

致力於安全及有效率的航空系統  
Committed to a Safe and Efficient Air Transport System

第五章 CHAPTER 5

## 機場安全標準 Airport Standards



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機場安全標準部的職責包括簽發機場牌照、監察機場安全、監管航空保安、管制障碍物、監管危險品的空運以及監察航空交通安全。本部亦肩負協調機場簡化手續的任務。

年內，本部繼續密切監察香港國際機場的安全及航空保安水平。為確保機場運作安全，本部經常派員視察機場道面的狀況、飛行區設施、飛行區內的維修工程及新建設之工程項目，例如停機位加建工程和機場地面燈控制和監察系統改善工程。本部亦審核香港機場管理局（機管局）各項操作程序和安全管理系統。此外，本部透過檢查、審核及測試，對實行機場保安計劃和機場租戶禁區保安計劃的機構進行監管。

美國九一一事件發生後，本部對機場保安作出檢討，並要求機管局及航空公司實施更嚴格的措施。為提醒旅客有關攜帶危險品和違禁品登機的規定，本部更推行危險品和違禁品認知計劃，透過不同渠道向旅客提供有關資料。

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 safety and security standards at the Hong Kong International Airport (HKIA). Frequent inspections of airfield pavement conditions, airside facilities and airside maintenance works were conducted. New developments, such as the construction of additional aircraft parking stands and the upgrading of Airfield Ground Lighting (AGL) System were witnessed. Audits were also carried out on various operational procedures and safety management system adopted by the Airport Authority Hong Kong (AAHK). The implementation of the Airport Security Programme and Tenant Restricted Area Security Programmes was monitored through inspections, audits and tests.

Following the occurrence of the September 11 incidents in the United States, a review of security measures was made and enhanced measures were implemented. To warn passengers on the requirements of how dangerous goods (DG) and restricted articles (RA) should be carried on board aircraft, a DG and RA Awareness Campaign was launched.

## I. 機場安全

### 簽發機場牌照

本部繼續密切監察機管局的表现，確保該局符合機場牌照的要求。本部經常巡察機場道面、目視助航設備及飛行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。機管局於二零零零年十二月開始在貨機停機坪上建造八個新停機位。本部在審核機管局提交的建造工程文件及派員觀察新停機位的運作測試後，新停機位於二零零一年八月開始分階段投入服務，並於同年十二月全面投入服務。機場地面燈的質素也在年內得到不斷提高。自二零零一年九月開始，機場北跑道地面燈的控制和監察系統改善工程經過不同階段的測試，該系統預計於二零零二年五月正式啟用。另外兩個與機場北跑道地面燈系統有關的部分，即飛機感應通訊系統和道面交匯處控制系

安全事務主任在香港國際機場視察停機坪的各項運作。  
A safety officer carried out ramp inspection at HKIA.



## 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 the construction of airside facilities carried out by AAHK. The construction of eight additional aircraft parking stands in the cargo apron at HKIA started in December 2000. After the Division had vetted the submissions relating to the construction works and witnessed the operational trials on the newly constructed aircraft parking stands, the stands commenced phased operations in August 2001, and were fully commissioned in December 2001. The AGL System continued to be upgraded during the year. The enhancement of the AGL North Control and Monitoring System had been under various stages of testing since September 2001 and the System was expected to be commissioned in May 2002. The two associated components

in the AGL System for the north runway: Dedicated Sensor Communication System and Complex Intersection Control System had also been under various stages of testing since July 2001 and would undergo reliability acceptance test from mid-2002.

Regular and ad-hoc audits were also conducted on AAHK's airfield





機場一旦發生緊急事故時，消防船可提供拯救服務。

This Fire Services Department vessel provides rescue services in the event of emergency at the airport.

統亦自二零零一年七月起經過不同階段的測試，系統接收測試可望於二零零二年年中開始進行。

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、飛行區工作人員的培訓和安全管理系統的施行。為建立一套適用於整個機場的安全管理系統，機管局於二零零一年四月開始覆檢其現行的安全管理系統。現時該套專為飛行區操作工序而設的安全管理系統由安全審核、初步風險評估和風險登記系統組合而成。此次覆檢預料於二零零二年年中完成，並建立一套系統，用作管理機管局與其商業伙伴所簽訂合約內之安全事宜，亦會訂明安全管理系統中各安全手冊的關係。機管局建立該套適用於整個機場的安全管理系統後，日後將繼續改進和更新有關系統。

本部亦不斷審核機場手冊、緊急應變程序手冊和其他與飛機操作有關的手冊（如商用航空中心操作手冊和機場操

operational procedures, airside maintenance procedures, training provided to airfield operational staff and the implementation of a safety management system. With a view to developing an airport-wide safety management system, AAHK commenced in April 2001 a review on its present safety management system comprising safety audit, preliminary hazard assessment and hazard registration system in respect of airside operations. This review was expected to be completed by mid-2002 with the establishment of a system of management of contracts in respect of safety issues, and the relationship between safety manuals in the safety management system. The improvement and enhancement of the airport-wide safety management system would be undertaken by AAHK on a continual basis in future.

The Aerodrome Manual, 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 under constant review by the Division to ensure that the information contained therein was appropriate, up-to-date and in accordance with the aerodrome licensing requirements.



安全事務主任視察機場進行緊急事故演習的情況。  
A safety officer observed the conduct of an airport emergency exercise.

作手冊等)，確保其內容適當及不斷更新，並且符合機場簽發牌照的要求。

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。在緊急事故警報方面，經機管局改善了的緊急事故警報系統於二零零一年七月啟用。另一方面，為了測試各機構在發生緊急事故時的通訊和協調能力，機管局聯同其他機構及政府部門在二零零一年六月及二零零二年一月舉行共兩次緊急救援演習和緊急事故演習。

年內，本部透過嚴密監察機管局的表現，確保該局完全符合簽發機場牌照的要求。

### 監察直升機場安全運作

本部繼續就信德直升機場的運作給予意見，同時派員監察，確保其運作按照直升機場手冊的程序進行。

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. For emergency alerting, the AAHK Enhanced Crash Alarm System was commissioned in July 2001. To test the communication and coordination of various agencies during emergency situation, two aircraft crash and emergency exercises were conducted by AAHK in conjunction with other agencies and government departments in June 2001 and January 2002.

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

### Monitoring of Heliports

The Division continued to provide advice on operational issues and carried out inspections at the Shun Tak Heliport to ensure that its operations were conducted in accordance with the Heliport Manual.

## II. 航空保安

### 機場保安

本部監管機場保安計劃及機場租戶禁區保安計劃的施行，並與機管局、機場保安有限公司、機場租戶、其他政府部門、航空公司及商業營運人保持緊密聯繫。本部透過派員定期檢查、審核及測試，確保各機構均根據保安計劃實施有關規定。為加強機場工作人員的保安意識，機管局應本部要求，制作了一套加強保安意識培訓計劃。

民航處密切監察香港國際機場的保安工作。  
The security arrangements at HKIA are closely monitored by CAD.



### 航空公司保安

本部又檢討在香港提供服務的航空公司所提交的保安計劃及監管其實施情況，並檢查了國泰航空有限公司及港龍航空有限公司多個外站的保安運作。

### 加強保安措施

在美國九一一事件發生後，本部隨即檢討香港國際機場的保安情況，並要求機管局及航空公司實施更嚴格的措施，包括增加保安人員，加強出入機場

## II. AVIATION SECURITY

### Airport Security

The Division monitored the implementation of the Airport Security Programme and Tenant Restricted Area Security Programmes at HKIA. Close working relationship was maintained with AAHK, Aviation Security Company Limited (AVSECO), airport tenants, other government bodies, airline operators and business partners. Officers of the Division carried out inspections, audits and tests to ensure compliance with the measures stipulated in

the security programmes. To enhance the security awareness of airport permit holders, the Division worked with AAHK to develop a security awareness training programme.

### Airline Security

Officers of the Division reviewed the airline operators' security programmes and monitor their compliance with the programmes. Inspections were made to out-stations served by Cathay Pacific Airways Limited and Hong Kong Dragon Airlines Limited.

### Enhanced Security Measures

In the light of the September 11 incidents in the United States, a review of security measures was made and enhanced measures were implemented. The measures included the provision of additional guards, enhanced access control, issue of Security



九一一事件發生後，個別航空公司以人手檢查乘客的手提行李。

Individual airlines required passengers' luggage to be hand-searched after the 911 incidents.

禁區管制，以及發出保安指示，由二零零一年九月二十八日起，禁止攜帶利器和有刀刃的物件進入機艙及香港國際機場的高度保安禁區，又實施在飛行中管制進入駕駛艙的程序等。

本部並與機管局協調，向航空公司提供額外的保安設施及人員，執行其他民航當局的額外保安要求。

### 保安認知宣傳計劃

為使旅客明瞭禁止攜帶利器和有刀刃的物件登機的規定，本部與機管局及航空公司合作推行一連串宣傳運動，包括在航空公司櫃位和保安檢查地點展出告示，在旅客辦理登機手續時提醒他們把違禁品存放在寄艙行李內，在機場內重覆廣播訊息，以及製作有關短片，發放給航空公司和旅行社向旅客作簡介，和在機場大堂的危險品和違禁品資料站播放等。

Directions to ban the carriage of sharp and bladed items into the aircraft cabin and the Enhanced Security Restricted Area of HKIA with effect from September 28, 2001, and the implementation of procedures for controlling access to cockpit during flight.

The Division also worked with AAHK to facilitate airlines to meet the additional security requirements imposed by their respective authorities.

### Security Awareness Campaign

To promote public awareness on the ban of sharp and bladed items, the Division, together with AAHK and airlines, embarked on a series of promotional campaigns including the display of notices at check-in counters and screening points, the issue of verbal reminders by airlines to passengers during check-in to put restricted items in hold baggage, the attachment of notices on air tickets issued to passengers, the broadcast of regular announcements through the public address system at HKIA, and the production of a video for airlines and travel agents for screening at pre-tour briefings as well as for the DG and RA display booths at HKIA.



自從實施更嚴謹的保安措施後，香港國際機場檢獲大量利器和有刀刃的物件。

A substantial amount of sharp and bladed items were confiscated at HKIA following the tightening of security measures.



## 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，本部與業界定期會面和查訪已登記的受規管託運商，繼續確保其營運符合制度的要求。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，促進業界對該制度的了解。截至二零零二年三月三十一日，共有923個貨運商登記成為受規管託運商。

在美國九一一事件發生後，本部隨即與機管局、機場保安公司及空運貨站公司協調，加強X光機保安檢查服務，以應付空運貨物的更嚴格保安要求。

## III. 安全監察

### 管制障礙物

本部繼續根據《香港機場（障礙管制）條例》第301章及其他航空安全的考慮，審核本港各分區計劃和發展計劃大綱。年內審核的主要項目包括東涌至昂坪的纜車計劃、深圳西部走廊工程、畢拿山石礦場的修復建議以及東涌和大嶼發展計劃等。至於廢物焚化發電和廢物處置新地點的全港性選址研究，本部亦有提供意見。為防止有害的燈光直接

## Regulated Agent Regime

After the Regulated Agent Regime was launched in March 2000, the Division continued to monitor its implementation through regular meetings with the industry and inspections of the regulated agents. Officers of the Division also actively assisted the industry in promoting understanding of the Regime by participating in its seminars. As at March 31, 2002, there were 923 regulated agents on the register.

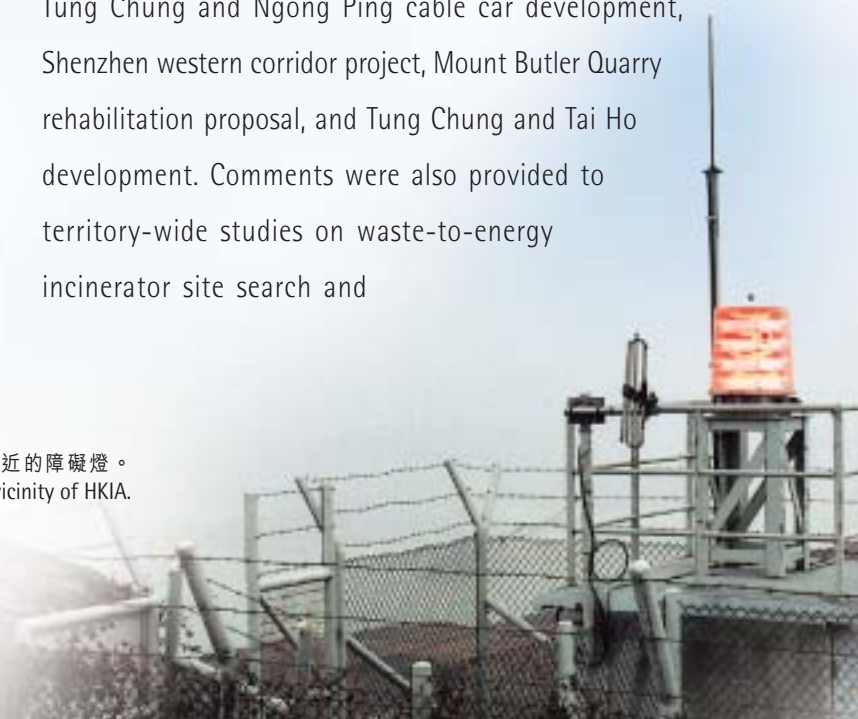
Subsequent to the September 11 incidents in the United States, the Division coordinated with AAHK, AVSECO and cargo terminal operators to provide additional screening facilities to meet the increased demand for cargo screening.

## 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. Major projects included the assessment of the Tung Chung and Ngong Ping cable car development, Shenzhen western corridor project, Mount Butler Quarry rehabilitation proposal, and Tung Chung and Tai Ho development. Comments were also provided to territory-wide studies on waste-to-energy incinerator site search and

置於香港國際機場附近的障礙燈。  
Obstacle lights in the vicinity of HKIA.





向天空投射並妨礙飛行安全，本部對大型燈光裝置給予意見，包括金鐘道政府合署天台的香港品牌亮燈標誌和尖沙咀海濱的星光大道工程。本部亦與航空交通管理部共同參與康樂及文化事務署所領導的國慶日和農曆新年煙花籌備委員會，以確保發放煙花不會危害飛行安全。

在審批建築物免受機場高度限制規管的過程中，本部向規劃地政局局長提供意見以作參考。另外，為方便工程進行及船隻在機場附近操作，本部亦批准50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的運作，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。海事處更加建了一個浮標以幫助船隻辨認限制區的範圍。年內，由海事處提出檢控的非法闖入限制區個案共有六宗。

### 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。

identification of new waste disposal sites. To prevent the operation of aircraft from being affected by hazardous light, the Division provided advice to proposals involving exhibiting light to the sky. These included the Brand Hong Kong illuminated sign installation atop Queensway Government Offices and the Avenue of Star project at Tsim Sha Tsui waterfront. The Airport Standards Division and the Air Traffic Management Division participated in the National Day and Chinese New Year fireworks organising committees chaired by the Leisure and Culture Services Department and provided professional advice to ensure flight safety during the fireworks displays.

In the process of granting permanent exemption from the Airport Height Restrictions requirement for building developments, the Division assisted the Secretary for Planning and Lands by providing comments on the exemption order to be issued. On the other hand, to facilitate construction works and vessel operations in the vicinity of the airport island, 50 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 (MEZs) established in the vicinity of the airport. An extra buoy was installed by the Marine Department to provide better demarcation of the MEZs. Six prosecutions against illegal entry into the MEZs were instituted by the Marine Department during the year.



飛船在前啟德機場繫泊。  
Mooring of the airship at the former Kai Tak airport.

香港機械模型會要求獲得永久撥地，於元朗大棠設立模型飛機場，本部評估有關建議後予以支持。

年內，本處審批了The Lightship Group公司在香港航行飛船的申請。此澳洲註冊的飛船在香港國際機場的香港飛機工程有限公司機庫裝配及注入氦氣，並於二零零一年八月十六日移往前啟德機場停泊及準備當天首航。此次利用飛船作空中廣告和慈善用途的飛行活動如期順利舉行至二零零一年十一月十六日。

#### IV. 運載危險物品

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，確保有關法規和國際民航組織要求獲得遵行。本處在年初批准四間航空公司的全新申請及六間航空公司的續期申請，使獲民航處批准空運危險

#### 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.

The Division assessed and supported the Hong Kong Model Engineering Club's proposal to acquire a permanent site at Tai Tong, Yuen Long for model aircraft flying.

The Lightship Group was given approval by the Department to fly an airship in Hong Kong. The helium filled and Australian registered airship was assembled and inflated inside the hanger of the Hong Kong Aircraft Engineering Company Limited at HKIA. Its positioning and inaugural flight was launched on August 16, 2001 from HKIA to the former Kai Tak airport, where it was moored. The airship flights for aerial advertising and a charity cause were successfully conducted until November 16, 2001 as scheduled.

#### IV. CARRIAGE OF DANGEROUS GOODS

The Division continued to monitor the safe carriage of DG by air. Through regular and random inspections of air cargo shippers, freight forwarders, airlines and handling agents, compliance with appropriate regulations and the International Civil Aviation Organization (ICAO) requirements was ensured. With the approval of four new applications and renewal of six permissions during the year, 48 airlines were permitted to carry DG on board their aircraft to, from or over Hong Kong. In line with the ICAO Annex 18 amendment to require individual States to provide DG



民航處舉辦研討會，提高航空公司和航空貨運業界對安全運載危險品的認識。

A seminar on the safe carriage of dangerous goods was organised to enhance the awareness of the airlines and the air cargo industry.

品進出或飛越香港的航空公司總數增至48間。本部又推行危險品認知計劃，向旅客提供有關攜帶危險品登機所需注意的資料，履行民航處對實施《國際民航組織附件18》新修訂要求的責任。危險品認知計劃的活動包括向旅客派發宣傳單張，為航空公司和航空貨運業界舉辦危險品研討會，以及製作宣傳片，安排於各旅行社舉辦的茶會中播放。

為實施國際民航組織的安全空運危險品最新標準，本部安排《危險品（航空托運）（安全）條例》和《飛航（香港）令附表16》於二零零一年十一月作出修訂。

## V. 航空交通安全監察

本部繼續與航空交通管理部保持緊密聯絡，為改良現有服務，建立新程序及採用新儀器和設施提出意見，以確保航空交通服務既安全又有效率。本部又通過參與事故調查和技術工作小組，對

information to passengers, the Division launched a DG awareness programme during the year. Activities of the programme included the issue of leaflets to passengers, organisation of a seminar for the airlines and the air cargo industry, and production of a DG video, which is screened at tea gatherings organised by travel agents.

To give effect to the new ICAO standards for the safe transport of DG by air, the Division arranged for the amendment of the Dangerous Goods (Consignment by Air)(Safety) Regulations and Schedule 16 to the Air Navigation (Hong Kong) Order in November 2001.

## V. MONITORING OF AIR TRAFFIC SAFETY

The Division continued to work closely with the Air Traffic Management Division to ensure the provision of safe and efficient air traffic services. It provided advice on improvement of existing services, establishment of new procedures, and introduction of new equipment and facilities from a safety perspective. Through participation in incident investigation and technical working groups, the Division provided advices on the enhancement of the windshear and turbulence warning

改良現有的風切變及湍流警告系統，因應航空安全相關人員使用酒精及藥物可能產生的問題發出指引，改良現有航空交通系統和儀器，以及加強航空交通管制人員的培訓等，提供建議。

## VI. 簡化手續

本部透過參與機場簡化手續委員會，監察《國際民航組織附件九》內的標準及建議措施的實施情況。年內，本部推出了全新設計的空勤人員證書，並為本地航空公司的機組人員換發8 400多張新證書。

system, guidelines on problematic use of alcohol and drug by safety related aviation personnel, improvement of the existing air traffic system, as well as the enhancement of equipment and training of air traffic controllers.

## VI. FACILITATION

Through participation in the Airport Facilitation Committee, the Division monitored the application of the Standards and Recommended Practices of the ICAO Annex 9 at HKIA. During the year, the Division introduced a new format of the Crew Member Certificate (CMC) and issued over 8 400 CMC to crew members of Hong Kong registered airlines.



機場安全標準部的其中一項重要任務是監察航空交通安全。  
Monitoring of air traffic safety is one of the important responsibilities of the Airport Standards Division.