# Matters Relating to the Opening of the New Airport at Chek Lap Kok

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Prepared by

Ms Eva LIU Ms Vicky LEE Miss Elyssa WONG Mr Joseph LEE

Research and Library Services Division Legislative Council Secretariat

5th Floor, Citibank Tower, 3 Garden Road, Central, Hong Kong

Telephone: (852) 2869 7735
Facsimile: (852) 2525 0990
Website: http://legco.gov.hk
E-mail: library@legco.gov.hk

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# MATTERS RELATING TO THE OPENING OF THE NEW AIRPORT AT CHEK LAP KOK

#### **PART 1 - INTRODUCTION**

#### 1. Background

The New Airport at Chek Lap Kok (the New Airport) commenced operation on 6 July 1998 and replaced the airport at Kai Tak. However, chaos and problems emerged: flights were delayed or cancelled, pieces of luggage were missing and air cargo services had to be halted. The House Committee of the Legislative Council (LegCo) proposed on 10 July 1998 to establish a Select Committee to Inquire into Matters Relating to the Opening of the New Airport at Chek Lap Kok to look into the matters. This research report is prepared by the Research and Library Services Division (RLS) to assist Members in the discussion of the matters in the coming meetings.

#### 2. Objective

2.1 This research study aims to identify and summarize major issues and problem areas associated with the preparation, management and operation of the New Airport. The focus is on the operation of the New Airport itself, without making reference to problems of the Airport Core Programme (ACP), which have also shown malfunction.

#### 3. Methodology

3.1 This study mainly focuses on the materials available in the LegCo Library, which include past papers and reports of the Government, the Airport Authority (AA), the Provisional AA and LegCo. Reference has also been made to newspapers clippings and the Internet.

#### PART 2 - PLANNED OPERATION OF THE NEW AIRPORT

#### 4. Background

- 4.1 The New Airport, which costs about HK\$70.2 billion, started operation on 6 July 1998. It comprises Passenger Terminal Buildings, runways and taxiways, centralized terminal processing buildings, attached and satellite terminal concourses, aircraft parking positions, road bridges, aircraft maintenance facilities and support and ancillary facilities.
- 4.2 <u>Appendix I</u> lists the major statistics of the planned operation of the New Airport.

#### 5. Authorities for the Planning and Operation of the New Airport

#### Main Duties of the Authorities

Airport Authority (AA)

• responsible for the management and operation of the New Airport

Airport Consultative Committee (ACC)

advises on matters related to the New Airport

New Airport Projects Co-ordination Office (NAPCO)

- responsible for the implementation of the ten core airport projects which have to be completed on time and within budget
- reports to the Airport Development Steering Committee (ADSC)

Airport Development Steering Committee (ADSC)

• monitors the progress of the New Airport

# PART 3 - MAJOR ISSUES RELATING TO THE OPERATION OF THE NEW AIRPORT

- 6.1 Major issues relating to the operation of the New Airport as from its operations on 6 July 1998 are classified into the following categories:
  - infrastructure
  - passengers services
  - air cargo services
  - operation of the New Airport and
  - other areas

Tables 1 to 5 below summarize the major issues relating to the above categories.

#### 7. Infrastructure

7.1 A number of defects were found in the Passenger Terminal Buildings and Airport Railway since 6 July 1998. Table 1 summarizes the details.

Table 1 - Problems Encountered in the Passenger Terminal Buildings and Airport Railway

Problem Area	Description	Progress / Remarks		
	Airport Passenger Terminal Buildings			
Air-conditioning	malfunctioning of the cooling system	reported to have been restored		
Toilets	<ul> <li>inadequate number</li> <li>no flush and fresh water supply</li> </ul>	<ul> <li>contractor reported to have increased manpower to maintain hygienic conditions</li> <li>cleaning services reported to have been increased to once every two hours</li> </ul>		
Telephones	<ul> <li>over 200 public telephones not connected</li> <li>malfunctioning of mobile phone network</li> </ul>	reported to be installed shortly		

Problem Area	Description	Progress / Remarks		
Utilities	<ul><li>breakdown of water supply</li><li>breakdown of electricity supply</li></ul>	AA to ensure 24-hour water and electricity supply		
Escalators / elevators	<ul> <li>Not in operation</li> <li>Inadequate number</li> <li>Passengers have to use emergency exits</li> </ul>	• reported to have been restored		
Display boards	<ul> <li>inaccurate information such that passengers could not locate the departing aircraft</li> </ul>	n.a.		
Sign boards in departure hall and restricted areas	<ul><li>incorrect information</li><li>inadequate number</li><li>too small in size</li></ul>	<ul><li>only 86 in total</li><li>temporary signs to be installed</li></ul>		
Rubbish bins	<ul><li>inadequate number</li><li>emptied infrequently</li><li>small in size</li></ul>	n.a.		
Seats in departure hall	• inadequate number	n.a.		
Restaurants	<ul><li>inadequate number</li><li>inadequate seats</li><li>not opening on a 24-hour basis</li></ul>	n.a.		
Offices for airline staff	<ul> <li>renovation incomplete</li> </ul>	n.a.		
Taxi stands	<ul> <li>taxis have to wait for hours and cannot leave the queue</li> <li>no toilets for taxi-drivers at taxi stands</li> </ul>	n.a.		
Press room	• only one telephone line installed	n.a.		
Floor	• surface slippery and reflective	n.a.		
	Airport Railway			
Ticket machines	• malfunction	• reported to have been restored		
Airport railway	• working hours do not match with flight schedule	n.a.		
Turnstiles	• malfunction	• reported to have been restored		

#### 8. Passenger Services

8.1 Table 2 summarizes the problems encountered by passengers in the arrival and departure halls.

**Table 2 - Problems Encountered by Passengers** 

Problem Area	Description	Progress / Remarks
Luggage handling	<ul> <li>luggage misplaced, delayed, missing or undelivered</li> <li>long waiting time (more than 24 hours on the first two days of operation)</li> <li>Luggage Handling System breakdown due to computer software problem</li> </ul>	recent waiting time reported to reduce to 30 minutes
Flight schedule	<ul> <li>on 6 July, 146 flights departed, of which 80 were within 15 minutes of scheduled time and 13 were within 15-30 minutes of scheduled time</li> <li>no announcements were made for delayed flights</li> </ul>	n.a.
Shuttle bus (tarmac)	<ul><li>inadequate number</li><li>long waiting time (2 hours)</li></ul>	n.a.
Flight Delay	<ul> <li>inadequate refill of fuel supplies</li> <li>inexperienced ramp operators</li> <li>lack of co-ordination among ramp operating companies leading to slow processing</li> </ul>	n.a.

#### 9. Air Cargo Services

- 9.1 Air cargo services are run by:
  - Hong Kong Air Cargo Terminals Limited (HACTL) 82% of daily air cargo of 4 000 tonnes; and
  - Asia Airfreight Terminal Limited (AATL) the remaining 18% of daily air cargo.

Table 3 summarizes the problems identified in air cargo services.

**Table 3 - Problems Encountered in Air Cargo Services** 

Problem Area	Description	Progress / Remarks
No contingency plan	total reliance on computer system, no manual handling procedures	n.a.
Unstable supply of electricity	<ul> <li>weighing machines breakdown</li> <li>computer system breakdown such that cargo cannot be located</li> </ul>	n.a.
Moratorium of all air cargo services (except for inward and outward news, inward perishables, lifesaving materials and strong room items)	software and mechanical problems	<ul> <li>diversion of flights to airports outside Hong Kong Special Administrative Region</li> <li>a temporary arrangement to allow some cargo to be exported using the Air Freight Forwarding Centre at the New Airport</li> <li>Government offers rent-free usage of the basement of the airport at Kai Tak</li> <li>by 19 July, handles 50% of the air cargo</li> <li>by end-July, handles 75% of the air cargo</li> <li>by mid-August, handles 100% of the air cargo with the support of the airport at Kai Tak</li> <li>by end-August, the New Airport alone handles 100% of air cargo</li> </ul>

# 10. Operation of the New Airport

Table 4 summarizes the inadequacy in the training and familiarization of airport staff in operating the New Airport.

Table 4 - Problems Encountered in the Operation of the New Airport

Problem Area	Description	Progress / Remarks
Ground handling staff	<ul> <li>two-thirds of the ground handling staff were newly hired with little or no experience</li> <li>unfamiliar with airport facilities</li> </ul>	n.a.
Airbridge staff	inadequate number	n.a.
Information officers	inadequate number	n.a.

#### 11. Other Areas

11.1 Table 5 summarizes the security system in the New Airport and the noise problems under the flight path.

**Table 5 - Problems Encountered in Other Areas** 

Problem Area	Description	Progress / Remark		
	Security			
Trespassing  Unaccompanied	<ul> <li>trespassers found in restricted areas</li> <li>persons left restricted areas without clearance by Immigration</li> <li>against international</li> </ul>	n.a.		
luggage found on board	rules			
Dangerous goods undetected	compressed cans on board not detected	n.a.		
Blind spot in the communication network of the Hong Kong Police Force (HKPF)	communication     breakdown in certain     locations	n.a.		
Fire prevention system	<ul> <li>no fire drill was reported to have been held in passenger terminals</li> <li>blockage of fire exits</li> <li>malfunctioning of fire alarm system</li> <li>malfunctioning of sprinkling system</li> </ul>	n.a.		
Noise				
Noise	<ul> <li>ground noise level under flight path averaged around the international standard of 70 DB;</li> <li>reports of higher noise level in Tsing Yi, Sai Kung and Shatin</li> </ul>	n.a.		

#### PART 4 - ANALYSIS

#### 12. Factors Leading to the Problems

Factors leading to the chaos and problems at the New Airport are yet to be found. Nonetheless, it appears that the following factors might warrant attention.

#### **Inadequate Preparation of the New Airport**

- 12.2 Examples of inadequate preparation:
  - late installation of computer back-up system
  - lack of contingency plan
  - small-scale test run involving only 4 flights and no passengers
- 12.3 AA originally planned to open the New Airport in April 1998. In the *ACP Quarterly Report Jan-Mar 1998*, the AA reported that approximately 96% of the AA works were complete. However, as the transport network was not ready then, the Chief Executive-in-Council decided in January 1998 to delay the opening of the New Airport to July 1998. (Please see <u>Appendices II and III</u> for details). Nonetheless, a large number of defects were still found in the New Airport infrastructure after its opening on 6 July. It leads to the natural question of how the decision was made as regards the date of the opening of the New Airport.

#### Communication Problems Among Various Parties

12.4 Paragraphs 12.5-12.8 present some examples of possible communication problems among various parties relating to the operation of the New Airport.

#### Between AA and the Civil Aviation Department (CAD)

12.5 The airport at Kai Tak was operated by the CAD while the New Airport is run by the AA. There might be a lack of effective communication between the two.

#### Between AA and Different Airlines

Preparation of offices for some airlines was not yet complete when operation commenced on schedule.

#### Between AA and HACTL

The AA announced that the New Airport would start normal operation on 6 July 1998. However, HACTL originally scheduled to offer all cargo handling services on 18 August 1998 and the Occupation Permit was issued to HACTL only on 2 July 1998. It appears that HACTL was not ready to operate at full strength by 6 July 1998.

#### Between AA and the Hong Kong Police Force (HKPF)

12.8 The HKPF does not have access to restricted areas even in cases of emergency. (Please refer to the incident on 10 July). It might cause delays in actions taken by the Police and pose security threats to passengers.

#### **Centralized Computer System**

12.9 All the operations in the New Airport are computerized and they are controlled by one centralized computer system. In case of any breakdown of the centralized computer system, the whole operation will be affected. The back-up computer system was only installed in April 1998. It is unclear if test runs on the back-up system were made before 6 July 1998.

#### Crisis Management

12.10 Contingency plans are not available for most subject areas. These include breakdowns in the centralized computer system and cargo services.

#### **PART 5 - CONCLUDING REMARKS**

- As a result of the chaos associated with the opening of the New Airport, the Government decided to set up an independent team to investigate into the problems. The House Committee of the LegCo proposed to establish a Select Committee to Inquire into Matters Relating to the Opening of the New Airport at Chek Lap Kok to look into the matters. In addition, the Office of the Ombudsman announced that it would investigate into the case. Appendix IV shows the composition, power and areas to be investigated by the three bodies.
- 13.2 The chaos associated with the opening of the New Airport have already caused damage to the economy. The Financial Secretary estimated that the GDP growth would be reduced by 0.1 percentage point. This was held to be a conservative estimate. The reputation and role of Hong Kong as a leading cargo handling centre has already been adversely affected.

# Appendix I

# **Statistics of the New Airport**

Item		Stat	istics	
Total airport site		1 248 hectares		
Annual passengers	design capacity	35 million		
Air cargo tonnage	design capacity	3 million		
Airfield	• runways	1 (2)*		
	runway length	3 800m		
	taxiway system	26km	(35km)*	
	apron area	1.25km <sup>2</sup>	$(1.33 \text{km}^2)^*$	
Total passenger terminal	retail areas	30 000m <sup>2</sup>	(31 300 m <sup>2</sup> )*	
floor area	retail outlets	1:	20	
	• total floor area	515 000 m <sup>2</sup>	$(550\ 000\ m^2)$ *	
Aircraft gates	• frontal (connected to terminal by airbridge)	(48)*	38**	
	• remote	27		
	air cargo	13		
Check-in counters		288		
Immigration control desks	• arrivals	128		
	• departures	9	96	
Customs inspection position		76		
Security screening position	is (departures)	16		
Luggage reclaim units		12		
Passenger facilities • travelators		48		
automated people mover				
	care parking spaces	3 100 24 17		
	taxi loading spaces			
	• bus stops			
	lounge seating		12 530	
	flight information display boards	2 000		

#### Remarks:

Source: Airport Authority Annual Report 1996/1997

<sup>\*</sup> After the commissioning of the second runway, extension of the north west concourse and associated facilities will be made.

<sup>\*\*</sup> Temporary closure of one frontal gate is planned due to the construction work for the extension of the north west concourse.

#### Appendix II

#### **DAILY INFORMATION BULLETIN**

#### **New Airport to open in July**

Hong Kong will open the new airport at Chek Lap Kok for operation on July 6, 1998, the first Monday in that month.

On opening, the new airport will be of world class with supporting facilities, including the Airport Railway, ready for operation.

The new airport will be known as Hong Kong International Airport.

"The commissioning of the new airport and the Airport Railway in tandem will be significant. It will also denote the successful conclusion of the \$155 billion Airport Core Programme," a Government spokesman said.

"We have to ensure what is available on Day One is a world class airport supported by efficient transport arrangements.

"On July 6, 1998, which is the first Monday in July, the new airport will start operation as we need a Sunday night with lighter road traffic to facilitate a smooth airport relocation exercise and as air traffic also happens to be lighter on Monday," said the spokesman.

Judging from current works progress, the new airport should be ready for operation in late April and the MTR Corporation has confirmed that the Airport Railway will be available in late June as originally scheduled.

"We acknowledge the tremendous efforts made by both the Airport Authority and the MTR Corporation," the spokesman said.

The new airport is the largest single construction project ever undertaken in Hong Kong. Unlike Kai Tak, the new airport will be able to operate round the clock. During its initial operation, it will be able to handle up to 35 million passengers and three million tonnes of cargo a year. Upon full development in the longer term, the airport will have an annual throughput capacity of 87 million passengers and nine million tonnes of cargo.

In 1996, 29.5 million passengers and 1.56 million tonnes of cargo passed through Kai Tak. According to Airport Council International's statistics, Hong Kong ranks first in international air cargo throughput and third in terms of international passengers.

The Airport Railway is designed to carry about 40 per cent of air passengers. The Airport Express will take passengers from Central to the new airport in 23 minutes in business-class comfort. In-town check-in facilities are available at the Central Station and Kowloon Station.

End/Tuesday, January 13, 1998

Source: Information Services Department

Appendix III

#### **DAILY INFORMATION BULLETIN**

#### Transcript of FS's media session

Following is a transcript of a media session by the Financial Secretary, Mr Donald Tsang, at CGO this (Tuesday) afternoon:

Mr Tsang :

On the advice of the Executive Council, the SAR Government has decided to open the new airport at Chek Lap Kok together with all the other component facilities, including the Airport Railway, air cargo terminal etc., on July 6, which is the first Monday in July. By the time of its opening, it will be a world class facility, which has least rivals in the rest of the world. We have chosen July 6 because it will be the first Monday in July. We need to open the airport on a Monday because there will be the least air traffic on Monday. And we also need a Sunday, where there would be favourable road conditions for the transfer of equipment from Kai Tak to Chek Lap Kok. The new airport will be known as Hong Kong International Airport. The airport terminal itself will be completed at the end of April. This is in accordance with the construction programme. It will be completed on time and within budget. The Airport Railway itself will be completed by the end of June again on time and within budget. Taking account of these, and the completion dates of other component facilities, we have decided to open it on July 6. This will be a marvellous facility and it will be a world class airport, as I said, we will find very hardly any rival in the rest of the world.

Reporter : ... concern about ... loss of revenue?

Mr Tsang : No, there won't be any loss of revenue. The loss of revenue in the new Hong

Kong International Airport will be made anyway at Kai Tak. So there will

be no net loss of revenue.

Reporter : How about loss of confidence ...?

Mr Tsang : The point is, we have told everybody the ready date for the Railway will be

in June. There has been no delay in either the railway project or the airport terminal project. There is no loss of confidence at all. In fact it is the determination of the Government to make sure the facility when launched

will be of world class standard. It will not be a second rate facility.

Reporter : Will Kai Tak able to cope with the increase in traffic?

Mr Tsang : Yes, yes. It will be able to cope until the end of June.

Reporter : When did the Government decide to open in July?

Mr Tsang : Well, as I said the Executive Council, gave the advice this morning. And the

Chief Executive decided that will be the date its July 6.

Reporter : Decided today?

Mr Tsang : That's right.

Reporter : What do you think about the liquidation of Peregrine?

Mr Tsang : Well I feel very sorry about it because it is a Hong Kong firm. But it is a

market operation. It is a market decision. And it has made a lot of unprofitable investment in Indonesia resulted in the closure. I feel very sorry about it. I am relieved to hear that Mr Tose attached great importance to looking after the staff. I hope that the liquidation process would be a smooth one, and I understand that they are still in negotiation with some

other buyers.

Reporter : Moody's downgrading the rating of KCRC and MTRC, how would that

affect the lending for these companies?

Mr Tsang : I have not heard of downgrading. I mean they are open to review. These are

public corporation. We are conducting the affairs very well. They are doing excellent business. It is open for review by any rating agency. I don't think it will affect the operation of the railway, Mass Transit Railway Corporation or

any entities for that matter.

Reporter : I mean ... downgrading of three banks in Hong Kong ...

Mr Tsang : Well, I think they are open to look at all aspects of financial situations

subject of course if they are involving target entities they must have the permission of the entities concerned. We are a robust economy, with our corporation functioning in a most prudent way. I think they are open to ...

the books are open, the operations are open, it is clear for all to see.

Reporter : ... the market performed?

Mr Tsang : Well the market is a healthy market, it goes up, it comes down. It would do

what a market will do.

End/Monday, January 12, 1998

Source: Government Information Services Department

# Appendix IV

# **Authorities Investigating into Matters Relating to the New Airport**

Authority	Composition	Area to be Investigated	Powers and Duties
Investigation team of the Government	<ul> <li>one community leader</li> <li>two international experts</li> </ul>	<ul> <li>luggage handling</li> <li>flight information</li> <li>cargo system breakdown</li> <li>responsible parties</li> </ul>	<ul> <li>independent inquiry reporting to the Chief Executive</li> <li>no powers to enforce follow-up action</li> <li>recommendations will be made</li> </ul>
Select Committee of the Legislative Council	seven members	• to be decided	<ul> <li>may subpoena witnesses and documents unless the Chief Executive gives exemption</li> </ul>
Working group under the Office of the Ombudsman	eight members     headed by the Chairman	<ul> <li>preparation         work</li> <li>airport         operation</li> <li>monitoring of         airport         commissioning         and relocation</li> <li>causes of         operational         problem</li> <li>measures taken         to alleviate         problems</li> </ul>	Ombudsman reports to Chief Executive but only on administration within Government     May make recommendations

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