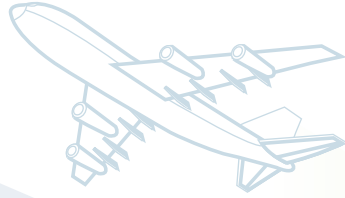


## 飛行標準及適航

## Flight Standards and Airworthiness



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

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





## 飛行標準及適航 Flight Standards and Airworthiness

### 飛行標準組

### FLIGHT STANDARDS OFFICE

#### 簽發和續發航空營運許可證

#### Issue and Renewal of AOC

截至二零一零年三月三十一日，有九家航空公司持有香港航空營運許可證，計為：

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

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

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

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

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



## 航空器移交

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

## Delivery of Aircraft

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

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

## 適航事務組

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

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

## AIRWORTHINESS OFFICE

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

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

## 飛行標準及適航 Flight Standards and Airworthiness

### 飛機維修

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

### 飛機維修訓練

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

### Aircraft Maintenance

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

### Aircraft Maintenance Training

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

### 適航事務組統計數字 Airworthiness Office Statistics

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

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



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





飛行標準組人員到訪航空營運許可證持證公司視察機組人員訓練情況。

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

## 航空人員執照事務組

### 空勤人員執照

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

## PERSONNEL LICENSING OFFICE

### Flight Crew Licensing

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

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



## 飛行標準及適航 Flight Standards and Airworthiness

### 飛機維修執照

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

### 飛行安全組

#### 安全管理系統

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

#### 安全數據分析

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

### Aircraft Maintenance Licensing

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

### FLIGHT SAFETY OFFICE

#### Safety Management System

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

#### Safety Data Analysis

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



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



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



## 協調本地空域使用者

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

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

## COORDINATION WITH LOCAL AIRSPACE USERS

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

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



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



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



## 飛行標準及適航 Flight Standards and Airworthiness

### 飛機登記

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

### AIRCRAFT REGISTER

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

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

截至二零一零年三月三十一日，香港民用航空器登記冊內共有220架民用航空器。

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





民航航處人員檢查本港航空公司所採用的飛行模擬機。

CAD officers inspecting flight simulators used by local airlines.



## 意外調查

### 香港旋達有限公司Robinson R22型直升機

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

## ACCIDENT INVESTIGATION

### Hong Kong Rotor Company Limited Robinson R22 Helicopter

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