



飛行標準及適航部負責簽發航空營運許可證，以及在發出許可證後監察所有持證公司的運作，確保這些公司遵守國際民用航空組織（國際民航組織）所訂的標準和建議措施。本部的其他職責包括簽發航空人員執照、分析安全數據、監察在香港登記的飛機的適航標準和維修水平、監察輕型飛機和直升機運作，以及調查飛機意外和事故。

隨着航空交通管理標準組於二零零三年三月成立，本部亦兼負規管航空交通服務和監察航空交通管制運作的安全。

The Flight Standards and Airworthiness Division (FSAD) is responsible for the issue of Air Operator's Certificate (AOC) and the subsequent monitoring of all AOC holders to ensure their compliance with the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO). Other functions of the Division include personnel licensing, safety data analysis, supervision of airworthiness and maintenance standards of aircraft registered in Hong Kong, supervision of light aircraft and helicopter operations, and the investigation of aircraft accidents and incidents.

With the establishment of the Air Traffic Management (ATM) Standards Office in March 2003, the Division also regulates the provision of air traffic services and oversees the safety of air traffic control (ATC) operations.

## 航空營運督察組

### 簽發和續發航空營運許可證

截至本報告年度結束為止，本港共有九家公司持有香港航空營運許可證。年內，本部調撥所需人力和資源，處理 Jet Aviation Business Jets(Hong Kong)Limited的航空營運許可證申請，以採用龐巴迪全球快車 BD700 型長程公務噴射機經營運輸業務。為了審批有關申請和日後監管其運作，本處一名適航主任和一名航空營運督察前往位於加拿大蒙特利爾的龐巴迪總部接受訓練。本處於二零零二年五月十三日簽發航空營運許可證予該公司。九家持有航空營運許可證的公司為：

- 國泰航空有限公司
- 港龍航空有限公司
- 香港華民航空有限公司
- 直升機服務(香港)有限公司
- 香港商用飛機有限公司
- 港聯直升機有限公司
- 中富航空有限公司
- Jet Aviation Business Jets (Hong Kong) Limited
- Visions Balloons Limited

本處於二零零三年一月八日收到Visions Balloons Limited提出簽發新的航空營運許可證的申請。為處理該宗申請，本處派出一名高級營運督察和一名適航主任視察該公司繫留氣球的設施和運作，及後於二零零三年三月六日向該公司發出航空營運許可證。這是本處首次簽發航空營運許可證予氣球營運公司。

## FLIGHT OPERATIONS INSPECTORATE

### Issue and Renewal of AOC

There were nine Hong Kong AOC holders by the end of the report period. During the year, the Division put in the necessary manpower and resources to process the AOC application by Jet Aviation Business Jets (Hong Kong) Limited for the operation of a Bombardier Global Express BD700 (a long range business jet aircraft). To process the application and for future monitoring, a CAD Airworthiness Officer and a Flight Operations Inspector (FOI) received training at the Bombardier Headquarters in Montreal, Canada. The AOC was presented to the new operator on May 13, 2002. The nine AOC holders were:

- Cathay Pacific Airways Limited (CPA)
- Hong Kong Dragon Airlines Limited (Dragonair) (HDA)
- Air Hong Kong Limited (AHK)
- Heliservices (Hong Kong) Limited (HEL)
- Metrojet Limited
- Helicopters Hong Kong Limited (HHK)
- CR Airways Limited (CRA)
- Jet Aviation Business Jets (Hong Kong) Limited (Jet Aviation)
- Visions Balloons Limited

The application for a new AOC from Visions Balloons Limited was received on January 8, 2003. To process the application, a CAD Senior Operations Inspector (SOI) and an Airworthiness Officer had inspected its facilities and operation of the tethered balloon before the AOC was issued on March 6, 2003. It was the first AOC issued to a balloon operator by the Department.



年內，本部推行一項聯合巡查計劃，監察本地持有航空營運許可證的公司的運作。航空營運督察組視察了22個外站和進行了97次飛行檢查，而有關航空營運許可證的其他巡查則合共有160次。本部亦按照年檢程序，對本港航空公司採用的22台飛行模擬器進行評審、視察及重新批給使用許可。年內，本部進行了15次停機坪突擊巡查，確保使用香港國際機場的外國航空公司均符合國際水平。

#### 接收新飛機和直升機

國泰航空公司接收的兩架新空中巴士A340-600型飛機，已於二零零二年年底開始投入服務。該公司是全球兩家最先採用該型號飛機提供運輸服務的公司之一。與此同時，港龍航空公司接收的第三架波音B747-300型貨機和兩架空中巴士A330型飛機亦投入服務。由於香港自二零零三年三月爆發非典型肺炎疫症，以致客運航班數目減少，港龍航空公司遂把兩架空中巴士A321型飛機的接收日期延至二零零三年年底。香港商用飛機公司則於二零零三年二月以灣流G200型公務機取代旗下的灣流GIV型公務

During the year, the activities of the local AOC holders were monitored through a combined programme of inspections. The flight operations inspectorate completed 22 station inspections, 97 flight inspections and a total of 160 other AOC inspections. The 22 flight simulators used by the local airlines were evaluated, inspected and re-approved for use in accordance with the annual inspection procedures. To ensure compliance with international standards by foreign airlines using the Hong Kong International Airport (HKIA), the Division conducted 15 ad-hoc ramp inspections during the report period.

#### Delivery of New Aircraft

CPA received two new Airbus A340-600 aircraft and they have commenced services since end of 2002. CPA was one of the first two airlines in the world to operate this new aircraft type. HDA, meanwhile, received its third Boeing B747-300 freighter and two Airbus A330 aircraft. These aircraft have commenced services. HDA has postponed the delivery schedule of two Airbus A321 aircraft to the end of 2003 due to the significant reduction in the number of passenger flights as a result of Severe Acute Respiratory Syndrome (SARS) outbreak in Hong Kong since March 2003. Metrojet replaced its Gulfstream GIV with a Gulfstream G200 business jet in February 2003. The helicopter operator CR Airways has applied to bring a fixed-wing CRJ-200 aircraft under its



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香港航空發動機維修服務公司於將軍澳工場為飛機發動機所提供的維修服務，乃受民航處嚴密監察。  
*Maintenance services provided to aircraft engines at HAESL's Tseung Kwan O facility are subject to CAD's stringent monitoring.*

助理處長梁汝強於法國檢驗政府飛行服務隊購置的EC155型直升機，以便為該直升機簽發通航證。  
*Assistant Director-General Mr Y K Leung conducts aircraft inspection in France for the issue of Certificate of Airworthiness to GFS's EC155 helicopter.*

國泰航空公司一羣機組人員剛完成接收空中巴士A340-600型飛機之旅回港，處長林光宇在場歡迎。  
*Director-General Mr Albert Lam welcomes the CPA crew members upon their return from the Airbus A340-600 aircraft delivery trip.*

機。此外，經營直升機服務的中富航空公司已申請添置一架CRJ-200型定翼機，以經營商業客運服務。年內，本部派出航空營運督察、高級營運督察、高級航空安全事務主任和適航主任評估上述航空公司的飛行運作和飛機維修的安排。

本部亦繼續監察政府飛行服務隊的直升機和定翼機運作。年內，政府飛行服務隊添置的三架超級美洲豹AS332 L2型直升機和五架歐洲直升機公司EC155 B1型直升機均已投入服務。本港兩家商用直升機公司——港聯直升機公司和直升機服務(香港)公司積極開拓本地和內地的營運商機。年內，前者接收了兩架新的歐洲直升機公司AS350B3小松鼠型直升機，在香港提供包機和空中吊重服務。

operation. FOI, SOI, Senior Safety Officers and Airworthiness Officers were deployed to assess the flight operation and aircraft maintenance arrangements during the year.

The Division also continued to monitor the helicopter and fixed-wing aircraft operations of the Government Flying Service (GFS). The introduction to service of three Eurocopter Super Puma AS332 L2 and five Eurocopter EC155 B1 helicopters of the GFS was successfully completed during the year. HHK and HEL, two of the commercial helicopter operators in Hong Kong, were also actively exploring new operating opportunities within Hong Kong and to the Mainland. The former took delivery of two new Eurocopter AS350B3 Squirrel helicopters for charter and aerial crane work in Hong Kong during the year.

### 實施「縮小垂直間隔」規定

隨着香港空域於二零零二年十一月一日成功實施「縮小垂直間隔」規定，國泰航空公司、港龍航空公司和香港華民航空公司均已符合本處在飛機儀器和運作方面的有關要求，並獲准在實施「縮小垂直間隔」程序的空域內，實行該套新規定。此外，兩間公務飛機公司—Jet Aviation和香港商用飛機公司分別擁有的龐巴迪飛機和灣流飛機，亦獲准以「縮小垂直間隔」的規定運作。

### 工作組

飛行工作時間限制工作組和酒精及藥物工作組均由本處領導。酒精及藥物工作組正研究引入酒精及藥物測試程序。

鑑於各界日漸關注宇宙輻射對機組人員的影響，本處於二零零二年八月發出飛行運作通告，對飛行高度在26 000呎以上的飛機強制實施宇宙輻射監測計劃。自二零零二年九月一日起，所有在香港登記作公共運輸的飛機，其營運的航空公司必須記錄和備存機組人員於飛行高度可能超過26 000呎飛機上，所受宇宙輻射總劑量及有關機組人員的姓名。有關監測計劃將於來年的宇宙輻射及航空會議進行檢討。

### 頒發飛行訓練機構許可證

本處出版的《CAD 509》文件，概述對飛行訓練機構頒發許可證的要求；這些訓練機構提供綜合訓練課程，以培訓具備儀表飛行等級的香港商用（飛機）飛行員。二零零零年年中，位於澳洲阿得雷德的英國宇航航空訓練學校（英國宇航）獲本處根據《CAD 509》文件頒發首個許可證，有效期為兩年。在許可證的有效期內，英國宇航可為國泰航空公司和港龍航空公司的飛行學員舉辦飛行訓練課程。

### Implementation of RVSM

With the successful implementation of Reduced Vertical Separation Minimum (RVSM) in Hong Kong on November 1, 2002, CPA, HDA and AHK have satisfied CAD's aircraft equipment and operations requirements and obtained the approval to operate RVSM in airspace where the RVSM procedures are in force. The two business jet operators, namely Jet Aviation and Metrojet have also obtained RVSM approval for their Bombardier and Gulfstream aircraft respectively.

### Working Groups

The Flight Time Limitation Working Group and the Alcohol and Drugs Working Group (ADWG) are under the chairmanship of CAD. The ADWG has been studying the introduction of procedures for conducting alcohol and drugs screening.

With the increased concern on the impact of cosmic radiation on aircrew, CAD issued a Flight Operations Notice in August 2002 mandating the Cosmic Radiation Monitoring Programme for flights above 26 000 feet. With effect from September 1, 2002, operators of public transport aircraft registered in Hong Kong shall, in respect of any flight by that aircraft during which it may fly at an altitude in excess of 26 000 feet, keep a record of the total dose of cosmic radiation to which the crew are exposed together with the names of that crew. The monitoring programme will be reviewed by the Cosmic Radiation and Aviation Meeting in the coming year.

### Approval of Flying Training Organisation

CAD 509 published by the Department outlines the requirements for the CAD Approval of a Flying Training Organisation offering an Integrated Course of Training for Hong Kong Commercial Pilot's Licence with Instrument Rating (Aeroplane). In mid-2000, the first CAD 509 Approval was granted to the BAE Systems Flight Training (Australia) Pty. Limited (BAE), a flying training organisation in Adelaide, Australia to conduct flying training for the cadet pilots of CPA and HDA for a period of two years.



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航空營運和適航督察到訪位於澳洲的英國宇航航空訓練學校，根據《CAD 509》對該校進行審核。

*Flight Operations and Airworthiness Inspectors visit the BAE Systems Flight Training (Australia) Pty. Ltd. for a CAD 509 audit.*

適航事務組密切監察維修人員的訓練情況。

*The Airworthiness Office keeps a close eye on the training of maintenance personnel.*

在二零零二／零三年度內，英國宇航舉辦了五次飛行員考試，並由航空人員執照事務主任監考。本部督察曾於二零零二年七月前往英國宇航，根據《CAD 509》文件所訂的標準評審考試和監考程序，並對該校進行審核。為向英國宇航續發許可證而進行的審查結果令人滿意，本處遂於二零零二年八月底向該校續發許可證，為期兩年。飛行標準組一名督察於二零零三年三月前往英國宇航進行中期視察。本處來年須評審英國宇航核准考核人員的水平，並續發英國宇航訓練人員的核准考核人員證書。

During 2002/03, five flight crew examinations at BAE under Personnel Licensing Officers' invigilation were conducted. Inspectors from the Division visited BAE in July 2002 to evaluate the examinations and invigilation procedures and audit the training school according to standards stipulated in CAD 509. The result of the renewal audit was satisfactory and renewal approval was issued to BAE at the end of August 2002 for two years. An interim inspection was conducted by an inspector from Flight Standards Office in March 2003. In the coming year, CAD will be required to evaluate the Authorised Examiners of BAE and renew the Authorised Examiner Certificates for BAE's training staff.

### 適航事務組

適航事務組繼續監察所有在香港登記的飛機的維修和適航水平，以及審查香港航空公司在本港、內地和海外的飛行站和認可的維修機構。該組為在香港登記的飛機簽發或續發適航證前，會在新加坡、土魯斯、廈門和香港等地檢查有關飛機。

### AIRWORTHINESS OFFICE

The Airworthiness Office continued to monitor the maintenance and airworthiness standards of all Hong Kong registered aircraft. Routine AOC line station audits and approved maintenance organisation audits were carried out in Hong Kong, the Mainland and overseas. Aircraft were surveyed at various locations including Singapore, Toulouse, Xiamen and Hong Kong in support of the issue and renewal of Certificates of Airworthiness for Hong Kong registered aircraft.



處長林光宇於簽署「互相認可航空器維修單位批准」合作安排的儀式上致辭，其旁為中國民航總局局長楊元元和中國民航總局飛行標準司長饒紹武。

Director-General Mr Albert Lam delivers a speech at the signing ceremony of the Cooperation Arrangement on mutual acceptance of approval of aircraft maintenance organisations. Next to him are Captain Yang Yuan-yuan, CAAC Minister, and Mr Rao Shao-wu, Director General of Flight Standards Department, CAAC.

本地適航主任的人數已增加至15名。為了配合本港航空業的急速發展，本處在年內增聘了多名本地適航主任。新入職者會接受正規課堂培訓，然後才獲派執行檢查職務。至於現職人員，則繼續接受有關飛機意外調查、飛機型號、私人飛行員執照，以及人為因素等方面的訓練。

### 飛機維修

適航事務組透過機庫檢查、公司運作審查及產品審查，定期監察所有香港認可的飛機維修及飛機部件維修公司，並不斷審查和定期視察香港飛機工程有限公司及香港航空發動機維修服務有限公司等主要維修公司。此外，兩家海外維修公司因運作理由而遭撤銷許可證。

二零零二年五月二十一日，本處與中國民用航空總局和澳門民航局簽訂「互相認可航空器維修單位批准」合作安排，訂明獲所屬民航當局指明的航空器部件維修公司須接受有關民航當局代表的評估和審查，以達致一致的維修標準。維修公司一經認可，所有簽署

The number of local Airworthiness Officers increased to 15. Recruitment of local officers was conducted in the year to cater for the rapid expansion of Hong Kong's aviation industry. New recruits have received established indoctrination training before they are discharged for inspection duties. Existing officers continued to receive training on aircraft accident investigation, aircraft type, private pilot licence and human factors, etc.

### Aircraft Maintenance

The Airworthiness Office monitors all Hong Kong approved aircraft and aircraft component maintenance companies regularly through hangar surveys, company audits and product audits. Major maintenance companies, including Hong Kong Aircraft Engineering Company Limited (HAECO) and Hong Kong Aero Engine Services Limited (HAESL), are monitored by rolling audits and regular visits. Two overseas companies had their approvals revoked due to operational reasons.

On May 21, 2002, the Department signed a Cooperation Arrangement on mutual acceptance of approval of aircraft maintenance organisations with the General Administration of Civil Aviation of China (CAAC) and Civil Aviation Authority of Macao (CAAM). Nominated aircraft component maintenance companies by the respective authorities will be subject to

合作安排的民航當局須根據互相認可合作安排，承認該等公司的放行證。來年，適航事務組會繼續進行互相認可合作安排的最後審查工作和認可細則。

在本報告年度期內，適航事務組繼續舉辦與飛機維修有關的工作坊。在六月舉行為期五天的認可維修時間表工作坊，由英國民航局代表擔任客席講者，內容涵蓋部件的可靠程度及制訂飛機維修計劃的指引。鄰近地區的航空當局，包括內地、新加坡及澳門均有派代表出席。其他參加者包括來自航空公司和飛機維修機構的維修工程師、技術服務專家、維修管制人員、經理、品質監控人員和適航督察。

assessments and audits by representatives from the authorities to ensure a common maintenance standard can be achieved among all companies. Once these companies are approved, all participating authorities will accept release certificates from the companies based on mutual recognition. The Airworthiness Office will continue with the finalisation of all auditing and approval details of the Cooperation Arrangement in the coming year.

The Airworthiness Office continued to conduct maintenance related workshop in the year. The five-day Approved Maintenance Schedule Workshop, which was conducted in June with a guest speaker from the United Kingdom Civil Aviation Authority (UKCAA), covered topics on component reliability and guidelines in formulating an aircraft maintenance programme. Representatives from the neighbouring aviation authorities including the Mainland, Singapore and Macao attended the workshop. Other participants included maintenance engineers, technical services experts, maintenance controllers, managers, quality monitoring personnel and airworthiness inspectors from airlines and aircraft maintenance organisations.

#### 適航事務組統計數字：

#### Airworthiness Office Statistics:

		數目 Number
簽發適航證	Certificate of Airworthiness Issued	16
續發適航證	Certificate of Airworthiness Renewed	127
審定重大改裝	Major Modification Approved (AANs)	40
簽發飛機維修公司許可證	Aircraft Maintenance Company Approval Issued	0
續發飛機維修公司許可證	Aircraft Maintenance Company Approval Renewed	18



### 英國民航局諮詢服務

英國民航局根據與本處新簽署的合約，於二零零二年七月派出安全規管組副總檢查主任來港，向本處所有適航主任講解審定新飛機的最新要求、設計及製造、未來發展，以及英國民航局、歐洲聯合民用航空局和美國聯邦航空管理局的要求等。他亦對適航事務組的運作程序和標準進行品質審查，並就進一步改善工作流程和執行規定提出一些建議。除此以外，其他各方面的審查結果均令人滿意。

### 飛機維修訓練

國泰航空公司的技術訓練學校去年獲頒發《香港航空要求-147(核准維修訓練/考試)》許可證，成為獲本處認可的第三間維修訓練機構。國泰航空公司獲准提供空中巴士A330型、A340型以及波音B747型和B777型飛機維修訓練課程和考試。同時，位於澳洲布里斯本的Aviation Australia和香港專業教育學院(青衣分校)已申請簽發《香港航空要求-147》許可證，以舉辦基本訓練課程和考試，適航事務組正審核有關申請。

### 航空人員執照事務組

#### 飛行員執照

年內，航空人員執照事務組處理了1 340份有關首次簽發牌照、牌照續期、批核和延期的申請，並簽發了3 377份體檢合格證明書，以及評核了2 891份飛行員和飛機維修工程師執照考試試卷。這些考試中，有668次是在澳洲阿得雷德的英國宇航舉行。所有考試均由本處人員監考。香港大部分專業飛行員執照，均是以轉換國際民航組織其他成員國所發執照的方式簽發。年內，航空人員執照事務組共處理185份由這類海外牌照持有人提出的轉換申請。

### UKCAA Advisory Services

Under a new contract between UKCAA and the Department, the Deputy Chief Surveyor of UKCAA Safety Regulation Group provided an airworthiness briefing to all Airworthiness Officers in July 2002. The briefing covered the latest requirements on new aircraft certification, design and manufacturing, future development and requirements in UK, Joint Aviation Authorities (JAA) and Federal Aviation Administration of the United States (FAA). He also conducted quality audits on the procedures and standards of the Office. Apart from several recommendations for further enhancement in workflow and implementation of requirements, the audit results were satisfactory.

### AIRCRAFT MAINTENANCE TRAINING

The Technical Training School of CPA was granted the HKAR-147 (Approved Maintenance Training / Examinations) Approval last year to become the third maintenance training organisation approved by CAD. CPA is approved to provide aircraft type training and examination for Airbus A330 and A340 as well as Boeing B747 and B777 aircraft. Meanwhile, Aviation Australia in Brisbane, Australia and Hong Kong Institute of Vocational Education (Tsing Yi) have submitted their applications for the HKAR-147 Approval to conduct basic training course and examination. Their applications are being considered by the Airworthiness Office.

### PERSONNEL LICENSING OFFICE

#### Flight Crew Licensing

During the year, the Personnel Licensing Office handled 1 340 applications for initial issue, renewal, endorsement and extension of licences, issued 3 377 medical certificates and set 2 891 examination papers for applicants of flight crew licences and aircraft maintenance engineer licences. Amongst those examinations, 668 were conducted at BAE in Adelaide, Australia. All the examinations were invigilated by the Department's officers. Most of Hong Kong's professional flight crew licences were issued by conversion from licences issued in other ICAO States. In the year, 185 applications from such licence holders were processed.



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處長林光宇頒授《香港航空要求-147》許可證予國泰航空公司航務部董事白樂勤機長。

Director-General Mr Albert Lam presents the HKAR-147 Certificate to Captain Ken Barley, CPA's Director Flight Operations.

航空人員執照事務主任正在監考。  
A Personnel Licensing Officer invigilates an examination.

### 飛機維修工程師執照

隨着新訂有關簽發維修人員執照的《香港航空要求-66》在二零零二年四月一日生效，簽發飛機維修工程師執照的安排進入了新時期。《香港航空要求-66》新規定實行後，根據《香港航空要求(執照簽發-飛機維修工程師)》規定簽發執照的制度便告終止。新的執照簽發規定與最佳國際標準十分接近。根據新的《香港航空要求-66》執照簽發制度，申請人必須通過若干科目單元的考試，才可獲發所申請組別的執照。申請人通過單元考試的成績可保留五年。年內，有82人申請參加《香港航空要求-66》執照考試。本處共舉辦了15次考試，涉及555份科目試卷。至於轉換執照方面，有445名舊證持有人獲轉發新的《香港航空要求-66》執照。有關執照的轉換工作會在二零零四年三月三十一日前完成。

### 協調本地空域使用者

香港分區飛行安全委員會繼續定期召開會議，協調使用香港空域的本地機構的運作情況。這些使用本地空域的機構包括旋翼機機構(政府飛行服務隊、中國人民解放軍駐香港部隊(駐港部隊)、直升機服務(香港)公司、港聯直升機公司和中富航空公司)、定翼機機構(政府飛行服務隊和香港飛行總會)、滑翔

### Aircraft Maintenance Engineers Licensing

Aircraft maintenance engineers licensing (AMEL) entered into a new era when the new HKAR-66 requirement for the licensing of maintenance personnel became effective on April 1, 2002. The implementation of HKAR-66 put an end to the HKAR-AMEL system. This new licensing requirement aligns closely with the best international standard. Under the new HKAR-66 licensing system, applicant has to pass certain subject modules before a specific category licence is granted. He/she can retain a passed module for five years. A total of 82 applicants applied for the HKAR-66 licence examinations in the year. Fifteen examinations were conducted involving 555 subject examination papers. Regarding the transfer of HKAR-AMEL licences, 445 have been successfully converted into the new HKAR-66 licences. The conversion will be completed before March 31, 2004.

### COORDINATION WITH LOCAL AIRSPACE USERS

The Hong Kong Sectors Flight Safety Committee continued to hold regular meetings to coordinate operations of local airspace users within Hong Kong airspace. These local airspace users include rotary wing operators (GFS, the Hong Kong Garrison of the People's Liberation Army (PLA), HEL, HHK and CRA), fixed-wing operators (GFS and the Hong Kong Aviation Club (HKAC)), paraglider operator (the Hong Kong Paragliding Association) and

傘機構(香港滑翔傘會)以及個別航空器擁有人。該委員會定期開會，討論因航空交通量增加而須加強本地空域安全和協調的事宜。

由於石崗機場是本港唯一可供輕型飛機運作的機場，因此駐港部隊暫時批准香港飛行總會於周末繼續在該機場進行康樂性質的定翼機飛行活動和訓練。該會亦計劃在石崗提供直升機飛行活動和訓練。駐港部隊亦允許政府飛行服務隊在該機場進行直升機駕駛員訓練。為確保飛行安全，所有使用石崗機場的機構與駐港部隊保持緊密聯繫和協調在該機場進行的活動。香港分區飛行安全委員會在有需要時會參與協調工作。

### 航空器登記

年內共有16個航空器列入香港民用航空器登記冊內，計有兩架空中巴士A330型、兩架空中巴士A340-600型、一架波音B747型、一架灣流G200型飛機、九架直升機和一個熱氣球。同期取消登記的有一架灣流GIV型和一架波音B747型飛機。截至二零零三年三月三十一日，香港的民用航空器共有151個。

截至二零零三年三月三十一日，香港民用航空器登記冊上的航空器分類如下：

private aircraft owners. The Committee had regular meetings to discuss issues that would enhance safety and coordination in the local airspace due to the increase in traffic density.

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

### AIRCRAFT REGISTER

During this year, a total of 16 aircraft were put on the Hong Kong Civil Aircraft Register. They were two Airbus A330, two Airbus A340-600, one Boeing B747, one Gulfstream G200 aircraft, nine helicopters and one hot air balloon. In the meantime, one Gulfstream GIV and one Boeing B747 aircraft were removed from the Register. As at March 31, 2003, the total number of civil aircraft in Hong Kong was 151.

The composition of aircraft on the Hong Kong Civil Aircraft Register as at March 31, 2003 was as follows:

航空器類型 Aircraft Type		數目 Number
空中巴士 A320 型	Airbus A320	8
空中巴士 A321 型	Airbus A321	4
空中巴士 A330 型	Airbus A330	29
空中巴士 A340 型	Airbus A340	17
波音 B747 型	Boeing B747	34
波音 B777 型	Boeing B777	12
龐巴迪 BD700 型	Bombardier BD700	1
HS125 型	HS125	1
BAe4100 型	BAe4100	2
灣流 G200 型	Gulfstream G200	1
直升機	Helicopters	31
其他定翼機	Other fixed-wing aircraft	10
熱氣球	Hot air balloon	1
合計	Total	151



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From left to right

航空交通管理標準主任審核航空交通管制主任發牌考試。  
An Air Traffic Management Standards Officer monitors an examination for the issue of licence to Air Traffic Control Officers.

處長林光宇出席香港商用飛機有限公司灣流G200型公務機抵港儀式。該飛機於年內列入香港民用航空器登記冊內。  
Director-General Mr Albert Lam attends the arrival reception of Metrojet's Gulfstream G200 business jet. The aircraft was added to the Hong Kong Civil Aircraft Register in the year.

### 航空交通管理標準組成立

為了不斷提升航空交通服務的安全、質素和效率，本處在二零零三年三月三日成立航空交通管理標準組，規管航空交通服務。本處透過重整管理架構，抽調部分航空交通管制主任在飛行標準及適航部內成立航空交通管理標準組。該組的主要職責是制訂航空交通管理安全政策、訂立和貫徹運作安全標準，以及按照國際民航組織訂定的標準和建議措施製備相關指引。

為達致上述規管職能，航空交通管理標準組透過執照簽發制度，規管航空交通管制主任的認可資格，監察航空交通管理部的能力保證計劃，以及審查香港國際機場航空交通管制的運作，以確保符合各項安全規定和原則。

自航空交通管理標準組成立後，飛行標準及適航部除了履行飛行標準和適航的監管工作外，還肩負監察航空交通管制安全的職能。

### ESTABLISHMENT OF THE AIR TRAFFIC MANAGEMENT STANDARDS OFFICE

As part of CAD's continuous effort to strive for improvement to safety, quality and efficiency of our air traffic services, the ATM Standards Office was established on March 3, 2003 to regulate the provision of air traffic services. Through re-organisation of the management structure of CAD, a team of ATC officers was deployed to set up the ATM Standards Office under the Flight Standards and Airworthiness Division. Its main role is to formulate air traffic management safety policies, set out and maintain operational safety standards and develop guidance material in accordance with the ICAO Standards and Recommended Practices.

To accomplish the above regulatory functions, the ATM Standards Office is responsible for regulatory approval of ATC officers through the personnel licensing system, overseeing the competency assurance scheme of the Air Traffic Management Division, and auditing ATC operations at HKIA so as to ensure compliance with safety requirements and principles.

Since the establishment of the ATM Standards Office, the FSAD has taken up the safety oversight of ATC operations in addition to its regulatory responsibilities pertaining to flight standards and airworthiness.



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適航主任檢視維修運作情況，以確保飛行安全。  
*An Airworthiness Officer examines maintenance operations to ensure flight safety.*

航空營運督察在航機上完成審核後抵達外站。  
*Flight Operations Inspectors arrive at an outport after conducting an in-flight check.*

### 意外調查

若香港境內發生飛機意外，或在香港登記的飛機發生意外，本處會從飛行標準及適航部、機場安全標準部和航空交通管理部抽調曾受訓練的人員組成小組，進行詳細調查。民航處處長將以總意外調查主任的身份率領調查小組。

年內，本處完成了有關中華航空公司一架波音麥道-11型飛機(呼號CAL642)在一九九九年八月二十二日降落香港國際機場25L跑道時失事的最後調查報告。有關報告未有發表，須視乎中華航空公司根據《香港民航(意外調查)規例》要求覆核而成立的覆核委員會聆訊的結果。

### 安全數據分析

本部與各航空公司和維修機構保持緊密聯繫，跟進涉及在香港登記的飛機的事件。年內，本部調查和分析了781宗個案。

### ACCIDENT INVESTIGATION

When an accident occurs in Hong Kong or to a Hong Kong registered aircraft, a detailed investigation will be conducted by a team of trained personnel deployed from the Flight Standards and Airworthiness Division, Airport Standards Division and the Air Traffic Management Division. The Director-General of Civil Aviation will head the investigation team as the Chief Inspector of Accidents.

In the year, the investigation report on the accident occurred to a China Airlines Boeing MD-11 aircraft (callsign CAL642), which crash-landed on Runway 25L at HKIA on August 22, 1999, was finalised. Publication of the report is pending subject to the results of the Board of Review raised by China Airlines under the Hong Kong Civil Aviation (Investigation of Accidents) Regulations.

### SAFETY DATA ANALYSIS

The Division maintained close liaison with airline operators and maintenance organisations regarding occurrences involving Hong Kong registered aircraft. During the year, 781 occurrences were investigated and analysed.

## 航空保安及飛行安全

自美國於二零零一年發生九一一事件後，全球極為關注航空保安的問題。本部與美國聯邦航空管理局等海外航空當局保持聯繫，互換有關保安的資料，並協助航空公司加強保安措施。年內，本部人員代表民航處出席多個有關駕駛艙保安和飛行安全的國際會議。

本處根據國際民航組織有關駕駛艙保安的標準，在二零零二年八月發出飛行運作通告，規定所有在香港登記具備運輸(乘客)類別適航證，以及經核證最高起飛重量逾45 500公斤的飛機，或乘客座位數目超過60個的飛機，均須由二零零三年十一月一日起，根據該通告安裝獲認可的飛行員艙門。至於營運在港登記飛機的航空公司則須設立和提供獲認可的保安培訓課程，以確保機組人員能採取最合適的方法，減低非法干擾行為所造成的影響。

## 不丹人員暫駐本處

不丹民航局派出一名高級適航主任和一名飛行安全主任分別於二零零二年五月和二零零三年一月，暫駐本處適航事務組和飛行標準組。期間，該兩名暫駐人員與本處人員緊密合作，並認識上述兩組的不同工作。

## AVIATION SECURITY AND FLIGHT SAFETY

Since the September 11 incidents occurred in the United States in 2001, major aviation security concerns had been raised. The Division liaised with foreign aviation authorities, such as FAA to exchange security related information, and assisted airlines in carrying out additional security measures. During the year, members of the Division represented CAD in various international conferences related to cockpit security and flight safety.

In accordance with the ICAO Standards for cockpit security, CAD issued a Flight Operations Notice in August 2002. It required all Hong Kong registered aeroplanes with a Certificate of Airworthiness in the Transport (Passenger) Category and with a maximum certified take-off mass in excess of 45 500 kilogram, or with a passenger seating capacity greater than 60 to equip with an approved flight crew compartment door according to the requirements as stipulated in the Notice from November 1, 2003. Operators of Hong Kong registered aeroplanes shall establish and maintain an approved security training programme which ensures that crew members act in the most appropriate manner to minimise the consequences of unlawful interference acts.

## ATTACHMENT OF BHUTAN OFFICERS

A Senior Airworthiness Officer and a Flight Safety Officer from the Civil Aviation Authority, Bhutan were attached to CAD's Airworthiness Office in May 2002 and Flight Standards Office in January 2003 respectively. During the attachment periods, they worked closely with CAD officers and were introduced to different aspects of the Offices.