## CIVIL AVIATION DEPARTMENT HONG KONG, CHINA

## **Accident Investigation Bulletin**

No. 1/09 Issue 4

### **REPORTING OF AIRCRAFT ACCIDENTS AND INCIDENTS**

### 1 Introduction

- 1.1 Under Regulation 5 of the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (CAP. 448B), where a reportable accident occurs the commander of the aircraft involved at the time of the accident, or if he be killed or incapacitated then the operator of the aircraft, and, in the case of an accident occurring on or adjacent to an aerodrome, the aerodrome authority shall forthwith give notice thereof to the Chief Inspector of Accidents by the quickest means of communication available and in the case of a reportable accident occurring in or over Hong Kong shall also notify forthwith the Commissioner of Police of the accident and of the place where it occurred.
- 1.2 To promote accident prevention by analysis of accident and incident data, the Civil Aviation Department of Hong Kong (CAD) has established an Accident / Incident Reporting System, which consists of a Mandatory Incident Reporting System and a Voluntary Incident Reporting System, to collect relevant information and data of accidents and incidents. As tasked by the Chief Inspector of Accidents, the Accident Investigation Division (AID) headed by the Deputy Chief Inspector of Accidents is responsible for the administration of the Accident / Incident Reporting System.
- 1.3 The purpose of this Bulletin is to make the policies and procedures on the Accident / Incident Reporting System public.

## 2 Interpretations

In this Bulletin, unless the context otherwise requires, the interpretation of the following are:

- 2.1 Accident:- Includes an incident and a reportable accident
- 2.2 **Reportable Accident:** An occurrence associated with the operation of an aircraft which takes place between the time when any person boards the aircraft with the intention of flight and such time as all persons have disembarked therefrom, in which –

- a) any person suffers death or serious injury while in or upon the aircraft or by direct contact with any part of the aircraft (including any part which has become detached from the aircraft) or by direct exposure to jet blast, except when the death or serious injury is from natural causes, is self-inflicted or is inflicted by other persons or when the death or serious injury is suffered by a stowaway hiding outside the areas normally available in flight to the passengers and members of the crew of the aircraft; or
- b) the aircraft incurs damage or structural failure, other than
  - i. engine failure or damage, when the damage is limited to the engine, its cowling or accessories;
  - ii. damage limited to propellers, wing tips, antennae, tyres, brakes, fairings, small dents or punctured holes in the aircraft skin,

which adversely affects its structural strength, performance or flight characteristics and which would normally require major repair or replacement of the affected component; or

- c) the aircraft is missing or is completely inaccessible.
- 2.3 **Incident:** Any fortuitous or unexpected event, not being a reportable accident, by which the safety of an aircraft or any person is threatened. In other words, an occurrence, other than a reportable accident, associated with the operation of an aircraft which affects or could affect the safety of operation.
- 2.4 **Serious Incident**:- An incident involving circumstances indicating that there was a high probability of a reportable accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down. Examples of serious incidents are:
  - a) Near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate.
  - b) Collision not classified as reportable accidents.
  - c) Controlled flight into terrain only marginally avoided.

- d) Aborted take-offs on a closed or engaged runway, on a taxiway<sup>1</sup> or unassigned runway.
- e) Take-offs from a closed or engaged runway, from a taxiway<sup>1</sup> or unassigned runway.
- f) Landings or attempted landings on a closed or engaged runway, on a taxiway<sup>1</sup> or unassigned runway.
- g) Gross failures to achieve predicted performance during take-off or initial climb.
- h) Fires and / or smoke in the cockpit, in the passenger compartment, in cargo compartments or engine fires, even though such fires were extinguished by the use of extinguishing agents.
- i) Events requiring the emergency use of oxygen by the flight crew.
- j) Aircraft structural failures or engine disintegrations, including uncontained turbine engine failures, not classified as a reportable accident.
- k) Multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- 1) Flight crew incapacitation in flight.
- m) Fuel quantity level or distribution situations requiring the declaration of an emergency by the pilot, such as insufficient fuel, fuel exhaustion, fuel starvation, or inability to use all usable fuel on board.
- n) Runway incursions classified with severity A. The ICAO Manual on the Prevention of Runway Incursions (Doc 9870) contains information on the severity classifications.
- o) Take-off or landing incidents. Incidents such as under-shooting, overrunning or running off the side of runways.
- p) System failures, weather phenomena, operations outside the approved flight envelope or other occurrences which caused or could have caused difficulties controlling the aircraft.
- q) Failures of more than one system in a redundancy system mandatory for flight guidance and navigation.
- r) The unintentional or, as an emergency measure, the intentional release of a slung load or any other load carried external to the aircraft.

<sup>&</sup>lt;sup>1</sup> Excluding authorised operations by helicopters.

# **3** Reporting of Accidents and Incidents

# 3.1 Mandatory Incident Reporting

a) Under the Mandatory Incident Reporting System, when a reportable accident or serious incident occurs to civil aircraft in or over Hong Kong or elsewhere to civil aircraft registered in Hong Kong, the commander and/or operator of the aircraft, and the aerodrome authority shall report the occurrence to the AID by at least one of the following means:

Tel:	(852) 2910 6821 (24 hours)
Fax:	(852) 2910 1178 (24 hours)
Email:	aid@cad.gov.hk
AFTN:	VHHHYLYX
Post:	Accident Investigation Division,
	Civil Aviation Department,
	1 Tung Fai Road,
	Hong Kong International Airport,
	Lantau, Hong Kong

- b) The following shall be stated as far as possible:
  - (i) manufacturer, model, nationality and registration marks, and serial number of the aircraft;
  - (ii) name of owner, operator and hirer, if any, of the aircraft;
  - (iii) name and qualification of the pilot in command, and nationality of crew and passengers;
  - (iv) date and time (local time or UTC) of the occurrence;
  - (v) last point of departure and point of intended landing of the aircraft;
  - (vi) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;
  - (vii) number of crew and passengers; abroad, killed and seriously injured; others, killed and serious injured;
  - (viii) description of the occurrence and the extent of damage to the aircraft so far as is known;
  - (ix) physical characteristics of the occurrence area, as well as an indication of access difficulties or special requirements to reach the site; and
  - (x) presence and description of dangerous goods on board the aircraft.
- c) To facilitate reporting and the provision of relevant information, an Aircraft Accident / Incident Reporting Form (DCA 233) is provided on

the AID website through the following link : <u>http://www.cad.gov.hk/english/notifyairacc.html</u>.

d) Upon receipt of such report, the AID will determine if an investigation under CAP. 448B is required.

# 3.2 Voluntary Incident Reporting

a) For occurrences that are not captured by the Mandatory Incident Reporting System, all persons, including but not limited to the commander and /or operator of the aircraft, air traffic controller, maintenance services provider and the aerodrome authority, are encouraged to report such occurrences to the AID by at least one of the following means:

Fax: (852) 2326 3654
Email: vir@cad.gov.hk
Post: Accident Investigation Division, Civil Aviation Department, 1 Tung Fai Road, Hong Kong International Airport, Lantau, Hong Kong

- b) To facilitate reporting, a Voluntary Incident Reporting Form (DCA 234) has been designed and is available for download from the AID website through the following link: <u>http://www.cad.gov.hk/english/notifyairacc.html</u>.
- c) The Voluntary Incident Reporting System allows the AID to collect as much incident data as possible to perform meaningful analysis in order to fulfill the purpose of accident prevention and enhancing aviation safety. It is operated in a non-punitive environment and the source of information will not be disclosed unless required to do so by law, or the person concerned authorised the disclosure.
- d) Upon receipt of such report, the AID will assess the information and determine the appropriate follow up actions. These may include de-identifying the source and issuing the information to the concerned regulatory authorities and/or aviation organizations for action and safety management uses. The AID may also contact the person reporting the occurrence for additional information. The principles of protection of safety information and exceptions to such protection as stipulated in Annex 19 to the Convention on International Civil Aviation shall apply.

e) The AID may extract the safety information collected for the issuance of lessons learnt and safety statistics, and exchange safety information with other agencies or authorities for accident prevention and continuous safety improvements.

K.C. MAN Deputy Chief Inspector of Accidents