

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、管制機場附近的障礙物、監管危險品的空運以及監察航空交通安全。本部亦肩負協調機場簡化手續的任務。

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。本部對各新工程的監察尤為嚴謹，包括北跑道、西北客運廊停機位及該新建設的航空保安設施和安排等。此外，本部嚴格監察及審核機管局為了確保所有機場設備能安然過渡千禧所作的準備及應變計劃，包括機管局對機場各有關系統的檢查及應變演習，確保有足夠的準備。航空保安方面，受規管託運商制度經航空保安當局（即保安局）審批及獲納入香港航空保安計劃後，已於二零零零年三月六日順利實行。上述各項工作成績詳情見下文。



民航處職員透過定期視察，確保停機坪各項運作安全。
Safe operation of ramp activities is ensured through regular inspection.

1. 機場安全

簽發機場牌照

本部繼續監察機管局的表現，確保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運作區內必備的飛機運作設施的狀況。本部亦派員觀察飛行區的臨時及定期維修工程，以及新工程項目和飛機運作設施的實地驗收測試等。年內，北跑道分階段投入服務。該跑道於一九九九年四月十二日開始作為緊急應變之用，同年五月二十六日起在繁忙時間使用，並於八月三十一日全面運作。西北客運廊的新停機位亦於二零零零年一月二十日投入服務。

除上述的巡視及觀察外，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。本部亦審批機場運作手冊、緊急應變程序手冊和其他有關文獻如商業航空中心操作手冊和機場操作手冊等，確保其內容適當及不斷更新，並且符合機場牌照的要求。

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 co-ordinating 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), particularly on new facilities such as the north runway, the new parking stands as well as the security installations and arrangements in the Northwest Concourse. In addition, AAHK's preparations and formulation of contingency measures to ensure a smooth Y2K rollover were critically monitored and assessed, including their checking of airport systems to ensure Y2K compliance and the conduct of the drills to ensure that adequate contingency measures were in place. Following approval by the Aviation Security Authority, i.e. Security Bureau and its inclusion as a requirement in the Hong Kong Aviation Security Programme, the Regulated Agent Regime was successfully implemented on March 6, 2000. Details of the various achievements are contained in the following paragraphs.

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



西北客運廊等機場新設施的安全及保安水平均受嚴密監管。
The safety and security standards of new airport facilities such as the Northwest Concourse are closely monitored.

Division also witnessed ad-hoc and scheduled airside maintenance works carried out by AAHK as well as their site acceptance tests of airfield constructions and airside facilities. The year witnessed the phased introduction of the north runway into operations. It was opened for contingency use on April 12, peak hour use on May 26, and 24-hour operation on August 31, 1999. The Northwest Concourse parking stands were commissioned for operations on January 20, 2000.

Apart from the frequent inspections of the airside facilities in support of aircraft operations, regular and ad-hoc audits were conducted on AAHK's airfield operational procedures, airside maintenance procedures, the training provided to airfield operational staff and the implementation of a safety management system. The Aerodrome Manual and Emergency Procedures Manual and other manuals and documents such as the Business Aviation Centre Operations Manual and Airport Operations Manual were also vetted by the Division to ensure that the information

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

本部一直就機場的飛機緊急應變設施及各項緊急應變演習和操練是否適合或足夠，向機管局提供專業意見。一九九九年八月二十二日一架中華航空公司波音麥道-11型客機發生意外，當日各有關單位的應變表現足以證實香港國際機場所提供的救援及滅火服務充足及有效率。

本部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。

監察過渡千禧

為確保機管局所有與飛機運作安全及保安有關的系統能順利過渡二千年，本部對該等系統都作出嚴密監察。本部亦觀察機管局和獲該局授予經營權的機構，以及該局的商務夥伴所採取的各項應變措施和後備程序的演習。在本部的監察下，所有系統結果都能成功過渡二零零零年一月一日、二零零零年二月二十九日和二零零零年三月一日等多個關鍵日子。

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。

有關在香港國際機場設置直升機場的研究，本部亦為機管局提供意見。本地直升機公司利用香港國際機場作出入境清關的程序也於年內作出檢討。由於中環直升機場將於二零零二年左右關閉，政府正考慮另覓地點重置該機場供政府飛行服務隊和商用直升機使用。在這項研究上，本部負責統籌處內意見，並與其他政府部門作適當的協調。

II. 航空保安



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

機場保安計劃

隨着香港國際機場運作邁進第二年，本部繼續密切監察機場保安計劃及各機場租戶禁區營運者保安計劃的運作情況。本部通過實地巡察、審核、測試，及與機管局和其附屬機構機場保安公司、機場租戶及其他政府部門的緊密聯絡及討論，不時對各項保安設施、安排及服務的效益作出檢討，以確保機場保安能維持一貫的高水平，並在有需要時收緊保安要求。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，以防止同類事件再發生。

航空公司保安計劃

本部與各航空公司保持緊密聯絡，並提供指引協助他們按照香港保安計劃的要求制訂相關計劃，及推行行李確認系統的自動化措施。此外，本部還實地視察本港航空公司在外地機場的保安安排。

contained therein was appropriate, up-to-date, and in accordance with the aerodrome licensing requirements.

The Division also provided expert advice to AAHK regarding the adequacy of aircraft emergency response facilities and the conduct of airport emergency exercises and drills. As witnessed by the emergency response to the accident of the China Airlines Boeing MD-11 aircraft on 22 August, 1999, the provision of rescue and fire-fighting services at the HKIA proved to be adequate and effective.

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

Monitoring of Y2K Rollover

All AAHK's systems essential for the safety and security of aircraft operations were monitored for Y2K compliance. The Division also observed the conduct of the drills carried out by AAHK, its franchisees and business partners to test the adequacy of the contingency measures and fallback procedures, and witnessed the successful rollovers to January 1, 2000, February 29, 2000 and March 1, 2000.

Monitoring of Heliports

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

Advice was provided to AAHK in its study into the provision of heliports at HKIA. Operations by local helicopters at the HKIA for customs clearance in and out of Hong Kong were also reviewed. The Division also took up the responsibility for coordinating with other government departments in the search for replacement sites for the Central Heliport which was due to be closed around 2002.

II. AVIATION SECURITY

Airport Security Programme

As the HKIA proceeded into its second year of operation the Division ensured the proper implementation of the airport security programme and airport tenant restricted area operator's security programmes by the parties concerned. The effectiveness of the security installations, arrangements and services was kept under constant review through inspections, audits, tests and discussions, and meetings with AAHK and its subsidiary, the Aviation Security Company Limited, airport tenants, and other government departments to ensure that a high standard of security was maintained and enhanced where necessary. The Division also conducted investigations into breach of security incidents and monitored the implementation of remedial measures to prevent recurrence.

Airline Operator's Security Programme

Close liaison with airlines was maintained and guidance was provided



機場保安非常嚴密。
A high standard of security is maintained at the airport.



監察香港空運貨站公司小件貨物處理中心的保安管制。
Monitoring of security control implemented at HACTL Minishipment Centre.

受規管託運商制度

在貨運保安方面，受規管託運商制度經航空保安當局（即保安局）審批後，已於一九九九年三月獲納入香港航空保安計劃內。本部在年內與航空公司及空運業業界緊密合作，為落實推行受規管託運商制度作出準備。由於該制度獲業界鼎力支持，故得以於二零零零三月六日順利實施，共有538個商戶登記成為受規管託運商。至二零零零年三月底，受規管託運商的數目已增至647個。

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》及其他航空安全上之考慮，審核本港的分區用途制定和發展計劃。本部在年內針對新界西北的發展計劃，向規劃地政局和有關政府部門提供技術意見。在政府與華特迪士尼公司商討興建香港迪士尼主題公園期間，本部與經濟局及旅遊事務署保持緊密聯絡，在影響飛行安全的事宜方面，提出解決方案。至於在主題公園及其附近地方上空設置限制飛入區的法例現正在草擬中，並可望於二零零零年年中完成。

在執行《香港機場（障礙管制）條例》方面，本部在年內調查了兩宗懷疑違反《香港機場（障礙管制）令》的事故，並審批了23宗暫時超越該令所定高度限制的申請。

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，確保在機場附近的海上限制區內，船隻不得駛進，以免影響航空安全。年內，由海事處提出檢控的非法闖入限制區個案共有22宗。

監察飛行康樂活動

本部繼續監察飛行康樂活動的安全，包括滑翔傘、氣球及模型飛機等，以確保該類活動符合飛行安全法例，並且不會影響國際民航飛機的運作。

to facilitate their development of airline operator's security programmes in accordance with the Hong Kong Aviation Security Programme and the automation of their baggage reconciliation system. Security inspections were also conducted to monitor the security arrangement of local airlines at some of their outstations.

Regulated Agent Regime

On the air cargo security side, following the approval of the Regulated Agent Regime by the Aviation Security Authority, i.e. Security Bureau, and the inclusion of the requirement in the Hong Kong Aviation Security Programme in March 1999, the Division worked closely with airlines and the air cargo industry to prepare for its implementation. With the cooperation and support of the air cargo industry, the regime was successfully launched on March 6, 2000 with a total of 538 being registered as Regulated Agents. At the end of March 2000, the number of Regulated Agents has increased to 647.

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 and other aviation safety requirements. During the year, technical advice was provided to the Planning and Lands Bureau and government departments concerned on the Northwest New Territories development studies. Close liaison with the Economic Services Bureau and the Tourism Commission was also maintained throughout government negotiations with the Walt Disney Corporation on Hong Kong Disneyland theme park to resolve issues affecting aviation safety. The drafting of legislation for the establishment of an Air Intrusion Limitation Zone covering the proposed park area as well as its vicinity is in progress and will be completed in mid 2000.

Two cases of suspected infringement of height restrictions prescribed under the Hong Kong Airport (Control of Obstructions) Order (the Order) were investigated and a total of 23 temporary exemptions from the operation of the Order were issued.

To safeguard the operation of the 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 (MEZ) established in the vicinity of the airport. A total of 22 prosecutions against illegal entry into the MEZ 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 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.



在管制機場附近障礙物工作上，機場高度限制圖有着重要作用。

The airport height restrictions plan is referred to when working on control of obstructions.

IV. 危險物品的運載

為確保各航空付運人及發運人在運載危險物品時能達到法定要求，本部繼續派員巡察這類機構，現時有47間航空公司獲民航處批准空運危險物品進出及飛越香港。本部亦定時巡視這些航空公司及其地勤代理，以確保他們能恰當地處理危險物品。另一方面，透過澳洲航空當局、有關航空公司及包裝用品製造商和本部的共同努力，一項空運鮮魚的新包裝方法於年內獲確立，並獲認可及納入《危險品安全空運技術指令》內，為鮮魚出入口商提供一個額外而可行的運送選擇。



視察危險品處理方法。
Inspection of the handling of dangerous goods.

V. 航空交通安全的監察

本部繼續監察航空交通安全，並為因應新設施而制定及不斷演進的航空交通管制程序提供意見。這些新程序包括在北跑道於一九九九年四月十二日開始作緊急應變之用，以及於同年八月三十一日全面投入服務後而實施的雙跑道運作程序，同時也為精密跑道監察系統和備用航空交通管制中心及指揮塔的投入使用而作準備的程序。本部同事亦為香港衛星通訊、導航及監察系統/航空交通管理系統委員會成員，協助籌劃引進該系統的工作。

年內，本部與航空交通管理部聯合調查了15宗航空交通事件，當中有10宗涉及標準安全距離之偏差，一宗涉及飛機在跑道上中斷起飛程序，兩宗涉及飛機上防撞警報系統誤發警報，一宗涉及飛機被指示轉飛到不適當的高度層，以及一宗因飛機未能及時離開跑道而導致進場飛機需要復飛的事件。

根據國際民航組織的指引，以上10宗涉及標準安全距離之偏差事件均確定為航空交通事件分類的丙類(即無撞機危險)。其他事件經調查後，亦確定並未影響飛行安全。本部根據這些事件的調查結果，提出了改良運作程序，提高航空交通管制人員的培訓及增廣其知識，以及加強航空交通管制系統的監督架構等建議，以防範同類事件再發生。

VI. 促進機場服務

本部負責協調按照國際民航組織的標準和建議而實施的促進機場服務事宜，並且參與機場服務促進委員會的工作。

IV. CARRIAGE OF DANGEROUS GOODS

The Division conducted random inspections on air cargo shippers and freight forwarders to ensure their compliance with appropriate regulations in the handling of dangerous goods for carriage by air. The number of airlines allowed to carry dangerous goods on board their aircraft to, from and over Hong Kong remained at 47. These airlines and their handling agents were regularly inspected by the Division to ensure that they were competent in handling dangerous goods. Through the combined efforts of the Australian aviation authority, interested airlines, packaging manufacturer and the Division, a new packing method for the transportation of live fish by air was accepted and incorporated in the Technical Instructions for the Safe Transport of Dangerous Goods by Air. This offered an additional viable option for exporters and importers of live fish.

V. MONITORING OF AIR TRAFFIC SAFETY

The safety aspects of air traffic operations were monitored by the Division. The Division also provided comments on the development of air traffic control operational procedures as new facilities were introduced. Such procedures included those for parallel runway operations as the north runway entered into service on April 12, 1999 for contingency use and became fully operational on August 31, 1999, and those for the Precision Runway Monitor System, and the Backup Air Traffic Control Centre and Tower. The Division also participated in a working group set up to prepare for the introduction of the satellite-based Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) systems into Hong Kong.

During the year, the Division carried out joint investigations with the Air Traffic Management Division into a total of 15 air traffic incidents. Of these incidents, 10 involved the loss of standard separation, one involved aborted take-off by an aircraft after commencement of take-off procedures, two involved the activation of the Traffic Alert and Collision Avoidance System (TCAS) with no loss of standard separation, one involved an aircraft having been transferred at the incorrect level and one involved a missed approach due to the preceding aircraft not vacating the runway in time.

In accordance with the guidelines of the ICAO, all of the 10 loss of standard separation incidents were classified as Category C (no risk of collision). Investigations into the other five incidents also revealed that the safety of the aircraft had not been compromised. From the findings of these investigations, recommendations were made to prevent recurrence. These include : to improve current operating procedures, to reinforce the training and knowledge of air traffic personnel as well as to strengthen the supervisory structure of the air traffic control system.

VI. AIRPORT FACILITATION

The Division took up the role of coordinating airport facilitation matters to ensure compliance with the relevant ICAO Standards and Recommended Practices. It also participated in the Airport Facilitation Committee of the HKIA.



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