

# 機場安全標準 AIRPORT STANDARDS

機場安全標準部的職責範圍包括簽發機場牌照、監察機場安全、監管航空保安、管制障礙物、監管危險品的空運以及監察航空交通安全。本部亦肩負協調簡化機場手續的任務。

年內，本部繼續監察香港機場管理局(機管局)在管理香港國際機場所採納的機場安全及航空保安水平。為確保機場安全運作，本部經常派員巡察機場設施、飛行區內的維修工程及新工程項目，例如停機位加建工程。此外，本部透過檢查、審核及測試，對實施機場保安計劃之機構和按照受規管託運商制度登記的航空貨運公司進行監管。本部亦對航空交通管制運作及機場保安措施作出重大檢討。在空運危險品方面，本部在年內切實執行有關規例，並且採取一連串措施加強各方對妥善處理空運危險品的認識。

## I. 機場安全

### 簽發機場牌照

本部繼續監察機管局的表現，確保該局符合機場牌照的要求。本部經常巡察機場內鋪設的地面、目視助航設備及飛行運作區內必備的飛機運作設施的狀況。本部亦派員觀察由機管局負責的飛行區內臨時及定期維修工程，以及飛機運作新設施的工程項目。為改善機場內鋪設地面的質素，機管局於二零零零年十一月至二零零一年二月期間進行了機場南、北跑道和相關滑行道地面瀝青重鋪工程。機管局亦於二零零零年十二月開始在貨機停機坪上建造新停機位，預料於二零零一年七月開始分階段投入服務。機場地面燈光系統的質素在年內繼續不斷提高，該系統的南面控制和監察裝置的改善工程在二零零一年二月完成。

# 致力提供 **安全** 而 **有效率** 的航空運輸系統

COMMITTED TO PROVIDE A **SAFE** AND  
**EFFICIENT** AIR TRANSPORT SYSTEM

The Airport Standards Division is responsible for aerodrome licensing, monitoring of airport safety, aviation security, control of obstructions, the safe carriage of dangerous goods by air as well as overseeing air traffic safety. The Division has also taken up a coordinating role in airport facilitation.

During the year, the Division continued its close monitoring of the safety and security standards adopted by the Airport Authority Hong Kong (AAHK) in respect of the Hong Kong International Airport (HKIA). To ensure safe airport operation, frequent inspection of airport facilities, airside maintenance works and new developments like the construction of additional aircraft parking stands, had been carried out. Compliance with the airport security programmes and Regulated Agent Regime (RAR) requirements for air cargo operations by parties concerned was regulated through inspections, audits and tests. Two major reviews were also conducted, one on air traffic control operations and one on aviation security measures at HKIA. On the aspect of safe carriage of dangerous goods by air, enforcement of the relevant

regulations was effected and a series of measures to raise the awareness of proper handling of dangerous goods were implemented.

## I. AIRPORT SAFETY

### Aerodrome Licensing

The performance of AAHK in complying with aerodrome licensing requirements was continuously monitored by the Division. Frequent inspections of the conditions of airfield pavements, visual aids and other airside facilities essential for aircraft operations were carried out. The Division also witnessed ad-hoc and scheduled airside maintenance works as well as



除上述巡視及觀察外，本部亦定期及突擊審核機場操作程序、飛行區保養維修程序、飛行運作區工作人員的培訓和安全管理系統的實施及推行。機管局已設立一套專為飛行區操作工序而設的安全管理系統，該系統由安全審核、初步風險評估和風險登記系統組合而成。機管局亦將繼續改進和更新安全管理系統，使該系統適用於整個機場。本部亦審核機場運作手冊、緊急應變程序手冊和其他與飛機操作有關的手冊和文件，如商用航空中心操作手冊和機場操作手冊等，以確保其內容適當及不斷更新，並且符合機場牌照的要求。

本部透過與機管局和機場消防局定期會面和商討，繼續就機場的飛機緊急應變設施及各項緊急應變演習和操練提供意見。

本部又透過嚴密監察機管局的表現，確保該局在年內完全符合簽發機場牌照的要求。



民航處職員登上駐機場的消防船檢查其設施。  
CAD officer goes on board to check the facilities of the fire rescue vessel at HKIA.

### 監察直升機場安全運作

年內，本部繼續派員視察信德直升機場的運作，以確保其運作能遵照直升機場手冊的程序進行。



查察機場租戶禁區營運者施行的保安計劃。  
Inspection of airport tenant restricted area operator's security measures.

## II. 航空保安

### 機場保安計劃

本部透過定期檢查、審核及測試，監察及確保機管局、機場保安有限公司、航空公司和機場之商務夥伴符合機場保安計劃和機場租戶禁區保安計劃。對於機管局及機場禁區租戶因應客運及貨運增長而提出的發展計劃，本部在保安方面給予意見。本部亦負責調查違反航空保安規定的事宜和監管改善措施的推行，以防止同類事件再次發生。

the construction of airside facilities carried out by AAHK. From November 2000 to February 2001, asphalt pavements resurfacing works were carried out on the north and south runways and associated taxiways to improve the quality of airfield pavements. The construction of additional aircraft parking stands in the cargo apron started in December 2000 and was scheduled to complete for operations in phases from July 2001. The Airfield Ground Lighting (AGL) System continued to be upgraded during the year with the enhancement of the AGL South Control and Monitoring System completed in February 2001.

Apart from the above-mentioned inspections, regular and ad-hoc audits were also conducted on AAHK's airfield operational procedures, airside maintenance procedures, training provided to airfield operational staff and the implementation of a safety management system. AAHK's safety management system comprising safety audit, preliminary hazard assessment and hazard registration system in respect of airside operations was established. The improvement and enhancement of the airport-wide safety management system would continue to be undertaken by AAHK. The Aerodrome Manual and Emergency Procedures Manual, and other manuals and documents related to aircraft operations such as the Business Aviation Centre Operations Manual and Airport Operations Manual were also vetted by the Division to ensure that the information contained therein was appropriate, up-to-date and in accordance with the aerodrome licensing requirements.

Through regular meetings and discussions with AAHK and the Airport Fire Contingent, the Division continued to provide advice on the adequacy of aircraft emergency response facilities and the

conduct of airport emergency exercises and drills.

The Division has ensured that all aerodrome licensing requirements were fully met by AAHK in the year through close monitoring of its performance.

### Monitoring of Heliports

Inspections on the Shun Tak Heliport were carried out to ensure that its operations were conducted in accordance with the Heliport Manual.



## II. AVIATION SECURITY

### Airport Security Programme

The Division performed its regulatory function by monitoring the compliance with the airport security programmes and airport tenant restricted area operator's security programmes by AAHK, Aviation Security Company Limited (AVESCO), airline operators and business partners at HKIA through regular inspections, audits and tests. With the growth in passenger and cargo traffic, the Division provided advice to AAHK and the tenant restricted area operators on their proposed developments. The Division also conducted investigations into breach of security incidents and monitored the implementation of remedial measures to prevent recurrence.

### 航空公司保安計劃

本部繼續檢討航空公司香港國際機場施行的保安計劃。為確保本地航空公司在外站的運作符合香港航空保安計劃的要求，本部年內在國泰航空公司和港龍航空公司的外站進行了26次檢查。

### 保安事件

二零零零年七月三十一日，一名持玩具槍的亞裔男子強行進入機場禁區，脅持一名飛機清潔工人作人質後進入一架沒有載客的航機。該名男子於三小時後向警方投降，事件得以和平解決。民航處事後與機管局、機場保安有限公司及其他有關政府部門全面檢討機場的保安措施。檢討於二零零零年十一月完成，建議推行多項加強保安的措施，大部分建議現已落實。至於其他需較長時間完成的措施，本部會繼續監察其實施進度，以確保該等措施妥善地執行。

### 受規管託運商制度

受規管託運商制度於二零零零年三月實施後，本部在年內檢查已登記的受規管託運商，確保其營運符合制度的要求。本部與航空公司及空運業界舉行定期會議，檢討制度的推行進度及改善空運貨物的處理程序，以配合託運商的有效運作。本部的航空安全事務主任同時積極參與業界舉辦的研討會，促進業界對受規管託運商制度的了解和獲取他們的合作。截至二零零一年三月底，共有788個商戶登記成為受規管託運商。



## III. 安全監察

### 管制障礙物

本部根據《香港機場(障礙管制)條例》第301章及其他航空安全上之考慮，繼續審核本港的分區用途制定和發展計劃。有關計劃包括大嶼山沿岸由東涌至竹篙灣之發展，及連接北大嶼山至青龍頭和連接昂船洲至青衣的兩座大橋。

經本部詳細審核並證明不會對機場淨空環境造成影響後，本部向規劃地政局局長建議，豁免兩座分別位於飛鵝山和大帽山的小型建築物，不受機場高度限制之規管。另外，為方便機場附近進行工程，本部亦審批了33宗短暫豁免機場高度限制的申請。

為了保障香港國際機場及重要的無線電導航儀器之運作，本部獲海事處通力協助，確保船隻不得駛進機場附近的海上限制區。年內，由海事處提出檢控的非法闖入限制區個案共有33宗。



### Airline Operators' Security Programmes

The Division continued to review the airline operators' security programmes for their operations at HKIA. To ensure compliance with the aviation security requirements by local airlines at airports outside Hong Kong, 26 out-station inspections were conducted during the year at various destinations served by Cathay Pacific Airways Limited and Hong Kong Dragon Airlines Limited.

### Security Incident

On July 31, 2000, an Asian male, holding a toy firearm, forced his way into the airport restricted area and went into an aircraft with no passengers after taking an aircraft cleaner as hostage. The incident ended peacefully after three hours when the hostage taker surrendered himself to the Police. Subsequent to the incident, the Department together with AAHK, AVESCO and other relevant government departments conducted a comprehensive review of the aviation security measures at HKIA. On completion of the review in November 2000, a number of security enhancement measures were recommended, most of which had already been put in place. The Division will continue to monitor the progress of the long-term enhancement measures to ensure proper implementation.

### Regulated Agent Regime

After the implementation of RAR in March 2000, the Division carried out inspections of the regulated agents to ensure their operations comply with the RAR requirements. The Division met with representatives of the airlines and air cargo industry

regularly to review the progress and enhance the cargo handling procedures to facilitate the efficient operation of the regulated agents. Safety officers of the Division also participated in seminars organised by the industry to promote understanding on and cooperation in the operations of the Regime. As at March 31, 2001, there were 788 registered regulated agents.

## III. SAFETY REGULATION

### Control of Obstructions

The Division continued to vet zoning and development plans in the territory for compliance with the Hong Kong Airport (Control of Obstructions) Ordinance, Cap. 301, and other aviation safety requirements. Projects included development studies along the shoreline of Lantau from Tung Chung to Penny's Bay, and two towering bridges which will link North Lantau with Tsing Lung Tau and Stonecutters with Tsing Yi respectively.

As assessment indicated that the obstacle environment would not affect the safe operations of aircraft, the Division made two recommendations to the Secretary for Planning and Lands for granting permanent exemptions from compliance with the Airport Height Restrictions requirements for small buildings at Kowloon Peak and Tai Mo Shan. On the other hand, to facilitate construction works in the vicinity of the airport island, 33 temporary Airport Height Restrictions exemptions were issued.

To safeguard the operation of HKIA and its essential radio navigation equipment, the Division secured the assistance of the Marine Department to ensure the integrity of the Marine Exclusion Zones

### 監察飛行康樂活動

本部繼續監察滑翔傘、氣球、風箏及模型飛機等康樂活動的飛行安全，以確保該等活動在符合飛行安全法例的情況下進行，並且不會影響國際民航飛機的運作。



飄放風箏活動也受民航處監管，以確保飛行安全。  
Kite flying activities are monitored by CAD to ensure flight safety.

### IV. 危險物品的運載

本部繼續監察空運危險品的安全，並且透過定期和突擊巡察危險品付運人、發運人、航空公司及地勤代理，確保有關法規和要求獲得遵行。年內，中國國際航空公司成為首間獲准提供香港與內地間空運危險品服務的航空公司。現時共有45間航空公司獲民航處批准空運危險品進出及飛越香港。

年內，一間金屬製品廠被發現將重達兩公噸之5 000個打火機，在未經妥善包裝、加上標籤和標記及提供有關文件的情況下付運至新加坡，嚴重違反《危險品(航空托運)(安全)規例》。危險品付運人

其後遭正式檢控，並被法庭罰款及沒收貨物。為加強業界對妥善處理空運危險品的認識，本處已透過網頁提供更多有關資料，以供參考。此外，本部於二零零一年五月籌辦危險品研討會，並且致力進一步教育外遊市民妥善處理空運危險品。

### V. 航空交通安全的監察

在確保香港空域之航空交通安全方面，本部與航空交通管理部保持緊密聯絡，為改良現時之運作程序和制定新設備或服務之運作程序提供意見。這些設備和服務包括精密跑道監察系統，備用航空交通管制中心，備用指揮塔，以及透過數據鏈路傳送起飛前放行指示的系統。與此同時，本部亦參與不同類別的工作小組，包括與航空安全有關人員使用酒精及藥物的工作小組，風切變及湍流警告系統工作小組，和衛星通訊，導航及監察／航空交通管理系統委員會等。

年內，本部與航空交通管理部聯合調查了九宗航空交通事件。經過調查後，按照國際民航組織的指引，九宗事件均確定為未有對有關航機構成碰撞危險。本部因應調查結果而提出了多項建議，包括改良運作程序和裝置，以及提高航空交通管制(空管)人員的培訓等，以防止同類事件再發生。

新機場運作兩年後，為進一步改進本港航空交通服務的安全和效率，本部在年內主持了一個有航空交通管理部成員參與的內部工作小組，檢討不同層面的航空交通運作，包括現時的運作程序和裝置，空管人員之招募和培訓、操作標準和值勤調動等，並且提出改善建議。

(MEZs) established in the vicinity of the airport. A total of 33 prosecutions against illegal entry into the MEZs were instituted by the Marine Department during the year.

### Monitoring of Recreational Aviation Activities

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

## IV. CARRIAGE OF DANGEROUS GOODS

The Division continued to monitor the safe carriage of dangerous goods by air. Through regular and random inspections of air cargo shippers, freight forwarders, airlines and handling agents, compliance with appropriate regulations and requirements were ensured. With the permission given to Air China to be the first airline to carry dangerous goods on board its aircraft operating between Hong Kong and the Mainland, the total number of airlines holding general permission to carry dangerous goods increased to 45.

During the year, one case involving serious contravention of the Dangerous Goods (Consignment by Air) (Safety) Regulations was investigated and the responsible shipper was prosecuted for consigning 5 000 flammable lighters weighing two tonnes to Singapore without proper packaging, labelling, marking and documentation, etc.. The shipper was eventually fined by court, and



民航處職員定期查看安全空運危險品的有關程序。  
Procedures pertaining to the safe carriage of dangerous goods by air are regularly checked.

the goods were also confiscated. To raise the awareness of the proper handling of dangerous goods among the industry workers, efforts have been made to provide more relevant information in the CAD web site. In addition, a seminar is being organised for May 2001 and further efforts in educating the travelling public on the proper carriage of dangerous goods are being arranged.

## V. MONITORING OF AIR TRAFFIC SAFETY

The Division worked closely with the Air Traffic Management Division to ensure the safe provision of air traffic services within Hong Kong airspace. It provided input for the refinement of current operational procedures and the development of procedures for new facilities and services such as those relating to the Precision Runway Monitor, the Backup Air Traffic Control Centre, the Backup Aerodrome Control Tower, and the data link based Pre-Departure Clearance delivery system. The Division also provided advice through participation in working groups, including those on preventing the problematic use of alcohol and drug by safety related aviation personnel, on the windshear and



在指揮塔台監察航空交通安全。  
Monitoring air traffic safety at the control tower.

### VI. 簡化機場手續

在簡化機場手續方面，本部除參與簡化機場手續委員會的工作外，還於二零零一年二月派員前往加拿大蒙特利爾，參加國際民航組織簡化機場手續專家組第三次會議，以及就實施國際民航公約附件九內的標準及建議措施等事宜而聯絡機場各單位。在日常運作方面，本部負責向受聘於本地航空公司的機組人員簽發機組人員證。

由於香港國際機場的客運和貨運量不斷增加，簡化機場手續必須有妥善的協調。本部計劃增撥資源開設簡化手續小組，專責統籌和監察一切簡化機場手續事宜，確保能符合國際民航公約附件九內的標準及建議措施，以及政府的有關政策。



turbulence warning system, and on the introduction of the Satellite-based Communications, Navigation and Surveillance/Air Traffic Management Systems.

The Division continued to carry out joint investigation with the Air Traffic Management Division into air traffic incidents. A total of nine incidents were investigated during the year and it was determined in accordance with the guidelines of the International Civil Aviation Organization (ICAO) that there was no risk of collision in any of these incidents. Based on the findings of these investigations, measures to enhance operational procedures and equipment, and to reinforce training of air traffic personnel were identified. Recommendations to prevent recurrence were also made.

To further improve the overall safety and efficiency of air traffic services after two years of operations at the new airport, the Division led an internal working group with participants from the Air Traffic Management Division to review the various aspects of air traffic operations, including current operating procedures and equipment, recruitment, training, performance standards and rostering of air traffic services personnel. Enhancement measures required were identified and recommendations made.

## VI. FACILITATION

On airport facilitation matters, the Division participated in the Airport Facilitation Committee, attended the Third ICAO Facilitation Panel Meeting held in Montreal, Canada in February 2001, and coordinated inputs in respect of compliance with the Standards and Recommended Practices of ICAO Annex 9. On the operational side, the Division is responsible for the issue of Crew Member Certificates to crew members of Hong Kong-based airlines.

With increasing traffic at HKIA, it is essential that all facilitation matters at the airport be well coordinated. The Division plans to commit more resources through the establishment of a Facilitation Sub-section to coordinate and monitor airport facilitation matters for compliance with the Standards and Recommended Practices laid down in ICAO Annex 9, and in accordance with the government policy.



機場安全標準部參與促進機場服務事宜。  
The Airport Standards Division plays a role in airport facilitation matters.