

In order to reinforce Hong Kong's leading position in regional aviation services and sustain the long-term growth of the industry, the Chief Executive announced in the 2006-07 Policy Agenda an initiative to replace the air traffic control (ATC) system and develop a new CAD Headquarters on the Airport Island. The Civil Aviation Department Project (CAD Project) was initiated to implement the commitment.



# 民航處計劃

# The Civil Aviation Department Project

計劃目的為更換現有空管系統,以應付航空 交通量預計的增長,並興建民航處新總部, 以容納新的航空交通管制中心(空管中心), 以及讓本處各專責分部在同一大樓辦公, 從而善用資源和提升效率。

The CAD Project aims to replace the existing ATC system in order to handle the projected growth in air traffic while developing a new CAD Headquarters to accommodate a new Air Traffic Control Centre (ATCC) and all CAD functional divisions under one roof to optimise resource utilisation and enhance efficiency.

### 興建民航處新總部

機管局董事會撥出位於港龍/中航大廈以北、 東輝路兩旁,佔地共約28000平方米的土 地,用以興建本處新總部。

建築工程以「設計及建造」方式進行,優點 在於初期地面工程和各階段的詳細內部設計 工作可同步進行,加快工程進度。此外, 民航處同事對新大樓的設計要求及理念亦可 引入整個項目設計內,從而更能滿足用家的 實際使用要求。

新總部由三幅用地組成:東輝路以西的設施 大樓(用地A)、東輝路以東的空管中心大樓 和辦公及培訓大樓(用地B),以及空管中心 大樓以北的天線設備區。

新總部的建築面積約為41000平方米,其 中包括新空管中心及相關設施、行政及規管 辦公室和其他設施。新設施包括中央考試中 心、飛機意外調查設施、多用途會議廳、教 育徑及圖書館暨資源中心。

# Development of the new CAD Headquarters

A site north of the Dragonair House/CNAC Building on both sides of Tung Fai Road with a combined site area of approximately 28 000 m<sup>2</sup> was allocated by the Board of Directors of the AAHK for the construction of the new CAD Headquarters.

A design-and-build (D & B) approach is adopted for the construction of the new CAD Headquarters. Such an approach has a merit in running the initial ground works and detailed internal design stages concurrently, thus enhancing the efficiency of the construction programme. Besides, the practical needs from CAD colleagues could be integrated into the entire building design so as to meet our users' requirements.

The new headquarters will comprise three sites: the Facilities Building will be located to the west of Tung Fai Road (Site-A), the ATCC Building and the Office and Training Building will be located to the east of Tung Fai Road (Site-B), and the Antenna Farm will be located to the north of the ATCC Building.

The new CAD Headquarters will have a gross floor area of 41 000 m<sup>2</sup> to accommodate the new ATCC and its associated facilities, administration and regulatory offices and other facilities. New facilities will include a centralised examination centre, aircraft accident investigation facilities, a multipurpose auditorium, an education path and a library-cum-resource centre.





本處以可持續發展、環保及教育為新總部 主要設計主題。各個分部集中於同一地點辦 公,可精簡行政文書支援,提高生產力。 大樓設計備有足夠空間和彈性供日後擴展, 這 對 應 付 業 界 服 務 需 求 的 長 遠 增 長 非 常 重要。

新總部設有多項環保設施和裝置,達到香港 建築環境評估法的最高環保驗證標準,即白 金級別。總部北端天線區會有大片草地,廣 種植物,再加上設施大樓地下及一至三樓會 栽種茂密草木,新總部地面及樓頂的綠化面 積皆超過三成。民航處新總部將會是香港綠 化程度最高的建築物之一。

培訓設施方面,新總部設有演講室、工作 室、考試室、多用途會議廳、會議室,可支 援各式各樣的會議、研討會及培訓課程。此 外,教育徑內有導賞展覽廳、空管中心展覽 廊及機場看台,專為提高公眾對航空的興趣 而設。圖書館暨資源中心亦可讓民航處與業 界伙伴和其他政府機構交流資訊及資源。

Sustainability, environmental friendliness and education are the main design themes. The co-location of the various divisions will enhance productivity by streamlining administration and clerical support. Adequate space and flexibility for future expansion which are vital to sustain the long-term growth in service demand from the industry are also incorporated into the building design.

Under the Building Environmental Assessment Method in Hong Kong, the new headquarters will be certified with the highest platinum rating owing to its environmental-friendly facilities and installations. The large area of lawn and plants at the Antenna Farm on the north end of the site and the lush vegetation on the ground and around levels one to three of the Facilities Building will respectively provide a total of over 30% site area landscaped on ground level and over 30% planted area on the roof. The new CAD Headquarters will be one of the "greenest" building premises in Hong Kong.

With training facilities such as lecture rooms, workshops, examination rooms, multi-purpose auditorium and conference rooms, the new headquarters will be able to support a wide range of conferences, seminars and training courses. An education path consisting of a tour presentation and exhibition area, the ATCC viewing gallery, and an airport viewing deck is specially designed to arouse the general public's interest in aviation. The library-cumresource centre will also allow the CAD to share information and resources with industry partners and government counterparts.

#### 計劃進展

計劃雖然規模龐大兼且複雜,但得到民航處 全體人員和決策局全力支持,再加上督導委 員會領導有方,工作組又同心協力,計劃進 展順利平穩。

二零零九年五月二十日,香港寶嘉有限公司獲批「設計及建造」合約,並於同日接收工地。建築署、民航處及承建商其後並肩合作,草擬大樓的建築設計圖則並落實定稿。 地盤工程如期進行,並於二零零九年十一月二十七日舉行新總部奠基典禮。

連接各屋宇裝備、空管系統電纜及行人和維修通道的橋接,於二零一零年十一月二十六日晚上裝設。新總部大樓主體工程於二零一一年一月完成,而平頂儀式則於二零一一年七月十一日舉行。大樓的幕牆、內部裝修和屋宇裝備工程正全速進行。

根據建築時間表,整座新總部會在二零一二年第三季落成。空管中心大樓及相關設施在二零一二年第一季已可供安裝和測試新空管系統,以及培訓相關人員。新空管中心預計於二零一四年啟用。

#### **Project Progress**

With the full support from the entire Department and the policy bureau, and through the capable steer of the Steering Committee and the concerted effort of the Project Team, the CAD Project had been making steady progress despite its scale and complexity.

The D & B contract was awarded to Dragages Hong Kong Limited on May 20, 2009, and the site was taken over by the contractor on the same day. Thereafter, effective coordination was maintained among the Architectural Services Department, the CAD and the contractor to prepare and finalise the preliminary architectural layout plan for the building. On-site works had also proceeded as scheduled and the foundation stone laying ceremony was held on November 27, 2009.

The bridge connection, which links up all the building services, ATC systems cabling as well as the pedestrian and maintenance passageways, was erected on November 26, 2010 night. The superstructure of the new headquarters was completed in January 2011 and the topping-out ceremony was held on July 11, 2011. Works on the curtain wall system, internal fitting out, and building services were at full steam.

According to the construction schedule, the entire new headquarters will be completed in the third quarter of 2012. The ATCC Building and related facilities is ready in the first quarter of 2012 for the installation and testing of the new ATC systems and training of staff concerned. The new ATCC is planned to be commissioned by 2014.



## 更換空管系統

更換空管系統涉及15個主要系統和三個訓練 設施項目。新系統屬於最先進系統,安全功 能和運作效率都會提高。設計方面亦同時兼 顧系統擴展、互通能力、人類工程學、安全 管理和環保等不同範疇。新系統能夠處理預 期直至二零二五年在香港飛行情報區內的航 班流量。

主要系統和訓練設施的合約已全部批出。 年內,本處與承辦商檢視各個系統的詳細設計。新一代的空管系統已於二零一二年一月 開始在民航處新總部大樓內安裝。

## Replacement of ATC System

The replacement of the ATC system involves 15 major systems and three training facilities items. When commissioned, the new system will be one of the most advanced systems with enhanced safety features and operational efficiency. System expandability, inter-operability, ergonomics, safety management and environmental issues were also taken into consideration in the design. It will be able to handle the projected traffic movements operating in the HKFIR up to year 2025.

All the contracts for major systems and training facilities were awarded. During the year, the detailed design of each system was reviewed with the contractor, and the installation of the new generation of ATC system in the new CAD Headquarters has commenced since January 2012.

民航處代表從建築署及承辦商手上接過鑰匙,象徵新空管中心正式移交。 Having received the symbolic key from the Architectural Services Department and the contractor, the new Air Traffic Control Centre is officially handed over

