

民航處工程項目 The Civil Aviation Department Project

行政長官在二零零六至零七年《施政綱領》提出,更換民航處航空交通管制(空管)系統,並在機場島興建民航處新總部,以鞏固香港在區域航空服務的領導地位,維持航空 業的長遠發展。本處為落實這項綱領,展開上述工程項目。

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.



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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 提升效率,為業界和公眾提供一站式服務。

興建民航處新總部

香港機場管理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28 000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,整 個項目的設計亦可顧及民航處同事的實際需 要,以滿足用家的要求。

新總部由三幅用地組成:東輝路以西的設施大 樓、東輝路以東的空管中心大樓和辦公及培訓 大樓,以及空管中心大樓以北的天線場。

新總部的建築面積約為41 000平方米,其 中包括新空管中心及相關設施、監管及培訓 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、航 空教育徑及圖書館暨資源中心。

partment Hong Kong

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 enhance efficiency and provide one-stop service to the industry and the public.

Construction 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 m² was allocated by the Board of Directors of Airport Authority Hong Kong 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 users' requirements.

The new headquarters comprises three sites: the Facilities Building located to the west of Tung Fai Road, the ATCC Building and the Office and Training Building located to the east of Tung Fai Road, and the Antenna Farm located to the north of the ATCC Building.

The new CAD Headquarters has a gross floor area of 41 000 m² to accommodate the new ATCC and its associated facilities, regulatory and training offices and other facilities. New facilities will include a centralised examination centre, aircraft accident investigation facilities, a multi-purpose auditorium, an aviation education path and a library-cum-resource centre.



天台花園裝設了光導太陽光收集裝置。 Solar lighting collectors with fibre optic solar tracking are installed at the roof garden.





多用途會議廳。 Multi-purpose auditorium.

航空教育徑的展品讓訪客加深了解航空交通管制 的運作情況。 Visitors understand ATC operations better through exhibits at the Aviation Education Path.

本處以可持續發展、環保及教育為新總部主要 設計主題。各個專責分部集中於同一地點辦 公,可精簡行政及文書支援,提高生產力。大 樓設計備有足夠空間和彈性供日後擴展,以應 付公眾及業界對航空服務的長遠需求。

新總部的綠化面積超過三成,並設有多項環 保設施和裝置,例如太陽能光伏板、日光導 管、光導太陽光收集裝置、太陽能照明裝置 和雨水循環系統等,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,航空教育徑設有三個展覽廳及機場看 台,各有不同主題,讓訪客通過文字、展品 及多媒體互動系統了解民航運作和發展。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 of the CAD Headquarters. The co-location of the functional various divisions will enhance productivity by streamlining administrative and logistic support. Adequate space and flexibility for future expansion which are vital to sustain the long-term growth in service demand from the general public and the industry are also incorporated into the building design.

There is over 30% of landscaped/planted area, as well as environmentally friendly installations like photovoltaic panels, light pipes, solar lighting collectors with fibre optic solar tracking, solar powered pole lighting and rainwater recycling system. The new headquarters is 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. The Aviation Education Path consisting of three exhibition galleries and an airport viewing deck is also constructed. Through text, artifacts and interactive multimedia systems, visitors will be able to better their understanding of civil aviation operations and development. In addition, the library-cum-resource centre will also allow CAD to share information and resources with industry partners and government counterparts.

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辦公及培訓大樓於二零一二年六月 十四日正式移交民航處。 The Office and Training Building was officially handed over to CAD on 14 June 2012.

項目進展

工程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。在建築署、民航處及承建商攜手合作 下,地盤工程得以如期開展,並於二零零九 年十一月二十七日舉行奠基典禮。

新總部大樓主體工程於二零一一年一月完 成,而平頂儀式則於同年七月十一日舉行。 隨着工程在成本預算內如期完成,新總部 的辦公及培訓大樓於二零一二年六月十四日 正式移交民航處,而各專責分部亦已於同年 十二月陸續遷入辦公。

Project Progress

With the full support from the entire department and the policy bureau, and through the capable leadership 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 20 May 2009, and the site was taken over by the contractor on the same day. Having maintained effective coordination, the Architectural Services Department, CAD and the contractor were able to proceed as scheduled and the foundation stone laying ceremony was held on 27 November 2009.

The superstructure of the new headquarters was completed in January 2011 and the topping-out ceremony was held on 11 July 2011. With the headquarters built according to schedule and within budget, the Office and Training Building was officially handed over to CAD on 14 June 2012. Functional divisions were also relocated in phases in December 2012.

各專責分部於二零一二年十二月陸續 遷入新總部辦公。 Functional divisions were relocated to the new headquarters in phases

> 民航處 CIVIL AVIATION DEPARTMENT



更換空管系統

Replacement of ATC System

更換空管系統涉及15個主要系統和三個培訓 設施項目。新系統屬世界最先進系統之一, 安全告警功能和運作效率均有所提升,在設 計方面亦同時兼顧未來系統擴展能力、互通 能力、人機界面工程學、安全管理和環保等 不同範疇。新系統足以處理香港飛行情報區 超越二零三零年的預期航班流量。

新空管中心於二零一三年完成設備的安裝工 作後,新系統需要通過一系列嚴格的測試, 並根據國際航空安全管理標準及程序完成和 通過相關的安全評審。在完成新空管系統的 總體整合測試和空管人員的培訓後,預計新 空管中心可於二零一五年啟用。 The replacement of the ATC system involves 15 major systems and three training facilities items. 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 air traffic movements operating in the Hong Kong Flight Information Region up to year 2030 and beyond.

With the completion of equipment installation for the new ATCC in 2013, the new systems will need to undergo a series of stringent tests and satisfy safety assessment conducted in accordance with international aviation safety management standards and procedures. The commission of the new ATCC is estimated to be in 2015 after completing the comprehensive system integration tests and controller training.

