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(AMENDMENT) ORDER 2008****CONTENTS**

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**AIR NAVIGATION (HONG KONG) ORDER 1995
(AMENDMENT) ORDER 2008**

(Made by the Chief Executive in Council under section 2A of the Civil Aviation Ordinance (Cap. 448))

1. Commencement

This Order shall come into operation on a day to be appointed by the Director-General of Civil Aviation by notice published in the Gazette.

2. Aircraft to be registered

Article 3(1) of the Air Navigation (Hong Kong) Order 1995 (Cap. 448 sub. leg. C) is amended, in paragraph (i)(b) of the proviso, by adding “(except paragraph (1)(a))” after ““B Conditions””.

3. Certificate of airworthiness to be in force

(1) Article 7(1) is amended by repealing everything before “Provided that” and substituting—

“(1) An aircraft shall not fly unless—

(a) there is in force in respect of the aircraft a certificate of airworthiness duly issued or rendered valid under the law of—

(i) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or

(ii) if there is such a transfer, the state of the operator of the aircraft; and

(b) the conditions subject to which the certificate was issued or rendered valid are complied with.”.

(2) Article 7(1) is amended by repealing—

“Provided that the foregoing prohibition”

and substituting—

“(1A) Paragraph (1) of this Article”.

(3) Article 7(1A)(b) is amended by repealing “, if it is not being used for the public transport of passengers” and substituting “flying on a private flight”.

4. Article added

The following is added—

“7A. Damage to aircraft

An aircraft shall not fly if the aircraft has sustained damage of a nature such that the aircraft is no longer considered airworthy by—

- (a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or
- (b) if there is such a transfer, the state of the operator of the aircraft.”.

5. Issue, renewal, etc., of certificates of airworthiness

(1) Article 8(7)(b) is repealed and the following substituted—

“(b) until the completion of:

- (i) the inspection of the aircraft or of the equipment referred to in subparagraph (a) of this paragraph made for the purpose of ascertaining whether the aircraft remains airworthy; or
- (ii) the maintenance of the aircraft or of the equipment referred to in subparagraph (a) of this paragraph, being an inspection or maintenance:
- (iii) classified as mandatory by the Chief Executive; or
- (iv) required by a maintenance schedule approved by the Chief Executive in relation to the aircraft;”.

(2) Article 8(7)(c) is amended—

- (a) by repealing “or of any such equipment as aforesaid” and substituting “or of the equipment referred to in subparagraph (a) of this paragraph”;
- (b) by repealing the full stop and substituting “; or”.

(3) Article 8(7) is amended by adding—

“(d) if the aircraft has sustained damage of a nature such that, in the opinion of the Chief Executive, the aircraft is no longer airworthy.”.

6. Certificate of maintenance review

(1) Article 9(1) is amended by repealing “in either the transport or in the aerial work category”.

(2) Article 9(1)(b) is amended by adding “in the case of an aircraft in respect of which a certificate of airworthiness in either the transport or the aerial work category is in force,” before “there is”.

(3) Article 9(2) is amended by repealing “The” and substituting “In relation to an aircraft in respect of which there has been issued a certificate of airworthiness in either the transport or the aerial work category, the”.

(4) Article 9(3)(a) is amended by repealing “aircraft maintenance engineer’s licence” and substituting “aircraft maintenance licence”.

(5) Article 9(3) is amended, in the proviso, by repealing “its” and substituting “his”.

(6) Article 9(7) is repealed.

7. Technical log

(1) Article 10(1) is amended by repealing “in the” and substituting “the”.

(2) Article 10(2) is amended by repealing “the commander of the aircraft shall” and substituting “the pilot in command of the aircraft shall”.

(3) Article 10(2) is amended, in paragraph (iii) of the proviso, by repealing “as commander” and substituting “as pilot in command”.

(4) Article 10(2) is amended, in the proviso, by repealing “the commander of an aircraft” and substituting “the pilot in command of an aircraft”.

8. Inspection, overhaul, repair, replacement and modification

(1) Article 11 is amended by adding before paragraph (1)—

“(1A) This Article shall apply to an aircraft:

(a) that is registered in Hong Kong; and

(b) in respect of which a certificate of airworthiness issued or rendered valid under this Order is in force.”.

(2) Article 11(1) is amended by repealing “registered in Hong Kong, being an aircraft in respect of which a certificate of airworthiness issued or rendered valid under this Order is in force,”.

(3) Article 11(1) is amended, in paragraph (i) of the proviso, by repealing “commander” and substituting “pilot in command”.

(4) Article 11(1) is amended, in the proviso, by repealing “commander of the aircraft shall” and substituting “pilot in command shall”.

(5) Article 11(3) is amended by repealing “whether” and substituting “either”.

(6) Article 11(4)(a) is amended by repealing “equipment” and substituting “equipment”.

(7) Article 11(4) is amended by repealing “registered in Hong Kong”.

(8) Article 11(5)(a) is amended by repealing “be” and substituting “be,”.

(9) Article 11(6)(a) is amended by repealing “aircraft maintenance engineer’s licence” and substituting “aircraft maintenance licence”.

(10) Article 11(6)(b) is amended by repealing “aircraft maintenance engineer’s licence or authorisation as such an engineer” and substituting “aircraft maintenance licence or an authorization as an aircraft maintenance engineer”.

(11) Article 11(6)(e) is amended by repealing “or a Flight Navigator’s Licence”.

(12) Article 11 is amended by adding—

“(6A) Notwithstanding paragraph (6) of this Article, a certificate of release to service issued under a maintenance arrangement made by the Chief Executive with a civil aviation authority shall be deemed to be a certificate of release to service issued for the purposes of this Article.”.

(13) Article 11(9) is repealed.

9. Licensing of maintenance engineers

(1) Article 12(1) is amended by repealing “aircraft maintenance engineer’s licences” and substituting “an aircraft maintenance licence”.

(2) Article 12(2) is amended by repealing “aircraft maintenance engineer’s licence” and substituting “aircraft maintenance licence”.

(3) Article 12(2) is amended by repealing “to issue:” and substituting “to exercise the following privileges—”.

(4) Article 12(2)(a) is amended by repealing “certificates of a” and substituting “to issue certificates of”.

(5) Article 12(2)(b) is amended by adding “to issue” before “certificates”.

(6) Article 12(2)(c) is amended by adding “to issue” before “certificates”.

(7) Article 12(5) is repealed and the following substituted—

“(5) An aircraft maintenance licence granted under this Article shall not be valid unless it bears the ordinary signature of the holder of the licence in ink.”.

(8) Article 12 is amended by adding—

“(7) The holder of an aircraft maintenance licence—

- (a) shall not exercise the privileges of the licence if he knows or reasonably suspects that his physical or mental condition renders him unfit to exercise such privileges; and
 - (b) shall not, when exercising the privileges of the licence, be under the influence of psychoactive substances which may render him unable to safely and properly exercise such privileges.
- (8) The holder of an aircraft maintenance licence shall not engage in the use of psychoactive substances in a way that—
- (a) constitutes a direct hazard to the holder or endangers the lives, health or welfare of others; or
 - (b) causes or worsens an occupational, social, physical or mental problem or disorder of the holder.”.

10. Radio equipment of aircraft

Article 14(1) is repealed and the following substituted—

“(1) An aircraft shall not fly unless it is so equipped with radio and radio navigation equipment—

- (a) as to comply with the law of—
 - (i) if there is no Article 83 bis transfer of the functions and duties under Article 30 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or
 - (ii) if there is such a transfer, the state of the operator of the aircraft; and
- (b) to enable communications to be made and the aircraft to be navigated in accordance with the provisions of this Order and any regulations made under this Order including, in particular, Schedule 15 to this Order.”.

11. Article added

The following is added—

“14A. Minimum equipment requirements

(1) The Chief Executive may, in respect of any aircraft or class of aircraft registered in Hong Kong, grant a permission permitting such aircraft to commence a flight in specified circumstances.

(2) An aircraft registered in Hong Kong shall not commence a flight if any of the equipment required by or under this Order to be carried in the circumstances of the intended flight is not carried or is not in a fit condition for use unless—

- (a) the aircraft does so under and in accordance with the terms of a permission granted under this Article; and
- (b) in the case of an aircraft to which Article 25 of this Order applies, the operations manual required under that Article contains particulars of the permission.”.

12. Composition of crew of aircraft

(1) Article 18(3)(b) is amended by repealing “aircraft commander” and substituting “pilot in command”.

(2) Article 18(4)(a) is repealed.

(3) Article 18(4) is amended by repealing everything after “to this Order.”.

(4) Article 18(5) is repealed.

(5) Article 18(7)(b) is amended by repealing everything after “include” and substituting “members of the cabin crew.”.

(6) Article 18(7)(c) is amended by repealing “cabin attendant” and substituting “member of the cabin crew”.

(7) Article 18(7) is amended, in the proviso, by repealing “cabin attendants” and substituting “members of the cabin crew”.

(8) Article 18(8) is amended by repealing “cabin attendants” where it twice appears and substituting “members of the cabin crew”.

13. Members of flight crew—requirement of licences

(1) Article 19(1) is amended, in paragraph (d)(iv) of the proviso, by repealing the full stop and substituting a semicolon.

(2) Article 19(1) is amended, in the proviso, by adding—

“(e) subject to Article 20(8) of this Order, act as pilot in command of a balloon if—

- (i) he is the holder of an appropriate licence granted or rendered valid under this Order in all respects and he has not within the immediately preceding 13 months carried out as pilot in command in a balloon at least 5 flights each of not less than 5 minutes duration;

- (ii) he so acts in accordance with instructions given by a person authorized by the Chief Executive to supervise flying in the type of balloon being flown;
- (iii) no person other than that specified in sub-paragraph (ii) is carried; and
- (iv) the balloon is not flying for the purpose of public transport or aerial work other than aerial work which consists of the giving of instruction in flying or the conducting of flying tests.”.

(3) Article 19(2) is amended by repealing “in a country other than” and substituting “outside”.

(4) Article 19(2)(a) is amended by repealing “of the country in which the aircraft is registered; or” and substituting—
“of—

- (i) if there is no Article 83 bis transfer of the functions and duties under Article 32 a) of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or
- (ii) if there is such a transfer, the state of the operator of the aircraft; or”.

(5) Article 19(3) is repealed.

(6) Article 19(4)(b)(ii) is amended by repealing “, a flight navigator’s”.

(7) Article 19(5) is amended by repealing “a flight navigator’s or”.

(8) Article 19(8)(a) is repealed.

(9) Article 19(8)(b) is amended by repealing “of the giving of instruction in flying in a glider owned or operated by a flying club of which the person giving and the person receiving instruction are both members.” and substituting—

“of—

- (i) the giving of instruction in flying in a glider owned or operated by a flying club of which the person giving the instruction and the person receiving the instruction are both members; or
- (ii) the conducting of flying tests in a glider owned or operated by a flying club of which the person conducting the test and the person undergoing the test are both members.”.

14. Grant, renewal and effect of Flight Crew Licences

(1) Article 20(1)(a) is amended by adding “language ability, and” after “skill,”.

(2) Article 20(1) is amended by repealing the proviso.

- (3) Article 20(4)(b) is repealed.
- (4) Article 20(7)(a) is amended by adding “restricted” after “operator’s”.
- (5) Article 20(7)(d) is repealed and the following substituted—
 - “(d) Where the medical examination is conducted outside Hong Kong—
 - (i) the person conducting the examination shall make a report to the Chief Executive;
 - (ii) the Chief Executive, or any person in Hong Kong approved by him as competent to do so, may, on the basis of the report and subject to such conditions as he thinks fit, issue a medical certificate to the effect that he has assessed the holder of the licence as fit to perform the functions to which the licence relates; and
 - (iii) the certificate shall, without prejudice to paragraph (8) of this Article, be valid for such period as is specified in the certificate and shall be deemed to form part of the licence.”.
- (6) Article 20(8)(a) is amended by adding “reasonably” before “suspects”.

15. Article added

The following is added—

“20A. Endorsement in respect of language proficiency

(1) The Chief Executive may include in a licence granted under Article 20 of this Order an endorsement in respect of language proficiency, subject to such conditions as he thinks fit, on his being satisfied that the licence holder has demonstrated the ability to speak and understand the language used for radiotelephony communications.

(2) The endorsement shall be valid for the period specified in the licence.

(3) A person shall not act as a member of the flight crew of an aircraft registered in Hong Kong in or over a place outside Hong Kong unless his licence bears a valid language proficiency endorsement and the conditions subject to which the endorsement was made are complied with.”.

16. Personal flying log book

(1) Article 22(1) is amended by repealing “Member” and substituting “member”.

(2) Article 22(2)(d) is amended by repealing “night-flying” and substituting “night flying”.

17. Instruction in flying

Article 23(2) is amended, in the proviso, by repealing “if flying” and substituting “in flying”.

18. Training manual

Article 26(3)(a) is amended by repealing “applied” and substituting “applies”.

19. Public transport—operator’s responsibilities

(1) Article 27(1)(a) is amended by repealing “commander” and substituting “pilot in command”.

(2) Article 27(3) is amended by adding “or cargo” after “passengers”.

20. Loading—public transport aircraft and suspended loads

(1) Article 28(4) is amended by repealing “himself the commander” and substituting “himself the pilot in command”.

(2) Article 28(4) is amended by repealing “by the commander” and substituting “by the pilot in command”.

(3) Article 28(4) is amended, in paragraph (a) of the proviso, by repealing “commander” and substituting “pilot in command”.

21. Public transport—operating conditions

(1) Article 29(2) is amended by repealing “commander” and substituting “pilot in command”.

(2) Article 29(5) is amended by repealing “so as to be more than 20 seconds flying time from” and substituting “beyond”.

(3) Article 29(6) is amended by repealing “A2 shall not fly over water for the purpose of public transport for more than 15 minutes during any flight” and substituting “A1 or A2 shall not fly over water for the purpose of public transport beyond a distance from land corresponding to more than 10 minutes at its normal cruise speed”.

22. Aircraft registered in Hong Kong— Aerodrome operating minima

(1) Article 30(1)(a) is amended, in the proviso, by repealing “commander” and substituting “pilot in command”.

(2) Article 30(1)(b) is amended by repealing “commander” and substituting “pilot in command”.

(3) Article 30(4)(b) is amended by repealing “commander” and substituting “pilot in command”.

(4) Article 30(5) is repealed and the following substituted—

“(5) Without prejudice to paragraph (5A) of this Article, an aircraft to which Article 25 of this Order applies, when making an instrument approach to an aerodrome—

(a) if the relevant runway visual range at the aerodrome is at the time less than the specified minimum for landing, shall not continue the approach below 1 000 feet above the height of the aerodrome; or

(b) if the reported visibility or controlling runway visual range at the aerodrome falls below the specified minimum after the aircraft has descended below 1 000 feet above the height of the aerodrome, may continue the approach to—

(i) the decision altitude or decision height; or

(ii) the minimum descent altitude or minimum descent height.

(5A) Unless the specified visual reference for landing is established and maintained, an aircraft to which Article 25 of this Order applies shall not continue its approach to land at an aerodrome below—

(a) the decision altitude or decision height; or

(b) the minimum descent altitude or minimum descent height.”.

(5) Article 30(6) is amended by repealing “Air Traffic Control” and substituting “air traffic control unit”.

(6) Article 30(6) is amended by repealing “commander” and substituting “pilot in command”.

(7) Article 30(7) is amended by repealing “commander” and substituting “pilot in command”.

23. Aircraft not registered in Hong Kong— aerodrome operating minima

(1) The heading of Article 31 is amended by repealing “**not registered in**” and substituting “**registered outside**”.

(2) Article 31(1) is amended by repealing “in a country other than” and substituting “outside”.

(3) Article 31(3) is repealed and the following substituted—

“(3) Without prejudice to paragraph (3A) of this Article, a public transport aircraft registered outside Hong Kong, when making an instrument approach to an aerodrome—

(a) if the relevant runway visual range at the aerodrome is at the time less than the specified minimum for landing, shall not continue the approach below 1 000 feet above the height of the aerodrome; or

(b) if the reported visibility or controlling runway visual range at the aerodrome falls below the specified minimum after the aircraft has descended below 1 000 feet above the height of the aerodrome, may continue the approach to—

(i) the decision altitude or decision height; or

(ii) the minimum descent altitude or minimum descent height.

(3A) Unless the specified visual reference for landing is established and maintained, a public transport aircraft registered outside Hong Kong shall not continue its approach to land at an aerodrome below—

(a) the decision altitude or decision height; or

(b) the minimum descent altitude or minimum descent height.”.

24. Pre-flight action by commander of aircraft

(1) The heading of Article 32 is amended by repealing “**commander**” and substituting “**pilot in command**”.

(2) Article 32 is amended by repealing “commander” and substituting “pilot in command”.

(3) Article 32(b) is repealed and the following substituted—

“(b) either—

(i) that the equipment (including radio apparatus) required by or under this Order to be carried in the circumstances of the intended flight is carried and is in a fit condition for use; or

- (ii) that the flight may commence under and in accordance with the terms of a permission granted to the operator of the aircraft under Article 14A of this Order;”.

25. Pilots to remain at controls

(1) Article 33(1) is amended by repealing “The commander” and substituting “The pilot in command”.

(2) Article 33(1) is amended by repealing “commander shall cause” and substituting “pilot in command shall cause”.

(3) Article 33(1) is amended by repealing “the public transport of passengers the commander” and substituting “public transport, the pilot in command”.

26. Public transport of passengers— duties of commander

(1) The heading of Article 34 is amended by repealing “**commander**” and substituting “**pilot in command**”.

(2) Article 34(2) is amended by repealing “commander” and substituting “pilot in command”.

(3) Article 34(2)(b)(ii) is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

(4) Article 34(2)(e) is amended by repealing “before the aircraft takes-off, and before it lands” and substituting “except as provided in paragraph (a) of the proviso to Article 45 of this Order, from the moment when, after the embarkation of passengers for the purpose of taking off, the aircraft first moves until after it has taken off, and before it lands and until it comes to rest for the purpose of disembarkation of passengers”.

(5) Article 34(2)(e)(ii) is amended by repealing “secure” and substituting “secured”.

(6) Article 34(2)(g) is amended by repealing “millibars” and substituting “hectopascals”.

(7) Article 34(2)(g)(ii) is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

(8) Article 34(2)(h) is amended by repealing “millibars” and substituting “hectopascals”.

(9) Article 34(2)(h)(ii) is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

27. Operation of radio in aircraft

- (1) Article 35(1) is repealed and the following substituted—
- “(1) The radio station in an aircraft shall not be operated, whether or not the aircraft is in flight, except—
- (a) in accordance with the conditions of the licence issued in respect of that station under the law of—
 - (i) if there is no Article 83 bis transfer of the functions and duties under Article 30 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or
 - (ii) if there is such a transfer, the state of the operator of the aircraft; and
 - (b) by a person duly licensed or otherwise permitted to operate the radio station under the law of the country in which the aircraft is registered or of the state of that operator, as the case may be.”.

(2) Article 35(5), (6) and (7) is repealed.

28. Minimum navigation performance

- (1) Article 36 is amended by renumbering it as Article 36(1).
- (2) Article 36(1) is amended by repealing everything after “unless” and substituting “the aircraft is equipped with navigation systems which enable the aircraft to maintain the navigation performance capability prescribed under that Regulation.”.
- (3) Article 36 is amended by adding—
- “(2) The equipment that forms part of the navigation systems referred to in paragraph (1) of this Article shall—
- (a) be approved by the Chief Executive;
 - (b) be installed, and maintained, in a manner approved by the Chief Executive; and
 - (c) be operated in accordance with the procedures approved by the Chief Executive while the aircraft is flying in that airspace.
- (3) An approval granted by the Chief Executive for the purposes of this Article shall be in writing and may be subject to such conditions as the Chief Executive thinks fit.”.

29. Articles added

The following are added—

“36A. Area navigation and required navigation performance capabilities—aircraft registered in Hong Kong

(1) An aircraft registered in Hong Kong shall not fly in designated required navigation performance airspace unless the aircraft is equipped with area navigation equipment that complies with paragraph (2) of this Article.

(2) The equipment shall—

- (a) enable the aircraft to maintain the navigation performance capability specified in respect of the airspace in which the aircraft is flying;
- (b) be approved by the Chief Executive;
- (c) be installed, and maintained, in a manner approved by the Chief Executive; and
- (d) be operated in accordance with the procedures approved by the Chief Executive while the aircraft is flying in designated required navigation performance airspace.

(3) An aircraft registered in Hong Kong that is not equipped with area navigation equipment that complies with paragraph (2) of this Article may fly in designated required navigation performance airspace only if the flight has been authorized by the appropriate air traffic control unit and the aircraft complies with the instructions given by the unit.

36B. Area navigation and required navigation performance capabilities—aircraft registered outside Hong Kong

(1) An aircraft registered outside Hong Kong shall not, if the law of the country in which the aircraft is registered requires the aircraft to be equipped with area navigation equipment that complies with paragraph (2) of this Article when flying within designated required navigation performance airspace, fly in designated required navigation performance airspace in Hong Kong unless the aircraft is so equipped.

(2) The equipment shall—

- (a) be capable of being operated so as to enable the aircraft to maintain the navigation performance capability specified in respect of the airspace in which the aircraft is flying; and
- (b) be so operated while the aircraft is flying in that airspace.

(3) An aircraft registered outside Hong Kong that is not equipped with area navigation equipment that complies with paragraph (2) of this Article may fly in designated required navigation performance airspace in Hong Kong only if the flight has been authorized by the appropriate air traffic control unit of Hong Kong and the aircraft complies with the instructions given by the unit.

**36C. Height keeping performance capabilities—
aircraft registered in Hong Kong**

(1) Unless authorized by the appropriate air traffic control unit, an aircraft registered in Hong Kong shall not fly in reduced vertical separation minimum airspace notified for the purposes of this Article unless the aircraft is equipped with height keeping systems that comply with paragraph (2) of this Article and that enable the aircraft to maintain the height keeping performance capability specified in Schedule 15 to this Order.

(2) The equipment that forms part of the height keeping systems referred to in paragraph (1) of this Article shall—

- (a) be approved by the Chief Executive;
- (b) be installed, and maintained, in a manner approved by the Chief Executive; and
- (c) be operated in accordance with the procedures approved by the Chief Executive while the aircraft is flying in that airspace.

**36D. Height keeping performance capabilities—
aircraft registered outside Hong Kong**

(1) An aircraft registered outside Hong Kong shall not, if the law of the country in which the aircraft is registered requires the aircraft to be equipped with height keeping systems that comply with paragraph (2) of this Article when flying in any specified area, fly in Hong Kong reduced vertical separation minimum airspace unless the aircraft is so equipped.

(2) The equipment that forms part of the height keeping systems referred to in paragraph (1) of this Article shall—

- (a) be capable of being operated so as to enable the aircraft to maintain the height keeping performance capability specified in respect of the airspace in which the aircraft is flying; and
- (b) be so operated while the aircraft is flying in that airspace.

(3) An aircraft registered outside Hong Kong that is not equipped with height keeping systems that comply with paragraph (2) of this Article may fly in Hong Kong reduced vertical separation minimum airspace only if the flight has been authorized by the appropriate air traffic control unit of Hong Kong and the aircraft complies with the instructions given by the unit.”.

30. Use of flight recording systems and preservation of records

- (1) Article 37(2)(a) is amended by repealing “date” and substituting “data”.
- (2) Article 37(4)(a) is amended by repealing “8” and substituting “10”.
- (3) Article 37(4)(b)(i) is amended by repealing “eight” and substituting “10”.
- (4) Article 37(4)(b)(ii)(bb) is amended by adding “or” after “cases”.
- (5) Article 37(5) is amended by repealing “eight” and substituting “10”.
- (6) Article 37 is amended by adding—
 - “(7) A flight recorder shall be deactivated on completion of flight time following an accident as defined in regulation 2(1) of the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap. 448 sub. leg. B).
 - (8) A flight recorder deactivated pursuant to paragraph (7) of this Article shall not be reactivated before its disposition as determined by the investigation authority of the state conducting the investigation of the accident.
 - (9) If an aircraft becomes involved in an accident as referred to in paragraph (7) of this Article, the operator or pilot in command of the aircraft shall, to the extent possible, ensure that all related flight recorder records and if necessary, the associated flight recorders are preserved and retained in safe custody pending their disposition.
 - (10) In this Article, “flight recorder” means any of the recorders referred to in paragraphs (1), (2), (3) and (4) of this Article.”.

31. Article added

The following is added—

“37A. Use of airborne collision avoidance system

On any flight on which an airborne collision avoidance system is required by Article 14 of, and Schedule 6 to, this Order to be carried in an aeroplane, the system shall be operated—

- (a) in the case of an aeroplane to which Article 25 of this Order applies, in accordance with the procedures contained in the operations manual for the aeroplane;
- (b) in the case of an aeroplane registered in Hong Kong to which Article 25 of this Order does not apply, in accordance with the procedures that are suitable having regard to the purposes of the equipment that forms part of the system; or

- (c) in the case of an aeroplane registered outside Hong Kong, in accordance with the procedures that the aeroplane is required to comply with under the law of the country in which the aeroplane is registered.”.

32. Towing of gliders

(1) Article 38(1) is amended by repealing “law of the country in which that aircraft is registered includes” and substituting—

“law of—

- (a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the towing aircraft, the country in which the towing aircraft is registered; or
- (b) if there is such a transfer, the state of the operator of the towing aircraft,

includes”.

(2) Article 38(3) is amended by repealing “The commander” and substituting “The pilot in command”.

(3) Article 38(3)(b) is amended by adding “and” at the end.

(4) Article 38(3)(c) is amended by repealing “commander” wherever it appears and substituting “pilot in command”.

33. Towing, picking up and raising of persons and articles

(1) Article 39(1) is amended by repealing “that aircraft under the law of the country in which the aircraft is registered includes” and substituting—

“the aircraft under the law of—

- (a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or
- (b) if there is such a transfer, the state of the operator of the aircraft,

includes”.

(2) Article 39(7)(b) is amended by repealing “of saving life;” and substituting—

“of—

- (i) fire fighting or prevention;
- (ii) life-saving or law enforcement operation; or

- (iii) the training of the personnel engaged in the activities referred to in sub-subparagraph (i) or (ii) of this subparagraph;”.
- (3) Article 39(7)(c) is amended by adding “or” at the end.

34. Dropping of animals and articles

(1) Article 40(2) is amended, in the proviso, by repealing “commander” and substituting “pilot in command”.

(2) Article 40(2) is amended, in paragraph (a) of the proviso, by repealing “of saving life;” and substituting—

“of—

(i) fire fighting or prevention;

(ii) life-saving or law enforcement operation; or

(iii) the training of the personnel engaged in the activities referred to in sub-subparagraph (i) or (ii) of this subparagraph;”.

(3) Article 40(3) is amended by repealing “dropping” and substituting “, “dropping””.

(4) Article 40(4) is amended by repealing “law of the country in which it is registered includes” and substituting—

“law of—

(a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the helicopter, the country in which the helicopter is registered; or

(b) if there is such a transfer, the state of the operator of the helicopter,

includes”.

35. Dropping of persons

(1) Article 41(2) is amended by repealing “dropping” and substituting “, “dropping””.

(2) Article 41(4) is amended by repealing “that aircraft under the law of the country in which the aircraft is registered includes” and substituting—

“the aircraft under the law of—

(a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the aircraft, the country in which the aircraft is registered; or

(b) if there is such a transfer, the state of the operator of the aircraft,

includes”.

(3) Article 41(7) is amended by repealing “of saving life.” and substituting—
“of—

- (a) fire fighting or prevention;
- (b) life-saving or law enforcement operation; or
- (c) the training of the personnel engaged in the activities referred to in subparagraph (a) or (b) of this paragraph.”.

(4) Article 41(8) is amended by repealing “law of the country in which it is registered includes” and substituting—

“law of—

- (a) if there is no Article 83 bis transfer of the functions and duties under Article 31 of the Chicago Convention in respect of the helicopter, the country in which the helicopter is registered; or
- (b) if there is such a transfer, the state of the operator of the helicopter,

includes”.

36. Carriage of weapons and of munitions of war

(1) Article 43(1)(b) is amended by repealing “commander or” and substituting “pilot in command of”.

(2) Article 43(4) is amended by repealing “in a country other than” and substituting “outside”.

37. Exits and break-in markings

(1) Article 46(2) is amended, in paragraph (b) of the proviso, by repealing “commander” and substituting “pilot in command”.

(2) Article 46(5)(b) is amended by repealing “10 centimetres in length along its outer edge and 2.5 centimetres in width” and substituting “9 cm in length along its outer edge and 3 cm in width, and if the corner markings are more than 2 m apart, intermediate lines of 9 cm by 3 cm shall be inserted so that adjacent markings are less than 2 m apart”.

(3) Article 46(8) is amended, in paragraph (b) of the proviso, by repealing “No exit” and substituting “No Exit”.

38. Imperilling safety of aircraft

The heading of Article 47 is amended by repealing “**Imperilling**” and substituting “**Endangering**”.

39. Imperilling safety of any person or property

The heading of Article 48 is amended by repealing “**Imperilling**” and substituting “**Endangering**”.

40. Drunkenness in aircraft

- (1) The heading of Article 49 is repealed and the following substituted—
“**Passengers and crew members not to be under influence of psychoactive substances**”.
- (2) Article 49(1) is repealed and the following substituted—
“(1) A person shall not embark on an aircraft when under the influence of psychoactive substances, or be under the influence of psychoactive substances on board an aircraft, to such an extent as to jeopardize, or be likely to jeopardize—
 - (a) the safety of the aircraft or of persons or property on board the aircraft; or
 - (b) good order and discipline on board the aircraft.”.
- (3) Article 49(2) is amended by repealing “drink or a drug” and substituting “psychoactive substances”.
- (4) Article 49 is amended by adding—
“(3) A holder of a licence granted under this Order authorizing the holder to act as a member of the crew of an aircraft shall not engage in the use of psychoactive substances in a way that—
 - (a) constitutes a direct hazard to the holder or endangers the lives, health or welfare of others; or
 - (b) causes or worsens an occupational, social, physical or mental problem or disorder of the holder.”.

41. Smoking in aircraft

- (1) The heading of Article 50 is repealed and the following substituted—
“**Exhibition of notices indicating prohibition of smoking**”.
- (2) Article 50(2) is repealed.

42. Authority of commander of aircraft

(1) The heading of Article 51 is amended by repealing “**commander**” and substituting “**pilot in command**”.

(2) Article 51 is amended by repealing “commander” and substituting “pilot in command”.

43. Stowaways

Article 52 is amended by repealing “commander thereof” and substituting “pilot in command of the aircraft”.

44. Fatigue of crew—responsibilities of crew

Article 55(1) is amended by adding “reasonably” before “suspects”.

45. Records to be kept

(1) Article 58 is amended by renumbering it as Article 58(1).

(2) Article 58(1) is amended—

(a) by repealing “in a manner prescribed”;

(b) by repealing “the flight.” and substituting “the flight, unless the Chief Executive otherwise directs.”.

(3) Article 58 is amended by adding—

“(2) The operator of a public transport aircraft registered in Hong Kong shall, in respect of any flight by the aircraft during which it may fly at an altitude of more than 26 000 feet, keep a record of the total dose of cosmic radiation to which the members of the crew of the aircraft are exposed during the flight and of the names of such members so that the total cosmic radiation dose received by each member of the crew over a period of 12 consecutive months can be determined, unless the Chief Executive otherwise directs.”.

46. Production of documents and records

Article 59(1) is amended by repealing “commander” and substituting “pilot in command”.

47. Preservation of documents, etc.

(1) Article 61 is amended, in paragraph (a) of the proviso, by repealing “he” and substituting “, the first-mentioned operator”.

(2) Article 61 is amended, in paragraph (b) of the proviso, by repealing “he” and substituting “, the first-mentioned operator”.

(3) Article 61 is amended, in paragraph (c) of the proviso—

- (a) by repealing “him” and substituting “the first-mentioned operator”;
- (b) by repealing “registered in Hong Kong and operated by another person he” and substituting “that is registered in Hong Kong and operated by a person other than the first-mentioned operator, the first-mentioned operator”.

48. Revocation, suspension and variation of certificates, licences and other documents

Article 62(1) is amended by repealing “licence approval” and substituting “licence, approval”.

49. Rules of the air

(1) The heading of Article 64 is amended by repealing “air” and substituting “Air”.

(2) Article 64(3)(c) is amended by repealing “commander” and substituting “pilot in command”.

(3) Article 64(4) is amended by repealing “commander” and substituting “pilot in command”.

50. Provision of air traffic services

(1) Article 64A(2) is amended by repealing “radar” and substituting “air traffic service surveillance system”.

(2) Article 64A(3) is amended by repealing “aerodrome flight” and substituting “flight”.

51. Licensing of air traffic controllers, student air traffic controllers and aerodrome flight information service officers

(1) The heading of Article 65 is amended by repealing “, student air traffic controllers and aerodrome flight information service officers” and substituting “and student air traffic controllers”.

(2) Article 65(1) is amended—

- (a) by repealing “, as a student air traffic controller or as an aerodrome flight information service officer” and substituting “or a student air traffic controller”;
- (b) by adding “language ability, and” after “skill,”.

- (3) Article 65(1) is amended, in paragraph (a) of the proviso—
- (a) by repealing “or an aerodrome flight information service officer’s licence”;
 - (b) by repealing “18” and substituting “21”.

(4) Article 65(1) is amended, in paragraph (b) of the proviso, by repealing everything after “includes” and substituting “ratings of classes as set out in Schedule 10 to this Order to a person under the age of 21 years.”.

(5) Article 65(1) is amended by repealing paragraph (c) of the proviso.

(6) Article 65(2) is amended by repealing “radar equipment” and substituting “air traffic service surveillance system”.

(7) Article 65(4) is repealed.

(8) Article 65(5) is amended by repealing everything after “an air traffic controller” and substituting “or a student air traffic controller shall not be valid unless it bears the ordinary signature of the holder of the licence in ink.”.

(9) Article 65(6) is amended by repealing “, as a student air traffic controller or as an aerodrome flight information service officer” and substituting “or a student air traffic controller”.

(10) Article 65(7)(b) is amended by repealing “and skill” and substituting “, skill and language ability”.

(11) Article 65(8) is repealed.

(12) Article 65 is amended by adding—

“(9A) The Chief Executive may include in a licence granted under this Article an endorsement in respect of language proficiency, subject to such conditions as he thinks fit, on his being satisfied that the licence holder has demonstrated the ability to speak and understand the language used for radiotelephony communications in the provision of air traffic control service or flight information service.

(9B) The endorsement referred to in paragraph (9A) of this Article shall be valid for the period specified in the licence.”.

(13) Article 65(10) is amended—

(a) by adding “or flight information service” after “control service”;

(b) by repealing everything after “his” and substituting—
“licence—

(a) includes a valid medical certificate issued under paragraph (9) of this Article; and

(b) bears a valid language proficiency endorsement referred to in paragraph (9A) of this Article and the conditions subject to which the endorsement was made are complied with.”.

52. Prohibition of unlicensed air traffic controllers, student air traffic controllers and aerodrome flight information service officers

(1) The heading of Article 66 is amended by repealing “, **student air traffic controllers and aerodrome flight information service officers**” and substituting “**and student air traffic controllers**”.

(2) Article 66(1) is amended by repealing “or an aerodrome flight information service” where it twice appears and substituting “or flight information service”.

(3) Article 66(1)(b) is amended—

(a) by repealing “case of an aerodrome” and substituting “case of a”;

(b) by repealing “aerodrome flight information service officer’s licence” and substituting “air traffic controller’s licence”.

(4) Article 66(2)(a) is amended by repealing “radar equipment” and substituting “air traffic service surveillance system”.

(5) Article 66(3) is amended by repealing “an aerodrome”.

(6) Article 66(4) is repealed.

(7) Article 66 is amended by adding—

“(6) Nothing in this Article shall prohibit a person approved by an authorized person for the purposes of this paragraph from relaying any air traffic control instruction or flight information when directed to do so by a holder of a valid air traffic controller’s licence with the appropriate rating which entitles the holder to give the instruction or information, as the case may be.”.

53. Article substituted

Article 67 is repealed and the following substituted—

“67. Manual of Air Traffic Control

(1) A person who provides an air traffic service in Hong Kong with the approval of the Chief Executive under Article 64A of this Order shall issue and maintain an up-to-date manual of air traffic control.

(2) If the Chief Executive so requires, the manual of air traffic control referred to in paragraph (1) of this Article shall be amended and produced to the Chief Executive.

(3) An air traffic controller and a student air traffic controller shall, when providing an air traffic control service or a flight information service, comply with the standards and procedures specified in the manual of air traffic control referred to in paragraph (1) of this Article.”.

54. Incapacity of air traffic controllers

Article 68(3) is repealed and the following substituted—

“(3) The holder of an air traffic controller’s licence who has reason to believe that she is pregnant shall not be entitled to exercise the privileges of her licence and ratings unless—

- (a) obstetrical evaluation and continued medical assessment indicate that her pregnancy is a low-risk uncomplicated pregnancy; and
- (b) she has undergone such medical examination as an authorized person may reasonably require for the purpose of ascertaining whether she is medically fit to exercise those privileges and the result of the examination shows that she is able to safely exercise those privileges.

(4) The holder of an air traffic controller’s licence shall not, after her confinement or the termination of her pregnancy, be entitled to exercise the privileges of her licence and ratings until she has undergone the medical examination referred to in paragraph (3)(b) of this Article and the result of the examination shows that she is able to safely exercise those privileges.”.

55. Articles added

The following are added—

“68A. Air traffic controllers not to exercise privileges of licences or use psychoactive substances in certain circumstances

- (1) The holder of an air traffic controller’s licence—
 - (a) shall not exercise the privileges of his licence if he knows or reasonably suspects that his physical or mental condition renders him unfit to exercise such privileges; and
 - (b) shall not, when exercising the privileges of the licence, be under the influence of psychoactive substances which may render him unable to safely and properly exercise such privileges.

(2) The holder of an air traffic controller's licence shall not engage in the use of psychoactive substances in a way that—

- (a) constitutes a direct hazard to the holder or endangers the lives, health or welfare of others; or
- (b) causes or worsens an occupational, social, physical or mental problem or disorder of the holder.

68B. Fatigue of air traffic controller—air traffic controller's responsibilities

The holder of an air traffic controller's licence shall not exercise the privileges of his licence if he knows or reasonably suspects that he is suffering from, or having regard to the circumstances of the period of duty to be undertaken is likely to suffer from, such fatigue as may endanger the safety of any aircraft or of the occupants of any aircraft.”.

56. Power to prohibit or restrict flying

(1) Article 69(2) is amended by repealing “commander” and substituting “pilot in command”.

(2) Article 69(3) is amended by repealing “commander” and substituting “pilot in command”.

57. Balloons, kites, airships, gliders and parascending parachutes

Article 70(1)(f) is amended by repealing “which” and substituting “winch”.

58. Aerodromes: public transport of passengers and instruction in flying

Article 71(2)(c) is amended by repealing “, (ii)”.

59. Aeronautical radio stations

(1) Article 74(2) is amended by repealing “radar” and substituting “air traffic service surveillance system”.

(2) Article 74(2) is amended, in the proviso, by repealing “of an aircraft and the commander thereof” and substituting “and the pilot in command of an aircraft”.

60. Aeronautical radio station records

Article 75(1) is amended by repealing “radar” and substituting “air traffic service surveillance system”.

61. Aeronautical lights

Article 79(1) is amended by repealing “of;” and substituting “of—”.

62. Flights over any place outside Hong Kong

(1) Article 85(1) is amended by repealing “commander” and substituting “pilot in command”.

(2) Article 85(3) is amended by repealing “commander” and substituting “pilot in command”.

63. Mandatory reporting

(1) Article 86(1)(a) is repealed and the following substituted—

“(a) is the operator or the pilot in command of—

- (i) a turbine-powered aircraft in respect of which there is in force a certificate of airworthiness issued by the Chief Executive; or
- (ii) an aircraft, whether registered in Hong Kong or elsewhere, operated by a holder of an air operator’s certificate granted by the Chief Executive; or”.

(2) Article 86(2) is amended, in the proviso, by repealing everything after “that” and substituting “an accident in respect of which notice has been given to the Chief Inspector pursuant to the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap. 448 sub. leg. B) shall not constitute a reportable occurrence for the purposes of this Article.”.

(3) Article 86 is amended by adding—

“(6) In this Article, “Chief Inspector” has the meaning assigned to it by regulation 2(1) of the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap. 448 sub. leg. B).”.

64. Power to prevent aircraft flying

(1) Article 87(1) is amended by repealing “commander” and substituting “pilot in command”.

(2) Article 87(3) is amended by repealing “commander” and substituting “pilot in command”.

65. Penalties

Article 91(1) is amended by repealing “of that aircraft and the commander thereof” and substituting “and the pilot in command of that aircraft”.

66. Application of Order to Chinese controlled aircraft not registered in Hong Kong

The heading of Article 93 is amended by repealing “**Chinese controlled aircraft not registered in**” and substituting “**aircraft registered outside**”.

67. Appeal to High Court

(1) Article 96(1) is amended—

(a) by repealing “a licence to act as an aircraft maintenance engineer,” and substituting “an aircraft maintenance licence or a licence to act as a”;

(b) by repealing “, student air traffic controller or aerodrome flight information service officer” and substituting “or student air traffic controller”.

(2) Article 96(1) is amended, in the proviso, by adding “language ability or” after “skill,”.

68. Interpretation

(1) Article 98(1) is amended by repealing the definition of “Aerodrome flight information unit”.

(2) Article 98(1) is amended by repealing the definition of “Aerodrome traffic zone” and substituting—

““Aerodrome traffic zone”, in relation to an aerodrome, means the airspace—

(a) which is in the vicinity of the aerodrome that is notified for the purposes of Rule 35 of Schedule 14 to this Order; and

(b) which is of defined dimensions established around the aerodrome for the protection of aerodrome traffic;”.

(3) Article 98(1) is amended by repealing the definition of “Commander”.

(4) Article 98(1) is amended, in the definition of “Decision height”, by repealing “establish” and substituting “established”.

(5) Article 98(1) is amended, in the definition of “Flight level”, by repealing “millibars” and substituting “hectopascals”.

(6) Article 98(1) is amended, in the definition of “Minimum descent height”, by repealing “may” and substituting “must”.

(7) Article 98(1) is amended, by repealing the definition of “Pilot in command” and substituting—

““Pilot in command”, in relation to an aircraft, means the pilot designated by the operator or the owner, as appropriate, as being in charge of the aircraft without being under the direction of any other pilot in the aircraft and charged with the safe conduct of a flight;”.

(8) Article 98(1) is amended, in the definition of “Runway visual range”, by repealing “commander” and substituting “pilot in command”.

(9) Article 98(1) is amended, in the definition of “Special VFR flight”, by repealing everything after “flight” and substituting “has the meaning assigned to it by Rule 23 of the Rules of the Air;”.

(10) Article 98(1) is amended by adding—

““Aeroplane” means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

“Air traffic service surveillance system” means automatic dependent surveillance—broadcast, primary surveillance radar, secondary surveillance radar or any comparable ground-based system that enables the identification of aircraft;

“Aircraft” means a machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth’s surface;

“Area navigation equipment” means equipment carried on board an aircraft which enables the aircraft to navigate on any desired flight path within the coverage of appropriate ground based navigation aids or within the limits of the equipment or a combination of the two;

“Article 83 bis transfer”, in relation to an aircraft, means a transfer under Article 83 bis of the Chicago Convention of all or part of the functions and duties under Articles 12, 30, 31 and 32 a) of the Convention in respect of the aircraft;

“Cabin crew”, in relation to an aircraft, means those crew members assigned by the operator or pilot in command of the aircraft to perform, in the interests of the safety of passengers, duties on board the aircraft but does not include members of the flight crew;

“Captive balloon” means a balloon which when in flight is attached by a restraining device to the surface;

- “Decision altitude”, in relation to the operation of an aircraft at an aerodrome, means the altitude in a precision approach at which a missed approach must be initiated if the required visual reference to continue that approach has not been established;
- “Designated required navigation performance airspace” means airspace that has been notified, prescribed or otherwise designated by the competent authority for the airspace in respect of which an aircraft is required to meet the specified navigation performance capabilities when flying in or over the airspace;
- “Flight information service” means a service that is provided for the purposes of giving advice and information useful for the safe and efficient conduct of flights;
- “Free balloon” means a balloon which when in flight is not attached by any form of restraining device to the surface;
- “Helicopter” means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes;
- “Microlight aeroplane” means an aeroplane designed to carry not more than 2 persons that has—
- (a) a maximum total weight authorized not exceeding—
 - (i) in the case of a single seat landplane, 300 kg;
 - (ii) in the case of a 2 seats landplane, 450 kg;
 - (iii) in the case of a single seat amphibian or floatplane, 330 kg; or
 - (iv) in the case of a 2 seats amphibian or floatplane, 495 kg; and
 - (b) a stalling speed at the maximum total weight authorized not exceeding 35 knots calibrated airspeed;
- “Minimum descent altitude”, in relation to the operation of an aircraft at an aerodrome, means the altitude in a non-precision approach below which descent must not be made without the required visual reference;
- “Private flight” means a flight which is not used for the purpose of aerial work or public transport;
- “Psychoactive substances” means alcohol, opioids, cannabinoids, sedatives, hypnotics, cocaine or other psychostimulants, hallucinogens or volatile solvents, but does not include coffee and tobacco;
- “State of the operator” means the state in which the operator of an aircraft has—
- (a) his principal place of business; or
 - (b) if he has no such place of business, his permanent residence;”.

- (11) Article 98(3)(c) is amended—
- (a) by repealing “or free balloon”;
 - (b) by repealing “thereto or comes to rest thereon” and substituting “to the surface or comes to rest on the surface”.
- (12) Article 98(3) is amended by adding—
- “(d) in the case of a free balloon, from the moment when the balloon, including the canopy and basket, becomes separated from the surface until the moment when it next comes to rest on the surface; or
 - (e) in the case of a captive balloon, from the moment when the balloon, including the canopy and basket but excluding the restraining device that attaches the balloon to the surface, becomes separated from the surface until the moment when it next comes to rest on the surface;”.

(13) Article 98(4) is amended by repealing “employed or engaged in an aircraft in flight on the business of the aircraft” and substituting “assigned by the operator of an aircraft to be involved in the operation of the aircraft during any portion of a flight”.

(14) Article 98(6)(a)(ii) is amended by repealing “aricraft” and substituting “aircraft”.

(15) Article 98(6)(a)(iii) is amended by repealing “hire-purchase” and substituting “hire-purchase agreement”.

69. Article added

The following is added—

“102. Safety management system

- (1) A person, other than a natural person, who—
- (a) is the operator of an aircraft registered in Hong Kong that is flown for the purposes of public transport;
 - (b) issues a certificate of release to service in respect of the aircraft referred to in subparagraph (a) of this paragraph, or of any equipment or part of the aircraft;
 - (c) provides an air traffic service; or
 - (d) is an aerodrome licence holder,
- shall, in respect of the activities that he is authorized, permitted, approved or required to carry out under this Order, implement a safety management system that—
- (e) complies with paragraphs (2) and (3) of this Article; and
 - (f) is accepted by the Chief Executive.

- (2) The safety management system shall—
- (a) identify safety hazards and manage associated risks;
 - (b) ensure that remedial action necessary to maintain an acceptable level of safety is carried out;
 - (c) provide for continuous monitoring and regular assessment of the safety level achieved;
 - (d) aim to make continuous improvement to the overall level of safety; and
 - (e) be appropriate to the size, nature and complexity of the activities concerned and the safety hazards and risks related to such activities.
- (3) The safety management system shall be a documented system and shall contain the following elements—
- (a) explicit safety policies on which the system is based;
 - (b) safety objectives and performance targets and indicators;
 - (c) clearly defined lines of safety accountabilities and responsibilities of staff at all levels;
 - (d) promotion of safety culture;
 - (e) safety training to ensure competence of staff;
 - (f) monitoring and reviewing of safety performance of staff;
 - (g) safety management and oversight procedures;
 - (h) collection and analysis of safety information and data with the aim of preventing adverse safety trend;
 - (i) maintenance and, where appropriate, sharing of safety information and data;
 - (j) a contingency and emergency response plan;
 - (k) investigation of accidents and occurrences of significant nature with a view to identifying and implementing safety improvement measures;
 - (l) periodic reviews, audits and inspections of the systems and procedures established in relation to the elements referred to in this paragraph.”.

70. Schedule 1 amended

- (1) Schedule 1 is amended by repealing “Article 4(6), 23(2) and 99(8)” at the beginning and substituting “Articles 4(6) and (8), 5(2), 23(2) and 98(8)”.
- (2) Column 2 of the Table in Part A of Schedule 1 is amended—
- (a) by repealing “Lighter than air” and substituting “Lighter-than-air”;

(b) by repealing “Heavier than air” and substituting “Heavier-than-air”.

(3) Column 4 of the Table in Part A of Schedule 1 is amended by adding—

“Powered Lift (Tilt Rotor)”

after—

“Aeroplane (Self-launching motor glider)”.

(4) Item 4(a) of Part B of Schedule 1 is amended by repealing “an aeroplane having an empty weight not exceeding 150 kg” and substituting “a microlight aeroplane,”.

(5) Paragraph (a) of Section I of item 5 of Part B of Schedule 1 is amended by repealing “Flying Machines and Gliders” and substituting “Heavier-than-air aircraft”.

(6) Paragraph (a)(i)(bb) of Section I of item 5 of Part B of Schedule 1 is amended by repealing “15” and substituting “30”.

(7) Paragraph (b) of Section I of item 5 of Part B of Schedule 1 is repealed and the following substituted—

“(b) Lighter-than-air aircraft

- (i) Airships: The marks shall appear either on the hull, or on the stabilizer surfaces. Where the marks appear on the hull, they shall be located lengthwise on each side of the hull and also on its upper surface on the line of symmetry. Where the marks appear on the stabilizer surfaces, they shall appear on the horizontal and on the vertical stabilizers; the marks on the horizontal stabilizer shall be located on the right half of the upper surface and on the left half of the lower surface, with the tops of the letters towards the leading edge; the marks on the vertical stabilizer shall be located on each side of the bottom half stabilizer, with the letters placed horizontally.
- (ii) Spherical balloons (other than unmanned free balloons): The marks shall appear in 2 places diametrically opposite. They shall be located near the maximum horizontal circumference of the balloon.
- (iii) Non-spherical balloons (other than unmanned free balloons): The marks shall appear on each side. They shall be located near the maximum cross-section of the balloon immediately above either the rigging band or the points of attachment of the basket suspension cables.
- (iv) Lighter-than-air aircraft (other than unmanned free balloons): The side marks shall be visible both from the sides and from the ground.

(v) Unmanned free balloons: The marks shall appear on the fireproof metal plate mentioned in item 4 of this Part.”.

(8) Paragraph (a) of Section II of item 5 of Part B of Schedule 1 is amended by repealing “Flying Machines and Gliders” and substituting “Heavier-than-air aircraft”.

(9) Paragraph (b) of Section II of item 5 of Part B of Schedule 1 is amended by repealing “Airships and Free Balloons” and substituting “Lighter-than-air aircraft”.

(10) Paragraph (a) of Section III of item 5 of Part B of Schedule 1 is repealed and the following substituted—

“(a) The width of each letter (except the letters I, M and W) and the length of the hyphen between the nationality mark and registration mark shall be two-thirds of the height of a letter. The width of the letter I shall be one-sixth of the height of the letter. The width of the letters M and W shall be neither less than two-thirds of their height nor more than their height.”.

(11) Paragraph (c) of Section III of item 5 of Part B of Schedule 1 is amended by repealing “by a space equal to half” and substituting “, by a space of not less than one-quarter of”.

71. Schedule 2 substituted

Schedule 2 is repealed and the following substituted—

“SCHEDULE 2	Articles 3(1), 5(3), 7(1A) and 39(7)
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A AND B CONDITIONS

The A and B Conditions referred to in Articles 3(1), 5(3), 7(1A) and 39(7) of this Order are as follows—

A Conditions

(1) The aircraft is an aircraft registered in Hong Kong and flies for a purpose set out in paragraph (2) of these Conditions when either—

- (a) it does not have a certificate of airworthiness issued or rendered valid under the law of Hong Kong; or
- (b) the certificate of airworthiness or certificate of validation issued in respect of the aircraft has ceased to be in force by virtue of any of the matters specified in Article 8(7) of this Order.

(2) The purposes referred to in paragraph (1) of these Conditions are as follows—

- (a) in the case of an aircraft falling within paragraph (1)(a) of these Conditions, enabling it to—
 - (i) qualify for the issue or renewal of a certificate of airworthiness or a certificate of validation after an application has been made for such issue or renewal, as the case may be;
 - (ii) carry out a functional check of a modification which has previously been approved by the Chief Executive in respect of that aircraft or another aircraft of the same type (“previously approved modification”);
 - (iii) proceed to or from a place at which any inspection, repair, modification, maintenance, approval, test or weighing of, or the installation of equipment in, the aircraft is to take place or has taken place for a purpose referred to in sub-subparagraph (i) or (ii) of this subparagraph after any relevant application has been made, or at which the installation of furnishings in, or the painting of, the aircraft is to be undertaken; or
 - (iv) proceed to or from a place at which the aircraft is to be or has been stored;
- (b) in the case of an aircraft falling within paragraph (1)(b) of these Conditions, enabling it to—
 - (i) proceed to a place at which any inspection or maintenance as provided in Article 8(7)(b)(iv) of this Order is to take place;
 - (ii) proceed to a place at which any inspection, maintenance or modification as provided in Article 8(7)(b)(iii) or (c) of this Order is to take place and in respect of which flight the Chief Executive has given permission in writing; or
 - (iii) carry out a functional check, test or in-flight adjustment in connection with the carrying out in a manner approved by the Chief Executive of any overhaul, repair, previously approved modification, inspection or maintenance as provided in Article 8(7)(a), (b) or (c) of this Order.

(3) The aircraft, including any modifications, is of a design which has previously been approved by the Chief Executive as being compliant with a standard accepted by the Chief Executive as appropriate for the issue of a certificate of airworthiness.

- (4) The aircraft and its engines are certified as fit for flight—
- (a) by the holder of an aircraft maintenance licence granted under this Order, being a licence which entitles him to issue that certificate; or
 - (b) by a person approved by the Chief Executive for the purpose of issuing certificates under this paragraph and in accordance with that approval.

(5) The aircraft carries the minimum flight crew specified in any certificate of airworthiness or certificate of validation or flight manual which has previously been in force under this Order in respect of the aircraft, or is or has previously been in force in respect of any other aircraft of identical design.

(6) The aircraft does not carry any persons or cargo except persons performing duties in the aircraft in connection with the flight or persons who are carried in the aircraft to perform duties in connection with a purpose set out in paragraph (2) of these Conditions.

(7) The aircraft does not fly over any congested area of a city, town or settlement except to the extent that it is necessary to do so in order to take off or land.

B Conditions

(1) The aircraft flies for a purpose set out in paragraph (2) of these Conditions whether or not it is registered as described in Article 3(1) of this Order and when there is not in force in respect of the aircraft—

- (a) in the case of an aircraft which is so registered, a certificate of airworthiness issued or rendered valid under the law of the country in which the aircraft is registered; or
- (b) in the case of an aircraft which is not so registered, either a certificate of airworthiness issued or rendered valid by the Chief Executive or a permit to fly issued by the Chief Executive.

(2) The purposes referred to in paragraph (1) of these Conditions are as follows—

- (a) experimenting with or testing the aircraft (including any engines installed in or on the aircraft) or any equipment installed in or carried in the aircraft;
- (b) enabling it to qualify for—
 - (i) the issue of a certificate of airworthiness or a certificate of validation;
 - (ii) the approval of a modification of the aircraft; or
 - (iii) the issue of a permit to fly;

- (c) demonstrating and displaying the aircraft, any engines installed in or on the aircraft or any equipment installed in or carried in the aircraft with a view to the sale of the aircraft, engines or equipment or of other similar aircraft, engines or equipment;
- (d) demonstrating and displaying the aircraft to employees of the operator;
- (e) giving flying training to or testing flight crew employed by the operator who are carried or are intended to be carried pursuant to paragraph (7)(a) of these Conditions or training or testing other persons employed by the operator who are carried or are intended to be carried pursuant to paragraph (7)(a) of these Conditions; or
- (f) proceeding to or from a place at which any experiment, inspection, repair, modification, maintenance, approval, test or weighing of, or the installation of equipment in the aircraft, demonstration, display or training is to take place for a purpose referred to in subparagraphs (a), (b), (c), (d) or (e) of this paragraph or at which the installation of furnishings in, or the painting of, the aircraft is to be undertaken.

(3) The flight is operated by a person approved by the Chief Executive for the purposes of these Conditions and subject to any additional conditions which may be specified in such an approval.

(4) If the aircraft is not registered in Hong Kong—

- (a) it is marked in a manner approved by the Chief Executive for the purposes of these Conditions; and
- (b) Articles 14, 15, 32, 35, 57 and 59 of this Order are complied with in relation to the aircraft as if it were registered in Hong Kong.

(5) If the aircraft is not registered in Hong Kong, it carries such flight crew as may be necessary to ensure the safety of the aircraft.

(6) No person acts as pilot in command of the aircraft except a person approved for the purposes of these Conditions by the Chief Executive.

(7) The aircraft does not carry any cargo or any persons other than the flight crew except the following—

- (a) persons employed by the operator who during the flight carry out duties or are tested or receive training in connection with a purpose set out in paragraph (2) of these Conditions;

- (b) persons acting on behalf of a manufacturer of a component part of the aircraft (including its engines) or of equipment installed in or carried in the aircraft who during the flight carry out duties in connection with a purpose of the flight (being a purpose set out in paragraph (2) of these Conditions) that is relevant to the component part or equipment;
- (c) persons approved by the Chief Executive under Article 101 of this Order as qualified to furnish reports for the purposes of Article 8(8) of this Order;
- (d) persons other than those carried under the preceding provisions of this paragraph who are carried in the aircraft in order to carry out a technical evaluation of the aircraft or its operation;
- (e) cargo which comprises equipment carried in connection with the purpose set out in paragraph (2)(f) of these Conditions; or
- (f) persons employed by the operator or a person acting on behalf of a manufacturer of a component part of the aircraft (including its engines) or of equipment installed in or carried in the aircraft in connection with the purpose set out in paragraph (2)(f) of these Conditions who carry out duties in connection with that purpose.

(8) The aircraft does not fly, except in accordance with procedures which have been approved by the Chief Executive in relation to that flight, over any congested area of a city, town or settlement.”.

72. Categories of Aircraft

Schedule 3 is amended by repealing “Article 3” at the beginning and substituting “Article 8(2)”.

73. Aerodrome Manual

Schedule 4 is amended—

- (a) in paragraph (xviii), by repealing “and” at the end;
- (b) in paragraph (xix), by repealing the full stop and substituting “; and”;
- (c) by adding—
 - “(xx) the system of managing safety in an organized and orderly approach at the aerodrome.”.

74. Aircraft Equipment

(1) Schedule 5 is amended by repealing “and 13(2)” at the beginning and substituting “, 13(2) and (8), 25(5) and 37(1), (3) and (4) and Schedule 11”.

(2) Paragraph 3(m) of Schedule 5 is amended by repealing “Y1 and Y2” and substituting “Y”.

(3) Paragraph 4 of Schedule 5 is amended by adding after the heading “TABLE”—

“For the purposes of this paragraph, “day” means the time from half an hour before sunrise until half an hour after sunset (both times exclusive), sunrise and sunset being determined at surface level.”.

(4) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(a), in the third column, by repealing “A(i) and (ii) and B(i)” and substituting “A(i), (ii) and (iii)(a) and B(i)”.

(5) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(a)(i), in the third column, by repealing “C and D” and substituting “C, E, F and G”.

(6) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(a), by adding—

“(iv) when flying under Visual Flight Rules (aa) outside controlled airspace. (bb) within controlled airspace.	E(iv), F(i) and (vi) and FF E with E(iv) duplicated and F H and J(iii) and (iv)
(v) on all flights which involve manoeuvres on water.	
(vi) in the case of a single-engined aeroplane, when flying over water beyond gliding distance from land.	H
(vii) when flying over water at a distance of more than 50 nautical miles away from land suitable for making an emergency landing.	H
(viii) when flying over water (aa) in the case of a single-engined aeroplane, when more than 100 nautical miles away from land suitable for making an emergency landing.	K(i)

- | | |
|---|------|
| (bb) in the case of a multi-engined aeroplane capable of continuing flight with one engine inoperative, when more than 200 nautical miles away from land suitable for making an emergency landing. | K(i) |
| (ix) when flying over land areas which have been designated by the State concerned as areas in which search and rescue would be especially difficult where, in the event of an emergency landing, tropical conditions are likely to be met. | U |
| (x) when flying over land areas which have been designated by the State concerned as areas in which search and rescue would be especially difficult where, in the event of an emergency landing, polar conditions are likely to be met. | V |
| (xi) when flying at a height of 10 000 ft or more above mean sea level. | L2”. |

(7) The Table in paragraph 4 of Schedule 5 is amended by repealing paragraph (2)(b)(iii) and substituting—

- “(iii) (aa) when flying over water at a distance of more than 50 nautical miles away from the shore, in the case of an aeroplane:
- (aaa) in the event of the critical power unit becoming inoperative at any point along the route or planned diversions from that point, it shall be able to continue the flight to an aerodrome at which landing can be made, without flying below the minimum flight altitude at any point; or

H

(bbb) having 3 or more power units, on any part of a route where the location of en-route alternate aerodrome and the total duration of the flight are such that the probability of a second power unit becoming inoperative must be allowed for if the general level of safety is to be maintained, it shall be able, in the event of any 2 power units becoming inoperative, to continue the flight to an en-route alternate aerodrome and land.	H
(bb) in the case of all other aeroplanes, when flying en-route over water beyond gliding distance from land.	H”.

(8) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2), in the second column, by repealing subparagraph (b)(v)(aa)(bbb) and substituting—

“(bbb) having no performance group classification in its certificate of airworthiness and of such a weight and performance that with any one of its power units inoperative and the remaining power unit or units operating within the maximum continuous power conditions specified in the certificate of airworthiness, performance schedule or flight manual relating to the aeroplane issued or rendered valid by the Chief Executive it is capable of a gradient of climb of at least 1 in 200 at an altitude of 5 000 ft in the International Standard Atmosphere specified in or ascertainable by reference to the certificate of airworthiness in force in respect of that aircraft, when either more than 400 nautical miles or more than 90 minutes flying time* from the nearest aerodrome at which an emergency landing can be made.”.

(9) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(b)(v)(bb), in the second column, by adding “either more than 100 nautical miles or” after “when”.

(10) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(b)(xi), in the third column, by repealing “Y2(i)” and substituting “Y(i)”.

(11) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(b)(xii), in the third column, by repealing “R2” and substituting “R”.

(12) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (2)(b), by adding—

“(xvi) when flying under Visual Flight Rules:	
(aa) outside controlled airspace.	E(iv), F(i) and (vi) and FF
(bb) within controlled airspace.	E with E(iv) duplicated and F
(xvii) when operated by a single pilot under the Instrument Flight Rules or at night.	ZZ”.

(13) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (6), in the first column, by repealing subparagraph (c) and substituting—

“(c) for which an individual certificate of airworthiness was first issued (whether in Hong Kong or elsewhere) on or after 1 June 1990 and which have a maximum total weight authorized exceeding 27 000 kg:

Provided that this paragraph shall not apply to aeroplanes falling within paragraph (6A).”.

(14) The Table in paragraph 4 of Schedule 5 is amended by adding—

“(6A) Aeroplanes in respect of which there is in force a certificate of airworthiness in the Transport Category (Passenger) or Transport Category (Cargo) and for which an individual certificate of airworthiness was first issued (whether in Hong Kong or elsewhere) on or after 1 January 2005 and which have a maximum total weight authorized exceeding 5 700 kg.	when flying on any flight.	S(viii)”.
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(15) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (7), in the first column, by repealing “27 000 kg.” and substituting—

“27 000 kg:

Provided that this paragraph shall not apply to aeroplanes falling within paragraph (7A).”.

(16) The Table in paragraph 4 of Schedule 5 is amended by adding—

<p>(7A) Aeroplanes in respect of which there is in force a certificate of airworthiness in the Aerial Work or Private Category and for which an individual certificate of airworthiness was first issued (whether in Hong Kong or elsewhere) on or after 1 January 2005 and which have a maximum total weight authorized exceeding 5 700 kg.</p>	<p>when flying on any flight.</p>	<p>S(viii)".</p>
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(17) The Table in paragraph 4 of Schedule 5 is amended by repealing paragraph (9) and substituting—

<p>(9) Aeroplanes powered by one or more turbine jets or one or more turbine propeller engines which have a maximum total weight authorized exceeding 5 700 kg or which in accordance with the certificate of airworthiness in force in respect of which may carry more than 9 passengers.</p>	<p>when flying on any flight.</p>	<p>X".</p>
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(18) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (12)(a), in the third column, by repealing "Y2(iv)" and substituting "Y(iv)".

(19) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (12)(b), in the third column, by repealing "Y2(iv)" and substituting "Y(iv)".

(20) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (12)(c), in the third column, by repealing "Y2(iv)" and substituting "Y(iv)".

(21) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a), in the third column, by repealing "A(i) and (ii) and B(i)" and substituting "A(i), (ii) and (iii)(a) and B(i)".

(22) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a)(i), in the third column, by repealing "D" and substituting "D, F(i) and (vi) and FF".

(23) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a)(ii)(aa), in the third column, by repealing "E with E(ii) duplicated" and substituting "E and F".

(24) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a)(ii)(bb), in the third column, by repealing "E with E(ii) and E(iv) duplicated" and substituting "E with E(iv) duplicated".

(25) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a)(iii)(bb)(aaa), in the third column, by repealing “C, E, with E(ii) duplicated, G(iii) and G(v)” and substituting “C, E, F and G(ii), (iii) and (v)”.

(26) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a)(iii)(bb)(bbb), in the third column, by repealing “C, E, with both E(ii) and E(iv) duplicated, F with F(iv) for all weights, G(iii) and G(v)” and substituting “C, E with E(iv) duplicated, F and G(ii), (iii) and (v)”.

(27) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(a), by adding—

“(iv) when flying over water	
(aa) in the case of a helicopter or gyroplane classified in its certificate of airworthiness as being of performance group A which is intended to fly a distance from land corresponding to more than 10 minutes at normal cruise speed.	H, K and KK
(bb) in the case of a helicopter or gyroplane classified in its certificate of airworthiness as being of performance group B when beyond autorotational or safe forced landing distance from land.	H, K and KK
(v) on all flights on which in the event of any emergency occurring during the take-off or during the landing at the intended destination or any likely alternate destination it is reasonably possible that the helicopter or gyroplane would be forced to land onto water.	H
(vi) when flying over land areas which have been designated by the State concerned as areas in which search and rescue would be especially difficult where, in the event of an emergency landing, tropical conditions are likely to be met.	U
(vii) when flying over land areas which have been designated by the State concerned as areas in which search and rescue would be especially difficult where, in the event of an emergency landing, polar conditions are likely to be met.	V

(viii) when flying at a height of 10 000 ft or more above mean sea level. | L2”.

(28) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(i)—

(a) in the third column, by repealing “D”;

(b) by adding—

“(aa) outside controlled airspace.

(bb) within controlled airspace.

D, F(i) and (vi)
and FF
E with E(iv)
duplicated and F”.

(29) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(ii), in the third column, by repealing “E with both E(ii) and E(iv) duplicated, F(ii), F(iii) and F(v)” and substituting “E with E(iv) duplicated and F”.

(30) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(iii)(bb), in the third column, by repealing “C, E with E(ii) duplicated and either E(iv) duplicated” and substituting “C, E with either E(iv) duplicated”.

(31) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(iv), in the third column, by repealing “C, E with both E(ii) and E(iv) duplicated” and substituting “C, E with E(iv) duplicated”.

(32) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(v)(cc), in the second column, by adding “or B” after “group A2”.

(33) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(v)(ee), in the second column—

(a) by repealing “on a flight” and substituting “or which actually flies beyond 10 minutes flying time from land on a flight which is either”;

(b) by repealing “commander” and substituting “pilot in command”.

(34) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (13)(b)(x), in the third column, by repealing “Y2(i)” and substituting “Y(i)”.

(35) The Table in paragraph 4 of Schedule 5 is amended by repealing paragraph (14)(c).

(36) The Table in paragraph 4 of Schedule 5 is amended, in paragraph (14), by adding—

“(e) which have a certificate of airworthiness issued in the Aerial Work or Private Category and which have a maximum total weight authorized exceeding 7 000 kg: Provided that this paragraph shall not apply to helicopters and gyroplanes falling within paragraph (15).	when flying on any flight.	SS(ii) or (iii)”.
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(37) The Table in paragraph 4 of Schedule 5 is amended by adding—

“(15) Helicopters and gyroplanes for which an individual certificate of airworthiness was first issued (whether in Hong Kong or elsewhere) after 1 January 2005 and which have a maximum total weight authorized exceeding 3 175 kg.	when flying on any flight.	SS(iv)”.
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(38) Paragraph (iii) of Scale A of paragraph 5 of Schedule 5 is repealed and the following substituted—

- “(iii) (a) An accessible first-aid kit.
(b) (aa) In the case of an aeroplane, accessible and adequate medical supplies as appropriate to the number of passengers the aeroplane is authorized to carry.
(bb) In the case of a helicopter or gyroplane, one or more first-aid kits as appropriate to the number of passengers the helicopter or gyroplane is authorized to carry.”.

(39) Paragraph (i)(b) of Scale B of paragraph 5 of Schedule 5 is amended by repealing “, in place of the safety belt with one diagonal should strap referred to under sub-paragraph (a)”.

(40) Paragraph (i)(e) of Scale B of paragraph 5 of Schedule 5 is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

(41) Paragraph (ii) of Scale B of paragraph 5 of Schedule 5 is amended by repealing “commander” and substituting “pilot in command”.

(42) Paragraph (ii) of Scale D of paragraph 5 of Schedule 5 is amended—

- (a) by adding “, with counter drum-pointer or equivalent presentation,” after “altimeter”;

(b) by repealing “commander” and substituting “pilot in command”.

(43) Paragraphs (ii) and (iii) of Scale E of paragraph 5 of Schedule 5 are repealed and the following substituted—

“(ii) (a) In the case of an aeroplane, an attitude indicator;

(b) In the case of a helicopter or gyroplane, an attitude indicator for each required pilot and one additional attitude indicator;

(iii) A heading indicator;”.

(44) Paragraph (iv) of Scale E of paragraph 5 of Schedule 5 is amended—

(a) by adding “, with counter drum-pointer or equivalent presentation,” after “altimeter”;

(b) by repealing “commander” and substituting “pilot in command”.

(45) The proviso to Scale E of paragraph 5 of Schedule 5 is amended—

(a) by repealing “gyroscopic bank and pitch indicator” and substituting “attitude indicator”;

(b) by adding “paragraph” before “(i) of this Scale”.

(46) Paragraph (iv) of Scale F of paragraph 5 of Schedule 5 is amended by repealing “If the maximum total weight authorized of the aircraft exceeds 5 700 kg a means of indicating” and substituting “A means of indicating in the flight crew compartment the”.

(47) Paragraph (v) of Scale F of paragraph 5 of Schedule 5 is repealed and the following substituted—

“(v) An airspeed indicating system with a means of preventing malfunction due to either condensation or icing; in the case of an aeroplane with speed limitations expressed in terms of Mach number, a Mach number indicator;”.

(48) Scale F of paragraph 5 of Schedule 5 is amended by adding—

“(vi) A magnetic compass.”.

(49) Paragraph 5 of Schedule 5 is amended by adding—

“*Scale FF*

An airspeed indicator.”.

(50) Paragraph (iii)(b)(bb)(aaa) of Scale G of paragraph 5 of Schedule 5 is amended by repealing “by readily accessible” and substituting “be readily accessible”.

(51) Paragraph (iii)(b)(bb)(bbb) of Scale G of paragraph 5 of Schedule 5 is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

(52) Paragraph (v)(a) of Scale G of paragraph 5 of Schedule 5 is amended by repealing everything after “group A,” and substituting “2 landing lights of which at least one is adjustable in flight so as to illuminate the ground in front of and below the helicopter or gyroplane and the ground on either side of the helicopter or gyroplane;”.

(53) Paragraph (v)(b) of Scale G of paragraph 5 of Schedule 5 is amended by repealing everything after “group B,” and substituting “2 landing lights.”.

(54) Scale J of paragraph 5 of Schedule 5 is amended—

(a) in paragraph (iii), by repealing the full stop and substituting a semicolon;

(b) by adding—

“(iv) Equipment for making the sound signals for preventing collisions at sea.”.

(55) Item (h) in paragraph (i) of Scale K of paragraph 5 of Schedule 5 is amended by repealing “sub-paragraph (i)” and substituting “item (i)”.

(56) The proviso to item (i) in paragraph (i) of Scale K of paragraph 5 of Schedule 5 is amended by repealing “sub-paragraph” and substituting “item”.

(57) Paragraph 5 of Schedule 5 is amended by adding—

“*Scale KK*

A permanent or rapidly deployable means of floatation so as to ensure a safe ditching of the helicopter or gyroplane.”.

(58) Paragraph (i) of Part I of Scale L1 of paragraph 5 of Schedule 5 is amended by repealing “millibars” and substituting “hectopascals”.

(59) Note A to Part II of Scale L1 of paragraph 5 of Schedule 5 is amended by repealing “millibars” and substituting “hectopascals”.

(60) Paragraph (ii)(b) of Part I of Scale L2 of paragraph 5 of Schedule 5 is amended by repealing “Cabin attendants” and substituting “Members of the cabin crew”.

(61) Paragraph (iii)(b) of Part I of Scale L2 of paragraph 5 of Schedule 5 is amended by repealing “Cabin attendants” and substituting “Members of the cabin crew”.

(62) Paragraph (ii)(b) of Part II of Scale L2 of paragraph 5 of Schedule 5 is amended by repealing “Cabin attendants” and substituting “Members of the cabin crew”.

(63) Paragraph (ii)(c) of Part II of Scale L2 of paragraph 5 of Schedule 5 is amended by repealing “Cabin attendants” and substituting “Members of the cabin crew”.

(64) Paragraph (iii)(b) of Part II of Scale L2 of paragraph 5 of Schedule 5 is amended by repealing “Cabin attendants” and substituting “Members of the cabin crew”.

(65) Note A to Part II of Scale L2 of paragraph 5 of Schedule 5 is amended—

- (a) by adding a comma after “occurs”;
- (b) by repealing “flight level 120 within 5 minutes” and substituting “flight level 130 within 4 minutes”.

(66) Paragraph (b) of the proviso to Scale O of paragraph 5 of Schedule 5 is amended by repealing “commander” where it twice appears and substituting “pilot in command”.

(67) Scale P of paragraph 5 of Schedule 5 is amended by adding “and retaining the data recorded during at least the last 25 hours of its operation” before “, by reference to a time-scale”.

(68) Scale R1 of paragraph 5 of Schedule 5 is repealed.

(69) Scale R2 of paragraph 5 of Schedule 5 is amended by renumbering it as Scale R.

(70) Paragraph (i)(a) of Scale R of paragraph 5 of Schedule 5 is amended by repealing “cabin attendant” and substituting “member of the cabin crew”.

(71) Paragraph (ii)(a) of Scale R of paragraph 5 of Schedule 5 is amended by repealing “cabin attendants” and substituting “members of the cabin crew”.

(72) Scale S of paragraph 5 of Schedule 5 is amended by repealing “A flight” and substituting—

“A flight data recorder required by this Scale shall be capable of retaining the data recorded during at least the last 25 hours of its operation. A cockpit voice recorder required by this Scale shall be capable of retaining the data recorded during at least the last 30 minutes of its operation. For a cockpit voice recorder installed in an aeroplane of a maximum total weight authorized exceeding 5 700 kg for which an individual certificate of airworthiness was first issued after 1 January 2003, it shall be capable of retaining the data recorded during at least the last 2 hours of its operation.

A flight”.

(73) Paragraph (i) of Scale S of paragraph 5 of Schedule 5 is amended by repealing “altitude” and substituting “attitude”.

(74) Paragraph (ii) of Scale S of paragraph 5 of Schedule 5 is amended by adding a colon after “in respect of the aeroplane”.

(75) Paragraph (iii) of Scale S of paragraph 5 of Schedule 5 is amended by repealing “the level or availability of essential AC electricity supply and”.

(76) Paragraph (v) of Scale S of paragraph 5 of Schedule 5 is amended by repealing “altitude” and substituting “attitude”.

(77) Paragraph (vi) of Scale S of paragraph 5 of Schedule 5 is amended—

- (a) by repealing “speed, altitude” and substituting “speed, attitude”;

- (b) by repealing “position of primary flying control and pitch trim surfaces” and substituting “position of primary flying controls and pitch trim position”;
- (c) by repealing everything after “cockpit warnings relating to” and substituting “ground proximity and the master warning system;”.

(78) Paragraph (vii) of Scale S of paragraph 5 of Schedule 5 is repealed.

(79) Scale S of paragraph 5 of Schedule 5 is amended by adding—

- “(viii) a cockpit voice recorder and a Type IA flight data recorder as described in paragraph 6.3.1.8 in Part I and paragraph 6.10.1.7 in Part II of Annex 6 to the Chicago Convention as amended by all amendments up to and including Amendment 31 to that Part I and all amendments up to and including Amendment 26 to that Part II.”.

(80) Scale SS of paragraph 5 of Schedule 5 is amended by adding immediately before paragraph (i)—

“For a cockpit voice recorder required by this Scale but installed in helicopters for which an individual certificate of airworthiness was first issued after 1 January 2003, it shall be capable of retaining the data recorded during at least the last 2 hours of its operation.”.

(81) Paragraph (i) of Scale SS of paragraph 5 of Schedule 5 is amended by repealing “8 hours” and substituting “10 hours”.

(82) Paragraph (i)(c) of Scale SS of paragraph 5 of Schedule 5 is amended by repealing “altitude” and substituting “attitude”.

(83) Paragraph (ii) of Scale SS of paragraph 5 of Schedule 5 is amended by repealing “8 hours” and substituting “10 hours”.

(84) Paragraph (iii)(b) of Scale SS of paragraph 5 of Schedule 5 is amended by repealing “8 hours” and substituting “10 hours”.

(85) Scale SS of paragraph 5 of Schedule 5 is amended by adding—

- “(iv) A cockpit voice recorder and a Type IVA flight data recorder as described in Attachment B to Part III of Annex 6 to the Chicago Convention as amended by all amendments up to and including Amendment 12 to that Part III with a recording duration of at least 10 hours.”.

(86) The proviso to Scale W of paragraph 5 of Schedule 5 is amended by repealing “commander” and substituting “pilot in command”.

(87) Scale X of paragraph 5 of Schedule 5 is repealed and the following substituted—

“Scale X

A ground proximity warning system which has a forward looking terrain avoidance function:

Provided that if the equipment becomes unserviceable, the aircraft may fly or continue to fly until it first lands at a place at which it is reasonably practicable for the equipment to be repaired or replaced.”.

(88) Scale Y1 of paragraph 5 of Schedule 5 is repealed.

(89) Scale Y2 of paragraph 5 of Schedule 5 is amended by renumbering it as Scale Y.

(90) Paragraph (iv)(b) of Scale Y of paragraph 5 of Schedule 5 is amended by repealing “the cabin attendants” and substituting “members of the cabin crew”.

(91) Paragraph 5 of Schedule 5 is amended by adding—

“Scale ZZ

- (i) A serviceable autopilot that has at least altitude hold and heading select modes;
- (ii) A headset with a boom microphone or equivalent; and
- (iii) Means of displaying charts that enables them to be readable in all ambient light conditions.”.

75. Radio and Radio Navigation Equipment to be carried in Aircraft

(1) Schedule 6 is amended by repealing “Article 14” at the beginning and substituting “Articles 14 and 37A”.

(2) The Table in paragraph 2 of Schedule 6 is amended, in the second column, by repealing “A B C D E F G H” and substituting “A B C D E F G H J”.

(3) The Table in paragraph 2 of Schedule 6 is amended, in paragraph (1)(a), in the second column, by repealing “A” and substituting “A*”.

(4) The Table in paragraph 2 of Schedule 6 is amended, in paragraph (1)—

(a) in subparagraph (c), by repealing the full stop;

(b) by adding—

“(d) when flying for the purpose of public transport

E*”.

(5) The Table in paragraph 2 of Schedule 6 is amended, in paragraph (3), by adding—

“(e) when flying for the purpose of public transport E”.

(6) The Table in paragraph 2 of Schedule 6 is amended by adding—

“(4) All—

(a) turbine-engined aeroplanes registered in Hong Kong, wherever they may be; and

(b) turbine-engined aeroplanes wherever registered when flying in Hong Kong, when flying for the purpose of public transport, which have a maximum total weight authorized exceeding 5 700 kg or which in accordance with the certificate of airworthiness in force in respect of the aeroplanes may carry more than 19 passengers.

J

(5) All—

(a) turbine-engined aeroplanes registered in Hong Kong, wherever they may be; and

(b) turbine-engined aeroplanes wherever registered when flying in Hong Kong, when flying for a purpose other than public transport, which have a maximum total weight authorized exceeding 15 000 kg or which in accordance with the certificate of airworthiness in force in respect of the aeroplanes may carry more than 30 passengers.

J”.

(7) Paragraph 3 of Schedule 6 is amended, in Scale E, by adding after “equipment”—

“which includes a pressure altitude reporting transponder capable of operating in Mode A and Mode C and is capable of being operated in accordance with such instructions as may be given to the aircraft by the air traffic control unit”.

(8) Paragraph 3 of Schedule 6 is amended by adding—

“Scale J

An airborne collision avoidance system.”.

(9) Paragraph 4 of Schedule 6 is amended—

(a) in subparagraph (3), by repealing “and” at the end;

(b) in subparagraph (4), by repealing the full stop and substituting a semicolon;

- (c) by adding—
- “(5) “airborne collision avoidance system” means an aeroplane system which—
- (a) is designed to provide advice and appropriate avoidance manoeuvres to the pilot in relation to other aeroplanes which are equipped with secondary surveillance radar transponders and are in undue proximity;
 - (b) is based on secondary surveillance radar transponder signals;
 - (c) operates independently of ground based equipment; and
 - (d) conforms to requirements specified for the purpose;
- (6) “Mode A” means replying to an interrogation from secondary surveillance radar units on the surface to elicit transponder replies for identity and surveillance with identity provided in the form of a 4 digit identity code; and
- (7) “Mode C” means replying to an interrogation from secondary surveillance radar units on the surface to elicit transponder replies for automatic pressure-altitude transmission and surveillance.”.

76. Areas Specified in connection with the Carriage of Flight Navigators as members of the Flight Crews or Approved Navigational Equipment on Public Transport Aircraft

(1) The heading of Schedule 8 is amended by repealing “FLIGHT NAVIGATORS AS MEMBERS OF THE FLIGHT CREWS OR”.

(2) Schedule 8 is amended by repealing “Article 18(4)” at the beginning and substituting “Articles 18(4) and 98(7) and Schedule 5”.

77. Flight Crew of Aircraft, Licences and Ratings

(1) Paragraph 1 of Part A of Schedule 9 is amended, under the heading “Private Pilot’s Licence (Aeroplanes)”, in the proviso—

- (a) in subparagraph (c)(i), by repealing everything after “airspace” and substituting “when the flight visibility is less than 3 kilometres;”;
- (b) in subparagraph (c)(ii), by repealing “5 nautical miles” and substituting “10 kilometres”;

- (c) in subparagraph (c)(iii), by repealing “and” at the end;
- (d) in subparagraph (d)(ii), by repealing the full stop and substituting “; and”;
- (e) by adding—
 - “(e) he shall not, unless his licence includes an instrument rating (aeroplanes), fly as pilot in command or co-pilot of such an aeroplane flying in controlled airspace notified for the purposes of this Schedule in circumstances which require compliance with the Instrument Flight Rules.”.

(2) Paragraph 1 of Part A of Schedule 9 is amended, under the heading “**Commercial Pilot’s Licence (Aeroplanes)**”—

- (a) in paragraph (1)(a), by repealing “1½ nautical miles” and substituting “3 kilometres”;
- (b) in paragraph (1)(b), by repealing “1 nautical mile” and substituting “1 800 metres”;
- (c) by repealing paragraph (e) of the proviso to paragraph (2);
- (d) in the proviso to paragraph (2), by adding—
 - “(f) he shall not, unless his licence includes an instrument rating (aeroplanes), fly as pilot in command or co-pilot of such an aeroplane flying in controlled airspace notified for the purpose of this Schedule in circumstances which require compliance with the Instrument Flight Rules.”;
- (e) in paragraph (3), by repealing everything after “for any purpose whatsoever” and substituting a full stop;
- (f) by repealing paragraph (4);
- (g) by adding—
 - “(5) Subject to paragraph (6), he shall be entitled to fly as pilot in command of an aeroplane of a type specified in any flying instructor’s rating or assistant flying instructor’s rating included in the licence on a flight for the purpose of aerial work which consists of—
 - (a) the giving of instruction in flying; or
 - (b) the conducting of flying tests for the purposes of this Order,

in either case in an aeroplane owned, or operated under arrangements entered into, by a flying club of which the person giving the instruction or conducting the test and the person receiving the instruction or undergoing the test are both members.

(6) He shall not be entitled to exercise the privileges contained in paragraph (5) other than in an aeroplane which he is entitled to fly as pilot in command on a private flight, an aerial work flight or a public transport flight pursuant to the privileges set out in paragraph (1) or (2) of these privileges.

(7) He shall not at any time after he attains the age of 60 years fly as pilot in command or co-pilot of any aeroplane on any flight for the purpose of public transport unless the aeroplane is fitted with dual controls and carries a second pilot who has not attained the age of 60 years and who holds an appropriate licence under this Order entitling him to act as pilot in command or co-pilot of that aeroplane.

(8) He shall not at any time after he attains the age of 65 years act as pilot in command or co-pilot of any aeroplane on a flight for the purpose of public transport.”.

(3) Paragraph 1 of Part A of Schedule 9 is amended by adding immediately before the heading “**Airline Transport Pilot’s Licence (Aeroplanes)**”—

“**Multi-Crew Pilot’s Licence (Aeroplanes)**

Minimum Age—18 years

Maximum Period of Validity—10 years

Privileges:

(1) The holder of the licence shall be entitled to fly as co-pilot of any aeroplane of a type specified in the aircraft rating included in the licence when the aeroplane is required to be operated with more than one pilot and is engaged on a flight for any purpose whatsoever:

Provided that—

- (a) he shall not, unless his licence includes an instrument rating (aeroplanes), fly such an aeroplane on any scheduled journey;
- (b) he shall not fly such an aeroplane on any flight for the purpose of public transport after he attains the age of 60 years unless the aeroplane is fitted with dual controls and carries a second pilot who has not attained the age of 60 years and who holds an appropriate licence under this Order entitling him to act as pilot in command of that aeroplane;
- (c) he shall not at any time after he attains the age of 65 years fly such an aeroplane on any flight for the purposes of public transport.

(2) He shall be entitled to exercise the privileges of a Private Pilot's Licence (Aeroplanes) in an aeroplane of any of the groups or types specified in his licence provided that the requirements for the issue of a Private Pilot's Licence (Aeroplanes) are met and that his licence carries an appropriate endorsement which enables him to do so.

(3) He shall be entitled to exercise the privileges of his instrument rating (aeroplanes) in a single pilot operation provided that he has demonstrated to the Chief Executive the ability to act as pilot in command in a single pilot operation exercised solely by reference to instruments and that his licence carries an appropriate endorsement which enables him to do so.”.

(4) Paragraph 1 of Part A of Schedule 9 is amended, under the heading “**Airline Transport Pilot's Licence (Aeroplanes)**”, by repealing everything after “shall not apply” and substituting a full stop.

(5) Paragraph 2 of Part A of Schedule 9 is amended, under the heading “**Private Pilot's Licence (Helicopters and Gyroplanes)**”, in paragraph (e) of the proviso, by repealing everything after “flying in” and substituting “controlled airspace notified for the purposes of this Schedule in circumstances which require compliance with the Instrument Flight Rules.”.

(6) Paragraph 2 of Part A of Schedule 9 is amended, under the heading “**Commercial Pilot's Licence (Helicopters and Gyroplanes)**”—

(a) by repealing paragraph (e) of the proviso to paragraph (2);

(b) in paragraph (f) of the proviso to paragraph (2), by repealing everything after “flying in” and substituting “controlled airspace notified for the purposes of this Schedule in circumstances which require compliance with the Instrument Flight Rules.”;

(c) in paragraph (3), by repealing everything after “for any purpose whatsoever” and substituting a full stop;

(d) by adding—

“(3A) He shall not at any time after he attains the age of 60 years fly as pilot in command or co-pilot of any helicopter or gyroplane on any flight for the purposes of public transport unless the helicopter or gyroplane is fitted with dual controls and carries a second pilot who has not attained the age of 60 years and who holds an appropriate licence under this Order entitling him to act as pilot in command or co-pilot of that helicopter or gyroplane.”.

(7) Paragraph 2 of Part A of Schedule 9 is amended, under the heading “**Airline Transport Pilot's Licence (Helicopters and Gyroplanes)**”, by repealing everything after “shall not apply” and substituting a full stop.

(8) Paragraph 3 of Part A of Schedule 9 is amended, under the heading “**Commercial Pilot’s Licence (Balloons)**”, by repealing “6 months*” and substituting “10 years*”.

(9) Paragraph 3 of Part A of Schedule 9 is amended, under the heading “**Commercial Pilot’s Licence (Airships)**”, by repealing “17 years” and substituting “18 years”.

(10) Paragraph 5 of Part A of Schedule 9 is amended by repealing—
“**Flight Navigator’s Licence**
Minimum Age—21 years
Maximum Period of Validity—10 years

Privileges: The holder of the licence shall be entitled to act as flight navigator in any aircraft.”.

(11) Paragraph 5 of Part A of Schedule 9 is amended by repealing—
“**Flight Radiotelephony Operator’s General Licence**
Minimum Age—18 years
Maximum Period of Validity—10 years

Privileges: The holder of the licence shall be entitled to operate radiotelephony apparatus in any aircraft.”.

(12) Paragraph 5 of Part A of Schedule 9 is amended by repealing—
“**Flight Radiotelephony Operator’s Licence**
Minimum Age—20 years
Maximum Period of Validity—12 months

Privileges: The holder of the licence shall be entitled to operate radiotelegraphy and radiotelephony apparatus in any aircraft.”.

(13) Paragraph 5 of Part A of Schedule 9 is amended by repealing—
“**Flight Radiotelegraphy Operator’s Temporary Licence**
Minimum Age—18 years
Maximum Period of Validity—12 months

Privileges: The holder of the licence shall be entitled to operate radiotelegraphy and radiotelephony apparatus in any aircraft under the supervision of a person who is the holder of a flight radiotelegraphy operator’s licence.”.

(14) Paragraph 1 of Part B of Schedule 9 is amended by repealing “airspace” where it twice appears and substituting “controlled airspace”.

(15) The Table in paragraph 1(a) of Part C of Schedule 9 is amended—
(a) in Case B, in the second column, by adding at the end—
“Multi-Crew Pilot’s Licence (Aeroplanes)”;

- (b) in Case C, in the second column, by adding at the end—
“Multi-Crew Pilot’s Licence (Aeroplanes)”;
- (c) in Case D, in the second column, by adding at the end—
“Multi-Crew Pilot’s Licence (Aeroplanes)”;
- (d) in Case E, in the second column, by adding at the end—
“Multi-Crew Pilot’s Licence (Aeroplanes)”;
- (e) by repealing Case F.

(16) Paragraph 4(b) of Part C of Schedule 9 is amended by adding “, an instrument rating (helicopters)” after “(aeroplanes)”.

(17) Paragraph 5(c) of Part C of Schedule 9 is repealed.

(18) Paragraph 6 of Part C of Schedule 9 is amended by repealing “, F”.

78. Air Traffic Controllers: Ratings

(1) Schedule 10 is amended by repealing “Article 66(2)” at the beginning and substituting “Articles 65 and 66”.

(2) Paragraph (a) of the proviso to paragraph 1 of Schedule 10 is amended by repealing “approach control rating” and substituting “approach control procedural rating”.

(3) Paragraphs (b) and (c) of the proviso to paragraph 1 of Schedule 10 are repealed and the following substituted—

- “(b) The approach control procedural rating and the approach control surveillance rating;
- (c) The area control procedural rating and the area control surveillance rating;
- (d) The approach control procedural rating and the approach control surveillance rating and the area control surveillance rating in accordance with the procedures as stated in the relevant air traffic control instructions and the Manual of Air Traffic Control for aircraft operating within the Hong Kong Control Zone or the Terminal Control Area, as notified.”.

(4) Paragraph 2(1) of Schedule 10 is amended—

- (a) by repealing “radar equipment” and substituting “air traffic service surveillance system”;
- (b) by repealing “radar control rating” and substituting “surveillance control rating”.

(5) Paragraph 2(2) of Schedule 10 is amended—

- (a) by repealing “Approach Control Rating” and substituting “Approach Control Procedural Rating”;

- (b) by repealing “radar equipment” and substituting “air traffic service surveillance system”;
 - (c) by repealing “radar control rating” and substituting “surveillance control rating”;
 - (d) by repealing “in the vicinity of the aerodrome traffic zone” and substituting “within the Hong Kong Control Zone or the Terminal Control Area, as notified”.
- (6) Paragraph 2(3) of Schedule 10 is amended—
- (a) by repealing “Approach Radar Control Rating” and substituting “Approach Control Surveillance Rating”;
 - (b) by repealing “surveillance radar equipment” and substituting “air traffic service surveillance system”;
 - (c) by repealing “40 nautical miles of the aerodrome traffic zone” and substituting “the Hong Kong Control Zone or the Terminal Control Area, as notified”.
- (7) Paragraph 2(5) and (6) of Schedule 10 is repealed and the following substituted—
- “(5) Area Control Procedural Rating shall entitle the holder of the licence to provide air traffic control service without the aid of any air traffic service surveillance system to aircraft flying in the control areas within the Hong Kong Flight Information Region, as notified in the Aeronautical Information Publication (AIP) for which the rating is valid.
- (6) Area Control Surveillance Rating shall entitle the holder of the licence to provide air traffic control service with the aid of any type of air traffic service surveillance system for which the rating is valid to aircraft flying in the control areas within the Hong Kong Flight Information Region, as notified in the Aeronautical Information Publication (AIP) for which the rating is valid.”.
- (8) Paragraph 2(7) of Schedule 10 is repealed.
- (9) Schedule 10 is amended by adding—
- “3. In this Schedule—
- “Hong Kong Flight Information Region” means an airspace of defined dimensions within which air traffic control service, flight information service and alerting service are provided as notified;
- “Terminal Control Area” means a control area normally established at the intersection of air traffic service routes in the vicinity of one or more major aerodromes.”.

79. Public Transport—Operational Requirements

- (1) Schedule 11 is amended by repealing—
“SCHEDULE 11”

and substituting—

“SCHEDULE 11

Articles 20, 25, 26 and 27
and Schedule 5”.

(2) Paragraph (xvi) of Part A of Schedule 11 is amended by repealing “an aircraft and the responsibilities of members of the crew in respect of the carriage of dangerous goods:” and substituting “or suspended beneath an aircraft, the responsibilities of members of the crew in respect of the carriage of dangerous goods and the action to be taken in the event of emergencies arising involving dangerous goods;”.

- (3) Part A of Schedule 11 is amended by adding—

“(xvii) such terms of any permission granted to the operator of the aircraft under Article 14A of this Order as may be necessary to enable the pilot in command of the aircraft to determine whether he can comply with Article 32(b)(ii) of this Order;

(xviii) procedures for the operation of any airborne collision avoidance system carried on the aircraft;

(xix) the establishment and maintenance of an accident prevention and flight safety programme:”.

(4) Paragraph 1(2)(c)(ii) of Part B of Schedule 11 is amended by repealing “flight.” and substituting “flight, or in a simulator of the type approved for the purpose by the Chief Executive subject to such conditions as are required by the Chief Executive.”.

- (5) Paragraph 1(2) of Part B of Schedule 11 is amended by adding—

“(d) In the case of a helicopter, every pilot included in the flight crew whose licence does not include an instrument rating but who is intended to fly at night under visual flight conditions shall within the relevant period have been tested, by or on behalf of the operator, in a helicopter of the type to be used on the flight—

(i) as to his competence to act as pilot of such a helicopter, while executing normal manoeuvres and procedures; and

(ii) as to his proficiency to act as pilot of such a helicopter, while executing specified manoeuvres and procedures in flight in instrument flight conditions by means approved by the Chief Executive.”.

- (6) Paragraph 1(4) of Part B of Schedule 11 is repealed.

(7) Paragraph 1(6) of Part B of Schedule 11 is amended, in the definition of “relevant period”—

(a) in paragraph (b), by adding “, (2)(d)(ii)” after “(2)(c)(i)”;

- (b) in paragraph (c), by repealing “(3)(a), (4)” and substituting “(2)(d)(i), (3)(a)”;
 - (c) in paragraph (i) of the proviso, by repealing “or (2)(c)(i)” and substituting “, (2)(c)(i) or (2)(d)(ii)”;
 - (d) in paragraph (ii) of the proviso, by repealing the full stop and substituting a semicolon.
- (8) Paragraph 1(6) of Part B of Schedule 11 is amended by adding—
““visual flight conditions” means weather conditions such that the pilot is able to fly by visual reference to objects outside the aircraft.”.

80. Documents to be Carried by Aircraft Registered in Hong Kong

(1) Schedule 12 is amended by repealing everything from “On a flight for the purpose of public transport:” to “A, B, C and G.” and substituting—

“On a flight for the purpose of public transport:

Documents A, B, C, D, E, F, H and, if the flight is external air navigation, Documents G, I and K.

On a flight for the purpose of aerial work:

Documents A, B, C, E, F and, if the flight is external air navigation, Documents G, I and K.

On a private flight, being external air navigation:

Documents A, B, C, G and I.

On a flight made in accordance with the terms of a permission granted to the operator of the aircraft under Article 14A of this Order:

Document J.”.

(2) Schedule 12 is amended by repealing the definition of “H” and substituting—

““H” means those parts of the operations manual, if any, required by Article 25(2)(a)(iii) of this Order to be carried on the flight;”.

(3) Schedule 12 is amended by adding—

““I” means a copy of the notified procedures to be followed by the pilot in command of an intercepted aircraft, and the notified visual signals for use by intercepting and intercepted aircraft;

“J” means the permission, if any, granted in respect of the relevant aircraft under Article 14A of this Order;

“K” means a certified true copy of the air operator’s certificate (or its equivalent document) in force in respect of the operator together with a copy of the authorizations, conditions and limitations relevant to the type of the aircraft and issued in conjunction with the air operator’s certificate (or its equivalent document).”.

81. Schedule 13 amended

(1) Part A of Schedule 13 is amended—

- (a) by repealing—
“19 Requirement for appropriate licence”
and substituting—
“19 Flight crew—requirement of licences”;
- (b) by repealing—
“32 Pre-flight action by commander of aircraft”
and substituting—
“32 Pre-flight action by pilot in command of aircraft”;
- (c) by repealing—
“34 Duties of commander on flight for public transport of passengers”
and substituting—
“34 Duties of pilot in command on flight for public transport of passengers”;
- (d) by repealing—
“51 Requirement to obey lawful commands of aircraft commander”
and substituting—
“51 Requirement to obey lawful commands of pilot in command of aircraft”;
- (e) by repealing—
“66 (except (4)) Requirement for licensing of air traffic controllers and aerodrome flight information service officers”
and substituting—
“66 Requirement for licensing of air traffic controllers”;
- (f) by repealing—
“67 Requirement for aerodrome information service manual”
and substituting—
“67 Manual of Air Traffic Control”.

- (2) Part A of Schedule 13 is amended by adding—
- | | |
|----------------|--|
| “12(7) and (8) | Exercise of privilege of aircraft maintenance licence whilst unfit |
| 14A | Minimum equipment requirements |
| 36A | Requirement for area navigation and required navigation performance capabilities—aircraft registered in Hong Kong |
| 36B | Requirement for area navigation and required navigation performance capabilities—aircraft registered outside Hong Kong |
| 36C | Requirement for maintaining height keeping performance capabilities—aircraft registered in Hong Kong |
| 36D | Requirement for maintaining height keeping performance capabilities—aircraft registered outside Hong Kong |
| 37A | Requirement for use of airborne collision avoidance system”. |
- (3) Part B of Schedule 13 is amended—
- (a) by repealing—
- | | |
|-----|---|
| “49 | Prohibition of drunkenness in aircraft” |
|-----|---|
- and substituting—
- | | |
|-----|--|
| “49 | Passengers and crew members not to be under influence of psychoactive substances”; |
|-----|--|
- (b) by repealing—
- | | |
|-----|---|
| “85 | Operator’s or commanders’ obligations in respect of flights over any place outside Hong Kong” |
|-----|---|
- and substituting—
- | | |
|-----|---|
| “85 | Operator’s or pilot in command’s obligations in respect of flights over any place outside Hong Kong”. |
|-----|---|

82. Rules of the Air

- (1) Schedule 14 is amended by repealing “Article 64” at the beginning and substituting “Articles 64 and 98(1)”.
- (2) Rule 1 of Schedule 14 is amended by adding—
- ““Day” means the time from half an hour before sunrise until half an hour after sunset (both times exclusive), sunrise and sunset being determined at surface level.”.

(3) Rule 5(3) of Schedule 14 is amended by repealing “saving life.” and substituting “fire fighting or prevention, life-saving or law enforcement operations and including the training of personnel engaged in such activities.”.

(4) Rule 5 of Schedule 14 is amended—

(a) by repealing—

“*Simulated instrument flight*”

and substituting—

“6. **Simulated instrument flight**”;

(b) by repealing—

“(6) An aircraft shall not”

and substituting—

“(1) An aircraft shall not”;

(c) by repealing—

“For the purposes of this Rule”

and substituting—

“(2) For the purposes of this Rule,”;

(d) by repealing—

“*Practice Instrument Approaches*”

and substituting—

“7. **Practice instrument approaches**”;

(e) by repealing—

“(7) Within Hong Kong”

and substituting—

“Within Hong Kong”.

(5) Rule 11(2)(a)(i) of Schedule 14 is amended by repealing “100 degrees” and substituting “110 degrees”.

(6) Rule 11(2)(a)(ii) of Schedule 14 is amended by repealing “100 degrees” and substituting “110 degrees”.

(7) Rule 20(2) of Schedule 14 is amended by repealing “aerodrome flight information service unit” and substituting “flight information service unit”.

(8) Rule 20(3) of Schedule 14 is amended by repealing everything from “more than” to “5 700 kg” and substituting “outside Hong Kong, the pilot in command of an aircraft”.

(9) Rule 22A of Schedule 14 is repealed.

(10) Rule 23 of Schedule 14 is amended—

(a) by renumbering it as Rule 23(1);

- (b) in paragraph (1), by repealing everything after “surface.”;
- (c) by adding—
- “(2) For the purposes of this Rule, “Special VFR flight” means a flight—
- (a) made in a control zone in any notified airspace in meteorological condition below Visual Meteorological Conditions or at night;
- (b) in respect of which the appropriate air traffic control unit has given permission for the flight to be made in accordance with special instructions given by that unit instead of in accordance with the Instrument Flight Rules; and
- (c) in the course of which the aircraft complies with any instructions given by that unit and remains clear of cloud and in sight of the surface.”.

(11) The heading of Table I in Rule 26 of Schedule 14 is amended by repealing “24 500 feet” and substituting “9 000 feet”.

(12) Table II in Rule 26 of Schedule 14 is repealed and the following substituted—

“TABLE II—Flights at or above Flight Level (FL) 110

Magnetic Track	Cruising Level
Less than 180 degrees	FL 110
	FL 130
	FL 150
	FL 170
	FL 190
	FL 210
	FL 230
	FL 250
	FL 270
	FL 290
	FL 310
	FL 330
	FL 350
	FL 370
	FL 390

Magnetic Track	Cruising Level
180 degrees but less than 360 degrees	FL 120
	FL 140
	FL 160
	FL 180
	FL 200
	FL 220
	FL 240
	FL 260
	FL 280
	FL 300
	FL 320
	FL 340
	FL 360
	FL 380
	FL 400

(13) The heading of Rule 34 of Schedule 14 is amended by repealing “**two**” and substituting “**tow**”.

(14) Rule 34(2)(b) of Schedule 14 is amended by repealing “appropriate” and substituting “appropriate”.

(15) The Table in Rule 35(1) of Schedule 14 is amended by repealing “aerodrome flight information unit” where it twice appears and substituting “flight information service unit”.

(16) Rule 35(2) of Schedule 14 is amended—

(a) by repealing “commander” and substituting “pilot in command”;

(b) by repealing “aerodrome flight information unit” where it twice appears and substituting “flight information service unit”.

(17) Rule 35(3)(b) of Schedule 14 is amended by repealing “aerodrome flight information unit” and substituting “flight information service unit”.

(18) Section VIII of Schedule 14 is repealed.

83. Air Navigation (General) Regulations

(1) Schedule 15 is amended by repealing “Article 9(3)(a)(iii), 11(3) and (6)(a)(iii), 14, 27(1)(c), 28(4), 29(1), 36, 78 and 86(1)” at the beginning and substituting “Articles 11(3), 14(1)(b), 27(1)(c), 28(4), 29(1), 36, 36C(1), 78, 86(1) and 97”.

(2) Regulation 1(2)(b) of Schedule 15 is repealed and the following substituted—

“(b) Where any immersion suit is worn or carried by a passenger or crew member, 3 kg shall be added to the appropriate weight shown in Table 1 in each case.”.

(3) Regulation 1(3)(a) of Schedule 15 is amended by repealing “the total weight of the aircraft the respective total weights of the baggage and cargo” and substituting “the total weight of a passenger aircraft, the respective total weights of the hold baggage and cargo”.

(4) Column 1 of Table 2 of Regulation 1 of Schedule 15 is amended by repealing “3 kg” and substituting “5 kg”.

(5) Regulation 1(3) of Schedule 15 is amended by repealing—

“(a) If Table 2”

and substituting—

“(b) If Table 2”.

(6) Regulation 1 of Schedule 15 is amended by adding—

“(3A) For the purpose of calculating the total weight of a freight aircraft, the respective total weights of the baggage and cargo entered in the load sheet shall be computed from the actual weight of each piece of baggage, cargo or cargo container and for that purpose each piece or container shall be separately weighed;

Provided that—

(a) any horses carried as cargo may, subject to paragraph (4) of this Regulation, be calculated at not less than the weights shown in Table 3 and the load sheet shall bear a notation to that effect—

Table 3

For the purposes of this Table, a hand equals 4 inches.

Foal	200 kg
Yearlings	400 kg
Mares & Stallions (2 years old or over)	500 kg
Ponies (not more than 15 hands high)	400 kg
Ponies (more than 15 hands high)	500 kg

(b) the total weights of any baggage carried may, subject to paragraph (4) of this Regulation, be calculated at not less than the weights shown in Table 4 and the load sheet shall bear a notation to that effect—

Table 4

Baggage per crew member	16 kg
Baggage per passenger	16 kg”.

(7) The heading of Regulation 4 of Schedule 15 is amended by adding “**or Performance Group B**” after “**Performance Group A**”.

(8) Regulation 4 of Schedule 15 is amended by adding “or performance group B” after “performance group A”.

(9) Regulation 4(1) of Schedule 15 is amended by repealing “for altitude and temperature”.

(10) Regulation 4(3)(a) of Schedule 15 is amended by adding “before reaching 1 500 feet” after “more than 15°”.

(11) Regulation 4(7)(b)(v)(bb) of Schedule 15 is amended by adding “or not less than 150 per cent of the forecast wind component in the direction of landing” after “of landing”.

(12) Regulation 5(3)(a) of Schedule 15 is amended by repealing “reading 1 500 feet” and substituting “reaching 1 500 feet”.

(13) Regulation 5(4)(a) of Schedule 15 is amended by adding “before reaching 1 500 feet” after “more than 15°”.

(14) Regulation 5(8) of Schedule 15 is amended by repealing “with all power units operating and with one power unit inoperative” and substituting “with all power units operating or with one power unit inoperative”.

(15) Regulation 6(2)(e) of Schedule 15 is repealed and the following substituted—

“(e) not more than 50 per cent of the reported wind component opposite to the direction of take-off or not less than 150 per cent of the reported wind component in the direction of take-off,

do not exceed the take-off run available and the emergency distance available respectively, at the aerodrome at which the take-off is to be made.”.

(16) Regulation 7(1)(c) of Schedule 15 is amended—

(a) by adding “, at any time after it reaches a height of 1 000 feet above the aerodrome from which take-off is to be made,” after “The aeroplane”;

(b) by repealing “meterological” and substituting “meteorological”;

(c) by adding “relating to the aeroplane” after “operations manual”.

(17) Regulation 7(1) of Schedule 15 is amended by adding—

- “(e) The landing distance required does not, at the aerodrome at which it is intended to land and at any alternate aerodrome, exceed 70 per cent of the landing distance available on the most suitable runway for a landing in still air conditions, and for the purposes of this paragraph the distance required to land from a height of 50 feet shall be taken to be that specified as being appropriate to—
- (i) the landing weight;
 - (ii) the altitude at the aerodrome; and
 - (iii) the temperature in the specified international standard atmosphere appropriate to the altitude at the aerodrome.”.

(18) Regulation 8(2)(i)(a) of Schedule 15 is amended by adding “relating to the aeroplane” after “operations manual”.

(19) Regulation 14(2)(a) of Schedule 15 is amended by repealing “aerodrome flight information service” and substituting “flight information service unit”.

(20) Regulation 14(2)(c) of Schedule 15 is amended—

- (a) in sub-subparagraph (iv), by repealing “radar equipment.” and substituting “air traffic service surveillance system;”;
- (b) by adding—
 - “(v) global positioning system.”.

(21) Regulation 14(3) of Schedule 15 is amended by adding “relating to the aeroplane” after “are included in the operations manual”.

(22) Regulation 15(1) and (2) of Schedule 15 is repealed and the following substituted—

- “(a) replacement of landing gear tyres, landing skids or skid shoes;
- (b) replacement of elastic shock absorber cord units on landing gear where special tools are not required;
- (c) replacement of defective safety wiring or split pins excluding those in engine, transmission, flight control and rotor systems;
- (d) patch-repairs to fabric not requiring rib stitching or the removal of structural parts or control surfaces, if the repairs do not cover up structural damage and do not include repairs to rotor blades;
- (e) repairs to upholstery and decorative furnishing of the cabin or cockpit interior when repair does not require dismantling of any structure or operating system or interfere with an operating system or affect the structure of the aircraft;
- (f) repairs, not requiring welding, to fairings, non-structural cover plates and cowlings;

- (g) replacement of side windows where that work does not interfere with the structure or with any operating system;
- (h) replacement of safety belts or safety harnesses;
- (i) replacement of seats or seat parts not involving dismantling of any structure or of any operating system;
- (j) replacement of bulbs, reflectors, glasses, lenses or lights;
- (k) replacement of any cowling not requiring removal of the propeller, rotors or disconnection of engine or flight controls;
- (l) replacement of unserviceable sparking plugs;
- (m) replacement of batteries;
- (n) replacement of wings and tail surfaces and controls, the attachments of which are designed to provide for assembly immediately before each flight and dismantling after each flight;
- (o) replacement of main rotor blades that are designed for removal where special tools are not required;
- (p) replacement of generator and fan belts designed for removal where special tools are not required;
- (q) replacement of VHF communication equipment, being equipment which is not combined with navigation equipment.”.

(23) Regulation 16(4)(g) of Schedule 15 is amended by repealing “equipment” and substituting “equipment”.

(24) The heading of Regulation 17 of Schedule 15 is amended by adding “**and Height Keeping Performance**” after “**Navigation Performance**”.

(25) Regulation 17 of Schedule 15 is amended by adding—

“(1A) For the purposes of this Regulation, “flight time” means the total time from the moment an aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight.

(1B) With reference to Article 36C of this Order the following height keeping performance capability is prescribed, that is to say, a capability to ensure that—

- (a) altimetry system error shall be in compliance with paragraph 2.1.1(2) of the Regional Supplementary Procedures (Document 7030/4)-NAT Part 1 Rules of the Air, Air Traffic Services and Search and Rescue (ICAO Regional Procedures, Fourth Edition-1987);
- (b) in respect of aircraft first registered in a Contracting State on or after 1 January 1997, altitude can be automatically controlled within a tolerance band of +/- 65 feet; and

(c) in respect of aircraft first registered in a Contracting State before 1 January 1997, altitude can be automatically controlled within a tolerance band of +/- 130 feet.”.

(26) Regulation 17(2) of Schedule 15 is amended—

(a) by repealing “flight level 275 to flight level 400” and substituting “flight level 285 to flight level 420”;

(b) by repealing “65°00’N 76°45’W” and substituting “65°00’N 57°45’W”;

(c) by repealing “27°00’N 25°00’W” and substituting—
“27°00’N 40°00’W
22°18’N 40°00’W
17°00’N 37°30’W
24°00’N 25°00’W”.

84. The Air Navigation (Dangerous Goods) Regulations

(1) Regulation 10 of Schedule 16 is amended by repealing everything after “pollution control.”.

(2) The Table of Comparison is repealed.

LAM Chik-ting, Tony
Clerk to the Executive Council

COUNCIL CHAMBER
8 April 2008

Explanatory Note

This Order amends the Air Navigation (Hong Kong) Order 1995 (Cap. 448 sub. leg. C) (“1995 Order”).

2. The main purposes of this Order are—

(a) to implement—

(i) the latest key international standards and recommended practices adopted by the International Civil Aviation Organization (“ICAO”); and

(ii) applicable international practices, in relation to airworthiness, aircraft equipment, safety management, data preservation and personnel licensing; and

(b) to provide for the necessary provisions to deal with the case where there is a transfer of the functions and duties under Article 83 bis of the Convention on International Civil Aviation (“the Chicago Convention”).

3. The international standards and recommended practices adopted by the ICAO are contained in the Annexes to the Chicago Convention.

4. This Order also removes certain obsolete references and provisions and rectifies certain textual errors in the 1995 Order.