

**ADVISORY COUNCIL ON THE ENVIRONMENT**

(ACE 22/94)

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(For Information)

**Aircraft Noise Controls at Kai Tak**

**INTRODUCTION**

This paper sets out the existing and proposed control mechanisms on aircraft noise from Kai Tak operations and explains the roles played by various government agencies for members' information.

**NOISE IMPACT**

2. Two consultancy studies were undertaken in 1978 and 1990. Although aircraft movements doubled in number between 1978 and 1990, the noise exposure footprint had decreased by 30% over this period, due to increasing use of quieter types of aircraft. Despite the progressive aircraft engine improvement in terms of noise reduction over the years, the 1990 study estimated that some 350,000 people living near Kai Tak or below the flight paths are being exposed to aircraft noise. A total of 39 Government and Aided schools (for approximately 44,000 pupils) affected by aircraft noise have been provided with double glazing and air-conditioning at a cost of HK\$76M.

**EXISTING STATUTORY CONTROLS**

3. The principal legislation for the control of aircraft noise is the Civil Aviation (Aircraft Noise) Ordinance Cap.312 [CA(AN)O]. There are three areas of control :

- (a) Subsonic jet aircraft types not complying with International Civil Aviation Organization's recommended standards are not allowed to use Kai Tak. This provision has been operational on both local and foreign registered aircraft since 1988 via the Civil Aviation (Aircraft Noise) (Aircraft Classes) Notice.
- (b) Programmed Take Offs and Landings are prohibited from the period from midnight to 6:30 a.m. Aircraft will only be given exceptional permission to land or take off in this period if emergency or unforeseen circumstances so dictate. These aircraft movements will normally be required to use the Lei Yue Mun corridor. The control is provided for under the Civil Aviation (Aircraft Noise) (Limitation on Landing or taking Off of Aircraft) Notice made under the Ordinance in 1989.

- (c) Ground noise between the restricted hours of 9 p.m. and 7 a.m. has been the subject of control since 1989 under the Civil Aviation (Aircraft Noise) (Limitation on Operation of Engines & Auxiliary Power Units) Regulation. The provisions regulate activities such as engine testing and the use of auxiliary power units during restricted hours.

#### ROLES OF RELEVANT GOVERNMENT AGENCIES

4. The Director of Civil Aviation [DCA] is the statutory authority under the CA(AN)O. The Director of Environmental Protection [DEP] is the statutory authority under the Noise Control Ordinance [NCO] Cap.400. Their respective departments are the executive departments enforcing, under delegated authority, these two pieces of legislation. The NCO, which provides for the prevention, minimizing and abatement of noise, specifically excludes noise caused by aircraft in section 36. However, as DEP remains government's principal environmental protection advisor, there has been a long standing communication channel whereby the expert advice from DEP can be sought on matters relating to aircraft noise.

5. The policy responsibility for civil aviation, which includes matters relating to aircraft noise, rests with the Secretary for Economic Services [SES], to which the Civil Aviation Department reports as the executive department. As the Secretary for Planning, Environment and Lands [SPEL] is charged with the formulation of environmental noise policy, consultation and liaison between PELB and ESB takes place whenever policy issues concerning aircraft noise have environmental implications.

#### THE "CURFEW"

6. The period between midnight and 6:30 a.m. is referred to by the public as the "curfew" because of the fact that under the terms of the Notice, the airport is, for practical purposes of flight scheduling, closed to operations. Aircraft may not land or take off during this period except with the specific permission of the Air Traffic Services Watch Supervisor. Such permission is only given in exceptional circumstances, which may include :

- (i) malfunctions of the aircraft or unserviceability of navigation aids;
- (ii) disruption of normal operations at the aerodrome of origin or destination;
- (iii) closures of airspace or air traffic congestion;

- (iv) disruption to normal airport and aircraft operations due to war, bomb threats, industrial dispute, search and rescue operations, and medical evacuation; and,
- (v) disruption of normal operations due to adverse weather conditions.

7. For 1992 and 1993 total movements and permissions granted to operate after midnight are set out in the table below:

	<u>1992</u>	<u>1993</u>
Total movements	120,968	135,097
Movements allowed after midnight because of major disruptions	55	164
Movements allowed for other reasons	345	356

The major cause of disruptions was weather (including one typhoon in 1992 and three in 1993) but additional disruption in 1993 was brought about by the accident to the China Airlines B747 on 4 November. Details are at Annex. In 1993 permission to operate after midnight was refused on 12 occasions (for 7 arrivals and 5 departures).

#### RECENT DEVELOPMENTS

8. For safety reasons, the Notice described in para. 3(b) was amended to suspend the opposite runway mode of operation on 29.10.1993. Under this mode, aircraft had to land and take off at Kai Tak via the Lei Yue Mun Gap in order to reduce noise to North Kowloon residents unless weather conditions did not so permit. As such, the prohibition of movements over Kowloon between 9:00 p.m. and midnight was lifted. The Administration recognises the need to reduce to a minimum, the disturbance which aircraft noise may cause to affected residents. A number of new measures have or will soon be introduced to alleviate noise nuisance caused by aircraft due to the change on opposite runway mode of operation. These include :-

- (a) establishment of a working group comprising representatives from Economic Services Branch, Planning, Environment and Lands Branch, Civil Aviation Department and Environmental Protection Department to consider mitigating measures which may be implemented;

- (b) arrangements to bring forward some forty-two late evening flights each week. Of these, thirty-two programmed flights have already been adjusted so as to arrive before rather than after 10:30 p.m. In order to enable airlines concerned to adjust their operations this rescheduling has been taking place progressively since January 1994. The Civil Aviation Department will continue to work with the airlines towards the objective of bringing forward arrivals to before 10:00 p.m. during Summer 1994; and,
- (c) the forthcoming introduction, in the current legislative session, of a Bill to amend the Civil Aviation (Aircraft Noise) Ordinance, to restrict certain types of aircraft from using Kai Tak. Whilst the Bill will not result in any immediate improvements in noise from aircraft using Kai Tak; it will prevent Hong Kong from becoming a dumping ground for noisy aircraft.

9. This paper is submitted for Members information.

Planning, Environment and Lands Branch  
Environment Division  
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