# 飛機噪音

## **Aircraft Noise**

## 目標成效

- ◆ 與航空公司及航空交通管制人 員共同努力,使:
- (1) 由午夜12時至翌日早上7時到港的飛機 中,有90%從機場西南方對出海面進 場降落。
- (2) 由晚上11 時至翌日早上7 時從07 號跑 道離港的飛機中,有95%使用經西博 寮海峽的南行航線。

本處環境管理組的同事一直密切監察飛 機噪音消減措施的施行情況。在二零零一 年,由午夜12時至翌日早上7時到港的飛 機中,我們錄得平均超過94%的飛機能夠 從機場西南方對出海面進場降落,而由晚 上11 時至翌日早上7 時向機場東北面離港 的飛機中,超過98%能夠使用經西博寮海 峽的南行航線起飛。有少數飛機不能依照 以上的要求,均是由於當時的風速及風 向、導航系統正進行維修保養、航空交通 擠塞及飛行安全等因素所致。

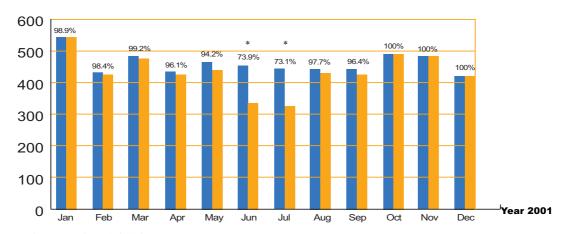
#### 圖一一由午夜12時至翌日早上 7 時抵港的飛機須從西南 方進場的記錄

## Performance against targets

- ♦ Work with airlines and Air Traffic Control (ATC) personnel to achieve:
- (1) 90% of arriving aircraft landing from the southwest (i.e. over water) between midnight and 07:00 am.
- (2) 95% of departing aircraft using the southbound route via West Lamma Channel when Runway 07 is in use between 11:00 pm and 07:00 am.

Measures to control the impact of aircraft noise have been closely monitored by our environmental management team. In 2001, we recorded that on average over 94% of arriving aircraft were able to land from the southwest (over water) between midnight and 07:00 am; and over 98% of aircraft departing to the northeast of the airport were able to take the southbound route over the West Lamma Channel between 11:00 pm and 07:00 am. The small percentages of non-compliant flights were caused by factors such as prevailing wind conditions, maintenance of ground navigation aids, air traffic congestion, safety considerations, etc.

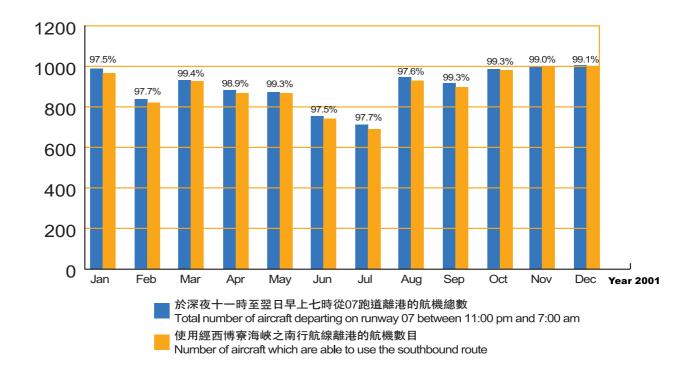
Diagram 1 - Achievement record for aircraft arriving between midnight and 07:00 am to land from the southwest.



- 於深夜十二時至早上七時抵港航機總數 Total number of aircraft arriving between midnight and 7:00 am
- 經機場西南面對出海面進入機場的航機數目 Number of aircraft which are able to land from the southwest, i.e. over water
- 註:在六月及七月,分別有11個深夜時段的風速/風向 情況是不利飛機從西南方降落機場,以致在六月及七月 執行有關措施的整體百分比分別降至73.9%及73.1%
- Note:In both June and July, there were 11 overnight periods during which the wind condition prevailing at the time was unfavourable for aircraft to land from the southwest. This explains why the overall performance rates for June and July were only 73.9% and 73.1% respectively.

圖二-由晚上11 時至翌日早上 7時從07號跑道離港的班 機須使用經西博寮海峽的 南行航線的記錄

Diagram 2 - Achievement record for aircraft departing on Runway 07 between 11:00 pm and 07:00 am to use the southbound route via the West Lamma Channel.



## ◆ 對於向機場東北面起飛的飛 機,航空公司繼續採用國際民 航組織的消減噪音離場程序

這項消減飛機噪音措施從一九九九年 八月起開始實施。在這些程序下,飛機必 須在起飛的初期維持預定的速度和推力 值,在較短距離內爬升至較高的飛行高 度,從而減低飛機噪音對機場附近地區的 影響。為進一步紓緩飛機爬升時所產生的 噪音影響,國際民航組織已修訂原有的消 減噪音起飛程序。新程序要求飛機在到達 800 呎或以上的飛行高度時降低動力,採 取消減噪音程序。在舊程序下,採取消減 噪音程序的最低飛行高度是較高的。我們 於二零零一年十一月進行一連串的模擬機 測試,並就可否推行新程序一事徵詢本地 航空公司意見,現打算於二零零二年三月 施行有關程序。

## ♦ Airlines continue to adopt the International Civil Aviation Organisation (ICAO) noise abatement departure procedures for aircraft departing to the northeast of the airport.

This noise mitigating measure has been in place since August 1999. Under these procedures, aircraft are required to maintain a pre-determined speed and power setting during the initial phase of the take-off so as to attain a higher altitude within a short distance. This aims to reduce the noise impact on areas located in the vicinity of the airport. In order to further alleviate the noise impact during take-offs, ICAO has revised the noise abatement take-off procedures. These new procedures require aircraft to initiate noise abatement procedures by means of power reduction upon reaching an altitude at or above 800 ft whereas in the old procedures, the minimum altitudes for initiating noise abatement procedures are higher. We have conducted a series of simulator trials and consultation with local airlines on the feasibility of these new procedures in November 2001 and planned to introduce them in March 2002.

#### ◆ 制定計劃,逐步淘汰較舊型及嘈 吵的飛機在香港國際機場運作

根據國際民航組織大會的決議,較舊 型及嘈吵的飛機(名為第二類別飛機\*)將會 逐漸由較新型、較寧靜的飛機(名為第三類 別飛機\*)取代。我們在香港推行淘汰高噪 音飛機的計劃是配合國際做法的。這項計 劃的一部分,是在一九九九年十月起實施 一項禁制措施,禁止航空公司編排第二類 別飛機在晚上11時至翌日早上7時期間升 降,而我們亦計劃在二零零二年全面禁止 第二類別飛機在機場升降。

- 註: "第二類別"或"第三類別"飛機,是指那些分 別符合《國際民用航空公約》附件16第1卷第二部分 第二章或第三章所載的噪音標準的飛機。
- 航機於晚上時份在香港國際機 場降落時繼續採用持續降落模 式運作

由二零零零年八月十日開始,本處籲 請於晚上11時至翌日早上7時的時段內, 所有從東北方進場, 飛經西貢、馬鞍山及 沙田上空的飛機,盡量使用持續降落模式 運作。由於採用此降落程序的航機由較高 的高度開始下降,並且在開始進場時通常 會使用較低動力飛行,故預料在地面上聽 到的噪音會較低。二零零一年,於晚上11 時至翌日早上7時的時段內,從東北方進 入香港國際機場的航機中,有73%已採用 持續降落模式運作。

## ◆ Establish a programme to gradually phase out the operation of older and noisier aircraft at Hong Kong International Airport

Under an ICAO Assembly Resolution, the older, noisier aircraft (known as Chapter 2 aircraft\*) would be gradually replaced with newer, quieter aircraft (known as Chapter 3 aircraft\*). Our programme of phasing out noisier aircraft in Hong Kong is in line with international practices. As part of our phasing out programme, a ban on the scheduled operation of Chapter 2 aircraft between 11:00 pm and 07:00 am has been successfully introduced since October 1999 and we plan to completely ban the operation of Chapter 2 aircraft in 2002.

- Note: "Chapter 2" or "Chapter 3" aircraft refer to those aircraft which meet the standards of noise specified in Volume I, Part II, Chapter 2 or Chapter 3 respectively of Annex 16 to the Convention on International Civil Aviation
- ♦ Airlines continue to adopt Continuous Descent Approach (CDA) procedure at HKIA during night period.

Starting from 10 August 2000, all aircraft on approach to the HKIA from the northeast between 11:00 pm and 07:00 am, which typically fly over Sai Kung, Ma On Shan and Shatin, are encouraged to adopt the CDA procedure whenever practicable. As aircraft on CDA will fly higher and normally in a low power/low drag configuration during the commencement of the approach, noise experienced on the ground is expected to be lowered. In 2001, 73% of aircraft on approach to the HKIA from the northeast between 11:00 pm and 07:00 am was able to adopt the CDA procedure.

#### ◆ 在東涌增設飛機噪音監察站

目前,全港共有15個飛機噪音監察 站,分別設於沙螺灣、東涌、陰澳、青 衣、葵涌、荃灣西、汀九、青龍頭、大欖 涌、馬灣、大圍、中半山、北角、渣甸山 及筲箕灣。民航處原計劃在二零零一年, 於東涌第二期發展區域內其中一幢新建住 宅大廈加裝一個新的飛機噪音監察站。不 過,由於建築工程進度緩慢,而這實非民 航處所能控制,監察站的落成日期須延至 二零零二年。

#### ♦ Install additional noise monitor in Tung Chung

At present, the aircraft noise and flight track monitoring system has a total of fifteen fixed noise monitors located at Sha Lo Wan, Tung Chung, Yam O, Tsing Yi, Kwai Chung, West Tsuen Wan, Ting Kau, Tsing Lung Tau, Tai Lam Chung, Ma Wan, Tai Wai, Mid-Levels in Central, North Point, Jardine's Lookout and Shau Kei Wan. It was planned to install an additional noise monitor at one of the new residential blocks at the second phase development area in Tung Chung in 2001. However, due to the slow progress of the building construction which was beyond the control of CAD, the target date for completion of this item has to be deferred to 2002.





#### 與有關區議會、傳媒及有關團 體保持定期的接觸

年內,我們得到傳媒、個別立法會議 員及有關區議會,包括離島區議會及中西 區區議會的邀請,講解飛機進入及離開機 場的運作情況和這對於居住在航道範圍或 附近的居民所造成的噪音影響。我們亦與 荃灣區議會保持緊密聯繫,向該會提供荃 灣和青衣區每月的飛機噪音資料。我們並 於二零零一年十一月安排荃灣區議員參觀 航空交通指揮塔。此外,我們曾數次與居 住在航道附近,對飛機噪音問題甚表關注 的居民會面。在會面期間,我們向居民講 述根據實地噪音測量所得而作的分析,並 詳細解釋現行的噪音緩解措施。本年內, 我們會繼續在需要時向有關區議會、其轄 下環境委員會和受影響的居民匯報我們的 工作,以加強雙方的聯繫。

我們在二零零一年總共收到369宗飛機 噪音投訴。我們會以專業及持平的態度去 調查所有的投訴,盡力回應社會的需要。

## ♦ Maintain regular contact with concerned district councils, the media and other concerned parties

During the year, we were invited by the media, individual legislative councillors, and concerned district councils such as the Islands District Council and the Central and Western District Council, to explain the flight operation to and from the airport and its noise impact on areas under or in the vicinity of flight paths. We also closely liaised with Tsuen Wan District Council by providing them monthly aircraft noise data of the Tsuen Wan and Tsing Yi areas. A visit to the Air Traffic Control Tower was also organised for Tsuen Wan District Council members in November 2001. Besides, meetings with residents in the vicinity of flight paths who showed particular interest on aircraft noise issues were also held. In the meetings, factual analyses based on on-site noise measurements together with detailed explanations of the current noise mitigation measures were presented. This year, we will continue to strengthen our links with the concerned district councils, their environmental committees and concerned residents through briefings to them as and when required.

In 2001, we received a total of 369 complaints on aircraft noise. We will endeavour to respond to community needs by investigating all complaints in a professional and impartial manner.

## ◆ 維持互聯網網站的運作以方便 公眾人士取得有關飛機噪音和 飛機航道資料

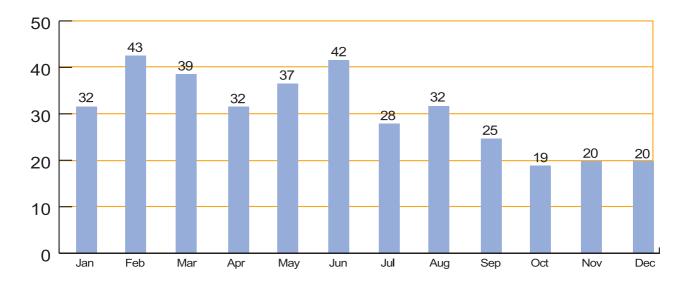
有關網站於一九九九年十二月設立, 以方便公眾人士取得飛機噪音和飛機航道 資料。在過去一年,我們不斷更新網站內 容,發放每月和每年的噪音資料,並且匯 報噪音消減措施的執行情況。

## ◆ Maintain an internet web site to facilitate public access to aircraft noise and flight path information

The web site was set up in December 1999 to facilitate public access to aircraft noise and flight path information. In the past year, we continued to maintain the web site and produce monthly and yearly noise data and performance records of noise abatement measures in the web site.

圖四-飛機噪音投訴數目

Diagram 4 - Number of Aircraft Noise Complaints



Year 2001

## 二零零二年的新目標

- ◆ 於青衣曉峰園增設一個飛機噪 音監察站,以監察該屋苑的飛 機噪音情況。
- ◆ 於上環增設一個飛機噪音監察 站,以監察信德直升機機場產 生的直升機噪音。
- ◆ 施行國際民航組織新定的消減 噪音離場程序。

## New target in 2002

- ♦ Install an additional noise monitor at Mount Haven, Tsing Yi, to monitor the aircraft noise environment of the estate.
- ♦ Install an additional noise monitor at Sheung Wan to monitor the helicopter noise arising from the operation of Shun Tak beliport.
- ◆ Introduce the new ICAO noise abatement departure procedures.

