續符合機場牌照發牌規定，本部在年內進行了14次審計和129次巡查，範圍包括飛行區內的臨時和定期維修工程、飛行區路面狀況、目視助航設備、飛機運作所需的其他設施、安全管理系統的實施、緊急應變計劃、機場救援和滅火服務、由機管局和地勤服務公司為飛機提供的地面支援服務，以及飛行區擴建項目。本部也參與機管局對機場特許經營公司進行的審計，並監察機管局對飛機地面事故的調查工作，以確保機管局有效地監督各機場特許經營公司的安全表現，以及確定相關各方已採取適當改善措施，防止同類事故重演。

年內，機管局推行和延續了數項飛行區大型維修計劃，其中於二零一二年九月展開的主要滑行道刨鋪工程，已在二零一四年七月順利完成。北跑道航空地面燈的110件主要電子配件的更換工程，亦於二零一四年十二月完成。其餘進行中的工程計劃，包括以混凝土取代路磚，重鋪北客運廊及西北客運廊廊前停機位的路面，以及以瀝青取代路磚，重鋪這些停機位後方道路的路面。工程於二零一四年七月展開，預計在二零一五年十二月完成。此外，機管局於年內檢查了飛行區內的所有引導標誌燈

AIRPORT SAFETY

Aerodrome Licensing

Airport Authority Hong Kong (AAHK) is granted an aerodrome licence by the CAD to operate Hong Kong International Airport (HKIA). APSD continued to exercise safety oversight on the performance of AAHK to ensure compliance with requirements stipulated in the Aerodrome Licensing Requirements Document.

To ensure HKIA's continued compliance with the aerodrome licensing requirements, the division carried out 14 audits and 129 inspections during the year covering both ad-hoc and scheduled airside maintenance works, conditions of airfield pavements, visual aids, other facilities required for aircraft operations, implementation of the Safety Management System, emergency planning, airport rescue and fire fighting services, aircraft ground operations provided by AAHK and its ground handling agents as well as airfield expansion projects. The division also participated in the airfield franchisee audits carried out by AAHK and monitored AAHK's investigation of aircraft ground incidents to ensure that effective oversight was exercised by AAHK on franchisees' safety performance and appropriate remedial measures had been taken by relevant parties to prevent recurrence.

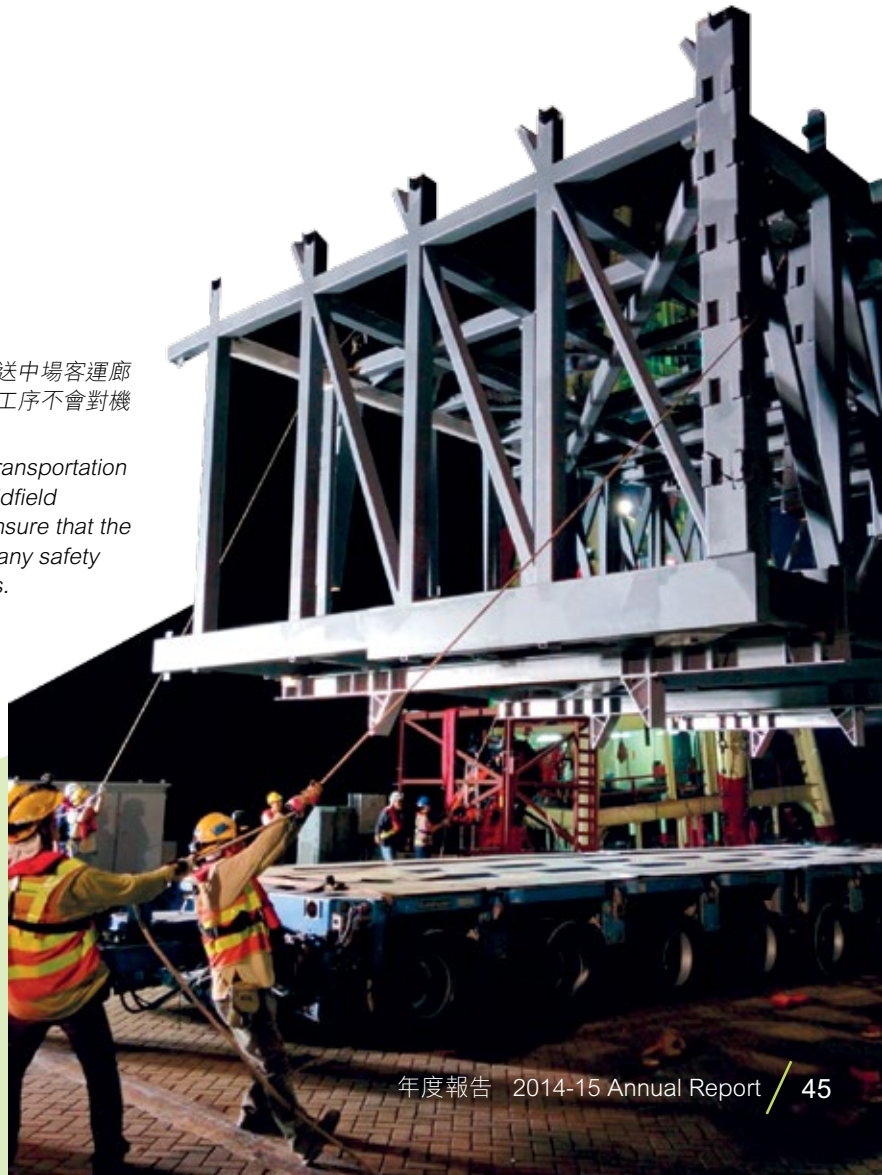
Several large-scale airfield maintenance projects were undertaken by AAHK during the year. Commenced in September 2012, the pavement resurfacing of major taxiways was completed smoothly in July 2014. The replacement of 110 major electronic devices for the aerodrome ground lighting serving the North Runway was also completed in December 2014. Other ongoing projects included the replacement of block pavement with concrete and asphalt at the parking stands and the back-of-stand roads respectively in the North and Northwest Concourse. Commenced in July 2014, the replacement works were scheduled for completion in December 2015. In addition, AAHK had conducted a review of the Movement Area Guidance Signs and decided

箱，並落實於二零一五年第四季至二零一八年第四季期間，分階段把現有的熒光燈管燈箱更換為發光二極管燈箱。

機管局於年內也展開了多項改善工程，以應付新需求和進一步提升機場運作的安全和效率。其中一項工程旨在提升機場處理基準代字為F的飛機的能力。機管局改建了維修停機坪，以便為波音B747-8型飛機提供維修服務。此外，機管局又展開了滑行道H(於滑行道N與V之間的道段)的道肩擴闊工程，為基準代字為F的飛機提供更多滑行道。本部會繼續監察機場的各項改善工程，確保新設施完全符合機場發牌規定。

to replace all the existing fluorescent tubes lighting boxes with LED lighting boxes in phases from the fourth quarter of 2015 to the fourth quarter of 2018.

A number of enhancement projects were also launched by AAHK during the year to meet new demand and to further enhance the safety and efficiency of airport operations. One such project was to further enhance the efficiency in handling Code F aircraft at HKIA. Modification works were carried out at the maintenance apron to accommodate the maintenance services of Boeing B747-8 aircraft. Taxiway shoulder widening works also commenced during the year at Taxiway H (the section between Taxiways N and V) to provide more taxiing route for Code F aircraft. The division will continue to monitor various upgrading works in HKIA to ensure that these new facilities fully comply with the aerodrome licensing requirements.



機場安全標準部人員監察運送中場客運廊新登機橋的過程，確保運送工序不會對機場運作衍生安全風險。

APSD officers inspect the transportation of new airbridges for the Midfield Passenger Concourse to ensure that the process would not impose any safety hazard to airport operations.

年度大型飛機意外救援演習於二零一四年十二月五日舉行。

A full-scale annual aircraft crash exercise was conducted on 5 December 2014.

為應付航班增長，機管局於機場中場範圍和西停機坪展開了大型發展計劃。該發展計劃包括興建一座客運廊、20個廊前停機位、16個遠方停機位和12個臨時停機位。年內，西停機坪的發展工程順利完成，當中的遠方停機位和臨時停機位已相繼落成啟用。中場客運廊的建築工程預計於二零一五年年底或之前竣工。本部在這些新設施啟用前實地巡查，審核是否符合機場發牌規定，以及是否已經制定相關運作程序。本部會繼續密切監察中場客運廊建築工程的進度，務使機場在提升處理客貨運能力之餘，飛行區的高度安全運作亦得以維持。

為確保機場運作安全順暢，本部聯同航空交通管理部和航空交通工程服務部，參與機管局主持的委員會和工作小組，就機場各項基建發展計劃(包括中場範圍第二期及餘下用地的發展)和《香港國際機場2030規劃大綱》提供意見。

為測試緊急應變程序，以及加強機場營運者與各個相關應變單位在處理飛機意外時的協調能力，機管局於年內舉行了多次緊急應變演習。本部一直積極參與籌劃，並定期視察這些演習，其中一次是於二零一四年十二月五日舉行的年度大型飛機意外救援演習。是次演習模擬

To cater for traffic growth, AAHK had embarked on a large-scale development project at the Midfield and the Western Apron. The project comprised the construction of a concourse, 20 frontal parking stands, 16 remote parking stands and 12 temporary parking stands. During the year, the Western Apron development project was completed smoothly with all the remote parking stands and temporary parking stands commissioned for operations. The Midfield Passenger Concourse was targeted for completion by the end of 2015. APSD had inspected these new facilities to ensure that they were in compliance with the aerodrome licensing requirements and all procedures were in place before they were put into use. The division will continue to closely monitor the progress of the Midfield Passenger Concourse to facilitate the enhancement in the airport's handling capability while maintaining a high level of airfield operational safety.

To ensure safe and smooth airport operations, APSD in collaboration with the Air Traffic Management Division and the Air Traffic Engineering Services Division participated in various committees and working groups convened by AAHK to provide inputs and comments on airport infrastructural development (including the development of the Midfield Phase Two and the Midfield remaining area) and HKIA Master Plan 2030 study.

For the purpose of testing the emergency response procedures and enhancing the coordination between the aerodrome operator and relevant responding parties in dealing with aircraft accidents, AAHK conducted a number of drills and exercises throughout the year. APSD actively participated

一架抵港的空中巴士A330型客機於降落後滑行至X455停機位途中，在滑行道N與一輛工程車相撞。是次演習特別選擇在西停機坪進行，目的是使應變單位熟習機場內的新設施，尤其是各個X停機位及西面飛行區隧道的環境。不同應變單位，包括機管局、政府相關部門和航空公司，均參與演習，以測試各單位處理飛機事故的緊急程序是否奏效。從籌備至完成演習，本部一直監察各階段的進展，並提出意見和建議，讓機管局和相關應變單位進一步改善緊急程序和提高應變能力。

《國際民用航空公約》(《國際民航公約》)附件19所載的安全管理國際標準和建議措施，已於二零一三年十一月生效。年內，本部繼續監察機管局，確保安全管理規定得以遵行。在此方面，本部對機管局為新發展計劃而設立的風險評估持續記錄系統，尤為重視。該記錄系統用作記錄因新發展計劃引致運作環境轉變而衍生的風險。記錄範圍涵蓋新發展計劃的設計、建築及運作階段。

in the planning meetings and conducted regular inspections on these drills and exercises. One of them was the full-scale annual aircraft crash exercise conducted on 5 December 2014. The exercise simulated an arrival Airbus A330 aircraft colliding with a service truck while taxiing on Taxiway N to Stand X455. The crash site was particularly chosen to allow responding parties to familiarise themselves with the newly commissioned facilities in the Western Apron, especially the X-stands and the Western Vehicular Tunnel. Different responding parties, including AAHK, relevant government departments and the participating airline, took part in the exercise to test the emergency procedures and responses in dealing with an aircraft accident. The division oversaw the preparation and operation of the exercise from planning until completion and provided comments and recommendations for AAHK and relevant responding parties to further enhance their emergency procedures and responses.

The Annex 19 to the Convention on International Civil Aviation containing the international standards and recommended practices of Safety Management became effective in November 2013. During the year, the division continued to monitor AAHK's compliance with the safety management requirements. The division had targeted its specific attention to the efforts of AAHK in setting up ongoing risk assessment register for new development projects to record any risk arising from the changes to existing operational environment. The register would cover the design, construction and operational phases of all the new development projects.

機場安全標準部人員實地巡查，確保新設施完全符合機場發牌規定。

APSD officers conduct inspection to ensure that new facilities fully complied with the aerodrome licensing requirements.

由於屯門至赤鱲角連接路—南面連接路高架道路段的部分施工位置，位於機場南跑道的航道之下，其承建商為工作船隻／機械安裝了船舶／機械高度監測系統，以保障機場運作不受影響。機場安全標準部人員在船隻上視察該監測系統的實地測試情況。

As part of the works area of the Tuen Mun-Chek Lap Kok Link Southern Connection Viaduct Section is under the flight paths of the South Runway of HKIA, a vessel/machinery height monitoring system is commissioned by the contractor for the vessels/machinery to ensure that airport operations would not be affected by the works. APSD officers inspect the site trial of the monitoring system.

安全監督

直升機場的運作和發展

機場安全標準部繼續監察直升機場的運作安全，並就規劃和設計區內直升機場，以及發展跨境直升機場，提供意見。

管制障礙物

民航處制定機場高度限制，以保障飛機航道及無線電航儀器不受障礙物影響。本部審核了多項建築和發展計劃及可行性研究，並提供意見，確保各個項目均符合機場高度限制和其他航空安全規定。年內，經本部審核的大型項目和研究，在機場範圍以外的有港珠澳大橋工程的香港口岸和香港接線、屯門至赤鱲角連接路、東涌餘下的發展計劃，以及欣澳填海的規劃及工程研究。在機場範圍內的大型項目，

SAFETY REGULATION

Heliport Operations and Development

APSD continued to monitor the safety of heliport operations and to provide advice on the planning and design of the domestic heliports as well as on the development of cross-boundary heliports.

Control of Obstructions

Airport Height Restrictions (AHR) are established to protect aircraft flight paths and radio navigational aids. APSD assessed and provided advice on various building and development projects and feasibility studies to ensure their compliance with AHR and other applicable aviation safety requirements. The major projects and studies outside HKIA assessed during the year included the Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) and the Hong Kong Link Road (HKLR), the Tuen Mun-Chek Lap Kok Link, the Remaining Development in Tung Chung, and the Planning and Engineering Study on Sunny Bay Reclamation. The major projects within HKIA

則包括機場中場範圍發展計劃、西停機坪發展計劃，以及擴建機場成為三跑道系統的工程項目。在機管局籌劃擴建機場成為三跑道系統的工程項目方面，本部就擴建機場後的機場高度限制和相關的海上限制區，積極提供意見，以確保新航道安全。

港珠澳大橋香港口岸的填海工程於機場東北對開水域進行，承建商必須調派大量工作船建造人工島，以便在該島上興建相關的基礎設施。由於這項重要工程的填海位置靠近機場，並在兩條跑道的航道之下，為了確保飛機的安全和避免機場運作受到建築工程干擾，本部主動要求港珠澳大橋香港口岸的項目顧問和承建商使用船舶/ 機械高度監測系統。該系統全日24小時運作，監測在機場附近填海位置工作的船隻/ 機械的最高高度，以監督承建商遵守機場高度限制的規定。這項安排對本部考慮是否臨時批准高身船隻豁免遵守機場高度限制的申請，尤其重要。本部也密切監察承建商在遵守機場高度限制方面的表現，並視乎需要要求承建商採取改善措施。其他在香港國際機場周邊的主要工程，亦須為其船隻/ 機械安裝類似的高度監測系統。

assessed included HKIA's Midfield development project, the Western Apron development project and the expansion of HKIA into a three-runway system. Regarding the project to expand HKIA into a three-runway system planned by AAHK, the division provided advice on AHR requirements and the associated Marine Exclusion Zones (MEZs) for an expanded airport system in order to ensure aviation safety of the new flight paths.

As the reclamation works at the waters off the northeast of HKIA for the HKBCF proceeded, a large number of working vessels were deployed by contractors to construct an artificial island on which infrastructures would be built. The HKBCF reclamation site was in close proximity to HKIA under the flight paths of the two-runway airport. To ensure aircraft safety and avoid any disruption to airport operations due to construction works of this strategic project, APSD took a proactive approach to require the project consultant and contractor to commission a vessel/machinery height monitoring system. It was designed to operate 24/7 for monitoring the highest altitude of vessels/machinery working at the reclamation site near HKIA and enhancing the contractor's compliance with the AHR requirements. This arrangement was particularly important for the division's consideration of applications for AHR exemption involving high airdraft vessels. The performance of the contractor in complying with the AHR requirements was also closely monitored by staff of the division who would require remedial actions from the contractor as and when necessary. Such monitoring systems are also required for other major projects and works around HKIA.

年內，本部共批准了110宗臨時豁免遵守機場高度限制的申請，以方便在香港境內進行建築工程及機場島附近的海事運作，當中60宗涉及港珠澳大橋香港口岸和香港接線的工程，12宗涉及機場中場範圍及西停機坪的發展計劃，12宗涉及擴建機場成為三跑道系統的前期研究工作。

本部得到海事處通力協助，繼續盡力防止船隻駛進機場島附近的海上限制區，以免航機和無線電導航儀器運作受到干擾。年內，海事處針對非法闖入限制區的事件，共提出了七次檢控。

禁止使用會危害飛機航行的燈光

為確保航空安全不受威脅，本部繼續監察各類激光、探射燈和煙花表演，如「幻彩詠香江」燈光匯演、農曆新年煙花匯演等，以及大廈外牆的燈光，尤其是有照明的廣告招牌，並提供意見。

This year, the division issued 110 temporary AHR exemptions to facilitate construction works in the territory and vessel operations in the vicinity of the Airport Island, of which 60 were issued to facilitate the works of the Hong Kong-Zhuhai-Macao Bridge HKBCF and HKLR projects, 12 for the Midfield and the Western Apron development projects, and 12 for the preliminary assessment of the expansion of HKIA into a three-runway system.

With the assistance of the Marine Department, APSD continued to ensure the integrity of the MEZs established in the vicinity of the Airport Island to safeguard the operation of aircraft and radio navigational aids. During the year, seven prosecutions against illegal entry into the MEZs were instituted by the Marine Department.

Prohibition of Lights Endangering Aircraft Operation

To ensure that aviation safety would not be compromised, APSD continued to monitor and give advice on the use of laser, search lights and fireworks displays at different shows such as "A Symphony of Lights", the Chinese New Year Fireworks Displays as well as other lighting displays at building facades, especially illuminated advertisement signs.

本部安排有意參與「幻彩詠香江」的建築物進行燈光測試。

Light testing is arranged for building owners who wish to join "A Symphony of Lights" show.

一般飛行活動

本部繼續規管康樂飛行活動，包括滑翔傘、風箏、模型飛機、無人駕駛飛機系統等，確保這些活動在符合飛行安全規例的情況下進行，而且不會影響民航飛機的運作。

運載危險品

機場安全標準部轄下危險品事務組根據國際民用航空組織(國際民航組織)和本地法例的規定，監管空運危險品。危險品事務組訂立了危險品許可證制度，航空公司必須符合相關的安全規定，才會獲發許可證運載危險品進出或飛越香港。年內，危險品事務組共處理了四宗新的危險品許可證申請及48宗許可證續期申請。截至二零一五年三月底，共有90家航空公司獲准運載危險品進出或飛越香港。此外，危險品事務組批准了26家機構為航空公司、空運貨站、貨運代理人和付運人開辦危險品訓練課程。該組又定期和突擊巡查航空公司、培訓機構、空運貨站、貨運代理人和付運人，監察他們有否遵從空運危險品的安全規定。

General Aviation Activities

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

CARRIAGE OF DANGEROUS GOODS

The Dangerous Goods Office of APSD regulates the transport of dangerous goods by air in accordance with the International Civil Aviation Organization (ICAO) and local legal requirements. Through a dangerous goods permission system established by the Dangerous Goods Office, airlines must satisfy all pertinent safety requirements before they are permitted to carry dangerous goods to, from or over Hong Kong. This year, four new and 48 renewal applications for dangerous goods permissions were processed. At the end of March 2015, 90 airlines were permitted to carry dangerous goods onboard their aircraft flying to, from or over Hong Kong. In addition, the Office approved 26 organisations for conducting dangerous goods training programmes for airlines, air cargo terminals, freight forwarders and shippers. Regular and ad-hoc inspections were conducted by the Office to monitor the compliance of the airlines, training institutions, air cargo terminals, freight forwarders and shippers with the safety requirements on air transport of dangerous goods.

機場安全標準部人員巡查空運危險品的運作情況。

APSD officer inspects the operations associated with the transport of dangerous goods by air.

發布安全規定

危險品事務組繼續通過教育和宣傳活動發布空運危險品的安全規定。年內，該組曾向貨運業界簡報最新的空運危險品規定，並繼續通過派發單張和海報，以及不時發放訊息，提醒空運業界遵從空運危險品的安全規定。

法例

為使本地兩套規管空運危險品的法例與國際民航組織最新的《危險物品安全航空運輸技術細則》的規定一致，相關的修例工作於年內繼續進行。

參與國際活動

為掌握空運危險品的最新國際要求，危險品事務組參加了國際民航組織於二零一四年十月舉行的危險品專家組工作小組會議。

危險品事故

年內發生的危險品事故，主要涉及未經申報的危險品。為免類似事件重演，危險品事務組調查所有事故，並向香港空運業界，以及其他航空當局發布具有參考價值的危險品事故資訊。

Promulgation of Safety Requirements

The Dangerous Goods Office continued to promulgate the safety requirements on air transport of dangerous goods through education and publicity. During the year, the Dangerous Goods Office briefed the air cargo industry on the new dangerous goods requirements. The Office also continued to distribute leaflets and posters, and to disseminate information from time to time to remind the air cargo industry of the safety requirements on air transport of dangerous goods.

Legislation

To align the two sets of local legislation with the latest requirements of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air, the related legislative amendment process continued in the year.

Participation in International Activities

To keep abreast of the development of international requirements on air transport of dangerous goods, the Dangerous Goods Office attended the ICAO Dangerous Goods Panel Working Group Meeting in October 2014.

Dangerous Goods Incidents

The incidents which occurred in the year were mainly related to undeclared dangerous goods. The Dangerous Goods Office conducted investigations into all these incidents with an aim to prevent recurrence. Useful incident information was disseminated to the air cargo industry in Hong Kong and other aviation authorities.

飛機噪音管理

民航處一向關注飛機噪音對居民的影響，並根據國際民航組織的指引，實施了一系列噪音消減措施。本部使用飛機噪音及航迹監察系統，監察各項噪音消減措施的實施情況和各地區的飛機噪音水平。該系統由16個戶外噪音監察站和一台中央電腦伺服器組成。電腦把雷達提供的飛行資料，與噪音監察站記錄的飛機噪音數據連繫起來。

年內，本部共處理了222宗飛機噪音投訴。為加深社區對各項噪音消減措施和噪音監察工作的認識，本部多次派員出席區議會的會議，並會見地區居民和團體。

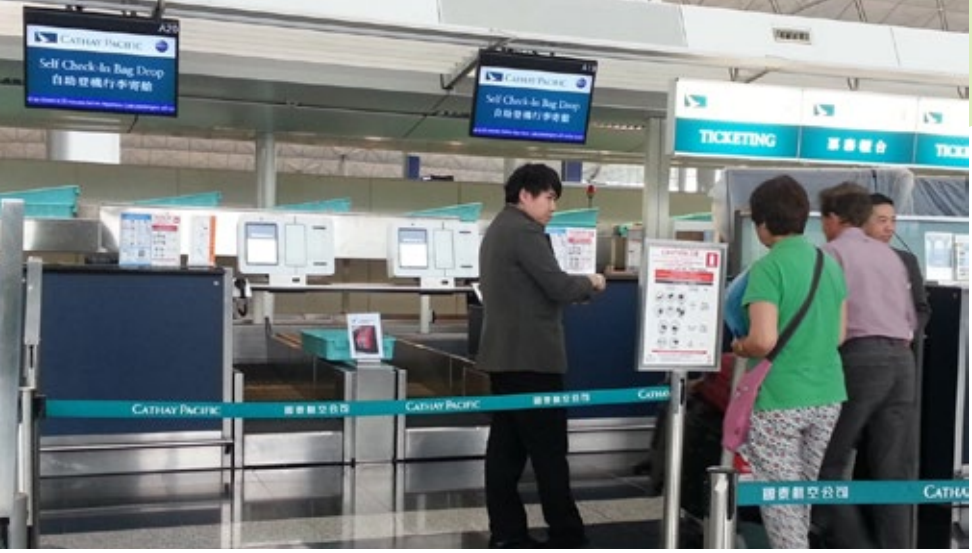
為進一步減低飛機噪音對社區的影響，民航處自二零一四年三月底起，不再容許航空公司編排僅符合《國際民航公約》附件16第一卷第二部分第三章所載的噪音標準的飛機，於晚上十一時至翌日早上七時在香港升降，並於同年十月底把這項措施延長至全日生效。

AIRCRAFT NOISE MANAGEMENT

CAD is conscious of the impact of aircraft noise on the community and has implemented a series of noise mitigating measures based on the guidelines of ICAO. The division monitored the implementation of various noise mitigating measures and the aircraft noise situations in various districts through the Aircraft Noise and Flight Track Monitoring System. The system comprises 16 outdoor noise monitoring terminals and a central computer server which correlates the flight data provided by radars and the noise data recorded by the noise monitoring terminals.

During the year, the division handled 222 aircraft noise complaints. With a view to enhancing the understanding of the noise mitigating measures and the noise monitoring work, representatives of the division attended various meetings organised by the District Councils, and met with local residents and organisations.

To further alleviate the impact of aircraft noise on the local communities, from the end of March 2014, CAD ceased to allow aircraft operators to schedule aircraft whose noise levels marginally meet the noise standards stipulated in Volume I, Part II, Chapter 3 of Annex 16 to the Convention on International Civil Aviation in Hong Kong between 11 pm and 7 am the following day. From the end of October 2014, the above measure was extended to take effect for the whole day.



香港國際機場的自助登機行李寄艙服務櫃台試行運作。

Trial operation of the Self Check-in Bag Drop Counters at Hong Kong International Airport.

航空保安

對機場各個營運者的保安監察

機場安全標準部通過審計和檢查，確保機管局和機場的各個營運者，包括租戶禁區營運者、航空公司，以及航機膳食和物品供應商，符合《香港航空保安計劃》的規定。

年內，本部根據《航空保安條例》處理了三宗指定禁區的個案，其中一宗是把中國飛機服務有限公司新擴建的停機坪指定為租戶禁區，另外兩宗則涉及重新劃定香港空運貨站有限公司速遞中心和機場南面貨物安全驗查區的範圍，以符合相關的運作規定。在執行這些改動前，本部人員到了現場實地巡查，確保有足夠的保安措施，適切管制進入禁區的人士。

AVIATION SECURITY

Security Oversight of Operators at HKIA

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

During the report period, the division processed three designations of restricted areas under the Aviation Security Ordinance. One of the designations was to demarcate the newly expanded apron of China Aircraft Services Limited as a tenant restricted area. The other two designations were for the reconfigurations of the Express Centre of Hong Kong Air Cargo Terminals Limited and the South Goods Screening Area at the HKIA for meeting their respective operational requirements. Officers of the division conducted inspections prior to the commencement of the designations to ensure that sufficient protection was provided for controlling access to the restricted areas.

機場安全標準部人員對航空公司進行航空保安審計。

APSD officer conducts an Airline Security Audit

空運貨物保安

根據管制代理人制度，每一名向民航處登記成為管制代理人的貨運代理，均須為空運貨物實施保安管制措施，並檢查指定來源的貨物。本部繼續監察已登記的管制代理人，確保他們遵守管制代理人制度的各項規定。

為遵行由國際民航組織頒布的新保安標準，民航處自二零一三年七月起把空運貨物保安規定的適用範圍，擴大至包括以全貨運航機運載的貨物。本部藉定期檢查，持續監察管制代理人的工作及水平。

為不斷改善管制代理人制度，本部繼續與業界商討進一步加強管制代理人制度的運作。為此，本部與空運業界的代表組成工作小組，定期舉行會議，研究措施以持續加強空運貨物的保安。

截至二零一五年三月三十一日，本處的登記冊上共有1 438名管制代理人。

難受管束人士的行為

為針對民航機上難受管束和擾亂秩序人士的行為，香港制定了《航空保安(修訂)條例》，對這類罪行施加制裁。年內，根據該條例檢控成功的個案共有四宗。

Air Cargo Security

Under the Regulated Agent Regime (RAR), a cargo agent registered as a Regulated Agent (RA) with CAD is required to provide security control measures on consignments of air cargo and apply screening on prescribed sources of air cargo. APSD continued to monitor the compliance of the RAs with the requirements of the RAR.

The RAR was enhanced in July 2013 to comply with ICAO's new standards which extended the application of supply chain security requirement to cargo carried onboard all-cargo aircraft. Continuous monitoring of Regulated Agents' operations and standards were effected through regular inspections.

The division continued to work with the industry to further enhance the operation of the RAR. A working group was set up for this purpose, which comprises representatives of the air cargo industry. The working group meets regularly to identify measures for continually enhancing the aviation security of the supply chain.

As at 31 March 2015, there were 1 438 RAs registered with CAD.

Unruly Behaviour

To fight against unruly or disruptive behaviour committed by persons on board civil aircraft, the Aviation Security (Amendment) Ordinance was enacted to impose penalties on such offences. During the report period, there were four cases of successful prosecution under the Ordinance.

簡化手續

機場安全標準部藉參與機場簡化手續委員會，監察《國際民航公約》附件9所訂的標準和建議措施在機場實施的情況。年內，本部向香港登記航空公司的機組人員發出了2 186張新的空勤人員證書。

國際事務

國際民航組織亞太地區互助航空保安計劃

香港自二零零四年起，參加國際民航組織亞洲太平洋地區互助航空保安計劃，並繼續參與該計劃第三階段的工作。該計劃旨在協助參與的成員遵行《國際民航公約》附件9和附件17所訂的航空保安標準和建議措施，以及提高航空保安能力。

區域航空保安協調論壇

香港於二零一四年十一月二十至二十一日，在民航處總部大樓舉辦了第二屆亞太地區區域航空保安協調論壇，參加者來自19個國家/ 政

Facilitation

Through the participation in the Airport Facilitation Committee, APSD monitored the implementation of the Standards and Recommended Practices of ICAO Annex 9 at HKIA. During the year, 2 186 new Crew Member Certificates were issued to the crew members of Hong Kong registered aircraft operators.

INTERNATIONAL ACTIVITIES

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

Hong Kong has joined the CASP-AP established by ICAO since 2004 and has continued to participate in Phase III of the programme. The programme aims at assisting states and administrations in the Asia Pacific region to comply with the standards and recommended practices for aviation security in ICAO Annexes 9 and 17, and to enhance their competence in aviation security.

Regional Aviation Security Coordination Forum

Hong Kong hosted the Second Meeting of the Regional Aviation Security Coordination Forum – Asia and Pacific Region at the CAD Headquarters on 20-21 November 2014. About 60 participants from 19 States/Administrations and 4 international organisations and industry partners including ICAO attended

府、四個國際組織和業界伙伴(包括國際民航組織)，共約60人。與會者討論了新近出現的問題對亞太地區的影響，大家以合作、協調和統一的方針加強全球航空保安。

國際民航組織航空保安專家組會議

機場安全標準部每年均派員以中國代表團成員身分，參與每年在加拿大蒙特利爾舉行的國際民航組織航空保安專家組會議。該會議專家組的目標是制定國際標準和建議措施，以保護民用航空免受非法干擾行為侵襲，以及識別和研究民用航空所面對的新威脅。

the Forum, which provided a platform to discuss and address the regional implications of emerging issues and develop a cooperative, coordinated and unified approach to strengthen aviation security globally.

ICAO Aviation Security Panel (AVSECP) Meeting

APSD has been participating, as part of the Chinese delegation, in the ICAO AVSECP Meeting held annually in Montreal, Canada. The objectives of the AVSECP are to develop standards and recommended practices for the purpose of safeguarding civil aviation against acts of unlawful interference, and to identify and examine new and emerging threats against civil aviation.

香港於二零一四年十一月二十至二十一日，在民航處總部大樓舉辦第二屆亞太地區區域航空保安協調論壇。

Hong Kong hosted the Second Meeting of the Regional Aviation Security Coordination Forum — Asia and Pacific Region at CAD Headquarters between 20 and 21 November 2014.

航班事務及安全管理

Air Services and Safety Management

航班事務及安全管理部於二零一四年四月一日成立。新分部在航空交通管理標準組和培訓及發展組併入原有的航班事務部之後改組成立。航班事務及安全管理部負責監察航空公司的空運服務，就本地航空公司的空運牌照申請及民用航空運輸談判向有關當局提供資料，處理有關民航的立法事宜和編訂航空交通統計數字。該部也負責制定和實施航空安全管理政策，以促進航空系統安全並提升安全水平，並且為飛機意外及嚴重事故的調查工作提供行政支援，以及監管香港的空中導航服務。

The Air Services and Safety Management Division was established on 1 April 2014 after the Air Traffic Management Standards Office (ATMSO) and the Training Development Office joined the former Air Services Division. The new Division is responsible for monitoring air services provided by airlines, providing information to relevant authorities regarding air transport licence applications by local airlines and for air services negotiations, handling civil aviation legislative matters and producing air traffic statistics. The Division is also responsible for developing and implementing safety policy to promote and enhance safety in the aviation system, providing administrative support to the investigation of aircraft accidents and serious incidents, and regulating Hong Kong air navigation services.


B-HSG
SWIRE
DRAGONAIR

航空服務

航空交通量增長

二零一四至一五年度的客運量比上一年度上升7%至6 426萬人次，飛機升降量增加5%至395 997架次。貨運量則按年增加5%至440萬公噸。

截至二零一五年三月底，提供往返香港的定期航班服務的航空公司總數為104家，服務網絡涵蓋的城市／機場約有185個。

本地航空公司的服務

截至二零一五年三月底，國泰航空公司(國泰)營辦的定期航班服務遍及全球71個目的地，當中包括貨運航班的新航點卡爾加里和加爾各答。

截至二零一五年三月底，港龍航空公司(港龍航空)營辦的定期客運航班服務遍及43個目的地，包括新增的航點峇里島和檳城。

香港華民航空公司(華民航空)繼續經營亞洲區定期貨運航班服務。截至二零一五年三月底，華民航空營辦往返亞洲12個目的地的定期航班服務。

截至二零一五年三月底，香港航空公司(香港航空)營辦往返33個目的地的定期航班服務，包括客運服務新航點長春、鹿兒島、札幌，以及貨運服務新航點阿拉木圖和伊斯坦堡。

AIR SERVICES

Air Traffic Growth

Traffic throughput in the year 2014-15 reached 64.26 million passengers with a growth rate of 7%. Aircraft movements also reached 395 997 movements, with a growth rate of 5%. Cargo throughput increased to 4.4 million tonnes, representing a year-on-year growth of 5%.

By the end of March 2015, the number of scheduled airlines serving Hong Kong was 104. The total number of cities/airports served by scheduled services to and from Hong Kong was around 185.

Services by Local Carriers

By the end of March 2015, Cathay Pacific Airways (CPA) operated scheduled services to 71 destinations worldwide, including new destinations to Calgary and Kolkata for scheduled all-cargo services.

Hong Kong Dragon Airlines Limited (HDA) operated scheduled passenger services to 43 destinations by the end of March 2015, including new destinations to Denpasar Bali and Penang.

AHK Air Hong Kong Limited (AHK) continued to operate scheduled all-cargo services in Asia. By the end of March 2015, AHK operated scheduled services to 12 destinations in Asia.

Hong Kong Airlines Limited (CRK) operated scheduled services to 33 destinations by the end of March 2015, including new destinations to Changchun, Kagoshima and Sapporo for passenger services; and Almaty and Istanbul for all-cargo services.

香港快運航空公司(香港快運)定位為低成本航空公司，是本港目前唯一的低成本航空公司。截至二零一五年三月底，香港快運的定期航班服務涵蓋14個目的地，新增的航點包括釜山、福岡、名古屋、東京(成田)、煙台和鄭州。

美捷香港商用飛機有限公司、TAG Aviation Asia Limited和香港航空公務機管理有限公司繼續營辦不定期客運航班服務，接載乘客到世界各地。

空中快線直升機有限公司繼續營辦香港與澳門之間的不定期客運航班服務。

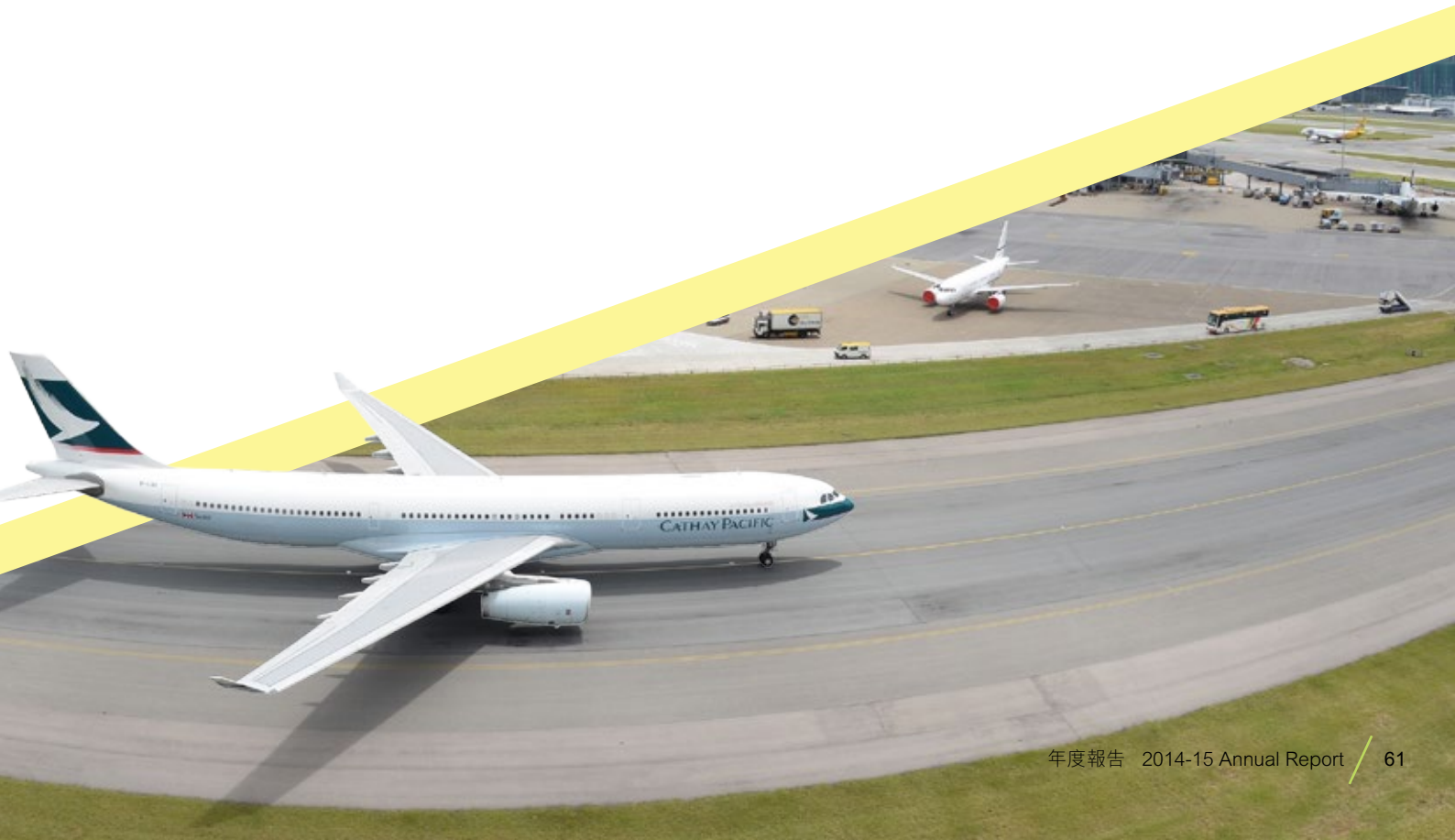
直升機服務(香港)有限公司繼續在本地提供客運包機和空中作業服務。

Hong Kong Express Airways Limited (HKE) positioned itself as a low cost carrier (LCC). It was also the only LCC in Hong Kong. By the end of March 2015, HKE operated scheduled services to 14 destinations, adding Busan, Fukuoka, Nagoya, Tokyo (Narita), Yantai and Zhengzhou to its network.

Metrojet Limited, TAG Aviation Asia Limited and Hong Kong Airlines Corporate Jet Management Limited continued to operate non-scheduled passenger services to cities around the world.

Sky Shuttle Helicopters Limited continued to operate non-scheduled passenger services between Hong Kong and Macao.

Heliservices (Hong Kong) Limited (HEL) continued to operate local passenger charters and aerial work services.



非本地航空公司的服務

年內，共有四家航空公司首次開辦往返香港的定期客運服務，包括：美國航空於二零一四年六月開辦往返華盛頓和達拉斯的航班；暹羅航空於二零一四年十月開辦往返曼谷的航班；香草航空於二零一四年十一月開辦往返東京(成田)的航班；以及捷星日本於二零一五年二月開辦往返大阪的航班。

定期貨運服務方面，K-Mile Air於二零一四年十一月重辦由烏隆經香港往曼谷的服務。

年內，有四家航空公司停辦往返香港的定期航班服務，計有：曼達拉航空(二零一四年七月)，孟加拉航空(二零一四年八月)，匈奴航空(二零一四年十一月)，以及Nordic Global Airlines(二零一四年十二月)。

年內，民航處合共簽發了139張經營許可證予航空公司，以供營辦往來香港的定期航班服務，並處理了大約4 800宗更改定期航班服務的申請，另又簽發了896張經營香港境內和往來香港包機服務的許可證。

Services by Non-Hong Kong Carriers

Four foreign operators commenced new scheduled passenger services during the year. American Airlines commenced services from Washington and Dallas in June 2014. Siam Air Transport started services from Bangkok in October 2014. Vanilla Air commenced services from Tokyo (Narita) in November 2014. Jetstar Japan launched services from Osaka in February 2015.

For scheduled all-cargo services, K-Mile Air resumed services on the route Udon Thani – Hong Kong – Bangkok from November 2014.

During the year, four airlines suspended their scheduled services to and from Hong Kong. They were Mandala Airlines in July 2014, Biman Bangladesh in August 2014, Hunnu Air in November 2014, and Nordic Global Airlines in December 2014.

During the year, CAD issued 139 operating permits to airlines for operation of scheduled services to and from Hong Kong, and processed around 4 800 applications for changes to the schedules. A total of 896 permits were also issued for the operation of charter services to, from and in Hong Kong.

運價

年內，民航處共處理了1 563宗涉及修訂往來香港客運和貨運定期航班服務的運價申請(不包括燃油附加費的申請)。另外，本處批准航空公司繼續收取客運和貨運燃油附加費，以彌補部分因油價波動而增加的營運成本。客運燃油附加費每月審批一次。年內，本處共處理了1 599宗燃油附加費的申請，並在本處網站公布核准的燃油附加費金額。

TARIFFS

During the year, CAD processed 1 563 tariff filings (excluding filings concerning fuel surcharges) for carriage of passengers and cargo on scheduled services to and from Hong Kong. Airlines were allowed to continue levying passenger and cargo fuel surcharges to partially recover the increase in operational costs due to fluctuations in aviation fuel prices. The passenger fuel surcharges were reviewed on a monthly basis. In the year, the department processed 1 599 filings on the adjustment of fuel surcharges. The approved fuel surcharges were published on the department's website.

國際民航組織的活動

為遵行《基本法》的規定，保持香港國際和區域航空中心的地位，以及方便履行國際民用航空組織(國際民航組織)區域航行程序所定職責，民航處繼續積極參與國際民航組織的活動。年內，民航處代表以中華人民共和國代表團成員身分，出席了五次只限國家參加的國際民航組織會議，另以「中國香港」的名義，參加了28次並非以國家為單位的國際民航組織會議，其中包括於二零一四年十一月在香港舉行的亞洲及太平洋區民航局局長第51次會議。這次會議的出席者包括來自34個國家/ 政府和九個國際組織的276名代表。以上33次會議的詳情見附錄。此外，本處與國際民航組織往來的函件共有289份，主要就民航技術事宜提供意見及資料。

ACTIVITIES OF ICAO

To maintain the status of Hong Kong as a centre of international and regional civil aviation in accordance with the provisions of the Basic Law, and to facilitate the discharge of Hong Kong's responsibilities under the regional air navigation procedures of the International Civil Aviation Organization (ICAO), CAD continued to participate actively in ICAO's activities. 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 28 ICAO meetings which were not so limited, using the name "Hong Kong, China". Among them was the 51st Conference of Directors General of Civil Aviation, Asia and Pacific Regions, which was held in Hong Kong in November 2014. The conference was attended by 276 delegates from 34 States/ Administrations and nine International Organisations. Details of these 33 meetings are provided in the Appendix. The department also exchanged 289 letters with ICAO, the majority of which involved comments and information on technical matters related to civil aviation.

亞太經合組織的活動

民航處繼續以「中國香港」的名義，支持亞太經合組織的民航活動和措施。年內，本處因應亞太經合組織的17項要求，提供了民航技術事宜的意見及資料。

空運牌照

根據《空運(航空服務牌照)規例》(第448A章)，香港註冊航空公司如欲營辦定期航班運載乘客、郵件或貨物，必須先向空運牌照局申請營運牌照。年內，民航處因應兩宗更改牌照申請，向空運牌照局提供了與航班事務相關的資料和統計數字。

安全策略辦公室

安全策略辦公室負責落實安全管理措施和規定，統籌和協調本處推展安全方案和持續監察方法的工作，並與意外調查辦公室合作，促進安全管理和預防飛機意外及嚴重事故發生。

ACTIVITIES OF APEC

CAD continued to support aviation related activities and initiatives of APEC using the name "Hong Kong, China". During the year, the department handled 17 requests relating to APEC, which involved provision of comments and information on technical matters related to civil aviation.

AIR TRANSPORT LICENSING

In accordance with the Air Transport (Licensing of Air Services) Regulations (Chapter 448A), Hong Kong-registered aircraft operator intending to operate scheduled services to carry passengers, mail or cargo must apply to the Air Transport Licensing Authority for a licence for such operations. During the year, CAD provided the Air Transport Licensing Authority with air services-related information and statistics with regard to two applications for variation of licence.

STRATEGIC SAFETY OFFICE

The Strategic Safety Office is responsible for implementing safety management initiatives and requirements. It plans and coordinates the State Safety Programme (SSP) and Continuous Monitoring Approach (CMA) activities for the department, and collaborates with the Accident Investigation Office on the promotion of safety management principles, and the prevention of aircraft accidents and serious incidents.

香港安全方案 2014-2017
Hong Kong Safety Programme 2014-17

持續監察方法的落實工作

國際民航組織自二零一三年一月起，採用持續監察方法，取代以往對締約國展開周期安全監督審計的方法。持續監察方法要求各締約國及民航當局，向國際民航組織提供相關資料，以供國際民航組織持續審計，從而加強各國及民航當局監督航空安全的能力，保障全球航空安全。

根據持續監察方法的最新發展，民航處通過持續監察方法協調工作小組，協調制定行動計劃及執行的細節，積極落實相關工作，當中包括向國際民航組織提供所需資料，並依循持續監察方法安排內部安全審計等事宜。年內，落實持續監察方法的工作進展良好。

國家安全方案的實施

年內，民航處根據國際民航組織最新的安全管理標準和指引，完成了安全方案的檢討和更新工作，並於同年十月公布《香港安全方案2014-17》(《香港安全方案》)。新方案除了詳述香港現行的航空安全監督架構外，還闡述了落實安全方案的相關策略。《香港安全方案》已上載民航處網頁，以期提高安全意識，並促進跨專業範疇，包括持份者、服務提供者、本地與國際航空業界伙伴的合作關係。

民航處會繼續按部就班，分階段推行相關的全球航空安全策略和安全管理條文，不斷改進航空安全的規管工作。

Continuous Monitoring Approach (CMA) Implementation

The implementation of the CMA by ICAO since January 2013 has substituted the previous cyclical audits on states by ICAO. Under the CMA, all states and administrations are required to provide the required information to ICAO for the latter's continuous review, with a view to enhancing the safety oversight capability of states and administrations and promoting global aviation safety.

In the light of the latest CMA developments, CAD has proactively implemented the CMA activities through the coordination of the CMA Coordination Working Group in the formulation of the action plans and associated tasks, which include provision of the required information to ICAO and conduct of CMA internal audits. Positive progress in the CMA implementation was achieved during the year.

State Safety Programme (SSP) Implementation

By referring to the latest ICAO's requirements and guidance, CAD completed the review and updating of the SSP document for Hong Kong in 2014, and published an updated SSP document, namely "Hong Kong Safety Programme 2014-17" (HKSP) in October 2014. This newly updated SSP document not only describes the safety oversight framework currently in place in Hong Kong, but also sets out the strategies which Hong Kong has adopted for the implementation of SSP. The HKSP is published on the CAD website to promote safety awareness and to foster safety partnership across disciplines, including the stakeholders, service providers, industry partners and the international aviation community.

CAD will continue to adopt a phased approach to implement the related global aviation safety strategies and safety management provisions with a view to continually enhancing our safety regulation.

飛機意外及嚴重事故調查

民航處是本港的飛機意外調查當局，負責調查於香港發生的飛機意外及嚴重事故。調查工作由訓練有素的意外調查主任，根據《國際民航公約》附件13的標準和建議措施進行，目的是確定發生事故的情況及因由，避免事故再次發生。

年內，民航處公布了下列意外的調查報告：

二零一零年七月三日，亞太航空旗下一架阿古斯塔威斯特蘭AW139型直升機，在上環空中快線直升機機場起飛後不久，尾槳脫落，在維多利亞港水面迫降。機組人員和乘客全部獲救。本處於二零一一年發出的兩項安全建議已獲妥為執行，因此最後報告並無提出進一步的安全建議。

另外，仍在調查中的意外事故如下：

二零一三年九月二十八日，一架隸屬香港飛行總會的塞斯納172P型定翼機，在石崗機場中斷着陸後復飛不成功，導致飛機於11號跑道的北面草地上着地，最後機身翻轉停於草坪上。機上有兩名乘客受輕傷。

AIRCRAFT ACCIDENT AND SERIOUS INCIDENT INVESTIGATIONS

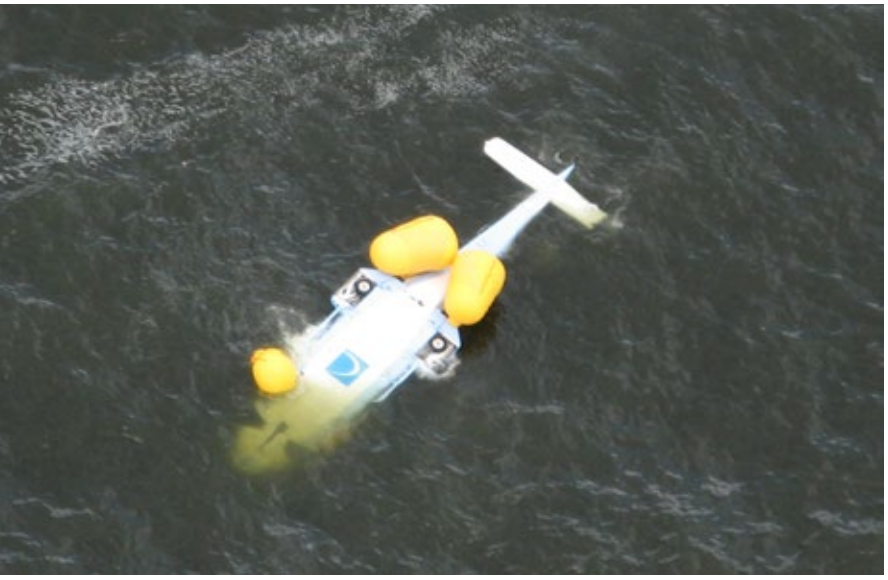
CAD is also the aircraft accident investigation authority for aircraft accidents and serious incidents occurred in Hong Kong. These investigations are carried out by trained Inspectors of Accidents in line with the ICAO Annex 13 Standards and Recommended Practices with the purpose of determining the circumstances and causes of the occurrences to prevent recurrence in future.

During the year, CAD published a report on the investigation of the following accident:

On 3 July 2010, an Agusta Westland AW139 helicopter of East Asia Airlines experienced a loss of tail rotors shortly after takeoff from the Sky Shuttle Heliport in Sheung Wan and ditched in Victoria Harbour. All crew and passengers onboard were rescued. The two safety recommendations issued in 2011 had been implemented. No further safety recommendation was made in the Final Report.

In addition, the following accidents are under investigation:

On 28 September 2013, a Cessna 172P aircraft of the Hong Kong Aviation Club made an unsuccessful balked landing maneuver at Shek Kong Airfield. The aircraft landed on grassy area to the northern side of Runway 11 and came to a stop in an upside down position. Two passengers suffered minor injuries.



An Agusta Westland AW139 helicopter of East Asia Airlines ditched in Victoria Harbour in 2010.
亞太航空旗下一架阿古斯塔威斯特蘭AW139型直升機於二零一零年在維多利亞港水面迫降。

二零一三年十月六日，同屬香港飛行總會的Robinson R22 Beta II型直升機，在石崗機場進行懸停訓練期間，向右翻倒。在意外中，飛行學員受輕傷。

所有調查報告，包括初步報告及意外調查公報，均已上載民航處網頁(www.cad.gov.hk/chinese/reports.html)。

航空交通管理標準組

航空交通管理標準組(空管標準組)負責確保本港提供的空中導航服務，達到並維持在所訂的最高安全水平。

安全監督工作

為持續監察航空安全，空管標準組年內對航空交通管理部和航空交通工程服務部進行了兩次審計和26次安全檢查。審計內容包括查核服務機構有否遵守安全管理系統的規管要求，並重點審查安全政策/ 目標和促進安全的措施的實施成效。檢查範圍包括航空交通管理的運作、程序、培訓和考試，安全管理系統的應用，空管設備/ 系統，安全事故調查，以及安全建議的跟進行動。檢查人員巡查了多個設施和工作單位，包括空管中心、控制塔、航空情報中心、航空網絡中心、備用空管中心、備用控制塔、培訓組、雷達模擬機和塔台模擬機。曾經接受檢查的其他空中導航服務領域包括通訊、導航及監察，航空氣象，搜索和救援，涉及飛機運作的空中導航服務程序，以及航空資訊服務(包括繪製航圖)。

On 6 October 2013, a Robinson R22 Beta II helicopter of the Hong Kong Aviation Club rolled over during a hover training exercise and came to rest on its right side at Shek Kong Airfield. The student pilot suffered minor injuries.

All the investigation reports, including the preliminary reports and accident bulletins, are published on the CAD's website (www.cad.gov.hk/english/reports.html).

AIR TRAFFIC MANAGEMENT STANDARDS OFFICE (ATMSO)

ATMSO is responsible for ensuring that a high standard of safety is set, achieved and maintained in the provision of air navigation services in Hong Kong.

Safety Oversight Activities

For ongoing safety regulatory surveillance, ATMSO conducted two audits and 26 safety inspections on the Air Traffic Management Division (ATMD) and Air Traffic Engineering Services Division (AESD) in 2014-15. The audits covered the regulatory compliance of the service providers' Safety Management System (SMS) with a focus on the effective implementation of safety policy/objectives and safety promotion elements. The inspections included ATM activities in operations, procedures, training, examinations, SMS implementation, ATC equipment/systems, safety occurrences investigations, and follow-up actions arising from safety recommendations. Facilities visited by the inspectors included the ATCC, Control Tower, Aeronautical Information Centre, Aeronautical Network Centre, Backup ATCC and Backup Tower, Training Unit, radar simulator and Tower simulator. Inspections on CNS, meteorological information, search and rescue, Procedures for Air Navigation Services–Aircraft Operations, as well as Aeronautical Information Services (including aeronautical charting) domains of air navigation services were also conducted.

通過空中導航服務標準協調會議，空管標準組定期和空中導航服務提供單位檢討應用安全管理系統的事宜，共同努力持續發展並改進該系統。

二零一四年二月，空管標準組的審查人員對航空交通管理部的安全管理系統展開續期審查，過程順利。該系統其後獲續期至二零一九年。

航空交通安全評核委員會繼續每半年召開會議，檢討空管事故和其他安全事故。委員會成員包括飛行標準及適航部、空管標準組和航空交通管理部的代表，以及本地主要航空公司和政府飛行服務隊負責航空安全的人員。

年內，空管標準組為履行安全監督職責，繼續積極參與更換空管系統的項目並提供意見，確保現有系統安全過渡至新系統。

文件編製

空管標準組定期覆檢和修訂現有的規管文件，確保內容準確有效和符合現況。年內發出了一份論述本處架構重組的《空中航行服務資料通告》。

Through the Air Navigation Services Standards Coordination Meeting, ATMSO regularly reviewed in collaboration with air navigation service provider (ANSP) issues pertinent to the implementation of SMS to promote continual development and improvement.

In February 2014, ATMSO inspectorate staff conducted an SMS renewal inspection on ATMD SMS and consequently, it was successfully renewed up to 2019.

Review of ATC incidents and other safety occurrences continued to be conducted half-yearly by the Air Traffic Safety Assessment Committee, which comprised representatives from the Flight Standards and Airworthiness Division, ATMSO, ATMD, and flight safety personnel of major local airline operators and GFS.

As part of the safety regulatory oversight responsibilities, ATMSO continued to participate actively in the ATC systems replacement project to provide inputs with a view to facilitating the safe transition to the new systems.

Documentations

ATMSO reviews and updates existing regulatory documents periodically to ensure that they remain accurate, valid and up-to-date. One Air Navigation Services Information Notice was promulgated in this year on the re-organisation of the department.

空管人員執照

空管標準組的重要職責之一，是根據《國際民航公約》附件1的標準和《1995年飛航(香港)令》的規定，執行空管主任執照簽發制度。年內，該組共發出了111份首次簽發的空管主任執照、空管級別執照和合格證書，另續發了162份空管級別執照和合格證書。

認可培訓機構

根據《國際民航公約》和《1995年飛航(香港)令》的規定，航空交通管理部獲批准成為認可培訓機構，可為航空交通管制員提供培訓。航空交通管理部舉辦的空管培訓課程，必須依據《國際民航公約》附件1的規定開辦，並須接受空管標準組監管。

安全推廣工作

為推廣安全訊息，空管標準組定期為空中導航服務提供單位和維修服務承辦商的職員，舉辦安全文化和安全管理系統的簡報會，以鞏固安全監督和安全管理的概念。空管標準組與本處轄下的香港民航訓練中心攜手合作，為本地航空機構籌辦了「安全管理系統概論」培訓課程。該課程會視乎可用的培訓時段和航空業界的反應，繼續在適當的時機推出。此外，空管標準組也定期於本處內聯網發布規管資訊和安全管理資料，方便所有空中導航服務人員查閱。

ATC Personnel Licensing

One of the important functions of ATMSO is to administer the ATC licensing scheme in accordance with the standards in ICAO Annex 1 and the requirements of Air Navigation (Hong Kong) Order 1995. During the report period, ATMSO processed 111 initial awards of ATC Licences, ATC Ratings and Certificates of Competency, as well as 162 renewals of Ratings and Certificates.

Approved Training Organisation

In accordance with requirements of ICAO and the Air Navigation (Hong Kong) Order 1995, ATMD was recognised as an approved training organisation for conducting training for air traffic controllers. ATC training conducted by ATMD shall be run pursuant to stipulations in ICAO Annex 1 and subject to regulatory oversight of ATMSO.

Safety Promotion

For safety promotion, ATMSO conducted periodic briefings to ANSP colleagues and the staff of the maintenance services provider on safety culture and SMS to reinforce safety oversight and safety management concepts. In association with the department's Civil Aviation Training Centre, ATMSO had also prepared an Introduction to SMS Training Course for the local aviation communities. The course would continue to be presented depending on the availability of training slot and general response of the aviation communities. In addition, ATMSO regularly published regulatory information and safety management materials on the intranet for convenient access by all air navigation services staff.

培訓及發展組

培訓及發展組由培訓及發展委員會督導，與各分部的培訓協調人員緊密合作，致力推行獲委員會批准的培訓措施。培訓及發展組一直密切留意國際民航組織發布的最新培訓方針和模式，以供委員會參考。在採納了以才能為本的做法之後，培訓及發展組業已依據各類職位的具體情況，為專業級別人員初步訂定了培訓需要，並會因應實施效果，再作檢討。

成立民航訓練學院

行政長官在二零一四年《施政報告》中提到，在經濟發展委員會轄下航運業工作小組支持下，政府將會就成立民航訓練學院進行可行性研究，以期提高本地和海外航空從業員的技術水平。該學院可為航空業培養人才，提升航空運輸安全水平和效率，並進一步鞏固香港作為區內主要航空樞紐的領導地位。可行性研究已於二零一四年六月展開，預計於二零一五年完成。研究範圍包括：評估本港和區內/ 主要經濟體系的航空業現時和未來的人手情況及培訓需求；成立民航訓練學院的可行性及相關事

TRAINING AND DEVELOPMENT OFFICE (TDO)

Being steered by the Training and Development Committee (TDC), the TDO works closely with divisional training coordinators for effective implementation of training initiatives duly endorsed by the committee. Whilst that, TDO always keeps abreast of the latest training approaches, so promulgated by the ICAO, for consideration by the TDC. With the adoption of competency-based approach, TDO has formulated the training needs for professional grade officers of various specialised positions which would be reviewed based on further operational use.

Establishment of a Civil Aviation Training Institute

The Chief Executive announced in the Policy Address 2014 that with the support of the Working Group on Transportation under the Economic Development Commission, the Government would conduct a study on the feasibility of establishing a civil aviation training institute, with a view to enhancing the skills for local and overseas practitioners of the aviation industry, thereby nurturing talented practitioners for the aviation industry, enhancing the level of safety and efficiency of air transport, and further strengthening Hong Kong's leading status as a major aviation hub in the region. The feasibility study has commenced in June 2014 and targets for completion in 2015. The scope includes an assessment on current and future manpower situation in Hong Kong aviation industry and in the region/ key economies, vis-à-vis the demand for training; and the feasibility of establishing a civil aviation training institute in Hong Kong and related issues, such as the scale of the

宜，例如學院的規模、所提供培訓的類型和水平、師資，以及與持份者(包括現有培訓機構)的相互合作等。待可行性研究完成後，政府會考慮和跟進研究結果。

institute, types and level of training to be offered, trainers, and interaction and collaboration with the stakeholders (including those existing training institutes), etc. The Government will review and follow up on the findings arising from the consultancy study as appropriate.

民航處培訓資料庫

在採納了以才能為本的做法之後，民航處培訓資料庫作為管理工具，既可用作編列各類職位的培訓需要，又有助訂定分配培訓資源的先後次序。用於管理培訓需要和安排培訓課程的模組已投入服務，餘下模組的程式編製工作也到了最後階段。

CAD Training Database

With the adoption of competency-based approach, the CAD Training Database Programme forms the management tool for matching the training needs for the various specialised positions and as well help prioritise the resource allocation. The module for managing the training needs and scheduling of training courses for officers had been put into operation. The programming work for the other modules was in the final stage.

航空教育徑

市民大眾，尤其是學生(小學至高等院校)對民航處設立的航空教育徑都報以好評。參觀教育徑不單可以增進知識，當中的青年人可能還會因而對投身航空業產生興趣。

Aviation Education Path

The Aviation Education Path was well received by the general public in particular the students, ranging from primary school to tertiary education. It serves not only as a means for public education but indeed could arouse the interest of the youth in joining the aviation industry.

Aviation Education Path
航空教育徑

附錄

二零一四年四月至二零一五年三月期間，民航處人員參加的國際民航組織會議：

	會議名稱	地點	日期
1	機場專家組第三次會議	加拿大蒙特利爾	二零一四年四月七日至十一日
2	廣播式自動相關監察系統研究和實施專責小組第13次會議	中國香港	二零一四年四月二十二日至二十五日
3	區域共同虛擬專用網絡專責小組第二次會議	韓國首爾	二零一四年五月十二日
4	航空通訊服務實施協調小組第一次會議	韓國首爾	二零一四年五月十三日至十六日
5	飛行失控專題討論會	加拿大蒙特利爾	二零一四年五月二十日至二十二日
6	預防及管理經由航空交通散播之公共衛生事故亞太地區合作安排第七次會議	斯里蘭卡哥林堡	二零一四年五月二十日至二十三日
7	亞太地區航空安全小組轄下意外調查專責小組第二次會議	中國香港	二零一四年五月二十七日至二十八日
8	機場營運及規劃專責小組第二次會議	印尼日惹	二零一四年六月三日至五日
9	亞太地區互助航空保安計劃主導委員會第11次會議	中國澳門	二零一四年六月十二日至十三日
10	亞太地區航行規劃和實施小組轄下通訊/導航及監察分組第18次會議	中國北京	二零一四年七月二十一日至二十五日
11	亞太地區航行規劃和實施小組轄下航空交通管理分組第二次會議	中國香港	二零一四年八月四日至八日
12	亞太地區航行規劃和實施小組轄下氣象分組第18次會議	中國北京	二零一四年八月十八日至二十一日
13	亞太地區航行規劃和實施小組第25次會議	馬來西亞吉隆坡	二零一四年九月八日至十一日
14	亞太地區航空安全報告及計劃專責小組第三次會議	泰國曼谷	二零一四年九月十五日
15	亞太地區航空安全小組第五次會議	泰國曼谷	二零一四年九月十六日至十九日

APPENDIX

ICAO conferences and meetings attended by representatives of CAD between April 2014 and March 2015:

	Name of Conference or Meeting	Venue	Dates
1	3rd Meeting of the Aerodromes Panel	Montréal, Canada	7 – 11 April 2014
2	13th Meeting of Automatic Dependent Surveillance-Broadcast Study and Implementation Task Force	Hong Kong, China	22 – 25 April 2014
3	2nd Meeting of the Common Regional Virtual Private Network Task Force	Seoul, Republic of Korea	12 May 2014
4	1st Meeting of Aeronautical Communication Services Implementation Coordination Group	Seoul, Republic of Korea	13 – 16 May 2014
5	Loss of Control In-flight Symposium	Montréal, Canada	20 – 22 May 2014
6	7th Meeting of the Collaborative Arrangement for the Prevention and Management of public health events in Civil Aviation Asia Pacific	Colombo, Sri Lanka	20 – 23 May 2014
7	2nd Meeting of the Asia Pacific Accident Investigation Group of the Asia Pacific Regional Aviation Safety Team	Hong Kong, China	27 – 28 May 2014
8	2nd Meeting of the Aerodromes Operations and Planning Working Group	Yogyakarta, Indonesia	3 – 5 June 2014
9	11th Cooperative Aviation Security Programme - Asia Pacific Steering Committee Meeting	Macau, China	12 – 13 June 2014
10	18th Meeting of the Communications/ Navigation and Surveillance Sub-Group of the Asia Pacific Air Navigation Planning and Implementation Regional Group	Beijing, China	21 – 25 July 2014
11	2nd Meeting of the Air Traffic Management Sub-Group of the Asia Pacific Air Navigation Planning and Implementation Regional Group	Hong Kong, China	4 – 8 August 2014
12	18th Meeting of the Meteorology Sub-group of the Asia Pacific Air Navigation Planning and Implementation Regional Group	Beijing, China	18 – 21 August 2014
13	25th Meeting of the Asia Pacific Air Navigation Planning and Implementation Regional Group	Kuala Lumpur, Malaysia	8 – 11 September 2014
14	3rd Meeting of the Asia Pacific Safety Reporting and Programme Ad hoc Working Group	Bangkok, Thailand	15 September 2014
15	5th Meeting of the Asia Pacific Regional Aviation Safety Team	Bangkok, Thailand	16 – 19 September 2014

	會議名稱	地點	日期
16	東南亞地區航空安全小組第17次會議	泰國曼谷	二零一四年九月十九日
17	第一屆航空安保創新研討會	加拿大蒙特利爾	二零一四年十月二十一日至二十三日
18	亞太地區互助航空保安計劃技術與操作第三次會議	緬甸仰光	二零一四年十月二十九日至三十日
19	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16次會議	東帝汶帝力	二零一四年十月二十九日至三十一日
20	亞太地區飛行程序計劃主導委員會第六次會議	澳洲坎培拉	二零一四年十一月三日至五日
21	安全管理專家組第一次會議	加拿大蒙特利爾	二零一四年十一月三日至七日
22	亞太地區區域航空安全小組第四次會議	中國香港	二零一四年十一月二十日至二十一日
23	亞太地區航空保安協調論壇第二次會議	中國香港	二零一四年十一月二十日至二十一日
24	第51次亞太地區民航局局長會議	中國香港	二零一四年十一月二十四日至二十七日
25	亞太地區航空交通流量管理主導小組第四次會議	泰國曼谷	二零一四年十二月一日至五日
26	亞太地區航行規劃和實施小組轄下區域共同虛擬專用網絡專責小組第三次會議	泰國曼谷	二零一四年十二月九日至十二日
27	南中國海主要航空交通流量檢討專責小組第一次會議	馬來西亞吉隆坡	二零一五年一月十九日至二十日
28	第二次高級別安全會議	加拿大蒙特利爾	二零一五年二月二日至五日
29	機場設計和運行專家組第一次會議	加拿大蒙特利爾	二零一五年二月九日至十三日
30	東南亞航空交通服務協調小組第22次會議	泰國曼谷	二零一五年三月九日至十二日
31	基於性能導航實施協調小組第一次會議	中國北京	二零一五年三月十日至十二日
32	遙控航空器系統專題研討會	加拿大蒙特利爾	二零一五年三月二十三日至二十五日
33	亞太地區航空交通流量管理主導小組第五次會議	泰國曼谷	二零一五年三月三十日至四月三日

	Name of Conference or Meeting	Venue	Dates
16	17th Meeting of the South East Asia Regional Aviation Safety Team	Bangkok, Thailand	19 September 2014
17	1st Symposium on Innovation in Aviation Security	Montréal, Canada	21 – 23 October 2014
18	3rd Annual Technical and Operational Meeting of the Co-operative Aviation Security Programme – Asia Pacific	Yangon, Myanmar	29 – 30 October 2014
19	16th Steering Committee Meeting of the Co-operative Development of Operational Safety and Continuing Airworthiness Programme – Southeast Asia	Dili, Timor-Leste	29 – 31 October 2014
20	6th Meeting of the Asia-Pacific Flight Procedure Programme Steering Committee	Canberra, Australia	3 – 5 November 2014
21	1st Meeting of the Safety Management Panel	Montréal, Canada	3 – 7 November 2014
22	4th Meeting of the Regional Aviation Safety Group – Asia and Pacific Regions	Hong Kong, China	20 – 21 November 2014
23	2nd Meeting of the Regional Aviation Security Coordination Forum	Hong Kong, China	20 – 21 November 2014
24	51st Conference of Directors General of Civil Aviation, Asia and Pacific Regions	Hong Kong, China	24 – 27 November 2014
25	4th Meeting of the Asia Pacific Air Traffic Flow Management Steering Group	Bangkok, Thailand	1 – 5 December 2014
26	3rd Meeting of the Common Regional Virtual Private Network Task Force of the Asia Pacific Air Navigation Planning and Implementation Regional Group	Bangkok, Thailand	9 – 12 December 2014
27	1st meeting of the South China Sea Major Traffic Flow eview Group	Kuala Lumpur, Malaysia	19 – 20 January 2015
28	2nd High-level Safety Conference	Montréal, Canada	2 – 5 February 2015
29	1st Meeting of the Aerodrome Design and Operations Panel	Montréal, Canada	9 – 13 February 2015
30	22nd Meeting of the South-East Asia Air Traffic Services Coordination Group	Bangkok, Thailand	9 – 12 March 2015
31	1st Meeting of Performance based Navigation Implementation Coordination Group	Beijing, China	10 – 12 March 2015
32	Remotely Piloted Aircraft Systems Symposium	Montréal, Canada	23 – 25 March 2015
33	5th Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group	Bangkok, Thailand	30 March – 3 April 2015

財務
Finance

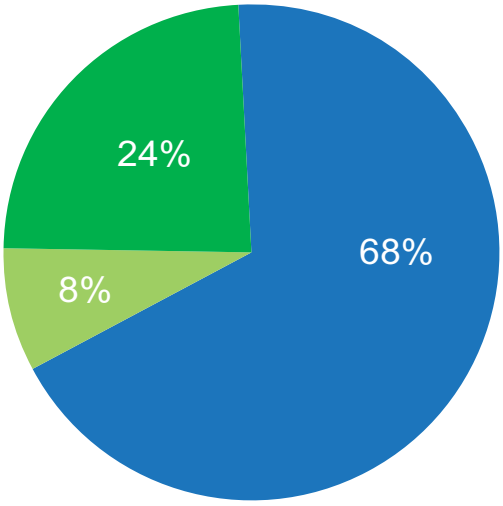
本處收入與開支

本處收入主要源自提供航空交通服務、過境導航服務及簽發牌照予本地航空公司、空勤人員、飛機維修機構、飛機工程師、培訓機構及香港國際機場。在二零一四至二零一五年度，本處的總收入達11.19億元，同期總經營支出(包括政府其他部門提供服務的成本)為12.03億元。年內資本開支達5,800萬元，主要項目包括衞星通訊、導航及監察/航空交通管理系統，以及更換航空交通管制系統。本處向來謹慎理財及在精簡的架構下仍維持有效率的運作。

Departmental Revenue and Expenditure

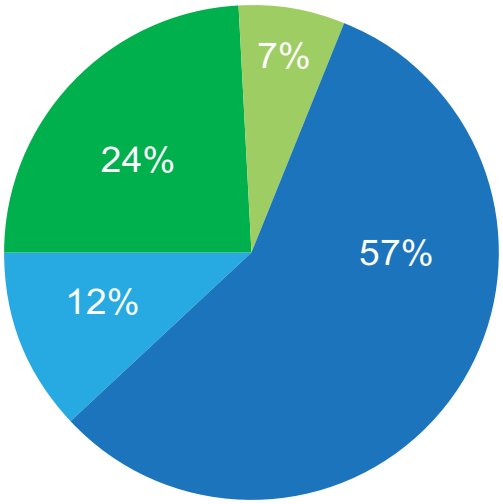
The revenue of the department is mainly derived from the provision of air traffic services, en-route navigation services and licensing of local airlines, aircrews, maintenance organisations, aeronautical engineers, training organisations and the Hong Kong International Airport. Total revenue in 2014-2015 amounted to $1,119 million. Total operating expenditure including costs of services provided by other government departments for the same period amounted to $1,203 million. Capital expenditure during the year amounted to $58 million, and major items included Satellite-based Communications, Navigation and Surveillance/Air Traffic Management Systems and Replacement of Air Traffic Control System. The department exercises prudence in financial management and operates in a lean but efficient manner.

收入分析
Analysis of Revenue (2014-2015)



	百萬元$(M)
航空交通 Air Traffic Services	759
過境導航 En-route Navigation Services	273
牌照及其他收費 Licences and Other Fees	87
	1,119

經營開支分析
Analysis of Operating Expenditure (2014-2015)



	百萬元$(M)
員工支出 Staff	685
一般支出 General Expenses	288
折舊 Depreciation	142
維修 Maintenance	88
	1,203

香港民航處
Civil Aviation Department Hong Kong

香港大嶼山香港國際機場東輝路1號民航處總部
Civil Aviation Department Headquarters, 1 Tung Fai Road,
Hong Kong International Airport, Lantau, Hong Kong

www.cad.gov.hk