

## **ITEM FOR ESTABLISHMENT SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 158 – GOVERNMENT SECRETARIAT : TRANSPORT AND HOUSING BUREAU (TRANSPORT BRANCH)**

#### **Subhead 000 Operational expenses**

Members are invited to recommend to the Finance Committee the creation of the following non-civil service position in the Transport Branch of the Transport and Housing Bureau for about three years, with immediate effect upon approval of the Finance Committee up to 31 March 2020 –

1 Chief Inspector of Accidents  
(equivalent to the rank of D2) (\$161,450 - \$176,550)

#### **PROBLEM**

The Transport and Housing Bureau (THB) needs dedicated directorate support to lead an independent air accident investigation authority (independent investigation authority) to be established under THB, in order to comply with the new requirement of the International Civil Aviation Organisation (ICAO).

#### **PROPOSAL**

2. We propose to create a non-civil service position equivalent to the rank of D2, to be designated as Chief Inspector of Accidents (CIA), for about three years with immediate effect upon approval of the Finance Committee (FC) up to 31 March 2020, to lead the independent investigation authority under the purview of THB and spearhead civil aviation accident investigations. This independent investigation authority will be responsible for the investigation of accidents and serious incidents relating to civil aircraft under the leadership of CIA.

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## JUSTIFICATION

### Existing practice of civil aviation accident investigation

3. According to the long standing requirements of ICAO and international practice, the objective of civil aviation accident investigation is to identify the causes of accidents or serious incidents involving civil aircraft, so as to facilitate lesson learning and improvement of mechanism to prevent similar event from happening again. The purpose of investigation is not to apportion blame or liability. This is to encourage the parties involved to be forthcoming in providing information to the accident investigation authorities such that the authorities may identify the underlying causes of the accidents or serious incidents concerned.

4. In Hong Kong, civil aviation accident investigation is conducted in accordance with the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Chapter 448B) (Regulations) with reference to ICAO's requirements in this respect. ICAO stipulates its Standards and Recommended Practices on the manner of civil aviation accident investigation in 'Annex 13 to the Convention on International Civil Aviation – Aircraft Accident and Incident Investigation' (Annex 13). According to Annex 13, an ICAO Contracting State is obliged to conduct investigation into civil aviation accidents or serious incidents which occur in its territory. It is also entitled to participate in the investigation of accidents or serious incidents which occur outside its territory but involve aircraft under its registry. A State may also participate in the investigation of aircraft accidents or serious incidents where a large number of its nationals are involved. Hong Kong, being part of China which is one of the 191 Contracting States of ICAO, has an obligation to comply with the Standards set by ICAO on the investigation of civil aviation accidents.

5. Under the Regulations, the Chief Executive (CE) is the authority for appointing CIA, who is responsible for the investigation of civil aviation accidents and serious incidents which occur in Hong Kong or which involve Hong Kong-registered aircraft outside Hong Kong. Over the years, the Director-General of Civil Aviation (DGCA) is appointed by the CE as CIA. For each investigation of accident or serious incident, CIA will assign a dedicated team for the investigation work. Generally speaking, each investigation team comprises a number of qualified Inspectors of Accidents (Inspectors) temporarily deployed from different divisions in the Civil Aviation Department (CAD), among whom one will be the Investigator-in-Charge<sup>1</sup>. Usually, the Inspectors would work on the investigations on a part-time basis. The investigation team will also invite the State of Registry,

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<sup>1</sup> Depending on the seriousness and the level of complexity of the incident, the Investigator-in-Charge will usually be a CAD staff whose rank is Senior Operations Officer or above, possessing the qualification required for accident investigation.

the State of Design, the State of Manufacture, the State of the Operator, the airline and the aircraft manufacturer, etc. to participate in the investigation. Moreover, CAD has established a specialised Accident Investigation Office (AIO), comprising two permanent posts (i.e. one Senior Operations Officer (SOO) and one Operations Officer (OO)), whose full-time duties are to co-ordinate all the administrative and logistics support work of investigations.

6. An investigation team conducts investigation in accordance with the Regulations. For instance, the Inspector-in-Charge/Inspector may summon any person to examine and take statements as he/she thinks fit, and require any aircraft involved to be preserved unaltered pending investigation, and is accountable to and reports directly to CIA. According to the Regulations, CIA will submit report to the CE upon completion of an investigation. Generally speaking, the CE will arrange for the inspector concerned to publish the investigation report on the CAD website (Web link: <http://www.cad.gov.hk/english/reports.html>).

#### **Need for an independent air accident investigation authority**

7. From time to time, ICAO would introduce new requirements on the manner of civil aviation accident investigation through amending Annex 13. One of the major amendments to Annex 13 endorsed by the Council of ICAO in February 2016 requires the Contracting States to establish an independent air accident investigation authority, i.e. the investigation authority should be independent from the state aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation. The new Standard became applicable from November 2016. ICAO recommended the Contracting States to implement this new Standard within two years (i.e. by the end of October 2018).

8. Despite the fact that CAD has all along closely complied with the Standards and Recommended Practices of Annex 13 in its past accident investigation work, there might be occasions where an investigation may need to look into the regulatory functions and services provided by CAD. These could include, for example, CAD's safety oversight on airlines and airworthiness of aircraft, and the provision of air traffic control service by CAD. Under the existing arrangement whereby the DGCA is also the CIA, the impartiality of investigations may be perceived to be compromised, and to this extent the continuation of the present arrangement could not meet the latest requirement of ICAO (see paragraph 7 above). Although CAD has in place an internal mechanism to deal with real or perceived conflict of interests<sup>2</sup>, the existing arrangement still cannot fully comply with the objective or spirit of the amended Annex 13. On the other hand, without

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<sup>2</sup> CIA (who currently is also DGCA) is liable to transfer out those inspectors who may have conflicting roles or conflict of interests from the investigation posts to ensure the impartiality of the investigation.

dedicated manpower resource for accident investigations, most Inspectors participate in investigations on a part-time basis and are required to perform their original CAD duties during the investigation process. Such an arrangement not only puts a strain on resources, but also inevitably lengthens the investigation period, which is not conducive to the timely conclusion and publication of investigation results. Therefore, the Government is of the view that an independent investigation authority must be established as soon as possible with a view to complying with the latest requirement of ICAO.

### **Organisational structure and functions of the independent investigation authority**

9. Under the Government's proposal, the new independent investigation authority will be fully segregated from CAD's organisational structure and will come under the direct purview of THB<sup>3</sup>. Investigations of accidents or serious incidents will be led by a full-time CIA who will no longer be DGCA (or other member of CAD). CIA will be appointed by the CE under the Regulations and directly accountable to the Secretary for Transport and Housing. This arrangement is to ensure the neutrality of the investigation authority vis-a-vis CAD, and the impartiality and credibility of investigation findings. CIA will be underpinned by full-time staff in order to expedite the investigation process. The industry will then be able to learn about the findings early, so as to draw safety lessons and adopt and implement safety recommendations timely. The suitable provision of manpower and resources could also help step up safety management and accident prevention initiatives to further enhance aviation safety.

### **Scope of work of the independent investigation authority**

10. The independent investigation authority will be responsible for conducting investigations into all accidents and serious incidents related to civil aircraft that happen within the Hong Kong territory and also those involving Hong Kong-registered civil aircraft which happen outside Hong Kong. The primary functions of the independent investigation authority include determining the cause(s) of accidents, publishing investigation reports, protecting evidence, reporting investigation progress to victim families or survivors and so forth. Furthermore, the independent investigation authority will be responsible for safety management and accident prevention initiatives, such as managing accident and incident database, analysing data to identify safety hazards, proposing safety recommendations and collaborating with the aviation industry to disseminate safety

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<sup>3</sup> The new independent investigation authority will be housed at the Accident Investigation Centre at the CAD Headquarters. It is separated from the office building of CAD and is under 24-hour security surveillance. The Centre is equipped with storage designated for accident evidence and investigation equipment and facilities.

information, etc. The independent investigation authority will also provide recurrent training for personnel and maintain facilities and equipment to ensure readiness for accident investigations and fulfilment of requirements of the Regulations at all times.

### **Proposed creation of a non-civil service CIA position at directorate level**

11. As civil aviation accident investigation is highly specialised and complex, and as the cause of accidents or serious incidents may involve various fronts of operations of the aviation industry, CIA, who leads the independent investigation authority, has to possess professional aviation knowledge, such as civil aviation legislation, aircraft operation, aircraft engineering, air traffic control, airport operation, airline management and safety management, etc. CIA must also have practical experience in civil aviation accident and serious incident investigations in order to oversee the investigation work effectively. Moreover, subject to the passage of the relevant legislative amendments, CIA will have statutory powers to direct and oversee accident investigation work, including appointing persons to assist in investigations as well as allowing authorised persons to have access to and remove the aircraft concerned, etc.

12. Throughout an investigation, CIA has to maintain close liaison with the aviation industry (such as CAD, airlines and aircraft maintenance companies, etc.) to collect statements and evidence from inquiries during the course of investigation and to release safety information to the industry. In this connection, CIA must have certain qualifications, reputation and status in the industry, enabling him/her to exert influence and discharge his/her duties in an effective manner. In addition, as CIA is also responsible for communicating with the media and the public to explain the progress and result of investigations, he/she must possess good communication skills.

13. Furthermore, as the head of the independent investigation authority, CIA's daily work includes ensuring the readiness and capability of the authority in civil aviation accident investigations and handling, analysing accident and incident data to identify potential safety hazards, co-ordinating the release of safety information and guidelines on prevention of accidents, and managing the internal affairs of the independent investigation authority (including staff deployment, staff training, procurement and maintenance of investigation facilities and equipment, etc.). The above tasks demand very strong administrative management and strategic competencies and have to be carried out by a professional with proven experience in administrative management. Taking into account the above factors and the importance of aviation safety, we consider the creation of a non-civil service position (equivalent to the rank of D2) necessary and appropriate. The position will last for about three years with immediate effect upon approval of FC

up to 31 March 2020. Such an arrangement would allow flexibility for the Government to review whether the manpower establishment of the newly set up independent investigation authority suits the actual operational needs and determine the long-term staff establishment in due course. The job description of the proposed non-civil service CIA position is at Enclosure 1.

Encl. 1

14. Given the job requirements and the wide areas of expertise required of CIA, the local pool of talents possessing the relevant experience and competence could be rather limited. To widen the pool of candidates and to give the Government the flexibility to recruit from overseas if necessary, we propose that the CIA position be appointed on non-civil service terms.

### **Non-directorate support for the proposed CIA position**

15. We propose to have three SOOs and three OOs under CIA to assist in the work of the authority. These six staff include a SOO and an OO currently serving in the AIO of CAD (see paragraph 5 above) who will be deployed to the independent investigation authority to ensure smooth transition of the on-going investigations from CAD and prepare for the prompt establishment of the new authority<sup>4</sup>. In addition, we propose to create an Assistant Clerical Officer post to assist in the clerical/secretarial duties. The proposed organisation chart of the independent investigation authority is at Enclosure 2. The key duties of the three investigation teams are at Enclosure 3.

Encl. 2

Encl. 3

### **ALTERNATIVES CONSIDERED**

16. We have critically examined the possibility of re-deploying existing staff resources within THB or CAD to take up the CIA position. However, as it is the requirement of ICAO that the air accident investigation authority has to be independent from the civil aviation authorities to ensure its impartiality, the arrangement of deploying existing CAD staff to fill the CIA position will not meet the requirement of Annex 13. On the other hand, given that air accident investigation is a highly specialised subject and the CIA position demands strong aviation background and competence, it is not appropriate for staff members from THB, who are usually generalists, to take up the post.

17. We have also critically considered whether an ad hoc set-up of independent civil aviation accident investigation authority (i.e. one to be convened as and when required) can serve the same purpose. Past experiences of CAD show

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<sup>4</sup> The guideline of ICAO does not preclude that states may need to deploy experts from civil aviation authorities to take up some posts of the air accident investigation authority (except the CIA).

that at any one time there were on average five on-going cases of investigation being conducted by CAD, and around six cases instigated by overseas authorities requiring CAD's participation. As at end March 2017, there were a total of 12 outstanding cases, with five being conducted by CAD and seven conducted by authorities outside Hong Kong requiring CAD's participation. A majority of these cases will not be completed by the time of the establishment of the independent investigation authority expected by end 2017 the earliest and will be passed on to the authority for follow-up, which also needs to take care of the transitional work relating to the transfer of civil aviation accident investigation functions from CAD during the initial period. It is expected that the independent investigation authority will be fully engaged in these investigations, while handling, among others, other key tasks e.g. promotion of aviation safety as well as the on-going review of the Regulations to comply with the latest standards in Annex 13.

18. Furthermore, the independent investigation authority has to ensure its readiness for accident investigations and fulfilment of requirements of the Regulations at all times, similar to other emergency services, as and when an accident or serious incident occurs. The authority must be able to attend to the scene immediately to collect evidence and conduct other investigation-related tasks. Thus, we consider a permanent set-up essential. A permanent set-up is also in line with the practice in other developed aviation jurisdictions. The set-up, including staffing provision, will be reviewed before the expiry of the three-year period on 31 March 2020 in the light of actual experience.

## **FINANCIAL IMPLICATIONS**

19. The total remuneration package for the proposed non-civil service CIA position will not exceed the full annual average staff cost of \$2,808,048, including salaries and staff on-cost, for a civil service post ranked at D2 level. As regards the five additional non-directorate posts mentioned in paragraph 15 above, the additional notional annual salary cost at mid-point will not exceed \$4,757,220. The full annual average staff cost, including salaries and staff on-cost, is about \$6,820,000.

20. We have included the necessary provision and resources in the draft Estimates of 2017-18 to meet the staff cost and other operating expenses, and will reflect the resources required in the Estimates of subsequent years.

## **PUBLIC CONSULTATION**

21. We have consulted the LegCo Panel on Economic Development on 27 March 2017. Members generally supported the proposal, while some enquired about the need for a permanent set-up which we addressed in paragraphs 17-18

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above. The industry has also been consulted on the proposal from March to April 2017, and generally supports the establishment of the independent investigation authority.

## BACKGROUND

22. ICAO is a specialised agency of the United Nations established in 1944 by virtue of the Convention on International Civil Aviation. At present, it has 191 Contracting States and China is one of them. China assumes responsibility for the international rights and obligations arising from the application of the above Convention and the relevant requirements, which also apply to Hong Kong. ICAO's objectives are to promote the development of international civil aviation in a safe and orderly manner, and to ensure that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically.

23. To ensure aviation safety, ICAO promulgates Standards and Recommended Practices on the manner of investigation of civil aircraft accidents and serious incidents in Annex 13, which has been updated and published by ICAO from time to time.

24. In order to empower CIA to execute his/her duties effectively, corresponding amendments to the Regulations need to be made. We are conducting the relevant legislative amendment exercise in parallel. Subject to the time needed for the recruitment work upon funding approval of FC for creation of the non-civil service CIA position, we plan to officially establish the independent investigation authority and appoint CIA by end 2017 at the earliest.

## ESTABLISHMENT CHANGES

25. The establishment changes in Head 158 – Government Secretariat: THB(TB) for the past two years are as follows –

Establishment (Note)	Number of posts		
	As at 1 April 2017	As at 1 April 2016	As at 1 April 2015
A	20 + (5)*	20 + (5)	20
B	67	53	47
C	105	111	108
<b>Total</b>	<b>197</b>	<b>189</b>	<b>175</b>

Note:

A - ranks in the directorate pay scale or equivalent

B - non-directorate ranks, the maximum pay point of which is above MPS point 33 or equivalent

C - non-directorate ranks, the maximum pay point of which is at or below MPS point 33 or equivalent

( ) - number of supernumerary directorate posts

\* - as at 1 April 2017, there was no unfilled directorate post in TB

**CIVIL SERVICE BUREAU COMMENTS**

26. The Civil Service Bureau supports the proposed creation of a non-civil service CIA position and the ranking at which it will be pitched is considered appropriate having regard to the level and scope of responsibilities and the professional input required.

**ADVICE OF THE STANDING COMMITTEE ON DIRECTORATE SALARIES AND CONDITIONS OF SERVICE**

27. As we propose to create a non-civil service position, advice from the Standing Committee on Directorate Salaries and Conditions of Service is not required.

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Transport and Housing Bureau  
April 2017

**Proposed Job Description of the Chief Inspector of Accidents Position**

**Rank** : Non-civil service position equivalent to the rank of D2

**Responsible to** : Secretary for Transport and Housing

**Aim of the Position –**

The proposed Chief Inspector of Accidents (CIA) will be tasked to lead and supervise the independent air accident investigation authority established under the Transport and Housing Bureau and direct the civil aviation accident investigation work and safety management work. The ultimate objective of the work of the authority, led by CIA, is to enhance and promote civil aviation safety.

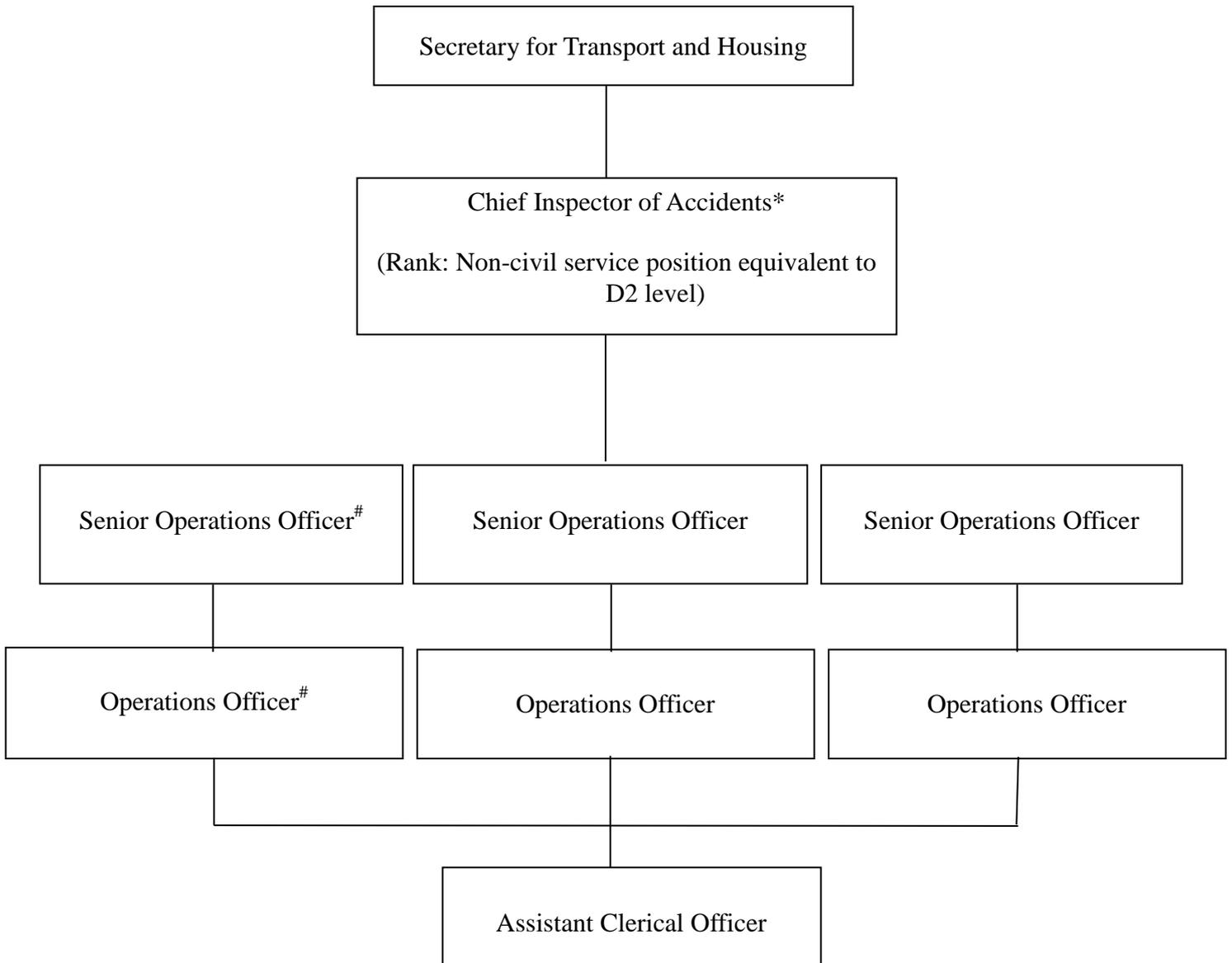
**Main Duties and Responsibilities –**

1. To investigate all civil aviation accidents and serious incidents which occur in Hong Kong or those which occur outside its territory but involve aircraft under its registry. The main responsibilities include investigating the causes of accidents, preservation of evidence of accidents and disposing of aircraft concerned, etc.;
2. To prepare and submit investigation reports to the Chief Executive, stating the circumstances and causes of accidents/serious incidents and making safety recommendations to prevent recurrence of accidents;
3. To lead and manage the air accident investigation authority, including staff deployment, staff training, procurement and maintenance of investigation equipment, facility maintenance and record management, etc., as well as to formulate strategies and measures to enhance accident investigation and safety management procedures;
4. To collect, protect and analyse relevant aviation safety information and data with a view to identifying potential safety hazards, to disseminate aviation safety messages to the industry and to co-ordinate the relevant education work;
5. To supervise the reporting (e.g. progress of investigation, information relating to the accident investigation) to be made to the bereaved/victims' families or survivors;

6. To provide support and professional advice to overseas air accident investigation authorities when necessary (e.g. when aircraft registered in Hong Kong are involved in accidents or serious incidents occurred overseas); and
7. On behalf of the Hong Kong Special Administrative Region Government, to participate in international organisations or activities in relation to air accident investigation and aviation safety and maintain close liaison with international organisations on relevant issues.

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**Proposed Organisation Chart of the Independent Air Accident Investigation Authority, Transport Branch, Transport and Housing Bureau**



\* Non-civil service position of Chief Inspector of Accidents proposed to be created in this paper.

# Posts currently under the Accident Investigation Office of the Civil Aviation Department. The post incumbents will be deployed to the independent air accident investigation authority under the Transport and Housing Bureau.

**Key Duties of the Three Investigation Teams**

Investigation Team 1

1. To conduct civil aviation accident investigations as directed by the Chief Inspector of Accidents (CIA);
2. To perform duties in relation to accident prevention, such as managing an incident reporting system, proactively collecting, processing and analysing safety data received from the industry to identify safety hazards, proposing safety recommendations and collaborating with the aviation industry to disseminate safety information;
3. To regularly review and update the legal provisions, arrangements and procedures for civil aviation accident investigation, in order to ensure Hong Kong's readiness and capability in accident investigation in compliance with local legislation and Annex 13; and
4. To perform any other duties as instructed by CIA.

Investigation Team 2

1. To conduct civil aviation accident investigations as directed by CIA;
2. To co-ordinate the training of Inspectors of Accidents, by organising ab-initio and refresher training for Inspectors and external experts when necessary;
3. To establish and manage civil aviation accident investigation equipment and facilities;
4. To report investigation progress to survivors and families of victims, and to provide assistance as necessary; and
5. To perform any other duties as instructed by CIA.

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Investigation Team 3

1. To conduct civil aviation accident investigations as directed by CIA;
2. To keep track of the latest international standards, developments and technologies in accident investigation and aviation safety with a view to updating the knowledge and equipment of the investigation team; and to promulgate relevant information to the industry to enhance safety awareness;
3. To liaise and co-ordinate with local and overseas organisations on accident investigation and aviation safety matters; and to participate and/or organise aviation safety and civil aviation accident investigation related activities; and
4. To perform any other duties as instructed by CIA.

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