

For Information
on 22 February 2010

Legislative Council Panel on Economic Development

Safety Oversight Audit of the Hong Kong Civil Aviation System

Purpose

This paper briefs Members on the results of a safety oversight audit of the civil aviation system of Hong Kong conducted by the International Civil Aviation Organization (ICAO¹) in early 2009.

Background

ICAO Universal Safety Oversight Audit Programme

2. International standards and recommended practices in civil aviation are set out by ICAO in the Annexes to the Convention on International Civil Aviation (the Chicago Convention). The Annexes are updated regularly to promulgate the latest requirements in the relevant areas. A list of the Annexes is at **Annex A**.

3. With a view to ensuring aviation safety worldwide, ICAO launched the Universal Safety Oversight Audit Programme (USOAP) in 1999. The Programme aims to audit aviation authorities to determine their effectiveness in discharging safety regulatory functions. Specifically, it focuses on the capability of the authorities in providing safety oversight by assessing the effective implementation of the critical elements of a safety oversight system that is conducive to aviation safety.

4. In the first audit conducted on Hong Kong in 2000, the ICAO audit team concluded that Hong Kong maintained a high standard of aviation safety and commented favourably on our policies, regulations, procedures,

¹ ICAO was established by the Convention on International Civil Aviation and is the world's most important organisation in the field of civil aviation. At present, it has 190 Contracting States. Its 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.

organisation and staffing in maintaining the high standard. The findings and recommendations of the audit were reported to the then Legislative Council Panel on Economic Services on 26 November 2001 vide paper no. CB(1)364/01-02(01).

5. Since 2005, ICAO has enlarged the scope of the USOAP audit to cover 16 out of the 18 Annexes to the Chicago Convention² and another audit was conducted on Hong Kong by a team of 5 ICAO auditors from 26 February to 6 March 2009.

6. The audit assessed the overall performance of Hong Kong's oversight system in a wide spectrum of aviation activities ranging from personnel licensing, operation and airworthiness of aircraft, aerodrome licensing, air navigation services to aircraft accident and incident investigations. Apart from a review of the organisation, processes, procedures and programmes established and maintained by the Civil Aviation Department (CAD), the ICAO auditors also visited the Hong Kong International Airport, certain Hong Kong based airline operators, as well as the aircraft maintenance organisations and air traffic control facilities in Hong Kong to observe how the safety oversight system had been applied at the industry and operational level.

Audit Results

Overall score

7. The final audit report issued by ICAO in November 2009 is at **Annex B** (English version only). Hong Kong achieved an overall score of 94.47% in the effective implementation of a safety oversight system, representing the 5th highest score (as at November 2009) in the ICAO USOAP record under the enlarged audit scope. Compared with the global average score of 57.74% among the 136 ICAO Contracting States audited, Hong Kong's score shows that we have continued to maintain a highly effective aviation safety oversight system for the civil aviation activities in Hong Kong.

8. While noting our successful implementation of an effective aviation safety oversight system, the ICAO audit team has made a number of recommendations for improvement as detailed in Appendix 1 of Annex B. The main recommendations include –

² The pre-2005 audits only covered Annexes 1, 6 and 8.

- (a) promulgating legislative provisions and expediting the process for the amendment of legislation and national standards, to ensure that our legislation and standards reflect the latest requirements stipulated in the Chicago Convention and Annexes thereto;
- (b) ensuring that a sufficient number of qualified inspectorate staff are available to carry out the safety oversight tasks over the entities providing air navigation, aeronautical information and cartography services, and that a formal and periodic training programme should be provided to the inspectorate staff;
- (c) developing and implementing a formal training programme for personnel licensing officers and other staff involved in licensing activities, and enhancing the training record management system to include processes for documenting the specific types of training received and satisfactorily completed by the staff concerned;
- (d) developing and implementing a comprehensive flight standards safety surveillance programme that includes all of the types and frequencies of inspections necessary for ensuring that all Air Operator Certificate holders comply with our regulations and the relevant ICAO provisions outlined in the Annexes to the Chicago Convention; and
- (e) formulating legislation to provide for non-punitive voluntary occurrence reporting, protection of sources of information and non-disclosure of certain records for purposes other than aircraft accident or incident investigation. The Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap 448B) should be updated to adopt the latest definitions in Annex 13 to the Chicago Convention.

Follow-up Actions

9. CAD has drawn up an action plan to follow up the ICAO audit team's recommendations. The details are set out in Appendix 3 of Annex B and a summary of the recommendations and Hong Kong's follow-up actions is at **Annex C**. Immediate actions are taken where feasible. These include strengthening the staffing provision for CAD's Air Traffic Management Standards Office to meet the safety oversight functions of air navigation, aeronautical information and cartography services (to be completed by end 2010); formulating comprehensive training programmes for the flight safety

inspectorate staff and personnel licensing officers (completed); and developing and implementing a comprehensive flight standards safety surveillance programme (completed).

10. For those recommendations that may involve legislative changes, we are studying their possible implications on the operations of the aviation industry of Hong Kong in the light of relevant overseas experiences, and stakeholders will be consulted in due course. If it is concluded that legislative amendments are required, they will be introduced into the LegCo.

**Transport and Housing Bureau
Civil Aviation Department
February 2010**

Annexes to the Convention on International Civil Aviation

Annex 1 — *Personnel Licensing*

Annex 2 — *Rules of the Air*

Annex 3 — *Meteorological Service for International Air Navigation*

Annex 4 — *Aeronautical Charts*

Annex 5 — *Units of Measurement to be Used in Air and Ground Operations*

Annex 6 — *Operation of Aircraft*

Annex 7 — *Aircraft Nationality and Registration Marks*

Annex 8 — *Airworthiness of Aircraft*

* **Annex 9** — *Facilitation*

Annex 10 — *Aeronautical Telecommunications*

Annex 11 — *Air Traffic Services*

Annex 12 — *Search and Rescue*

Annex 13 — *Aircraft Accident and Incident Investigation*

Annex 14 — *Aerodromes*

Annex 15 — *Aeronautical Information Services*

Annex 16 — *Environmental Protection*

* **Annex 17** — *Security*

Annex 18 — *The Safe Transport of Dangerous Goods by Air*

Note: * Annexes 9 and 17 are not safety-related and therefore not covered by USOAP.

ICAO Universal Safety Oversight Audit Programme

**FINAL REPORT
ON THE SAFETY OVERSIGHT AUDIT
OF THE
CIVIL AVIATION SYSTEM
OF
THE HONG KONG SPECIAL
ADMINISTRATIVE REGION OF CHINA**

(26 February to 6 March 2009)



International Civil Aviation Organization

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ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME

Final Report on the Safety Oversight Audit of the Hong Kong Special Administrative Region of China

(26 February to 6 March 2009)

1. INTRODUCTION

1.1 Background

1.1.1 The 32nd Session of the ICAO Assembly (Assembly Resolution A32-11 refers) resolved the establishment of the ICAO Universal Safety Oversight Audit Programme (USOAP), comprising regular, mandatory, systematic and harmonized safety audits of all Contracting States. The mandate for regular audits foresaw the continuation of the Programme, and the term “safety audits” suggested that all safety-related areas should be audited. The expansion of the Programme “at the appropriate time”, as recommended by the 1997 Directors General of Civil Aviation Conference on a Global Strategy for Safety Oversight, had thus been accepted as an integral part of the future of the Programme.

1.1.2 The 35th Session of the ICAO Assembly considered a proposal of the Council for the continuation and expansion of the USOAP as of 2005 and resolved that the Programme be expanded to cover all safety-related Annexes to the *Convention on International Civil Aviation*, hereinafter referred to as the “Chicago Convention” (Assembly Resolution A35-6 refers). The Assembly also requested the Secretary General to adopt a comprehensive systems approach for the conduct of safety oversight audits.

1.1.3 Assembly Resolution A35-6 further directed the Secretary General to ensure that the comprehensive systems approach maintain as core elements the safety provisions contained in Annex 1 — *Personnel Licensing*, Annex 6 — *Operation of Aircraft*, Annex 8 — *Airworthiness of Aircraft*, Annex 11 — *Air Traffic Services*, Annex 13 — *Aircraft Accident and Incident Investigation* and Annex 14 — *Aerodromes*; to make all aspects of the auditing process visible to Contracting States; to make the final safety oversight audit reports available to all Contracting States; and also to provide access to all relevant information derived from the Audit Findings and Differences Database (AFDD) through the secure website of ICAO.

1.1.4 In accordance with Assembly Resolution A35-6, safety oversight audit reports have been restructured to reflect the critical elements of a safety oversight system, as presented in ICAO Doc 9734 — *Safety Oversight Manual*, Part A — *The Establishment and Management of a State’s Safety Oversight System*. ICAO Contracting States, in their effort to establish and implement an effective safety oversight system, need to consider these critical elements.

1.2 ICAO audit team composition

1.2.1 The safety oversight audit team was composed of: Mr. Dhiraj Ramdoyal, team leader, primary aviation legislation (LEG), civil aviation organization (ORG), air navigation services (ANS) and aircraft accident and incident investigation (AIG); Ms. CJ Collins, team member, personnel licensing (PEL) and aircraft operations (OPS); Mr. Arvind Mohan, team member, airworthiness of aircraft (AIR); Mr. Chee Beng Loo, team member, aerodromes (AGA); and Mr. Gregory R. Parnell, team member, on-the-job training (OJT)/AGA.

1.3 Acknowledgements

1.3.1 ICAO expresses its sincere appreciation for the assistance provided to the audit team during the preparation and conduct of the audit. The professionalism and enthusiasm of all personnel who interacted with the audit team greatly contributed to the success of the audit mission.

2. OBJECTIVES AND ACTIVITIES OF THE AUDIT MISSION

2.1 The comprehensive systems approach for the conduct of safety oversight audits consists of three phases. In the first phase, the level of implementation of Annex provisions is assessed and differences from ICAO Standards and Recommended Practices (SARPs) are identified for each Contracting State through a review of a duly completed State Aviation Activity Questionnaire (SAAQ) and Compliance Checklists (CCs) for all safety-related Annexes, as well as through a review of documents developed by the State to assist it in implementing SARPs and in maintaining an effective safety oversight system. In the second phase, the State being audited is visited by an ICAO audit team to validate the information provided by the State and to conduct an on-site audit of the State's overall capability for safety oversight. The third phase of the audit process consists of the activities following the completion of the on-site audit.

2.2 The safety oversight audit of the Hong Kong Special Administrative Region of the People's Republic of China, hereinafter referred to as the "Hong Kong SAR, China", was carried out from 26 February to 6 March 2009 in accordance with the standard auditing procedures provided for in ICAO Doc 9735 — *Safety Oversight Audit Manual* and the Memorandum of Understanding (MOU) agreed to on 9 May 2006 between the People's Republic of China and ICAO, and corresponding amendment, as per exchange of letters of 8 October 2008 and 23 October 2008 between ICAO and the Hong Kong SAR, China (see attachment to this report). The audit was carried out with the objective of fulfilling the mandate given by the Assembly which requires ICAO to conduct a safety oversight audit of all Contracting States (Assembly Resolutions A32-11 and A35-6 refer), reviewing a State's compliance with ICAO SARPs set out in all safety-related Annexes and their associated guidance material, as well as with related Procedures for Air Navigation Services (PANS). Furthermore, the objective was also to offer advice, as applicable, to the Hong Kong SAR, China in implementing these provisions.

2.3 The audit team reviewed the SAAQ and the CCs submitted by the Hong Kong SAR, China prior to the on-site audit in order to have a preliminary understanding of the civil aviation system established in the Hong Kong SAR, China, to determine its various functions as well as to assess the status of implementation of relevant Annex provisions. Information provided and assessed prior to the conduct of the audit was validated during the on-site audit phase. In this regard, particular attention was given to the presence of an adequate organization, processes, procedures and programmes established and maintained by the Hong Kong SAR, China to assist it in fulfilling its safety oversight obligations.

2.4 The audit results, including the findings and recommendations contained in this report, reflect the capabilities and limitations of the civil aviation system of the Hong Kong SAR, China as assessed by the audit team. They are thus based on evidence gathered during interviews by the audit team with the Hong Kong SAR, China's technical experts and background information provided by such personnel, review and analysis of civil aviation legislation, specific regulations, related documentation and file records. Considering the time that was available to conduct the audit and the fact that the safety oversight audit team members could only review and analyse information and documentation made available by the Hong Kong SAR, China, it is possible that some safety concerns may not have been identified during the audit. The findings and recommendations related to each audit area are found in Appendix 1 to this report.

3. AUDIT RESULTS

3.1 Critical element 1 — Primary aviation legislation

“The provision of a comprehensive and effective aviation law consistent with the environment and complexity of the State’s aviation activity, and compliant with the requirements contained in the *Convention on International Civil Aviation*.”

3.1.1 The Hong Kong SAR was established in accordance with Article 31 and sub-paragraph 13 of Article 62 of the Constitution of the People’s Republic of China as of 1 July 1997. In accordance with Article 31, the Basic Law of the Hong Kong SAR was adopted on 4 April 1990 by the Seventh National People’s Congress of the People’s Republic of China and came into effect on 1 July 1997. The Basic Law prescribes the systems to be practised in the Hong Kong SAR after the People’s Republic of China resumed the exercise of sovereignty over Hong Kong from 1 July 1997.

3.1.2 The USOAP audit related primary aviation legislation governing international civil aviation in the Hong Kong SAR, China is contained in the:

- a) Civil Aviation Ordinance (Chapter 448 of the Laws of Hong Kong, also known as CAP 448), lastly amended in 2006;
- b) Dangerous Goods (Consignment by Air) (Safety) Ordinance (CAP 384), lastly amended in 2001;
- c) Hong Kong Airport (Control of Obstructions) Ordinance (CAP 301), lastly amended in 2007;
- d) Airport Authority Ordinance (CAP 483), lastly amended in 2004; and
- e) Civil Aviation (Aircraft Noise) Ordinance (CAP 312), lastly amended in 2002.

3.1.3 The Basic Law is the constitutional document of the Hong Kong SAR, China. It enshrines within a legal document the important concepts such as “One country, Two systems” and “a high degree of autonomy”. Article 60 of the Basic Law states that: “*The head of the Government of the Hong Kong Special Administrative Region shall be the Chief Executive of the Region*”.

3.1.4 Articles 128 to 135 of the Basic Law give specific mention on how the civil aviation system in the Hong Kong SAR, China should be administered. Article 130 of the Basic Law states that: “*The Hong Kong SAR shall be responsible on its own for matters of routine business and technical management of civil aviation, including the management of airports, the provision of air traffic services within the flight information region of the Hong Kong Special Administrative Region, and the discharge of other responsibilities allocated to it under the regional air navigation procedures of the International Civil Aviation Organization*.”

3.1.5 CAP 448 is comprised of 16 Sections (including Section 2A). Section 2A of CAP 448 addresses power to give effect to the Chicago Convention and regulate air navigation; Section 3 addresses investigation of accidents; Section 5 addresses air transport licensing; Section 10 addresses exemption of aircraft and parts thereof from seizure on patent claims; and Section 12 addresses regulations, orders and supplementary provisions.

3.1.6 The responsibilities of the Chief Executive in Council with respect to rule-making are stipulated under paragraphs (1) to (7) of Section 2A of CAP 448. Paragraph (1) of Section 2A stipulates that: “*The Chief Executive in Council may by order make such provision as appears to the Chief Executive in Council to be necessary or expedient*:

- (a) *for carrying out the Chicago Convention, any Annex thereto relating to international standards and recommended practices (being an Annex adopted in accordance with the Convention) and any amendment of the Convention or such Annex made in accordance with the Convention;*
- (b) *generally for regulating air navigation;*

provided that such provision deals only with routine business and technical management of civil aviation including:

- (1) the management of aerodromes;*
- (2) the provision of air traffic services within the flight information region of Hong Kong; and*
- (3) the discharge of other responsibilities allocated to Hong Kong under the regional air navigation procedures of the International Civil Aviation Organization”.*

3.1.7 The Hong Kong Civil Aviation Department (HKCAD) is one of the 61 departments of the Government of the Hong Kong SAR, China established by administrative means under the Transport and Housing Bureau (THB), which has policy responsibility for the civil aviation system and policy oversight on the work of the HKCAD. It is the only entity established in the Hong Kong SAR, China for regulating air navigation and overseeing air transport safety and security in civil aviation fields.

3.1.8 Other entities dealing with aviation matters include:

- a) the Hong Kong Observatory, responsible for provision of meteorological services to international air navigation; and
- b) the Airport Authority Hong Kong (AAHK), responsible for the operation and management of the Hong Kong International Airport.

3.1.9 CAP 448 is supplemented by subsidiary legislation, one of which was promulgated as the Air Navigation (Hong Kong) Order 1995, as amended, hereinafter referred to as “CAP 448C”, and other operating regulations. CAP 448C covers a wide range of safety oversight duties discharged by the HKCAD, including the certification of air operator and licensing of aerodromes.

3.1.10 Pursuant to Article 98, paragraph 1, of CAP 448C, the Director-General of Civil Aviation has been authorized by the Governor (now the Chief Executive of the Hong Kong SAR, China) since 18 March 1996, gazetted as G.N. 1425 of 1996, to exercise the powers and duties on behalf of the Governor (now the Chief Executive), other than the power to make regulations under Article 97. This authorization is still valid.

3.1.11 The Director-General of Civil Aviation, in exercise of the powers vested upon him by Article 98(12) of CAP 448C, has accordingly delegated to some officers of the HKCAD, holding a certain rank of post prescribed in the Schedule to the Delegation, the authority to exercise or perform on his behalf certain powers or duties as specified in the Order.

3.1.12 CAP 448 and CAP 448C contain provisions outlining penalties for contravention of the legislative provisions. The penalty provisions and the provisions setting out the penalty level are contained in Sections 3, 4, 5 and 6 of CAP 448 and Article 91 of CAP 448C.

3.1.13 Article 95 of CAP 448C also addresses exemptions from the Order. It stipulates that the Chief Executive may exempt from any of the provisions of this Order (other than Articles 84 and 96 thereof) or any regulation made thereunder, any aircraft or persons or classes of aircraft or persons, either absolutely or subject to such conditions as he thinks fit.

3.1.14 Article 159 of the Basic Law lays down the process for its amendment. The power of amendment of the Basic Law is vested in the National People's Congress and the power to propose bills for amendments to the Basic Law is vested in the Standing Committee of the National People's Congress, the State Council and the Hong Kong SAR, China.

3.1.15 Article 17 of the Basic Law stipulates that the Hong Kong SAR, China shall be vested with legislative power. Article 73 further stipulates that the Legislative Council of the Hong Kong SAR, China shall exercise the power to enact, amend or repeal laws in accordance with the provisions of the Basic Law and legal procedures.

3.1.16 Concerning the aviation legislation in the Hong Kong SAR, China, the HKCAD may therefore propose an amendment, if necessary. For primary legislation, such as the CAP 448, the process will usually commence with consultation within the HKCAD and dialogue, as necessary, with the industry. After clearing with the concerned policy bureau, the HKCAD will request the Department of Justice to prepare a draft Bill to effect the proposed amendments. Subject to the approval of the Executive Council, the Bill will be published in the Government Gazette and then be introduced into the Legislative Council by the public officer in charge of the Bill. The House Committee of the Legislative Council might consider the need for setting up a Bills Committee to scrutinize the Bill. If so, the Bills Committee will prepare a report before the resumption of the second reading at the Legislative Council. After this process, the public officer in charge of the Bill will move the third reading of the Bill. If the third reading motion is carried, the Bill is passed. The time taken to enact a Bill depends on factors, such as the nature and complexity of the proposed amendments.

3.1.17 Section 2A(2)(y) of CAP 448 empowers the Chief Executive in Council by Order to make provisions for prescribing or enabling the Chief Executive to prescribe fees for the issuance of licences and validations, as well as for licensing examination and testing. Similarly, the power under Section 2A(2)(z) is granted to the Chief Executive in Council for making provisions by Order exempting any aircraft or person from the provisions of the Order.

3.1.18 Section 2A(2) of CAP 448 empowers the Chief Executive in Council by Order to make provisions as to the conditions for aircraft flying in the Hong Kong SAR, China and for the use of commercial purposes. Section 2A(2)(o) addresses the detention of aircraft for securing the safety of air navigation and preventing aircraft endangering other persons and property. Section 4 of CAP 448 applies a penalty of up to \$100,000 HKD and/or imprisonment of up to six months for flight causing danger to persons or property. Section 5 of CAP 448 addresses air transport licensing and prohibits commercial operations without a licence. Offences of the regulations made under this Section carry penalties of up to \$5,000,000 HKD and/or imprisonment of up to two years.

3.1.19 With respect to airworthiness of aircraft, paragraphs 2(a) and 2(b) of Section 2A of CAP 448 provide requirements for aircraft registration, certificate of airworthiness and other airworthiness-related matters. Civil Aviation (Aircraft Noise) Ordinance (CAP 312) stipulates that an aircraft in operation in the Hong Kong SAR, China shall comply with the requirements on environment protection for aircraft and engines. Paragraph 1(a) of Section 2A empowers the Chief Executive in Council to make provisions for carrying out the Chicago Convention, any Annex thereto relating to international standards or recommended practices and any amendment of the Convention or any Annex made in accordance with the Convention.

3.1.20 In the air navigation services field, Section 2A of CAP 448 spells out the responsibility of the Chief Executive in Council to make orders with respect to the provision of air traffic services (ATS) within the Hong Kong flight information region (FIR), generally for securing safety, efficiency and regularity of air navigation and for requiring persons engaged in, or employed in or in connection with, air navigation to supply meteorological information for the purposes of air navigation.

3.1.21 With reference to aerodromes, the legislative regulations to implement the provisions of Annex 14 to the Chicago Convention are contained in CAP 448C. The requirements relating to the licensing of aerodromes are stipulated in Articles 71 and 73 of the Order. Article 71 requires an aerodrome operator to obtain an aerodrome licence if the aerodrome has operations with aircraft used for the public transport of passengers, or for the purpose of instruction in flying. Article 73 requires the aerodrome operator to submit an aerodrome manual as part of the licensing process, and Article 102 requires the licensed aerodrome operator to implement a safety management system (SMS). The provisions in Article 62 empower the Director-General of Civil Aviation (acting under authorization by the Chief Executive of Hong Kong SAR, China) to, after due inquiry, revoke, suspend or vary the aerodrome licence.

3.1.21.1 In addition, the Hong Kong Airport (Control of Obstructions) Ordinance (CAP 301) safeguards the airspace around the Hong Kong International Airport in accordance with obstacle limitation surfaces found in Annex 14 to the Chicago Convention, and all other relevant safeguarding surfaces for PANS-OPS and radio navigation aids.

3.1.22 Section 3, paragraphs (1) to (2) of CAP 448 spells out the requirements as provided for in the regulations with respect to the investigation of aircraft accidents in the Hong Kong SAR, China. Paragraph (1) of Section 3 stipulates that the Chief Executive in Council may make regulations providing for the investigation of any accident arising out of or in the course of air navigation and occurring in or over Hong Kong, or occurring elsewhere to aircraft registered in Hong Kong. Additional provisions are contained in the subsidiary legislation, the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (CAP 448B), in particular:

- a) Regulation 4 which states that: “*the fundamental purpose of investigating accidents under these regulations shall be to determine the circumstances and causes of the accidents with a view to the preservation of life and avoidance of accidents in the future; it is not the purpose to apportion blame or liability.*”; and
- b) Regulation 8 which states that: “*for the purpose of carrying out investigation into the circumstances and causes of aircraft accidents, the Chief Executive shall from time to time appoint a suitable qualified person to be the Chief Inspector of Accidents*”.

3.2 **Critical element 2 — Specific operating regulations**

“The provision of adequate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation and providing for standardized operational procedures, equipment and infrastructures (including safety management and training systems), in conformance with the Standards and Recommended Practices (SARPs) contained in the Annexes to the *Convention on International Civil Aviation*.

Note.— The term ‘regulations’ is used in a generic sense to include instructions, rules, edicts, directives, sets of laws, requirements, policies, orders, etc.”

3.2.1 CAP 448C is the major civil aviation operating regulation within the Hong Kong SAR, China made by the Chief Executive in Council, as provided for under Section 2A of CAP 448.

3.2.2 CAP 448C contains 115 articles, divided in 10 parts, and 16 schedules. The 10 parts are:

- a) Part I — *Registration and Marking of Aircraft*;
- b) Part II — *Air Operators' Certificates*;
- c) Part III — *Airworthiness and Equipment of Aircraft*;
- d) Part IV — *Aircraft Crew and Licensing*;
- e) Part V — *Operation of Aircraft*;
- f) Part VI — *Fatigue of Crew*;
- g) Part VII — *Documents and Records*;
- h) Part VIII — *Control of Air Traffic*;
- i) Part IX — *Aerodromes, Aeronautical Lights and Dangerous Lights*; and
- j) Part X — *General*.

3.2.3 The 16 schedules address, among other things, classification of aircraft; aerodrome manual; aircraft equipment; radio and radio navigation equipment to be carried in aircraft; aircraft, engine and propeller log books; areas specified in connection with the carriage of approved navigational equipment on public transport aircraft; flight crew of aircraft, licences and ratings; air traffic controllers ratings; public transport — operational requirements; documents to be carried by aircraft registered in Hong Kong; rules of the air; and the air navigation (dangerous goods) regulations.

3.2.4 Operating requirements, which are promulgated in support of CAP 448C, also form part of the “regulations”. These requirements are promulgated by the Director-General of Civil Aviation through bulletins, civil aviation documents (CADs) or the Aeronautical Information Publication (AIP).

3.2.5 All the enabling regulations are available to the public at the HKCAD library and also on the official website (<http://www.cad.gov.hk>).

3.2.6 With respect to personnel licensing, various legal instruments have been promulgated to incorporate the provisions of Annex 1 to the Chicago Convention. Article 12 of CAP 448C defines the requirements for the issuance by the Chief Executive of an aircraft maintenance licence with a validity period of up to five years, along with the privileges authorized to the licence holder. Article 12(4) allows for the issuance of a certificate of validation on the basis of a foreign aircraft maintenance engineer licence. Article 12(6) provides for the approval of training programmes and instructors, as well as the designation of maintenance training examiners.

3.2.6.1 For flight crew licences, Articles 19 and 20 of CAP 448C provide for granting and renewing flight crew licences with Schedule 9 listing the classes of licences issued. Article 20(7)(b) requires medical examination, conducted by a person approved by the Chief Executive, to determine the fitness of an applicant for a flight crew licence, with (c) granting the Chief Executive or any person approved by him the power to issue a medical certificate to a flight crew licence applicant/holder. For air traffic controller licensing, Article 65(7)(a) provides for a person approved by the Chief Executive to conduct the medical examination and to make a report on the required form, with (9) granting the Chief Executive or any person approved by him the power to issue a medical certificate to an air traffic controller's licence applicant/holder. Article 20(11) grants the power to approve flight crew training programmes and instructors and to designate flight examiners. Articles 20(11)(b) and 20A allow for the testing of language proficiency and endorsing the licence with the level of proficiency. Article 21 grants the power to issue a certificate of validation on the basis of a foreign flight crew licence.

3.2.6.2 For air traffic controller licences, CAP 448C, Article 65 and Schedule 10 address the issuance of the licences and ratings, including language proficiency ability, medical examination and practical testing,

while Article 66 prohibits the use of unlicensed air traffic controllers. CAD 744 — *Personnel Licensing — Hong Kong Air Traffic Controllers* details the ATCO licensing procedures and requirements, including those for demonstrating language proficiency.

3.2.6.3 Additional personnel licensing requirements are contained in the following publications:

- a) CAD 50 — *The Flight Engineer's Licence*;
- b) CAD 54 — *Requirements Document: Pilot Licences and Associated Ratings*;
- c) CAD 509 — *Approval of Flying Training Organizations (Aeroplane)*;
- d) CAD 509(H) — *Approval of Flying Training Organizations (Helicopter)*;
- e) Hong Kong Aviation Requirement (HKAR)-66 — *Licensing of Maintenance Personnel (Certifying Staff — Maintenance)*;
- f) HKAR-147 — *Approved Maintenance Training/Examinations*; and
- g) Air Navigation Service Information Notice (ANSIN) No. 4 — *Approved Training Courses for ATC Licences and Ratings*.

3.2.6.4 Procedures have been developed and implemented for issuing requirements to national regulations when amendments are made to Annex 1 to the Chicago Convention. For example, the provisions of Amendment 168 were adopted through the issuance of ANSIN No. 3. Significant differences from ICAO Standards have been published in the AIP.

3.2.7 In the area of aircraft operations, the provisions of Annex 6 to the Chicago Convention are promulgated through a variety of regulatory documents. Parts II, III, IV, V, VI and VII of CAP 448C provide regulations and requirements. Article 25 and Schedule 11 address the contents and structure of an air operator certificate (AOC) holder's operations manual, with Article 26 requiring a training manual. Article 57 and Schedule 12 specify the documents required to be carried on board an aircraft. Article 6(1) prohibits a Hong Kong-registered aircraft from commercial operations unless under the provisions of an AOC granted to the operator of the aircraft. Article 6(2) grants the Chief Executive the power to issue an AOC and Article 59 the power to request the pilot-in-command to produce documents and records. Article 60 grants the power to inspect and copy documents and records. Article 62 provides for the revocation, suspension and variation of certificates, licences and other documents. Article 63 prohibits improper use of a licence or certificate or false representation to obtain a licence or certificate. Article 69 grants the Chief Executive the power to prohibit or restrict flying in the public interest, with Article 87 allowing for informing an operator or pilot that he is not permitted to conduct the specified flight operations. Article 87 also reinforces the power to enter and inspect aircraft. Article 91 and Schedule 13 contain provisions and penalties for violations of national regulations and requirements and include fines to individuals of up to \$5,000 HKD and/or up to two years of imprisonment.

3.2.7.1 CAP 448A — *Air Transport (Licensing of Air Services) Regulations* requires an operator of a Hong Kong-registered aircraft to obtain a licence granted by the Air Transport Licensing Authority. In addition, the operator is required to obtain an AOC under CAP 448C for operating flights for the purpose of public transport. CAD 360 — *AOC Requirements Document* provides the requirements for the application for, and issuance of, an AOC. CAD 360, Part One, Chapter 3, paragraph 10 requires AOC holders to establish and maintain an accident prevention and flight safety programme. In addition, all AOC holders must have in place a functioning SMS by 1 January 2009, as directed by CAD 712 — *Safety Management System for Air Operators and Maintenance Organizations*.

3.2.7.2 Additional operations requirements are contained in the following publications:

- a) CAD 371 — *The Avoidance of Fatigue in Aircrew*;
- b) CAD 453 — *Flight Simulator Qualifications*;
- c) CAP 494A — *Aviation Security Regulations (pertaining to security training programmes for flight and cabin crew)*; and
- d) CAD 513 — *Extended Range Twin Operations*.

3.2.7.3 For the provisions of Annex 18 to the Chicago Convention, CAP 384 — *Dangerous Goods (Consignment by Air) (Safety) Ordinance* was promulgated in 1985 and last amended in 2001. It governs the control, preparation, packing, marking, labelling and offering of dangerous goods for transport by air. In addition, CAP 448C, Article 44 and Schedule 16 provide regulations related to the transport of dangerous goods by air. Fines for violation of the dangerous goods regulations range up to \$250,000 HKD and/or up to two years of imprisonment.

3.2.7.4 Procedures have been developed and implemented for issuing requirements to national regulations when amendments are made to Annexes 6 and 18 to the Chicago Convention.

3.2.8 CAP 448C addresses the airworthiness-related provisions of Annexes 6, 7 and 8 to the Chicago Convention as follows: Annex 6 in Parts II, III, V and VII of CAP 448C; Annex 7 in Part I of CAP 448C; and Annex 8 in Part III of CAP 448C. In addition, HKAR-145 and HKAR-21 lay down the requirements for approval of maintenance organizations and design and production organizations respectively. Furthermore, regulations for implementing the airworthiness-related provisions of Annex 16 to the Chicago Convention are addressed by CAP 312A — *Civil Aviation (Aircraft Noise) Certification Regulations*. Other airworthiness-related requirements are stipulated through HKAR-1 and Airworthiness Notices (CAD 455).

3.2.8.1 Section TM-R02 of the *Technical Procedure Manual* details the procedure for amending the Airworthiness Regulations in line with amendments to Annexes to the Chicago Convention and the procedure for notifying differences to ICAO.

3.2.9 With respect to air navigation services, operating regulations are contained in Part VIII — *Control of Air Traffic* of CAP 448C. Article 64 states that the Chief Executive may make rules of the air supplementary to, but not inconsistent with, the Rules of the Air contained in Schedule 14 to this Order. However, Schedule 14 is not in accordance with the provisions of Annex 2 to the Chicago Convention as it does not reflect the latest provisions of the Annex. Article 64A of the Order states that no person shall provide ATS otherwise than under and in accordance with the terms of an approval granted to him by the Chief Executive. Licensing of air traffic controllers is addressed under Articles 65, 66 and 68. The requirement for the service provider to issue and maintain an up-to-date manual of air traffic control is provided for under Article 67 of the Order, including the need for air traffic controllers/student air traffic controllers to comply with the standards and procedures specified in the manual of air traffic control. Articles 74 and 75 address the requirements for aeronautical radio stations and aeronautical radio station records.

3.2.9.1 The operating regulations are promulgated by the HKCAD through the AIP, expositions and other publications and are also found in CAD 670 — *Air Navigation Services Safety Requirements*. Requirements of the Hong Kong SAR, China with respect to compliance with Annexes 3, 4, 10, 11, 12 and 15 to the Chicago Convention have not been promulgated through legislation.

3.2.10 The operating requirements for the licensing of aerodromes are contained in the *Aerodrome Licensing Requirements Document (ALRD)* published by the HKCAD Airport Standards Division (APSD)

and made available to the aerodrome operator. Guidance materials to supplement aerodrome operating requirements are included as appendices to the ALRD or by reference to appropriate ICAO publications. There is a documented process to amend requirements in the ALRD pursuant to amendments to Annex 14 to the Chicago Convention, including identifying and notifying any differences to ICAO. In the case of aerodromes, there exists at present only one difference from Annex 14 SARPS with respect to the requirements adopted by the Hong Kong SAR, China and this difference has been notified to ICAO and accordingly published in the AIP.

3.2.11 Operating regulations with respect to Hong Kong Civil Aviation (Investigation of Accidents) Regulations are contained in CAP 448B. CAP 448B is further complemented by Accident Investigation Division Exposition, issued by the Chief Inspector of Accidents, which should be read in conjunction with the HKCAD Departmental Emergency Procedures. There is a mandatory requirement for the reporting of aircraft accidents and serious incidents in the Hong Kong SAR, China. The notification process is addressed in Chapter 2 of the Exposition and is in accordance with the requirements of Annex 13 to the Chicago Convention. However, the interpretation given to some of the definitions in Regulation 2 of CAP 448B is not in compliance with the definitions of Annex 13 to the Chicago Convention.

3.3 **Critical element 3 — State civil aviation system and safety oversight functions**

“The establishment of a civil aviation authority (CAA) and/or other relevant authorities or government agencies, headed by a Chief Executive Officer, supported by the appropriate and adequate technical and non-technical staff and provided with adequate financial resources. The State authority must have stated safety regulatory functions, objectives and safety policies.

Note.— The term ‘State civil aviation system’ is used in a generic sense to include all aviation-related authorities with aviation safety oversight responsibility which may be established by the State as separate entities, such as: CAA, airport authorities, air traffic service authorities, accident investigation authority, meteorological authority, etc.”

3.3.1 The Hong Kong SAR, China has been established in accordance with Article 31 of the Constitution of the People’s Republic of China under the principle of “one country, two systems”. Pursuant to the Basic Law of the Hong Kong SAR of the People’s Republic of China, Hong Kong SAR, China exercises a high degree of autonomy and enjoys executive, legislative and independent judicial power. The Government of Hong Kong SAR, China is headed by a Chief Executive to whom various Bureaux, Commissions and Units report. The HKCAD reports to the THB and is headed by a Director-General of Civil Aviation.

3.3.2 The Director-General of Civil Aviation is supported by one Deputy Director-General and seven divisions as follows:

- a) APSD, headed by an Assistant Director-General;
- b) Air Traffic Management Division (ATMD), headed by an Assistant Director-General;
- c) Air Services Division (ASD), headed by an Assistant Director-General;
- d) Flight Standards and Airworthiness Division (FSAD), headed by an Assistant Director-General;
- e) Air Traffic Engineering and Standards Division (AESD), headed by an Assistant Director-General;
- f) Administration Division, headed by the Departmental Secretary; and
- g) Finance Division, headed by the Chief Treasury Accountant.

Note. — An Accident Investigation Division (AID), which is not a permanent set-up, is also established, when required, to deal with accidents or serious incidents.

3.3.3 The HKCAD is staffed with appropriate qualified and experienced personnel. The Director-General has delegated adequate authority and credentials to inspectors in all areas to enable them to carry out their regulatory and oversight functions and responsibilities in an effective and efficient manner.

3.3.4 The activities pertaining to personnel licensing have been assigned to the personnel licensing staff, reporting to the Chief of the Flight Standards Office. Personnel licensing functions and responsibilities are contained in the FSAD Exposition and include pilot and aircraft maintenance licences, medical certificates and training approvals. Personnel licensing officers have been delegated the authority to perform their duties through a Delegation Letter most recently issued by the Director-General of the HKCAD on 29 December 2008. Job descriptions are contained in the *Personnel Licensing Office Procedures Manual*. Technically-qualified staff in the operations and airworthiness fields are assigned to assist in the technical matters concerning personnel licensing. For air traffic controller licences, the ATM Standards Office is responsible for approving training courses and for issuing air traffic controller licences.

3.3.4.1 The HKCAD has developed a system for the designation of flight and maintenance training examiners, with a current roster of 306 flight examiners and 78 maintenance training examiners. Minimum qualifications, training and work experience have been established, and delegation is granted through the issuance of a Letter of Authority to each individual as an authorized examiner for a validity period of up to three years.

3.3.4.2 Regarding medical examinations, the HKCAD uses the services of five medical assessors to review and assess the medical reports submitted by medical examiners. The prerequisites for initial appointment of designated medical examiners are contained in HKCAD documents and are verified with an Approval Document issued by a personnel licensing officer that states the duration of the designation and classes of medical examinations that are allowed to be performed. Twenty-two medical examiners have been authorized, with ten based outside Hong Kong. Examiners must perform a minimum of six medical examinations per year to maintain approval status.

3.3.5 The Flight Standards Office within the FSAD has responsibility for aircraft operations activities, including the issuance of AOCs. Functions and responsibilities of the Office are contained in the FSAD Exposition, and include air operator certification activities, the issuance of an AOC, oversight of flight and cabin safety, surveillance activities and regulatory enforcement responsibilities. The Office is staffed by flight operations inspectors and safety officers who have been delegated the authority to perform their duties through a Delegation Letter most recently issued by the Director-General of the HKCAD on 29 December 2008. Terms of reference for the respective posts are listed in detail in CAD 120 — *Inspecting Staff Manual (Flight Operations)*. There are twelve operations positions, of which five are currently vacant. The Office does not have sufficient human resources to perform its functions, responsibilities and mandate of providing safety oversight of civil aviation activities. Vacancy postings have been announced and the HKCAD is actively working to recruit new flight operations inspectors. Operations inspectors have received delegation of authority to perform their safety oversight duties and have been issued Warrant Cards as credentials to facilitate access for performing inspection activities.

3.3.5.1 The activities pertaining to the transport of dangerous goods by air have been assigned to technical staff in the Dangerous Goods Office within the APSD. Terms of reference have been developed for technical staff and key management personnel. Three officers are assigned to dangerous goods authorizations, inspections of AOC holders, forwarders and shippers and enforcement of dangerous goods regulations.

Security officers within the Division are assigned to review the security training programmes developed by AOC holders for flight and cabin crew training.

3.3.6 The Airworthiness Section within the FSAD has been established to meet Hong Kong's airworthiness obligations and it is mainly responsible for airworthiness-related issues outlined in Annexes 6, 7, 8 and 16 to the Chicago Convention.

3.3.6.1 Functions, responsibilities and job descriptions of the officers of the Airworthiness Section have been detailed in the *Administrative Manual AM-P02* and *AM-P03*. Airworthiness officers have been issued credentials to facilitate access for inspections of aircraft and facilities. The Airworthiness Section human resources are currently considered sufficient and include one trained and experienced airworthiness engineer. The duties assigned to the Airworthiness Section staff include aircraft registration, maintenance of the aircraft register, issuance of certificates of airworthiness, special flight permits, approval of air operator maintenance control manuals and maintenance programmes, airworthiness aspects of air operator specific operating provisions, approval of maintenance organizations, surveillance of air operators and maintenance organizations, ramp inspections, continuing airworthiness responsibilities of the State of Registry, and the issuance and renewal of AOCs.

3.3.7 The HKCAD ensures both regulatory/oversight and service provision functions. The ATMD is responsible for the provision of air navigation services, including air traffic management (ATM) service, aeronautical information service (AIS), aeronautical telecommunication service, search and rescue (SAR) coordination, Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS) and aeronautical maps and charts within the Hong Kong FIR.

3.3.7.1 The Hong Kong FIR is adjacent to the Manila, Sanya, Guangzhou and Taipei FIRs. It handles about 800 aircraft movements (arrivals and departures) per day and about 300 over-flights. A slight decrease of traffic level and cargo has been noted in recent months.

3.3.7.2 The AESD is comprised of the Projects Section, the Technical Support Section and the Air Traffic Management Standards Office (ATMSO). The Technical Support Section is responsible for maintaining communications, navigation, and surveillance/air traffic management (CNS/ATM) systems and information technology systems of the HKCAD, and the ATMSO is responsible for both regulatory and oversight of air navigation providers' activities.

3.3.7.3 The Hong Kong SAR, China has established a State Safety Programme (SSP) in accordance with ICAO requirements. It includes the Hong Kong SAR, China safety policy and objectives, safety risk management, safety assurance and safety promotion. Safety performance indicators and targets have been established and an effective SMS, acceptable to the regulatory body, is in place. In addition, a mechanism has been established and implemented for the collection and analysis of data/occurrences to support the SMS.

3.3.7.4 PANS-OPS, AIS and cartography services are provided by the ANSP in accordance with ICAO requirements. In addition, the AIS has a quality system in place and is ISO 9001:2000 certified. There is a shortage of qualified staff within the ATMSO to effectively carry out safety oversight of the PANS-OPS, AIS and cartography services. The current staffing level is four officers both responsible for regulatory and oversight duties. Effective oversight of the services is being carried out and all deficiencies identified are properly documented with timelines set for the resolution of the concerns raised. However, the fact that staff from the ATMD are called upon to carry out safety oversight of the above services, it presents a potential conflict of interest.

3.3.7.5 The oversight and provision of meteorological services to international air navigation are ensured by the Hong Kong Observatory, the Meteorological Authority in the Hong Kong SAR, China reporting to the Secretary for Commerce and Economic Development, and are provided in accordance with the provisions of Annex 3 to the Chicago Convention. The different types of services provided and the role of the Hong Kong Observatory in conducting safety oversight functions on the provision of meteorological services to international civil aviation are reflected in the Letter of Agreement between the HKCAD and the Meteorological Authority and it also includes the calibration of meteorological equipment used to support international air navigation.

3.3.7.6 The Hong Kong Observatory's Airport Meteorological Office is ISO 9001:2000 certified and has accordingly established and implemented a properly organized quality system with procedures, processes and resources necessary to provide for the quality management of the meteorological information to be supplied to the users.

3.3.7.7 Provision of SAR services in the Hong Kong SAR, China is under the direct responsibility of the Security Bureau, and the ATMD ensures a coordinating role in the process. The Security Bureau is responsible for the coordination of both aeronautical and maritime SAR operations in the Hong Kong search and rescue region (SRR). Formal agreements have been made with the Philippines (Manila FIR) for coordination of SAR operations. In addition, regular SAR exercises (SAREX) are organized with effective participation of other rescue coordination centres (RCCs), including the Guangdong RCC from mainland China.

3.3.8 The HKCAD APSD is responsible for aerodrome licensing and surveillance activities in Hong Kong SAR, China. Job descriptions for aerodrome regulatory and technical staff, including management personnel, have been developed and documented in the APSD's internal exposition. The APSD has adequate human resources to carry out its functions effectively. Aerodrome inspectors are issued with credentials to facilitate access to aerodromes and aerodrome-related documentation.

3.3.9 The Accident Investigation Division is mobilized only when required by drawing specially trained inspectors and staff from other divisions. Under the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (CAP 448B), the Director-General of Civil Aviation is appointed as the Chief Inspector of Accidents. However, as the HKCAD has two distinct entities under the authority of the DGCA for regulatory and service provision functions, the appointment of the DGCA as "*the Chief Inspector of Accidents*" presents a potential conflict of interest. Whenever an investigation is required, a trained inspector is designated as the Investigator-in-charge of the investigation. In addition, agreements have been made with the French *Bureau d'Enquêtes et d'Analyses* to facilitate the read-out of flight recorders and the analysis of data.

3.4 **Critical element 4 — Technical personnel qualification and training**

“The establishment of minimum requirements for knowledge and experience of the technical personnel performing safety oversight functions and the provision of appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent (periodic) training.”

3.4.1 For personnel licensing responsibilities, terms of reference have been developed for each post of the technical staff and are contained in the *Personnel Licensing Office Procedures Manual*. At least one officer each from the operations, airworthiness and air traffic fields is assigned to personnel licensing duties in his/her respective field. The manual includes entry qualifications and a training programme for personnel licensing officers and for technical staff assigned to perform licensing functions and responsibilities. The

programme includes initial, recurrent, specialized and on-the-job training (OJT), including a method for maintaining training records. However, OJT is mentioned in a general way, and actual training activities are not clearly defined and detailed. For the HKCAD-designated flight and maintenance training examiners, training requirements have been established for both the initial and renewal of delegated authority.

3.4.1.1 For medical assessors, the *Personnel Licensing Office Procedures Manual* contains the terms of reference for the medical officers. These include performing oversight of the approved medical examiners and the medical reports submitted by them, as well as serving as a liaison with ICAO and other State licensing authorities. For the approved medical examiners, the HKCAD checks and confirms the prerequisites for appointment, the training in aviation medicine and the access to a medical facility and equipment for performing examinations.

3.4.2 In the area of aircraft operations, minimum qualifications and experience requirements for operations inspectors are contained in the FSAD Exposition and include substantial educational and flight time experience. Duties and job descriptions are further defined in CAD 120. The HKCAD has developed formal training programmes for the operations inspectorate and the dangerous goods inspectors, including a method for maintaining training records for each officer. The programmes include initial, recurrent and specialized training and OJT. However, the details pertaining to OJT activities are not defined to ensure that training has been satisfactorily completed before an officer is assigned to perform particular tasks.

3.4.3 The Hong Kong SAR, China has established the minimum qualifications and experience required for airworthiness officers. There is an established programme and plans for carrying out initial, recurrent and specialized training and OJT for airworthiness officers. All officers need to satisfactorily complete initial training and OJT prior to being assigned tasks and responsibilities.

3.4.4 The inspectorate of the ATMSO is staffed by qualified staff to enable it to carry out safety oversight of ATS, CNS/ATM and SAR services. A training programme and plan has however not been established for inspectorate staff carrying out oversight of the SAR services.

3.4.5 The HKCAD APSD has established the minimum qualifications and experience requirements for its aerodrome regulatory staff. A training programme has been developed taking into account the competencies required for aerodrome inspectors, and a training plan prioritizing the training to be provided during the established period has been developed. The training received by aerodrome inspectors includes areas such as auditing skills, SMS, human factors as well as specialist areas such as airport engineering and rescue and fire-fighting. Certificates of attendance at training courses are maintained by individual inspectors with a duplicate kept by the HKCAD Administration Division.

3.4.6 Twenty-five officers of the HKCAD have been trained in the field of aircraft accident investigations. A training programme and training plan has been established and is being appropriately implemented. When staff of the HKCAD are involved in investigation duties, they are relieved from their current responsibilities during the conduct of the investigation and report directly to the Investigator-in-charge.

3.5 **Critical element 5 — Technical guidance, tools and the provision of safety critical information**

“The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and safety critical information, as applicable, to the technical personnel to enable them to perform their safety oversight functions in accordance with established requirements and in a standardized manner. In addition, this includes the

provision of technical guidance by the oversight authority to the aviation industry on the implementation of applicable regulations and instructions.”

3.5.1 Technical libraries are available at the HKCAD Headquarters and in the FSAD, ATMD, APSD and AESD. Relevant ICAO documents and other technical and regulatory publications are also readily available to the HKCAD officers via Intranet as well as in hard copy.

3.5.2 In the area of personnel licensing, the procedures are well-documented for standardizing the processing of licences, ratings, certificates and approvals, and staff have been provided with adequate facilities and office equipment. Licensing procedures are contained in the following publications:

- a) *Personnel Licensing Office Procedures Manual*;
- b) CAD 170 — *Guidance for Authorized Examiners*;
- c) CAD 620 — *Air Traffic Control Approved Examiner Handbook*;
- d) *Guidance Notes for Approved Medical Examiners*; and
- e) *Guidance for Approved Medical Assessors for Evaluation of Medical Reports*.

3.5.3 In the area of aircraft operations, the HKCAD has developed procedures that are well-documented and standardized for issuing an AOC, accompanying approvals and authorizations. The HKCAD operations inspectorate staff have been provided with offices, computers and equipment to allow them to perform their assigned tasks. Some of their guidance procedures have been recently issued. However, the procedures for granting permissions for aircraft leasing arrangements have not yet been implemented. The primary documents for procedures are CAD 120 and CAD 360. Additional guidance is contained in the following:

- a) CAD 359 — *Low Weather Minima Operations*;
- b) CAD 382 — *The Mandatory Occurrence Reporting Scheme (Information and Guidance)*;
- c) CAD 385 — *Performance (Transport) Guidance Document*;
- d) CAD 516 — *Ground Proximity Warning System (GPWS) Guidance Material*;
- e) *Flight Standards Office Procedures Manual*;
- f) *Flight Operations Notices* (total of 25); and
- g) *Operations Staff Instructions*.

3.5.3.1 Guidance for dangerous goods inspectors is contained in the *Policy Manual*, *Legal Manual*, *Procedures Manual*, and *Training Manual*. Four inspection handbooks have been issued to address airlines, shippers, enforcement and occurrence handling. A set of Dangerous Goods Advisory Circulars has been issued, for example AIC 03/03 — *General Permission for Carriage of Dangerous Goods in Aircraft*.

3.5.4 Airworthiness officers have been provided with a *Technical Procedures Manual* (TPM) and an *Administration Manual* which cover procedures and guidance material for every area. The TPM provides guidance to airworthiness officers on the overarching principles of audit methodology. The TPM also contains details and instructions on the forms and other tools to be used in the planning and reporting of audits and for documenting deficiencies found during audits of approved maintenance organizations (AMOs). The procedures and checklists have been included in the TPM to reflect the production and design approval process and for surveillance of approved production and design organizations as per internationally recognized practice.

3.5.4.1 Airworthiness officers have access to design organization documentation and continuing airworthiness information for all aircraft on the Hong Kong SAR, China register. Airworthiness officers have modern and sufficient facilities and equipment to perform their duties.

3.5.5 With respect to air navigation services, CAD 650 — *ANS Safety Regulatory Auditor and Inspector Handbook* has been published. The handbook lays down the procedures and processes of the safety regulatory oversight activities undertaken by the ATMSO of the HKCAD. The primary objective of the handbook is to assist ATMSO auditors/inspectors and the audited/inspected party by specifying the auditing/inspection principles and standards to be followed. The handbook also includes forms and checklists to assist the auditors.

3.5.5.1 All relevant ICAO documents, guidance material and procedures established by the HKCAD, and the AIP are readily available in hard copies and through the Intranet and are also posted on the HKCAD website. Inspectors are provided with the necessary tools and equipment.

3.5.5.2 The following documents are maintained by the ATMSO:

- a) CAD 610 — *ATMSO Exposition*;
- b) CAD 620 — *ATC Approved Examiner Handbook*;
- c) CAD 636 — *Guidance for Air Traffic Incident Investigation*;
- d) CAD 650 — *ANS Safety Regulatory Auditor and Inspector Handbook*;
- e) CAD 670 — *Air Navigation Services Safety Requirements*;
- f) CAD 744 — *Personnel Licensing — Hong Kong Air Traffic Controllers*;
- g) ANSIN — *Air Navigation Service Information Notice*; and
- h) ATMSO Document Holder List.

3.5.6 Guidance material and internal procedures have been developed to guide aerodrome inspectors while carrying out their functions. The *Aerodrome Licensing Manual* developed by the APSD is akin to an aerodrome inspector handbook and contains the necessary procedures and instructions for staff to deal with the aerodrome licensing and renewal process. The APSD maintains its own technical library stocked with the relevant Annexes to the Chicago Convention and publications including its internal publications. A clerical officer from the APSD doubles up as librarian and is responsible for the maintenance of the technical library to ensure that the publications are kept up to date. There are adequate facilities and office equipment including transportation means to enable the aerodrome inspectors to discharge their duties effectively.

3.5.7 In the field of aircraft accident and incident investigation, the *Handbook for Inspector of Accidents* has been published to provide necessary guidance to investigators, while conducting investigations. Investigators are also provided with the necessary tools and equipment to enable them to carry out their functions and responsibilities in a safe and effective manner. The handbook is comprehensive and addresses planning of the investigation, notification, action at the accident site, the investigation process and reporting.

3.6 **Critical element 6 — Licensing, certification, authorization and/or approval obligations**

“The implementation of processes and procedures to ensure that personnel and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorization and/or approval to conduct the relevant aviation activity.”

3.6.1 The HKCAD issues personnel licences for pilots, flight engineers, aircraft maintenance personnel and air traffic controllers; Classes I, II and III medical certificates; and approvals for approved training organizations. All licences except the air traffic controller licence are of the expiry type. The HKCAD develops, conducts and marks the written examinations which lead to the issuance of pilot, flight engineer, air traffic controller and aircraft maintenance licences. Training organizations are granted certain

levels of testing authorization, such as preparing and administering written examinations. Testing of language proficiency for flight crew and air traffic controllers is conducted as part of the requirements for obtaining a licence, and the level of proficiency is recorded as part of the licence. Conversions based upon foreign licences are conducted following CAD 54 provisions and the procedures in the *Personnel Licensing Office Procedures Manual*.

3.6.1.1 The approval process for training organizations is contained in various procedures documents applicable to the type of training offered with the final outcome being, for example, the issuance of an Approval — Flying Training Organization. The document states the approval of the training course, the validity period of up to two years and lists the type of aviation licence for which the course is offered. Schedules are attached to the approval to list key management and types of aircraft and simulators used in training. For maintenance training organizations, the HKCAD issues an approval certificate that includes a training approval schedule in accordance with HKAR-147 stating the class, ratings, limitations and conditions of the approval.

3.6.1.2 Regarding medical examinations, the HKCAD uses the services of five medical assessors to review and assess the medical reports submitted by medical examiners on a form which is then reviewed by a HKCAD medical assessor who signs for further processing by licensing staff. The prerequisites for initial appointment of designated medical examiners are contained in HKCAD documents and are verified, with an approval document issued that states the duration of the designation and classes of medical examinations that are allowed to be performed. The medical certificates are issued in accordance with the provisions of CAD 54 and signed by one of the five medical assessors. The confidentiality of medical reports is assured through secure storage facilities and non-disclosure confidentiality agreements signed by the HKCAD personnel licensing staff. Specific medical information is also stored in electronic form in the Operations Information System used for processing personnel licences.

3.6.2 In the area of aircraft operations, the HKCAD utilizes a five-phase AOC certification process and issues AOCs along with accompanying permissions and approvals. While the process in relation to the issuance of an AOC is ongoing, the Air Transport Licensing Authority determines whether to grant a licence for the operation of scheduled services using aircraft registered in the Hong Kong SAR, China. Prior to AOC issuance, security training programmes for flight and cabin crew are first reviewed by security officers within the APSD and then reviewed and approved by operations inspectors of the Flight Standards Office for incorporation into the AOC holder's training programmes. All flight and cabin crew training programmes must be approved by the HKCAD during the certification process. Eight AOCs issued by the HKCAD are currently valid in the Hong Kong SAR, China and these are issued as a certificate document along with individual sheets containing specific regions of operations, general conditions, special conditions, approvals, and permissions.

3.6.2.1 Regarding the transportation of dangerous goods by air, the HKCAD grants permissions of up to two years, which are attached to the air operator's AOC. Applicants are required to submit an application to the Dangerous Goods Office at least 14 days prior to their first flight requested. The application contains training programmes for ground staff and flight crew members and details if the AOC holder uses a shipping agency. Any request to import explosives must first receive permission from the Commissioner of Mines. Three AOC holders have been granted permission for air transport of dangerous goods. The five remaining AOC holders have dangerous goods recognition training programmes for non-carriage of dangerous goods.

3.6.3 With regard to airworthiness of aircraft, the Hong Kong SAR, China maintains an aircraft register in electronic version and does not issue type certificates. Type certificates issued by the Federal Aviation Administration (FAA) of the United States, the European Aviation Safety Agency (EASA), the Joint

Aviation Authorities (JAA) and the Civil Aviation Authority (CAA) of the United Kingdom are accepted for the purpose of inducting a new type of aircraft into the territory. Certificates of airworthiness are issued with a validity period of twelve months for the first time and are required to be renewed at an interval of every twelve months following implemented procedures. An aircraft noise certificate is issued based on the noise level as indicated in the original type certificate.

3.6.3.1 The Hong Kong SAR, China basically authorizes organizations to issue approvals of minor design modifications and repairs and only approves repairs in some cases. Regarding air operator certification, a formal process ensures that all applicable airworthiness requirements have been met by the operator prior to being issued an AOC. AMOs are addressed in HKAR-145 and are required to provide the Airworthiness Section with a Maintenance Organization Exposition, specifying the scope of work and how the AMO intends to comply with the requirements. The validity period of the AMO certificate issued or renewed by the Hong Kong SAR, China is not more than two years. The approval of maintenance organizations is based on established procedures. The Hong Kong SAR, China does not validate maintenance organization approvals granted by other States.

3.6.4 With respect to air navigation services, although the ATMD provides services in accordance with the approval granted pursuant to Article 64A of CAP 448C, it also issues and maintains an up-to-date manual of air traffic control.

3.6.4.1 The AIS and meteorological service providers have a quality system in place and are also ISO 9001:2000 certified. An SMS consistent with the State safety programme and acceptable to the ATMSO has been established and implemented. Navigational aids are regularly being flight checked in accordance with an established plan, and records of inspections are being kept by the AESD.

3.6.5 With respect to aerodromes, the Hong Kong International Airport is the only airport in the Hong Kong SAR, China and it has been licensed in accordance with the applicable aerodrome legislation and regulations since July 1998, prior to the aerodrome certification requirements introduced by ICAO in 2003. The aerodrome licence is renewed annually and there is a process for the aerodrome operator to apply for the licence prior to the expiry of the current licence and for the HKCAD APSD to make a thorough assessment before granting the renewal. The renewal of the aerodrome licence process consists of a series of ongoing audits and inspections carried out throughout the year, covering all aspects of aerodrome operations, including a review of the physical aerodrome facilities, airfield safety operations and maintenance, emergency planning, and SMS. The APSD maintains copies of the aerodrome manual submitted by the operator, including aerodrome-related correspondences between the HKCAD and the AAHK.

3.7 **Critical element 7 — Surveillance obligations**

“The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorization and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorized and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.”

3.7.1 The HKCAD has issued guidance for continuing surveillance of licensed personnel and HKCAD-designated examiners who administer maintenance training or flight examinations on behalf of the HKCAD. However, a system for the control and surveillance of HKCAD-designated examiners to ensure consistency and reliability of the examinations has not been fully implemented.

3.7.2 In the area of aircraft operations, the Flight Standards Office of the HKCAD has developed a surveillance programme for the operations inspectorate staff; however, it does not include defining all of the types and frequencies of inspections necessary for ensuring that all AOC holders comply with national regulations and Annex provisions. The planning and target number of inspections to be accomplished yearly are set out as part of the financial planning for the Flight Standards Office and are included in the annual Controlling Officers Report by the HKCAD. This process is further detailed in Operations Staff Instruction No. 2/2008 — *Flight Standards Safety Surveillance*. Some types of inspections receive a high target number for completion, while other types of inspections are not addressed in the surveillance programme. With regard to the transportation of dangerous goods by air, assigned officers follow an annual surveillance programme of oversight of AOC holders, agencies and shippers.

3.7.3 With respect to airworthiness of aircraft, the Hong Kong SAR, China has developed an annual surveillance programme including the area of inspection with the name of the assigned officer. The surveillance programme covers all Hong Kong SAR, China AOC holders, safety assessment of foreign aircraft, AMOs, design approval holders, production including parts manufacturer approval (PMA) holders and organizations performing delegated functions. The annual surveillance programme includes random inspections on all aspects of maintenance. The accomplishment of surveillance activities has been documented and the implementation has been confirmed during the industry visit.

3.7.4 In the air navigation services field, the ATMSO, the Projects Section and the Technical Support Section of the AESD have developed a periodic surveillance programme to inspect the provision of services, and regular inspections are being carried out in accordance with the inspectors' handbook.

3.7.5 With respect to aerodromes, the HKCAD APSD has developed and implemented a surveillance programme for continuing surveillance of the sole licensed aerodrome in the Hong Kong SAR, China. On average, the APSD carries out 14 audits and about 130 inspections annually covering all aspects of aerodrome operations, including SMS implementation. In addition, officers from the APSD participate as umpires in the annual crash exercise to test the effectiveness of the airport emergency plan with the aerodrome operator and other agencies involved. Annual renewal of the aerodrome licence is contingent on the satisfactory outcome of these surveillance audits and inspections.

3.8 **Critical element 8 — Resolution of safety concerns**

“The implementation of processes and procedures to resolve identified deficiencies impacting aviation safety, which may have been residing in the aviation system and have been detected by the regulatory authority or other appropriate bodies.

Note.— This would include the ability to analyse safety deficiencies, forward recommendations, support the resolution of identified deficiencies as well as take enforcement action, when appropriate.”

3.8.1 With respect to personnel licensing, deficiencies are recorded and monitored for follow-up by an assigned officer. The audit team reviewed an investigation report which was related to an aircraft maintenance licence holder working with an expired licence for a six-week period in connection with HKAR-145 authorization. A Letter of Warning was issued and maintained in the individual's personal file in the Personnel Licensing Office.

3.8.2 The Flight Standards Office has developed and implemented an electronic database system for tracking deficiencies identified during inspections and for ensuring their timely resolution. Documented inspection and enforcement procedures contained in the *Flight Standards Office Procedures Manual* detail the

method of communication with the offending air operator or individual and include four levels of seriousness that dictate the timeframe for rectifying any wrongdoing. The preparation of a case file was made by HKCAD dangerous goods inspectors, with the final outcome of a guilty judgment and the ordering of a monetary penalty by the court.

3.8.3 With regard to airworthiness of aircraft, the Hong Kong SAR, China does not issue any airworthiness directives (ADs), service bulletins, etc. Each operator of an aircraft registered in the Hong Kong SAR, China is required to ensure receipt of all ADs, service bulletins, etc., issued by the State of Design and State of Manufacturer and to comply with the same. Their implementation is ensured during surveillance inspections.

3.8.4 It is mandatory on the part of the operator to communicate information on faults, malfunctions and defects for aircraft registered, being operated or receiving maintenance under an approval issued by the Hong Kong SAR, China to the organization responsible for the type design as well as to the HKCAD.

3.8.5 A computerized system has been developed for the tracking of deficiencies identified during surveillance activities to ensure their timely resolution. All the findings identified during inspections, including delegated functions, have been resolved in a timely manner. Aircraft operators are required by the HKCAD to submit a monthly/quarterly report showing the assessment and compliance status with applicable ADs. The HKCAD has developed a mandatory occurrence reporting system for aircraft status monitoring. In the event that information obtained indicates degraded level of safety, the Hong Kong SAR, China will initiate a special evaluation and on the basis of which it will accordingly impose special operational restrictions.

3.8.6 In the field of air navigation services, reports of inspections are documented and timelines are set with a view to resolve the deficiencies identified. A system is in place at the level of the ATMD, the ATMSO, the Projects Section and the Technical Support Section of the AESD for the tracking of deficiencies identified during inspections to ensure their timely resolution. In addition, regular meetings and consultations are organized between the AESD and the ATMD to address safety issues.

3.8.7 The APSD has developed a process for the management of non-compliances identified during audits and inspections. A non-compliance report (NCR) will be raised and the aerodrome operator will be notified in writing to take the necessary corrective action as soon as possible. The APSD tracks the status of corrective actions taken by the aerodrome operator by carrying out follow-up visits to verify and ensure satisfactory resolution of any non-compliances.

3.8.8 With respect to safety promotion and education, the APSD has formed an Aerodrome Licensing Review Committee with four sub-committees looking into various areas of aerodrome operations involving the aerodrome operator. Safety performance indicators and targets such as bird strike incidents and airfield ground accidents and incidents are reviewed at these meetings.

3.8.9 In the accident and incident investigation area, reports of all incidents including serious incidents are forwarded to the AID and are investigated. In addition, an incident reporting system, which consists of a mandatory incident reporting system and a voluntary incident reporting system, is in place. The HKCAD, however, has not promulgated legislation and procedures for ensuring that its voluntary incident reporting system is non-punitive and for ensuring protection to the source of the information. A database compatible with the European Co-ordination Centre for Aviation Incident Reporting Systems (ECCAIRS) and the ICAO accident/incident reporting (ADREP) system for the posting of all incident, serious incident and

accident reports and recommendations is available through the HKCAD Intranet. In addition, there is an automatic exchange of data with other States.

4. VISITS TO THE INDUSTRY/SERVICE PROVIDERS

4.1 Accompanied by staff members of the State's civil aviation system, the audit teams visit aviation service providers, operations and maintenance departments of operators and maintenance organizations, aeronautical product/equipment manufacturers, aviation training institutes, etc. The objective of the visits is to validate the capability of the State to supervise the activities of these service providers, airlines and organizations.

4.2 In the case of the Hong Kong SAR, China, the audit team visited the following organizations:

- a) Hong Kong Dragon Airlines Ltd. at the Hong Kong International Airport (OPS);
- b) Hong Kong Aircraft Engineering Co. Ltd. at the Hong Kong International Airport (AIR);
- c) ATMD (air navigation service provider) at the Hong Kong International Airport, Air Traffic Control Centre (ATCC), including the Approach Control, En-route Control, Aerodrome Control Tower, Aeronautical Information Centre and RCC (ANS); and
- d) Main Fire Station, Aerodrome Control Tower and ATCC at the Hong Kong International Airport (AGA).

5. AUDIT FINDINGS AND DIFFERENCES DATABASE (AFDD)

5.1 The general objective of the AFDD is to assist States in identifying the elements that need attention in the implementation of the proposed corrective action plan. The information is also intended to assist States in establishing a priority of actions to be taken to resolve safety concerns identified by the audits. Appendix 2 to this report contains a graphic representation of the lack of effective implementation of the critical elements of the safety oversight system (ICAO Doc 9734, Part A refers) in the Hong Kong SAR, China and at a global level (average results from all States audited). The graphic representation enables the Hong Kong SAR, China to prioritize the necessary corrective actions and to identify assistance requirements based on its personnel, technical and financial capabilities in consideration of its safety oversight obligations.

6. STATE AVIATION ACTIVITY QUESTIONNAIRE (SAAQ)

6.1 The SAAQ is one of the major tools required for conducting a comprehensive systems approach-based safety oversight audit. As such, all Contracting States are required to complete the SAAQ and submit it to ICAO for proper evaluation and recording. The submitted information enables ICAO to maintain an up-to-date database on the Hong Kong SAR, China civil aviation activities. The Hong Kong SAR, China has submitted its SAAQ to ICAO, which can be found at www.icao.int/soa.

7. COMPLIANCE CHECKLISTS (CCs)

7.1 The CCs are one of the main tools used in the conduct of safety oversight audits under the comprehensive systems approach. As such, all Contracting States are required to complete the CCs and submit them to ICAO for evaluation and recording. The submitted information enables ICAO to maintain an up-to-date database on the Hong Kong SAR, China level of compliance to the ICAO SARPs and assist in

facilitating the conduct of a standardized audit of all Contracting States. As a result, States will be enabled to have a clear picture of the implementation status of the relevant SARPs. The Hong Kong SAR, China has submitted its CCs to ICAO, which can be found at www.icao.int/soa.

8. FOLLOW-UP ACTION

8.1 In accordance with the MOU agreed to between the People's Republic of China and ICAO, and corresponding amendment, as per exchange of letters between the Hong Kong SAR, China and ICAO, the Hong Kong SAR, China submitted a corrective action plan on 3 August 2009 and an update to the action plan on 2 November 2009. The action plan submitted was reviewed by the Safety Oversight Audit (SOA) Section and was found to fully address most of the findings and recommendations contained in this report. The proposed action plan, including comments and clarifications provided by the State, is attached as Appendix 3 to this report. Comments by ICAO on each corrective action are found in Appendix 1 to this report.

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APPENDIX 1

APPENDIX 1-1-01
FINDINGS AND RECOMMENDATIONS RELATED TO
PRIMARY AVIATION LEGISLATION AND CIVIL AVIATION REGULATIONS

<p>HONG KONG CHINA SAR</p> <p>Audit Period: 26/02/2009 - 06/03/2009</p>	<p>LEG/01 1.009; 6.015; 6.017; 7.009; 7.013;</p>
<p>DOCUMENT REFERENCE:</p> <p>Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.</p>	
<p>CE-1 CE-2 X CE-3 CE-4 CE-5 CE-6 CE-7 CE-8</p>	
<p>FINDING:</p> <p>The Hong Kong Special Administrative Region (SAR), China has developed procedures for the amendment of the primary legislation and operating regulations. However, the existing provisions do not reflect the latest status of the requirements of Annex 13 to the Chicago Convention. The Director General of Civil Aviation (DGCA) has, as a temporary measure, promulgated through the Exposition, Bulletins or Civil Aviation Publications some of the legislative and regulatory provisions whilst awaiting the completion of the formal amendment process. However, the delegation of authority by the Chief Executive, as provided for in Article 98, paragraph 12 of the Air Navigation (Hong Kong) Order 1995, as amended (hereinafter referred to as “CAP 448C”), does not include the power to make regulations.</p> <p>In addition, some requirements of the Hong Kong SAR, China as promulgated by the DGCA, do not reflect the latest provisions of Annexes 3, 4, 10, 11, 12 and 15 to the Chicago Convention. Furthermore, Schedule 14 of CAP 448C does not reflect the latest provisions of Annex 2 to the Chicago Convention.</p>	
<p>RECOMMENDATION:</p> <p>The Hong Kong SAR, China should establish a mechanism to expedite the process for the amendment of the enabling regulations and national standards and ensure that it addresses the requirements of the latest Annexes to the Chicago Convention.</p>	
<p>CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:</p> <p>Corrective action plan and comments submitted by the State are found at Appendix 3-1-1 of this report.</p>	
<p>COMMENTS BY ICAO:</p> <p>The corrective action plan submitted by the State partially addresses this ICAO finding and recommendation. The estimated implementation date does not address the need for the amendment process to be affected in a timely manner.</p>	

APPENDIX 1-1-02
FINDINGS AND RECOMMENDATIONS RELATED TO
PRIMARY AVIATION LEGISLATION AND CIVIL AVIATION REGULATIONS

HONG KONG CHINA SAR	LEG/02 7.485;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3 X	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The search and rescue (SAR) services system in the Hong Kong SAR, China does not include a legal framework.							
RECOMMENDATION:							
The Hong Kong SAR, China should establish a legal framework for the provision of SAR services within its search and rescue region (SRR).							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-1-2 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2010</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-2-01
FINDINGS AND RECOMMENDATIONS RELATED TO
CIVIL AVIATION ORGANIZATION

<p>HONG KONG CHINA SAR</p> <p>Audit Period: 26/02/2009 - 06/03/2009</p>	<p>ORG/01 2.021; 7.051; 7.061; 7.209; 7.211; 7.213; 7.215; 7.269; 7.277; 7.279; 7.281; 7.325; 7.333; 7.335; 7.337;</p>						
<p>DOCUMENT REFERENCE:</p> <p>Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.</p>							
CE-1	CE-2	CE-3 X	CE-4 X	CE-5	CE-6	CE-7	CE-8
<p>FINDING:</p> <p>The Hong Kong Civil Aviation Department (HKCAD) has two entities responsible for the provision of services: namely, the Air Traffic Management Division (ATMD), which is the main air navigation services provider, and the Projects and Technical Support Section of the Air Traffic Engineering and Standards Division (AESD). Regulatory and oversight duties and responsibilities of air navigation services are carried out by the Air Traffic Management Standards Office (ATMSO), which is another entity of the AESD.</p> <p>Due to a shortage of trained staff, the ATMSO uses some officers from the ATMD for carrying out safety oversight tasks in the fields of Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS), aeronautical information service (AIS) and cartography, presenting a potential conflict of interest. In addition, the AESD has responsibility for both service provision and regulatory and oversight functions.</p>							
<p>RECOMMENDATION:</p> <p>The Hong Kong SAR, China should establish a mechanism to ensure that a sufficient number of qualified inspectorate staff are available to carry out its safety oversight tasks over the entities providing PANS-OPS, AIS and cartography services. In addition, the following requirements should be taken into account:</p> <ul style="list-style-type: none"> a) the establishment of a formal training programme detailing what type of training should be provided to its inspectorate staff; and b) the development of a periodic training plan detailing and prioritizing what type of training will be provided during the established period. <p>The HKCAD should ensure a distinct separation between entities responsible for regulatory/safety oversight and service provision functions.</p>							
<p>CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:</p> <p>Corrective action plan and comments submitted by the State are found at Appendix 3-2-1 of this report.</p> <p style="text-align: right;">Estimated Implementation Date: 31/12/2010</p>							
<p>COMMENTS BY ICAO:</p> <p>The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.</p>							

APPENDIX 1-3-01
FINDINGS AND RECOMMENDATIONS RELATED TO
PERSONNEL LICENSING AND TRAINING

HONG KONG CHINA SAR	PEL/01 3.113;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4 X	CE-5	CE-6	CE-7	CE-8
FINDING:							
The HKCAD has developed a formal training programme for personnel licensing officers and for technical staff assigned to perform personnel licensing duties and responsibilities. However, the training programme does not include details pertaining to on-the-job training (OJT).							
RECOMMENDATION:							
The HKCAD should develop and implement a formal training programme for personnel licensing officers and other staff participating in licensing activities that includes details pertaining to OJT. The programme should include a method for documenting the specific types of training received and satisfactorily completed by the above-mentioned personnel prior to assigning them those tasks and responsibilities.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-3-1 of this report. <div style="text-align: right;">Estimated Implementation Date: 03/08/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-3-02
FINDINGS AND RECOMMENDATIONS RELATED TO
PERSONNEL LICENSING AND TRAINING

HONG KONG CHINA SAR	PEL/02 3.605;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4	CE-5	CE-6	CE-7 X	CE-8
FINDING:							
The HKCAD has not implemented a system for the control and surveillance of HKCAD-designated examiners who administer practical or flight examinations to ensure consistency and reliability of these examinations.							
RECOMMENDATION:							
The HKCAD should develop and implement a system for the control and surveillance of the HKCAD-designated examiners who administer practical or flight examinations on behalf of the Hong Kong SAR, China in order to ensure that these examinations are consistent and reliable.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-3-2 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-4-01
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION

HONG KONG CHINA SAR	OPS/01 4.025;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3 X	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The Flight Standards Office of the HKCAD does not have sufficient human resources to perform its functions, responsibilities and mandate of providing safety oversight of civil aviation activities. Vacancy postings have been announced and the HKCAD is actively working towards the recruitment of new flight operations inspectors.							
RECOMMENDATION:							
The Hong Kong SAR, China should ensure that the Flight Standards Office of the HKCAD is staffed with a sufficient number of flight operations inspectors for performing the activities of certification, surveillance and supervision in order to fulfil the mandate of providing safety oversight of civil aviation activities.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-4-1 of this report. <div style="text-align: right;">Estimated Implementation Date: 03/08/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-4-02
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION

HONG KONG CHINA SAR Audit Period: 26/02/2009 - 06/03/2009	OPS/02 4.047; 4.247; 4.443;
DOCUMENT REFERENCE: Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.	
CE-1 CE-2 CE-3 CE-4 CE-5 CE-6 CE-7 X CE-8	
FINDING: The Flight Standards Office of the HKCAD has developed a surveillance programme for the operations inspectorate staff; however, it does not include all of the types and frequencies of inspections necessary for ensuring that all AOC holders comply with national regulations and ICAO provisions. The planning and target number of inspections to be accomplished yearly are set out as part of the financial planning of the Flight Standards Office and are included in the annual Controlling Officers Report by the HKCAD. These are further detailed in Operations Staff Instruction No. 2/2008 — <i>Flight Standards Safety Surveillance</i> . Some types of inspections receive a high target number for completion, while other types of inspections are not addressed in the surveillance programme.	
RECOMMENDATION: The Flight Standards Office of the HKCAD should develop and implement a comprehensive surveillance programme that includes all of the types and frequencies of inspections necessary for ensuring that all AOC holders comply with national regulations and ICAO provisions outlined in the Annexes to the Chicago Convention.	
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE: Corrective action plan and comments submitted by the State are found at Appendix 3-4-2 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2009</div>	
COMMENTS BY ICAO: The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.	

APPENDIX 1-4-03
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION

HONG KONG CHINA SAR	OPS/03 4.051; 4.057;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4 X	CE-5	CE-6	CE-7	CE-8
FINDING:							
The HKCAD has developed a formal training programme for the Flight Standards Office operations inspectorate staff. However, the training programme does not include details pertaining to OJT.							
RECOMMENDATION:							
The HKCAD should develop and implement a formal training programme for the Flight Standards Office operations inspectorate staff that includes details pertaining to OJT. The programme should include a method for documenting the specific types of training received and satisfactorily completed by the operations inspectorate staff prior to assigning them those specific tasks and responsibilities.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-4-3 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-4-04
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION

<p>HONG KONG CHINA SAR</p> <p>Audit Period: 26/02/2009 - 06/03/2009</p>	<p>OPS/04 4.383;</p>
<p>DOCUMENT REFERENCE:</p> <p>Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.</p>	
<p>CE-1 CE-2 CE-3 CE-4 CE-5 X CE-6 CE-7 CE-8</p>	
<p>FINDING:</p> <p>The HKCAD has granted permissions for aircraft leasing arrangements in accordance with procedures that do not include all the necessary pre-approval checks. Recently, the HKCAD has issued new comprehensive procedures for the approval of aircraft leasing arrangements, but these have not yet been implemented.</p>	
<p>RECOMMENDATION:</p> <p>The HKCAD should implement the HKCAD's new comprehensive procedures for the approval of existing and future aircraft leasing arrangements.</p>	
<p>CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:</p> <p>Corrective action plan and comments submitted by the State are found at Appendix 3-4-4 of this report.</p> <p style="text-align: right;">Estimated Implementation Date: 30/11/2009</p>	
<p>COMMENTS BY ICAO:</p> <p>The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.</p>	

**APPENDIX 1-5
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRWORTHINESS OF AIRCRAFT**

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APPENDIX 1-6-01
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR Audit Period: 26/02/2009 - 06/03/2009	AIG/01 6.001;
DOCUMENT REFERENCE: Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.	
CE-1 CE-2 X CE-3 CE-4 CE-5 CE-6 CE-7 CE-8	
FINDING: The Civil Aviation Ordinance (Chapter 448 of the Laws of Hong Kong, also known as CAP 448) and the subsidiary legislation, Hong Kong Civil Aviation (Investigation of Accidents) Regulations (CAP 448B) stipulate the legislative and regulatory provisions requiring the institution of an investigation in the circumstances of aircraft accidents and serious incidents in the Hong Kong SAR, China. However, no specific mention is made to the fact that the investigations would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention.	
RECOMMENDATION: The Hong Kong SAR, China should ensure that the legislative or regulatory framework specifically includes provisions indicating that the conduct of investigations into the circumstances of aircraft accidents and serious incidents in the Hong Kong SAR, China would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention.	
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE: Corrective action plan and comments submitted by the State are found at Appendix 3-6-1 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2013</div>	
COMMENTS BY ICAO: The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.	

APPENDIX 1-6-02
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR	AIG/02 6.029; 6.031;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2 X	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not promulgated legislative provisions for the non-disclosure of cockpit voice recorder (CVR) recordings and for the non-disclosure of certain records for purposes other than aircraft accident or incident investigation.							
RECOMMENDATION:							
The Hong Kong SAR, China should promulgate legislative provisions for the non-disclosure of CVR recordings and for the non-disclosure of certain records for purposes other than aircraft accident or incident investigation.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-6-2 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2013</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-6-03
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR Audit Period: 26/02/2009 - 06/03/2009	AIG/03 6.033;						
DOCUMENT REFERENCE: Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2 X	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING: The Hong Kong SAR, China has not promulgated legislative provisions for permitting, as the State conducting the investigation, the participation of accredited representatives from the State of Operator and the State of Design.							
RECOMMENDATION: The Hong Kong SAR, China should promulgate legislative provisions for permitting, as the State conducting the investigation, the participation of accredited representatives from the State of Operator and the State of Design.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE: Corrective action plan and comments submitted by the State are found at Appendix 3-6-3 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2013</div>							
COMMENTS BY ICAO: The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-6-04
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR	AIG/04 6.341;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4	CE-5 X	CE-6	CE-7	CE-8
FINDING:							
The interpretation given to some of the definitions in Regulation 2 of CAP 448B is not in accordance with the definitions of Annex 13 to the Chicago Convention.							
RECOMMENDATION:							
With a view to harmonize the use of terms mentioned in aircraft accident and incident investigations, the Hong Kong SAR, China should adopt the definitions of Annex 13 to the Chicago Convention.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-6-4 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2013</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-6-05
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR	AIG/05 6.359;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4	CE-5 X	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not established means like procedures or Memoranda of Understanding (MOUs) to facilitate coordination between the investigator-in-charge (IIC) and the judicial authorities.							
RECOMMENDATION:							
The Hong Kong SAR, China should establish means, through procedures or MOUs, to facilitate coordination between the IIC and the judicial authorities.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-6-5 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2011</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-6-06
FINDINGS AND RECOMMENDATIONS RELATED TO
AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION

HONG KONG CHINA SAR	AIG/06 6.505;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2 X	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not promulgated legislation and procedures for ensuring that its voluntary occurrence reporting system is non-punitive and for ensuring protection to the sources of the information.							
RECOMMENDATION:							
The Hong Kong SAR, China should promulgate legislation and procedures for ensuring that its voluntary occurrence reporting system is non-punitive and for ensuring protection to the sources of the information.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-6-6 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2013</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-7-01
FINDINGS AND RECOMMENDATIONS RELATED TO
AIR NAVIGATION SERVICES

HONG KONG CHINA SAR	ANS/01 7.005;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2 X	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not promulgated regulations to facilitate the assistance of aircraft in distress in its territory in adherence to Article 25 of the Chicago Convention.							
RECOMMENDATION:							
The Hong Kong SAR, China should promulgate regulations to facilitate the assistance of aircraft in distress in its territory in adherence to Article 25 of the Chicago Convention.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-7-1 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/12/2010</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-7-02
FINDINGS AND RECOMMENDATIONS RELATED TO
AIR NAVIGATION SERVICES

HONG KONG CHINA SAR Audit Period: 26/02/2009 - 06/03/2009	ANS/02 7.159;
DOCUMENT REFERENCE: Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.	
CE-1 CE-2 X CE-3 CE-4 CE-5 CE-6 CE-7 CE-8	
FINDING: The Hong Kong SAR, China has not established contingency procedures for minimum safe altitude warning (MSAW).	
RECOMMENDATION: The Hong Kong SAR, China should establish contingency procedures for MSAW.	
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE: Corrective action plan and comments submitted by the State are found at Appendix 3-7-2 of this report. <p style="text-align: right;">Estimated Implementation Date: 31/12/2013</p>	
COMMENTS BY ICAO: The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.	

APPENDIX 1-7-03
FINDINGS AND RECOMMENDATIONS RELATED TO
AIR NAVIGATION SERVICES

HONG KONG CHINA SAR	ANS/03 7.105;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2 X	CE-3	CE-4	CE-5	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has implemented air traffic advisory service in Class F airspace and has accordingly established a plan for replacing the air traffic advisory service and implementing a higher classification of airspace. However, the implementation date is linked to the implementation of automatic dependent surveillance — broadcast (ADS-B), which is in 2014.							
RECOMMENDATION:							
The Hong Kong SAR, China should expedite the process for the replacement of air traffic advisory service and the implementation of a higher classification of airspace.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-7-3 of this report. <div style="text-align: right;">Estimated Implementation Date: 31/03/2010</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-7-04
FINDINGS AND RECOMMENDATIONS RELATED TO
AIR NAVIGATION SERVICES

HONG KONG CHINA SAR	ANS/04 7.311; 7.359;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4	CE-5 X	CE-6	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not established a mechanism to ensure that aeronautical data quality requirements related to publication resolution and data integrity are in accordance with the provisions of Appendix 7, Tables 1 to 5 of Annex 15 to the Chicago Convention and that the ones related to data integrity and charting resolution are in accordance with the provisions of Tables 1 to 5 to Appendix 6 of Annex 4 to the Chicago Convention.							
RECOMMENDATION:							
The Hong Kong SAR, China should establish a mechanism to ensure that aeronautical data quality requirements related to publication resolution and data integrity are in accordance with the provisions of Appendix 7, Tables 1 to 5 of Annex 15 to the Chicago Convention and that the ones related to data integrity and charting resolution are in accordance with the provisions of Tables 1 to 5 to Appendix 6 of Annex 4 to the Chicago Convention.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-7-4 of this report. <div style="text-align: right;">Estimated Implementation Date: 03/08/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-7-05
FINDINGS AND RECOMMENDATIONS RELATED TO
AIR NAVIGATION SERVICES

HONG KONG CHINA SAR	ANS/05 7.495; 7.497; 7.499;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4 X	CE-5	CE-6	CE-7	CE-8
FINDING:							
The oversight of the provision of SAR services in the Hong Kong SAR, China is carried out by trained and experienced officers of the ATMSO. However, a formal training programme detailing what type of training should be provided to its SAR inspectorate staff and a periodic training plan detailing and prioritizing the type of training to be provided during the established period have not been developed.							
RECOMMENDATION:							
The HKCAD should ensure that a formal training programme detailing what type of training should be provided to its SAR inspectorate staff and a periodic training plan detailing and prioritizing the type of training to be provided during the established period are developed and implemented.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-7-5 of this report. <div style="text-align: right;">Estimated Implementation Date: 03/08/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 1-8-01
FINDINGS AND RECOMMENDATIONS RELATED TO
AERODROMES

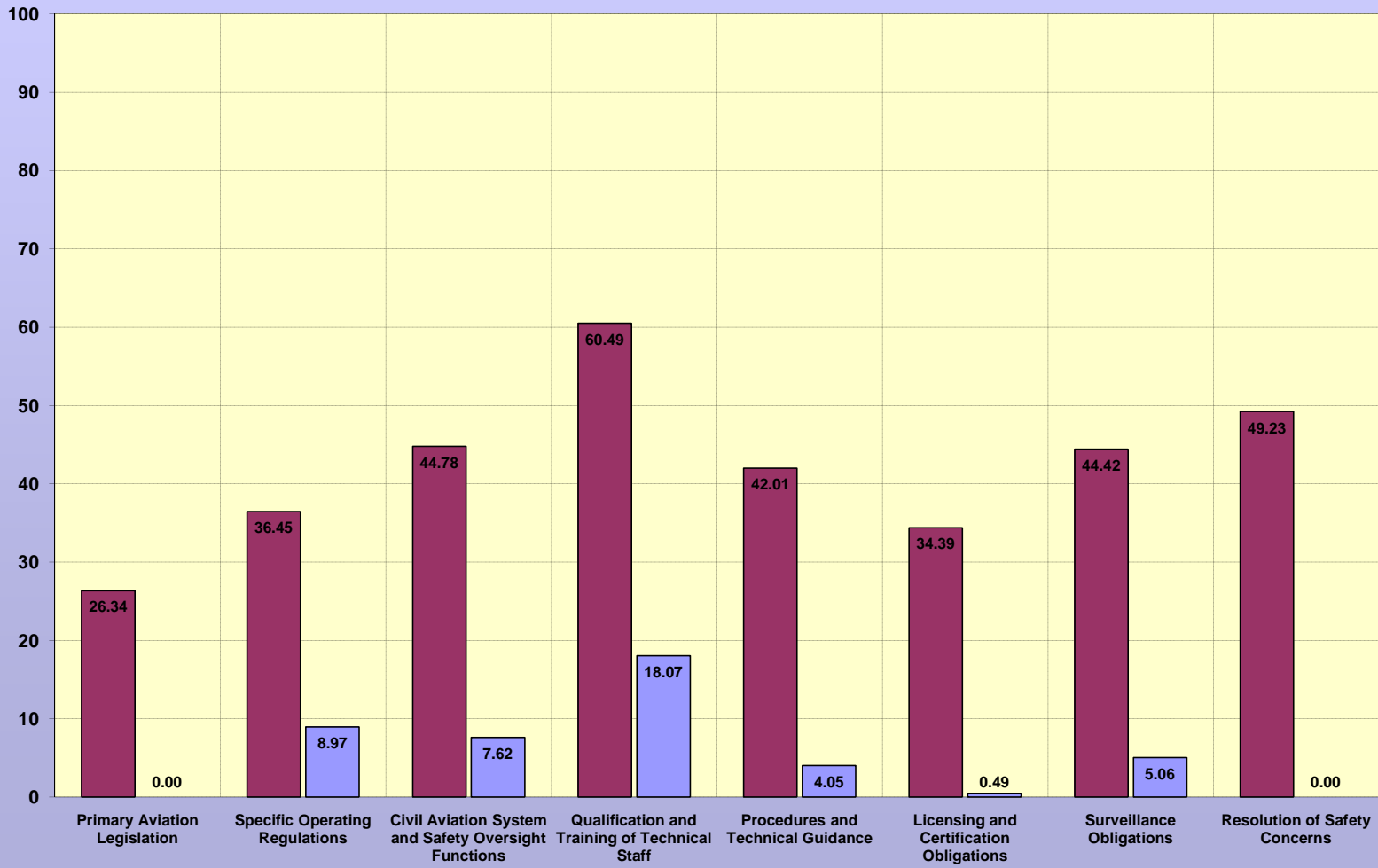
HONG KONG CHINA SAR	AGA/01 8.131; 8.135;						
Audit Period: 26/02/2009 - 06/03/2009							
DOCUMENT REFERENCE:							
Refer to Doc 9735, Appendix F for the document reference(s) associated with the protocol questions identified in this finding.							
CE-1	CE-2	CE-3	CE-4	CE-5 X	CE-6 X	CE-7	CE-8
FINDING:							
The Hong Kong SAR, China has not established a process to ensure that the accuracy, integrity and protection requirements for aeronautical data reported by the aerodrome operator throughout the data transfer process meet the requirements specified in Tables 1 to 5 of Appendix 5 to Annex 14, Volume I to the Chicago Convention.							
RECOMMENDATION:							
The Hong Kong SAR, China should establish a process to ensure that the accuracy, integrity and protection requirements for aeronautical data reported by the aerodrome operator throughout the data transfer process meet the requirements specified in Tables 1 to 5 of Appendix 5 to Annex 14, Volume I to the Chicago Convention.							
CORRECTIVE ACTION PLAN PROPOSED BY THE STATE:							
Corrective action plan and comments submitted by the State are found at Appendix 3-8-1 of this report. <div style="text-align: right;">Estimated Implementation Date: 30/09/2009</div>							
COMMENTS BY ICAO:							
The corrective action plan submitted by the State fully addresses this ICAO finding and recommendation.							

APPENDIX 2

CRITICAL ELEMENTS OF A SAFETY OVERSIGHT SYSTEM LACK OF EFFECTIVE IMPLEMENTATION (%)

■ Global: (136) Audited States: 42.26%

■ HONG KONG CHINA SAR 5.53%



APPENDIX 3

APPENDIX 3-1-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO PRIMARY AVIATION LEGISLATION
AND CIVIL AVIATION REGULATIONS**

AUDIT FINDING LEG/01		
Please refer to Appendix 1-1-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>The Civil Aviation Department (CAD) agrees that there is a need to reflect the latest ICAO requirements in our legislation in a timely manner. CAD will review the current process of reflecting the latest ICAO requirements in our legislation, with a view to reflecting the relevant requirements as quickly as possible.</p> <p>Separately, it should be noted that when the responsibility of service delivery rests with a government department in Hong Kong (including ICAO Annexes 3, 4, 10, 11, 12 and 15), the safety oversight over that service will be governed by internal procedures developed within or between government departments. CAD will continue to work closely with the relevant departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Review the current process of reflecting the latest ICAO requirements in our legislation, with a view to reflecting the relevant requirements as quickly as possible.</p> <p>If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments in phases from end 2013 to 2015.</p>	CAD	<p>Review to be completed by March 2011</p> <p>Introduce legislative amendments in phases from end 2013 to 2015.</p>

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-1-2

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO PRIMARY AVIATION LEGISLATION
AND CIVIL AVIATION REGULATIONS**

AUDIT FINDING LEG/02		
Please refer to Appendix 1-1-02 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>When the responsibility of service delivery rests with a government department in Hong Kong, the safety oversight over that service will be governed by internal procedures developed within or between government departments. This arrangement has been operating smoothly and we do not see the need to put it on a statutory footing.</p> <p>With regard to the implementation of SAR services, the relevant requirements are established by the Air Traffic Management Standards Office (ATMSO) of CAD while the implementation procedures are developed by the air navigation service provider and the relevant government departments in accordance with ATMSO's requirements. CAD will continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements as stipulated in Annex 12.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements as stipulated in Annex 12.	CAD	On-going
In the light of the finding, CAD will review the SAR system in relation to the establishment of a legal framework for the provision of SAR services within the Hong Kong search and rescue region.	CAD	End 2010

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-2-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO CIVIL AVIATION ORGANIZATION**

AUDIT FINDING ORG/01		
Please refer to Appendix 1-2-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding. Regarding the setup of ATMSO, while it is currently put under AESD, measures are in place to ensure its autonomy in discharging the relevant regulatory functions. That notwithstanding, given the audit finding, CAD will review whether there is scope to further enhance the segregation of Air Navigation Service (ANS) provision from ANS regulatory and oversight functions.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Strengthen staffing provision in the Air Traffic Management Standards Office (ATMSO) to meet safety oversight functions of the PANS-OPS, AIS and cartography areas.	CAD	By the end of 2010
Include in the training programme of the ATMSO staff as stipulated in the ATMSO Exposition, the appropriate specialised technical qualifications (i.e. PANS-OPS, AIS and Cartography) required for performing safety oversight of the ANSP in the relevant domains.	CAD	Completed
Formulate a training plan for ATMSO staff members detailing the types of training and training priority setting.	CAD	Completed
Review and consider possible organisational measures to further enhance the segregation of ANS regulatory and oversight functions from ANS provision.	CAD	By the end of 2010

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APPENDIX 3-3-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO PERSONNEL LICENSING AND TRAINING**

AUDIT FINDING PEL/01		
Please refer to Appendix 1-3-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD agrees generally with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Elaborate the Personnel Licensing Office (PELO) training programme for personnel licensing officers and technical staff to include the specific details pertaining to on-the-job training (OJT) activities. Such details are to be listed in an itemised format in all the PELO OJT forms. The training officer(s) shall document the satisfactory completion of the OJT by signing off all the training items in the OJT form before the trainee may be assigned to perform personnel licensing functions and responsibilities relevant to his/her post in PELO.	CAD	Completed

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APPENDIX 3-3-2

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO PERSONNEL LICENSING AND TRAINING**

AUDIT FINDING PEL/02		
Please refer to Appendix 1-3-02 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Airworthiness Office (AWO) of CAD has reviewed its existing policy for granting CAD Authorisations to the 78 Authorised Examiners (AEs) within HKAR-147 organisations. It was concluded that the practical examinations administered by these AEs were not related to the issue or amendment of an aircraft maintenance licence (AML). AWO shall formally withdraw these CAD Authorisations and will instruct HKAR-147 organisations to assume responsibility for the designation and oversight of their own examining staff. As CAD-designated practical examiners will no longer exist in AML system, a surveillance programme will not be required.	CAD	By the end of December 2009
Elaborate the Flight Standards Office risk-based surveillance programme for the control on the qualification and experience of designated examiners, and surveillance of examiners at regular intervals to ensure consistency and reliability of CAD-designated flight examiners.	CAD	By the end of December 2009
Establish a new Flight Safety Office within the Flight Standards Office to implement and monitor the amended surveillance programme.	CAD	By the end of December 2009

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-4-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION**

AUDIT FINDING OPS/01		
Please refer to Appendix 1-4-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>Despite the resource limitations, the Flight Standards Office has been able to carry out its safety critical oversight functions under a scheduled inspection plan.</p> <p>Nevertheless, the CAD will endeavour to fill up the vacant posts of operations inspectors and continue to review the manpower position for the Flight Standards Office.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Two operations inspectors have already reported duty to fill the vacant operations inspector posts in the Flight Standards Office.	CAD	Completed
Conduct detailed manpower analysis to identify the human resources requirements in the Flight Standards Office in the coming five years and devise human resources plan to ensure a sufficient number of flight operations inspectorates are in place to support Flight Standards Office operations.	CAD	Completed

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-4-2

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION**

AUDIT FINDING OPS/02		
Please refer to Appendix 1-4-02 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Elaborate the Flight Standards Office risk-based surveillance programme to define all of the types and frequencies of inspections necessary to ensure effective safety oversight of AOC operations and ensure that all AOC holders comply with national regulations and ICAO provisions. Wherever possible, the surveillance procedures will also be streamlined to follow best practice adopted by other regulatory authorities.	CAD	By the end of December 2009
Establish a new Flight Safety Office within the Flight Standards Office to implement and monitor the surveillance programme.	CAD	By the end of December 2009

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APPENDIX 3-4-3

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION**

AUDIT FINDING OPS/03		
Please refer to Appendix 1-4-03 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Elaborate the Flight Standards Office training programme for operations inspectorate staff to include specific details pertaining to OJT activities.	CAD	By the end of December 2009
Enhance the training records management system to include processes for documenting the specific types of training received and satisfactorily completed by officers prior to being assigned to perform specified safety oversight functions and duties.	CAD	By the end of December 2009

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-4-4

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT OPERATIONS CERTIFICATION AND SUPERVISION**

AUDIT FINDING OPS/04		
Please refer to Appendix 1-4-04 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
The aircraft leasing approval procedure and a checklist in accordance with the ICAO Doc 8335 have been developed and adopted in the assessment and consideration of granting of new permission for aircraft leasing with effect from March 2009. The permissions granted before the adoption of the new procedure are being reviewed using the new checklist. This review will be completed before the end of November 2009.	CAD	End of November 2009

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APPENDIX 3-5

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRWORTHINESS OF AIRCRAFT**

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APPENDIX 3-6-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/01		
Please refer to Appendix 1-6-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
Although CAP 448 and CAP 448B do not specifically mention that investigations would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention, all salient features of Annex 13 are included in our legislation. Moreover, the Accident Investigation Division (AID) of CAD has always conducted investigations in accordance with the provisions of Annex 13, as is demonstrated by past investigation records and AID's various publications such as Accident Investigation Bulletins, AID Exposition and Handbook for Inspectors.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Continue to conduct accident investigations in accordance with the provisions of Annex 13. CAD will review CAP 448B and consider the need of specifying that investigations would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.	CAD	On-going End 2013

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-6-2

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/02		
Please refer to Appendix 1-6-02 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>Although CAP 448B does not specifically provide for the non-disclosure of CVR recordings and other relevant records for purposes other than aircraft accident or incident investigation, under common law, the Inspector is subject to a duty of confidentiality not to disclose the information which he has collected from persons for the purpose of accident investigation to third parties for purposes other than accident investigation unless there is overriding public interest.</p> <p>Given the finding, CAD will consult the stakeholders and consider the need for legislative amendments to further assure the confidentiality of accident-related records.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Consult stakeholders and consider the need for legislative amendments to further assure the confidentiality of accident-related records.</p> <p>If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.</p>	CAD	<p>Review to be completed by March 2011</p> <p>End 2013</p>

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-6-3

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/03		
Please refer to Appendix 1-6-03 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>Although CAP 448B does not specifically provide for the participation of accredited representatives from the State of Operator and the State of Design in aircraft accident investigation, in practice, accredited representatives from the State of Operator and the State of Design have all along been allowed to participate, as is demonstrated by past investigation records and AID's various publications such as Accident Investigation Bulletins, AID Exposition and Handbook for Inspectors.</p> <p>Given the finding, CAD will consult the stakeholders and consider the need for legislative amendments to ensure that accredited representatives from relevant States are permitted to participate in aircraft accident investigations.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Consult the stakeholders and consider the need for legislative amendments to ensure that accredited representatives from relevant States are permitted to participate in aircraft accident investigations.</p> <p>If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.</p>	CAD	<p>Review to be completed by March 2011</p> <p>End 2013</p>

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-6-4

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/04		
Please refer to Appendix 1-6-04 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD generally agrees with the finding.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Consult the stakeholders and consider introducing legislative amendments to align the definitions in Regulation 2 of CAP 448B with the definitions of Annex 13 to the Chicago Convention. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.	CAD	Review to be completed by March 2011 End 2013

* Text reproduced as submitted by the Hong Kong SAR, China

APPENDIX 3-6-5

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/05		
Please refer to Appendix 1-6-05 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>The Judiciary of the Hong Kong SAR is responsible for the administration of justice in Hong Kong. It is separate from and independent of the executive and legislative branches of the Government. It plays an impartial role and hears all prosecutions based on the evidence presented by the prosecutor and defendant. The Judiciary does not carry out investigation and will not intervene with the investigation agencies, such as AID, regarding the investigation of aircraft accidents.</p> <p>Meanwhile, the Department of Justice of the Hong Kong SAR Government is responsible for criminal prosecution, and other law enforcement agencies, such as the Hong Kong Police, may also be involved in the securing and custody of evidence, identification of victims, flight recorder read-outs, examinations and tests, if criminal offence is suspected in an accident.</p> <p>CAD is prepared to consider the suggestion of establishing means to facilitate the coordination between IIC and the concerned law enforcement agencies or the judiciary, as appropriate, to reinforce the role of AID as guardian of aviation safety when investigating aircraft accidents and serious incidents.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Discuss with law enforcement agencies and the judiciary, as appropriate, to explore possible means like procedures or MOUs to facilitate the coordination with the concerned agencies.</p> <p>Subject to responses from and progress of discussion with the parties concerned, CAD will seek to have the procedures or MOUs in place by end 2011.</p>	CAD	End 2011

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APPENDIX 3-6-6

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIRCRAFT ACCIDENT AND INCIDENT INVESTIGATION**

AUDIT FINDING AIG/06		
Please refer to Appendix 1-6-06 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>The Accident Investigation Division (AID) of CAD has established an Incident Reporting System, which consists of mandatory and voluntary incident reporting, to collect incident data for the purpose of promoting accident prevention to comply with Chapter 8 Accident Prevention Measures, in particular Standards 8.1 and 8.2, of Annex 13 to the Chicago Convention.</p> <p>Given the finding, CAD will review the relevant legislation and consult the stakeholders on the need for possible legislative amendments.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Review the relevant legislation and consult the stakeholders on the need for possible legislative amendments.</p> <p>If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.</p>	CAD	<p>Review to be completed by March 2011</p> <p>End 2013</p>

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APPENDIX 3-7-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIR NAVIGATION SERVICES**

AUDIT FINDING ANS/01		
Please refer to Appendix 1-7-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>When the responsibility of service delivery rests with a government department in Hong Kong, the safety oversight over that service will be governed by internal procedures developed within or between government departments. This arrangement has been operating smoothly and we do not see the need to put it on a statutory footing.</p> <p>With regard to the implementation of Article 25 (Aircraft in distress), the relevant requirements are established by the Air Traffic Management Standards Office (ATMSO) of CAD while the implementation procedures are developed by the air navigation service provider in accordance with ATMSO's requirements. CAD will continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
<p>Continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements.</p> <p>In the light of the finding, CAD will review the SAR system in relation to the establishment of a legal framework for the provision of SAR services within the Hong Kong search and rescue region, including assistance of aircraft in distress.</p>	CAD	<p>On-going</p> <p>End 2010</p>

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APPENDIX 3-7-2

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIR NAVIGATION SERVICES**

AUDIT FINDING ANS/02		
Please refer to Appendix 1-7-02 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
<p>The MSAW function is available in the existing Radar Data Processing and Display System (RDPDS) of CAD. However, the design limitations of MSAW produce numerous false alarms that are considered to be safety hazards (distractions) to ATC operations. Besides, MSAW would be a useful tool as a safety net for non-precision flight operations over mountainous environment, whereas in Hong Kong virtually all flight operations are precision operations with aircraft altitudes monitored on radar. The Approach/Departure flight paths are mostly over water thus the risk of Controlled Flight Into Terrain (CFIT) is minimised. With due consideration of safety risks, MSAW is not currently activated for ATC use.</p> <p>As a system enhancement, CAD will make it a requirement that the replacement ATC system to be implemented in 2013 can support a terrain map with a grid size of not more than 0.5 NM², instead of 2 NM² for the existing system, in order to minimise false alarms so that the MSAW function and the relevant ATC contingency procedures can be implemented.</p>		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Include MSAW and the relevant ATC contingency procedures in the replacement ATC system.	CAD	Before the end of 2013

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APPENDIX 3-7-3

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIR NAVIGATION SERVICES**

AUDIT FINDING ANS/03		
Please refer to Appendix 1-7-03 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD agrees with the finding of the ICAO audit team.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Review and re-classify the airspace concerned to a more appropriate classification to suit operational needs.	CAD	By Q1 2010

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APPENDIX 3-7-4

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIR NAVIGATION SERVICES**

AUDIT FINDING ANS/04		
Please refer to Appendix 1-7-04 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD agrees with the finding of the ICAO audit team and has consulted the ICAO Air Navigation Bureau (ANB) for advice. Corrective action has been planned, taking into consideration the recommendations of ANB.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Incorporate in the Aeronautical Information Centre Quality Manual and the Manual of Aeronautical Information Service a mechanism on : (a) conducting systematic and periodic random verification of published data against data received from the primary data source; and (b) maintaining a register on file to document the verification and its results; so as to ensure that aeronautical data quality requirements are in accordance with the provisions in Annex 4 and Annex 15 to the Chicago Convention.	CAD	Completed

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APPENDIX 3-7-5

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AIR NAVIGATION SERVICES**

AUDIT FINDING ANS/05		
Please refer to Appendix 1-7-05 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD agrees with the finding of the ICAO audit team.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Devise a training programme for the Air Traffic Management Standards Office (ATMSO) staff members responsible for the safety oversight of the ANSP in SAR activities. This training programme to be stipulated in the ATMSO Exposition comprises basic, recurrent and specialised SAR training requirements, including regular attendance at SAR seminars and participation in SAR exercises.	CAD	Completed
Develop and implement a training plan detailing SAR training activities for ATMSO staff members responsible for safety oversight of ANSP's SAR activities. This plan should also include types of training and priority setting.	CAD	Completed

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APPENDIX 3-8-1

**CORRECTIVE ACTION PLAN PROPOSED BY THE HONG KONG SAR, CHINA
RELATED TO AERODROMES**

AUDIT FINDING AGA/01		
Please refer to Appendix 1-8-01 of this report for the text of the finding and recommendation along with the related protocol questions which should be considered in order to fully address this audit finding.		
HONG KONG SAR, CHINA COMMENTS AND OBSERVATIONS*		
CAD agrees with the finding of the ICAO audit team.		
CORRECTIVE ACTION(S) PROPOSED*	ACTION OFFICE	ESTIMATED IMPLEMENTATION DATE(S)
Establish a process to ensure that procedures are established and documented by the aerodrome operator to comply with the accuracy, integrity and protection requirements for aeronautical data reported by the aerodrome operator throughout the data transfer process meet the requirements specified in Tables 1 to 5 of Appendix 5 to Annex 14, Volume 1 to the Chicago Convention.	CAD	Completed

— END —

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Annex C

Recommendations by the ICAO Audit Team and Hong Kong's Follow-up Actions

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
1	LEG/01	The Hong Kong SAR, China should establish a mechanism to expedite the process for the amendment of the enabling regulations and national standards and ensure that it addresses the requirements of the latest Annexes to the Chicago Convention.	<p>CAD is reviewing the current process of reflecting the latest ICAO requirements in our legislation, with a view to reflecting the relevant requirements as quickly as possible.</p> <p>If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments in phases from end 2013 to 2015.</p>
2	LEG/02	The Hong Kong SAR, China should establish a legal framework for the provision of search and rescue services within its search and rescue region.	<p>CAD will continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements as stipulated in Annex 12.</p> <p>In the light of the ICAO's recommendation, Security Bureau and CAD are reviewing the need to introduce a legal framework for the provision of search and rescue services within the Hong Kong search and rescue region.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
3	ORG/01	<p>The Hong Kong SAR, China should establish a mechanism to ensure that a sufficient number of qualified inspectorate staff are available to carry out its safety oversight tasks over the entities providing Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS), aeronautical information service (AIS) and cartography services. In addition, the following requirements should be taken into account:</p> <p>a) the establishment of a formal training programme detailing what type of training should be provided to its inspectorate staff; and</p> <p>b) the development of a periodic training plan detailing and prioritizing what type of training will be provided during the established period.</p> <p>The HKCAD should ensure a distinct separation between entities responsible for regulatory/ safety oversight and service provision functions.</p>	<p>CAD has strengthened staffing provision in the Air Traffic Management Standards Office (ATMSO) to meet safety oversight functions of the PANS-OPS, AIS and cartography areas.</p> <p>CAD has included in the training programme of the ATMSO staff as stipulated in the ATMSO Exposition, the appropriate specialised technical qualifications (i.e. PANS-OPS, AIS and Cartography) required for performing safety oversight of the air navigation service provider (ANSP) in the relevant domains.</p> <p>CAD has formulated a training plan for ATMSO staff members detailing the types of training and training priority setting.</p> <p>CAD is reviewing and considering possible organisational measures to further enhance the segregation of air navigation service (ANS) regulatory and oversight functions from ANS provision.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
4	PEL/01	<p>The HKCAD should develop and implement a formal training programme for personnel licensing officers and other staff participating in licensing activities that includes details pertaining to on-the-job training (OJT). The programme should include a method for documenting the specific types of training received and satisfactorily completed by the above-mentioned personnel prior to assigning them those tasks and responsibilities.</p>	<p>CAD has elaborated the Personnel Licensing Office (PELO) training programme for personnel licensing officers and technical staff to include the specific details pertaining to OJT activities.</p> <p>Such details have been listed in an itemised format in all the PELO OJT forms. The training officer(s) shall document the satisfactory completion of the OJT by signing off all the training items in the OJT form before the trainee may be assigned to perform personnel licensing functions and responsibilities relevant to his/her post in PELO.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
5	PEL/02	<p>The HKCAD should develop and implement a system for the control and surveillance of the HKCAD-designated examiners who administer practical or flight examinations on behalf of the Hong Kong SAR, China in order to ensure that these examinations are consistent and reliable.</p>	<p>Airworthiness Office of CAD has reviewed its existing policy for granting CAD Authorisations to the 78 Authorised Examiners (AEs) within HKAR-147 organisations. It was concluded that the practical examinations administered by these AEs were not related to the issue or amendment of an aircraft maintenance licence. Airworthiness Office has formally withdrawn these CAD Authorisations and instructed HKAR-147 organisations to assume responsibility for the designation and oversight of their own examining staff. As CAD-designated practical examiners no longer exist in the aircraft maintenance licence system, a surveillance programme is not required.</p> <p>CAD has elaborated the Flight Standards Office risk-based surveillance programme for the control on the qualification and experience of designated examiners, and surveillance of examiners at regular intervals to ensure consistency and reliability of CAD-designated flight examiners.</p> <p>A new Flight Safety Office has been established within the Flight Standards Office to implement and monitor the amended surveillance programme.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
6	OPS/01	<p>The Hong Kong SAR, China should ensure that the Flight Standards Office of the HKCAD is staffed with a sufficient number of flight operations inspectors for performing the activities of certification, surveillance and supervision in order to fulfil the mandate of providing safety oversight of civil aviation activities.</p>	<p>Two operations inspectors have already reported duty to fill the vacant operations inspector posts in the Flight Standards Office.</p> <p>CAD has conducted a detailed manpower analysis to identify the human resources requirements in the Flight Standards Office in the coming five years and devised a human resources plan to ensure a sufficient number of flight operations inspectorates are in place to support Flight Standards Office operations.</p>
7	OPS/02	<p>The Flight Standards Office of the HKCAD should develop and implement a comprehensive surveillance programme that includes all of the types and frequencies of inspections necessary for ensuring that all Air Operator's Certificate (AOC) holders comply with national regulations and ICAO provisions outlined in the Annexes to the Chicago Convention.</p>	<p>CAD has elaborated the Flight Standards Office risk-based surveillance programme to define all of the types and frequencies of inspections necessary to ensure effective safety oversight of AOC operations and ensure that all AOC holders comply with national regulations and ICAO provisions. Wherever possible, the surveillance procedures are streamlined to follow best practice adopted by other regulatory authorities.</p> <p>A new Flight Safety Office has been established within the Flight Standards Office to implement and monitor the surveillance programme.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
8	OPS/03	<p>The HKCAD should develop and implement a formal training programme for the Flight Standards Office operations inspectorate staff that includes details pertaining to OJT. The programme should include a method for documenting the specific types of training received and satisfactorily completed by the operations inspectorate staff prior to assigning them those specific tasks and responsibilities.</p>	<p>CAD has elaborated the Flight Standards Office training programme for operations inspectorate staff to include specific details pertaining to OJT activities.</p> <p>CAD has enhanced the training records management system to include processes for documenting the specific types of training received and satisfactorily completed by officers prior to being assigned to perform specified safety oversight functions and duties.</p>
9	OPS/04	<p>The HKCAD should implement the HKCAD's new comprehensive procedures for the approval of existing and future aircraft leasing arrangements.</p>	<p>The aircraft leasing approval procedure and a checklist in accordance with the ICAO Doc 8335 have been developed and adopted in the assessment and consideration of granting of new permission for aircraft leasing with effect from March 2009. The permissions granted before the adoption of the new procedure have been reviewed using the new checklist.</p>

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
10	AIG/01	The Hong Kong SAR, China should ensure that the legislative or regulatory framework specifically includes provisions indicating that the conduct of investigations into the circumstances of aircraft accidents and serious incidents in the Hong Kong SAR, China would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention.	<p>CAD will continue to conduct accident investigations in accordance with the provisions of Annex 13.</p> <p>CAD is reviewing CAP 448B and considering the need of specifying that investigations would be carried out in accordance with the provisions of Annex 13 to the Chicago Convention. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.</p>
11	AIG/02	The Hong Kong SAR, China should promulgate legislative provisions for the non-disclosure of cockpit voice recorder (CVR) recordings and for the non-disclosure of certain records for purposes other than aircraft accident or incident investigation.	CAD will consult stakeholders and consider the need for legislative amendments to further assure the confidentiality of accident-related records. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.
12	AIG/03	The Hong Kong SAR, China should promulgate legislative provisions for permitting, as the State conducting the investigation, the participation of accredited representatives from the State of Operator and the State of Design.	CAD will consult the stakeholders and consider the need for legislative amendments to ensure that accredited representatives from relevant States are permitted to participate in aircraft accident investigations. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
13	AIG/04	With a view to harmonize the use of terms mentioned in aircraft accident and incident investigations, the Hong Kong SAR, China should adopt the definitions of Annex 13 to the Chicago Convention.	CAD will consult the stakeholders and consider introducing legislative amendments to align the definitions in Regulation 2 of CAP 448B with the definitions of Annex 13 to the Chicago Convention. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.
14	AIG/05	The Hong Kong SAR, China should establish means, through procedures or Memoranda of Understanding (MOUs), to facilitate coordination between the investigator-in-charge and the judicial authorities.	CAD will discuss with law enforcement agencies and the judiciary, as appropriate, to explore possible means like procedures or MOUs to facilitate the coordination with the concerned agencies. Subject to responses from and progress of discussion with the parties concerned, CAD will seek to have the procedures or MOUs in place by end 2011.
15	AIG/06	The Hong Kong SAR, China should promulgate legislation and procedures for ensuring that its voluntary occurrence reporting system is non-punitive and for ensuring protection to the sources of the information.	CAD is reviewing the relevant legislation and will consult the stakeholders on the need for possible legislative amendments. If the review shows that legislative amendments are necessary, CAD will seek to introduce the legislative amendments by end 2013.

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
16	ANS/01	The Hong Kong SAR, China should promulgate regulations to facilitate the assistance of aircraft in distress in its territory in adherence to Article 25 of the Chicago Convention.	CAD will continue to work closely with the relevant government departments to ensure that both the service delivery and safety oversight adhere to the applicable ICAO requirements. In the light of the ICAO's recommendation, Security Bureau and CAD is reviewing the need to introduce a legal framework for the provision of search and rescue services within the Hong Kong search and rescue region, including assistance of aircraft in distress.
17	ANS/02	The Hong Kong SAR, China should establish contingency procedures for minimum safe altitude warning (MSAW).	CAD will include MSAW and the relevant air traffic control (ATC) contingency procedures in the replacement ATC system.
18	ANS/03	The Hong Kong SAR, China should expedite the process for the replacement of air traffic advisory service and the implementation of a higher classification of airspace.	CAD will review and re-classify the airspace concerned to a more appropriate classification to suit operational needs.

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
19	ANS/04	The Hong Kong SAR, China should establish a mechanism to ensure that aeronautical data quality requirements related to publication resolution and data integrity are in accordance with the provisions of Appendix 7, Tables 1 to 5 of Annex 15 to the Chicago Convention and that the ones related to data integrity and charting resolution are in accordance with the provisions of Tables 1 to 5 to Appendix 6 of Annex 4 to the Chicago Convention.	CAD has incorporated in the Aeronautical Information Centre Quality Manual and the Manual of Aeronautical Information Service a mechanism on : a) conducting systematic and periodic random verification of published data against data received from the primary data source; and b) maintaining a register on file to document the verification and its results; so as to ensure that aeronautical data quality requirements are in accordance with the provisions in Annex 4 and Annex 15 to the Chicago Convention.

Item No.	Reference in Annex B	Recommendation by ICAO Audit Team	Follow-up Action of Hong Kong
20	ANS/05	<p>The HKCAD should ensure that a formal training programme detailing what type of training should be provided to its search and rescue inspectorate staff and a periodic training plan detailing and prioritizing the type of training to be provided during the established period are developed and implemented.</p>	<p>CAD has devised a training programme for the Air Traffic Management Standards Office (ATMSO) staff members responsible for the safety oversight of the air navigation service provider (ANSP) in search and rescue activities. This training programme stipulated in the ATMSO Exposition comprises basic, recurrent and specialised search and rescue training requirements, including regular attendance at search and rescue seminars and participation in search and rescue exercises.</p> <p>CAD has developed and implemented a training plan detailing search and rescue training activities for ATMSO staff members responsible for safety oversight of ANSP's search and rescue activities. This plan also includes types of training and priority setting.</p>
21	AGA/01	<p>The Hong Kong SAR, China should establish a process to ensure that the accuracy, integrity and protection requirements for aeronautical data reported by the aerodrome operator throughout the data transfer process meet the requirements specified in Tables 1 to 5 of Appendix 5 to Annex 14, Volume I to the Chicago Convention.</p>	<p>CAD has established a process to ensure that procedures are established and documented by the aerodrome operator to comply with the accuracy, integrity and protection requirements for aeronautical data reported by the aerodrome operator throughout the data transfer process meet the requirements specified in Tables 1 to 5 of Appendix 5 to Annex 14, Volume 1 to the Chicago Convention.</p>