



Civil Aviation

The Hong Kong International Airport (HKIA) at north Lantau, which opened for commercial operations in 1998, is a vital component of Hong Kong's economy, serving both tourism and commerce. Its strategic position in Asia has made it an important regional trans-shipment centre, passenger hub and gateway to other Chinese cities.

The airport has two runways and operates around-the-clock. In 2008, the airport handled about 47.8 million passengers and 3.7 million tonnes of cargo. The airport has been further developed in stages to cater for increasing air traffic demand and is undergoing a HK\$4.5 billion terminal and airfield enhancement programme. Projects of the enhancement programme underway include the reconfiguration of the North and South Departure Immigration halls in Terminal 1; expansion of the East Hall transfer area; consolidation of the two Arrivals Immigration halls; and the construction of the new North Satellite Concourse. These projects are scheduled for completion before 2011.

Administration: There are some 84 international airlines operating about 5 800 scheduled passenger and all-cargo flights each week between Hong Kong and some 154 destinations worldwide. About 63 per cent of these flights are operated with wide-bodied jets. There are also an average of approximately 142 non-scheduled passenger and cargo flights each week.

The Civil Aviation Department (CAD) is responsible for the provision of air traffic control services, certification of Hong Kong registered aircraft, monitoring of airlines on their compliance with bilateral Air Services Agreements, the regulation of general civil aviation activities and overseeing the safety and security of airport operations. The Airport Authority Hong Kong (AAHK) is required to ensure the operations of the HKIA comply with the safety and security requirements of CAD to obtain. An Aerodrome Licence issued by CAD to operate the Airport.

Runways and Parking Aprons: The south and the north runways are both 3 800 metres in length and 60 metres wide enabling them to cater to the new A380 aircraft. The south runway has been given a Category II Precision Approach, while the north runway has the higher Category IIIA rating, which allows pilots to land in only 200-metre visibility. The two runways have an ultimate capacity of over 60 aircraft movements an hour.

At present there are 49 frontal stands, 33 remote stands and 34 cargo stands. Five parking bays at the Northwest Concourse are capable of accommodating the arrivals of the A380.

Passenger Facilities: The airport is one of the most accessible in operation today. Despite its size, the passenger terminal is designed for maximum convenience. A simple layout and effective signage, moving walkways

and the automated people mover allow quick and easy movement throughout the building. Facilities for the disabled are in keeping with world requirements. The airport is also served by a complete transport system operational from the very beginning. The fully integrated ground transportation centre was designed together with the passenger terminal. It provides immediate access to and from the airport express train as well as other public transport services such as buses, coaches, hotel limousines and taxis.

Baggage and Ramp Handling: Quality ramp handling services are provided by Hong Kong Airport Services Limited, Jardine Air Terminal Services Limited, and Menzies Aviation Group (Hong Kong) Limited. Their services include handling of mail and passenger baggage, transportation of cargo, aerobridge operations and the operation of passenger stairways. The airport has an advanced baggage handling system (BHS), the main section of which is located in the basement level of the passenger terminal, and a separate remote transfer facility at the western end of the main concourse for handling of tight connection transfer bags. The BHS processes departure, arrival and transfer bags and utilises a conveyor of more than 24 kilometres long. Bar coding scanners read the standard International Air Transport Association (IATA) baggage labels and route bags to their destinations. Majority of the arrival bags are conveyed to 12 reclaim carousels within 20 minutes from aircraft landing.

Air Cargo: HKIA handled 3.7 million tonnes of cargo in 2008. The airport currently has four first-tier cargo operators. The Hong Kong Air Cargo Terminals Limited operates the SuperTerminal 1, the world's largest stand-alone air cargo handling facility. Occupying a gross floor area of about 330 000 square metres, the terminal has a designed capacity to handle 2.6 million tonnes of freight a year. The second service provider is Asia Airfreight Terminal Company Limited, whose facilities have a combined handling capacity of 1.51 million tonnes a year. DHL's 3.5-hectare Central Asia Hub at HKIA could handle more than 35 000 parcels and 40 000 documents per hour. With a total land area of about 2 hectares, Hongkong Post's Air Mail Centre handles 700 000 items of mail every day.

In addition, the Airport Authority awarded a franchise to Cathay Pacific Services Limited to operate a new cargo terminal at HKIA in 2008. The facility is scheduled for opening in mid 2013.

Aircraft Maintenance Services: Hong Kong Aircraft Engineering Company (HAECO) provides both line and base-maintenance services; China Aircraft Services Limited and Pan Asia Pacific Aviation Services Limited provide line maintenance services.

Line maintenance services include routine servicing of aircraft performed during normal turnaround periods and regularly scheduled layover periods. Base maintenance covers all airframe maintenance services and, for this, HAECO has two three-bay hangars which at the same time can accommodate up to five B747-400 aircraft and three A320 aircraft, with an adjoining support workshop.

Air Traffic Control Services: The Air Traffic Control Complex (ATCX), located at the centre of the airfield, is the nerve centre of the entire air traffic control system. Some 420 air traffic controllers and supporting staff work around-the-clock to provide air traffic control services for the safe and efficient flow of aircraft movements within the Hong Kong Flight Information Region (FIR). At the Air Traffic Control Tower, controllers provide 24-hour aerodrome control services to aircraft operating at the airport.

A Backup Air Traffic Control Centre/Tower constructed to the north of the ATCX is available for operational use in the event normal services provided in the ATCX are disrupted by unforeseen circumstances.

Replacement of Air Traffic Control System: As the existing air traffic control (ATC) systems have been used for more than 10 years, the capacities and functionalities of the systems will not be able to cope with the projected air traffic growth in Hong Kong. The replacement work for existing air traffic control systems is in good progress, with the first tender for equipment procurement gazetted in December 2008. Acceptance testing for replacement ATC systems planned for 2012.

Satellite-based Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Systems: To comply with the Global Implementation Plan, CAD has commenced study, trials and evaluation of the Satellite-based Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Systems since 2000 to enhance flight safety and efficiency as well as to maintain Hong Kong's status as a centre of international and regional aviation. Owing to the complexities involved, extensive studies and trials on certain CNS/ATM system elements are being conducted before the new technologies are implemented for operational use. Currently some CNS/ATM services including Digital-Automatic Terminal Information Service (D-ATIS), Digital-Meteorological Information for Aircraft in Flight (D-VOLMET), delivery of Pre-Departure Clearance (PDC) over data links, Aeronautical Telecommunication Network operations with Bangkok, and Air Traffic Services Inter-facility Data Communication (AIDC) with Sanya Area Control Centre (ACC) have been implemented at HKIA to enhance Air Traffic Control operational efficiency and flight safety.

Operational evaluation and optimization of the Advanced Surface Movement Guidance and Control System (A-SMGCS) for the Hong Kong International Airport were successfully completed in January 2009. The System, which is integrated with the existing Surface Movement Radar and Airfield Ground Lighting System, employs both the multilateration and Automatic Dependent Surveillance-Broadcast (ADS-B) technologies for enhanced surveillance of aircraft and vehicle movements on the airfield. The System provides conflict and runway incursion alerting functions for enhanced air traffic control safety and efficiency.

Trials on Arrival Manager (AMAN) System had been completed in 2008. The AMAN System will be commissioned for operational use in mid 2009 to provide Air Traffic Controllers with an efficient tool for planning of an optimum landing sequence and to reduce overall delays for aircraft arriving at the Hong Kong International Airport.

Weather Services for Aviation: The Airport Meteorological Office (AMO) of the Hong Kong Observatory (HKO) provides weather services for the aviation community in accordance with the standards and recommended practices of the International Civil Aviation Organisation. The AMO makes routine and special weather observations and provides fixed-time aerodrome forecasts and landing forecasts for the HKIA. It issues aerodrome warnings on adverse weather and tsunami for protection of aerodrome facilities and aircraft on the ground. It also issues significant weather information on thunderstorms, tropical cyclones, turbulence, icing, and other hazardous weather which may affect aviation safety within Hong Kong FIR. To enhance the safety of aircraft landing and taking off from HKIA, the AMO issues alerts of low-level windshear and turbulence. For service delivery, the HKO operates a web-based information service through which airline companies can retrieve the latest meteorological information and flight documentation including weather forecasts for departure, destination and alternate aerodromes, forecast charts of en-route significant weather, wind and temperature data, as well as lightning location information, weather radar and satellite images.

Rescue and Fire Fighting Services: Such services within the airport are covered by the Airport Fire Contingent of the Fire Services Department. The contingent has a strength of 250 uniformed members, operating two fire stations and two rescue berths for 24-hour emergency calls. It is equipped with 14 fire appliances which can respond to incidents occurred at any point of operational runways within two minutes in optimum conditions of visibility and surface conditions, satisfying the relevant recommendation of the International Civil Aviation Organisation. Two high capacity rescue boats, supported by eight speed boats, form the core of sea rescue operations.

Developments at the Airport: Airport business is the management of flows: the flows of passengers, cargo and information. To sustain the growth of flows, HKIA continues to expand its connections to new sources of passengers and cargo.

This means improving the network to the rapidly-growing markets in Mainland China, in particular the Pearl River Delta region (PRD). The coach station in Terminal 2 as well as the SkyPier ferry terminal established a close connection to the PRD region. The coach station features 36 bays and an all-weather waiting lounge, which provides a comfortable environment for passengers waiting to depart HKIA for different cities in PRD.

About 320 coach trips are made every day to link HKIA with destinations in 90 PRD cities and towns. Passengers expecting point-to-point transport services could use cross-boundary limousine for their PRD destinations. The cross-boundary coaches and limousines carried about 1.3 million passengers in 2008.

HKIA's network to the Mainland is also further strengthened by the opening of the temporary SkyPier in late September 2003, offering millions in the PRD direct access to the airport and its extensive international air network. In 2008, the temporary SkyPier served over 2 million passengers. Passengers coming to the SkyPier by high-speed ferries (sea-air passengers) will board bonded buses for onward flights while arriving air passengers (air-sea passengers) can board ferries at the pier for their journeys back to PRD. Passengers of both directions can bypass customs and immigration formalities which will cut up to half the original transit time. To further streamline the traveling process at the border, HKIA has launched up stream check-in service at Shekou, Fuyong, Humen and Macau for sea-air passengers.

Passengers can obtain their boarding passes and check-in their baggage before arriving at HKIA. SkyPier is currently connected to six PRD ports, namely: Shekou and Fuyong of Shenzhen, Dongguan, Zhongshan, Zhuhai and Macau.

The provision of cross-boundary coach, limousine and ferry services has transformed HKIA into a truly multi-modal transportation hub combining air, sea and land transport. It is also a significant step forward in HKIA's integration with the Mainland Chinese market.

Air Services: The operation of scheduled air services to and from Hong Kong are facilitated by Air Services Agreements between Hong Kong and its aviation partners. Since the opening of HKIA, the Hong Kong Special Administrative Region Government has firmly and proactively implemented a policy of progressive liberalisation of air services to promote consumer choice and competition and to provide airlines of Hong Kong and its aviation partners with opportunities for service expansion.

Commercial Aviation, Recreational Flying and the Government Flying Service: Cathay Pacific Airways Limited operates 23 B747, 26 B777 (including nine B777-300ER), 32 A330, 17 A340 aircraft and 22 B747 freighters providing scheduled services throughout Asia, Australia, New Zealand, the Middle East, Europe, South Africa and North America. Hong Kong Dragon Airlines Limited operates 16 A330, 10 A320, six A321 aircraft and five B747 freighters to provide scheduled passenger services in the region, and scheduled all-cargo services to

the Middle East and Europe. Air Hong Kong Limited operates scheduled all-cargo services with eight A300-600 freighters between Hong Kong and Beijing, Shanghai, Taiwan, Japan, Korea, Thailand, Malaysia and Singapore. Hong Kong Express Airways Limited operates six B737 aircraft for scheduled passenger services to the Mainland, Northeast and South East Asia. Hong Kong Airlines operates two B737 to Kunming. The two airlines also operate codeshare flights to a number of Mainland cities. Metrojet Limited operates five G200 aircraft for non-scheduled passenger services in the region. Skyshuttle (formerly Heli Express) Limited operates two S76C+ for local passenger charters and aerial works and for passenger charters between Hong Kong and Macau. Heliservices (Hong Kong) Limited operates four SA315B, one AS355N and one MD500E helicopters for local passenger charters and aerial works.

The Hong Kong Business Aviation Centre (BAC) is located within the confines of the airport and has its own terminal and facilities. It provides a full range of services for executive aircraft, including ground handling, baggage handling, fuelling, security and flight planning. Designated spaces are also provided at the BAC for private aircraft.

The Hong Kong Aviation Club conducts recreational flying in Hong Kong, undertakes flying training for private pilots and provides facilities for private owners.

The Government Flying Service provides short and long range search and rescue services, police support, medical evacuation as well as flights for other Government purposes. The fleet comprises three AS332, four EC155 helicopters and two BAe 4100 aircraft.