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No. S 351

**AIR NAVIGATION ACT
(CHAPTER 6)**

AIR NAVIGATION (AMENDMENT NO. 2) ORDER 2015

In exercise of the powers conferred by section 3 of the Air Navigation Act, the Civil Aviation Authority of Singapore, with the approval of the Minister for Transport, makes the following Order:

Citation and commencement

1. This Order may be cited as the Air Navigation (Amendment No. 2) Order 2015 and comes into operation on 2 June 2015.

Amendment of paragraph 2

2. Paragraph 2(1) of the Air Navigation Order (O 2) (referred to in this Order as the principal Order) is amended —

(a) by inserting, immediately after the definition of “crew”, the following definition:

““danger area” means an airspace of defined dimensions which is declared by the Chief Executive as an area within which activities dangerous to the flight of aircraft may exist at specified times and is notified as such in the Aeronautical Information Publication or Notice to Airmen;”;

(b) by inserting, immediately after the definition of “production”, the following definition:

““prohibited area” means an airspace of defined dimensions which is declared by the Chief Executive as an area above any land or territorial waters of Singapore within which the flight of aircraft is prohibited and is notified as

such in the Aeronautical Information Publication or Notice to Airmen;” and

- (c) by inserting, immediately after the definition of “ “required navigation performance” or “RNP” ”, the following definition:

“ “restricted area” means an airspace of defined dimensions which is declared by the Chief Executive as an area above any land or territorial waters of Singapore within which the flight of aircraft is restricted in accordance with certain specified conditions and is notified as such in the Aeronautical Information Publication or Notice to Airmen;”.

Deletion and substitution of paragraph 20A

3. Paragraph 20A of the principal Order is deleted and the following paragraph substituted therefor:

“Limitation on privileges of pilots of 60 years and above

20A. A holder of a licence granted under paragraph 20(1)(e), (f), (ia), (j) or (k) who is 60 years of age or older may act as a pilot of a public transport aircraft only if the holder is a member of a crew with 2 or more pilots.”.

Amendment of paragraph 50B

4. Paragraph 50B of the principal Order is amended —

- (a) by inserting, immediately after the definition of “ID number”, the following definition:

“ “mail” means any letter, correspondence, postal article or thing, tendered by and intended for delivery to a postal service in accordance with the provisions of the Convention regulating the affairs of the Universal Postal Union;” and

- (b) by inserting, immediately after the definition of “passenger aircraft”, the following definitions:

““Postal Authority” has the same meaning as in section 2(1) of the Postal Services Act (Cap. 237A);

“postal service” has the same meaning as in section 2(1) of the Postal Services Act;

“public postal operator” means any provider of postal services designated by the Postal Authority under section 7 of the Postal Services Act to operate postal services and to fulfil the related obligations of the Convention regulating the affairs of the Universal Postal Union on its territory;”.

New paragraph 50DB

5. The principal Order is amended by inserting, immediately after paragraph 50DA, the following paragraph:

“Dangerous goods in air mail

50DB.—(1) Only a public postal operator acting in accordance with this paragraph, and no other person, may accept dangerous goods as or in mail to convey or deliver by post by air.

(2) A public postal operator may accept any dangerous goods as or in mail to convey or deliver by post by air only if the dangerous goods are of the kind permitted under the Technical Instructions to be carried by air as mail.

(3) A public postal operator must not accept any dangerous goods as or in mail to convey or deliver by post by air unless the public postal operator —

- (a) has in place procedures (which are approved by the Chief Executive) for controlling the introduction of such dangerous goods in air transport;
- (b) complies with the provisions of Part IV of the Nineteenth Schedule; and
- (c) if the dangerous goods are lithium ion batteries or lithium metal batteries contained in equipment, does so

in accordance with the prior approval of the Chief Executive for those goods.

(4) An application for any approval referred to in this paragraph must be made to the Chief Executive at the time and in the form and manner specified by the Chief Executive.

(5) Any approval referred to in this paragraph may be granted subject to such terms and conditions but no approval may be granted under sub-paragraph (3)(c) for a period exceeding one year.

(6) To avoid doubt, nothing in this paragraph authorises the conveyance, despatch or delivery by post of any article that is prohibited by the Postal Services Act or any subsidiary legislation made thereunder.”.

Deletion of paragraph 64C

6. Paragraph 64C of the principal Order is deleted.

Amendment of paragraph 64D

7. Paragraph 64D of the principal Order is amended by deleting sub-paragraph (1) and substituting the following sub-paragraph:

“(1) Despite paragraphs 64 and 64A, a person must not fly or operate a kite, parasail or captive balloon —

(a) within the boundaries of any danger area, restricted area or prohibited area; or

(b) outside any area in sub-paragraph (a) in a manner likely to endanger the safety of any person, aircraft or property.”.

Amendment of paragraph 64E

8. Paragraph 64E(1) of the principal Order is amended —

(a) by deleting the words “64A, 64B and 64C” and substituting the words “64A and 64B”; and

(b) by deleting the words “or an unmanned airship”.

Amendment of paragraph 64F

9. Paragraph 64F of the principal Order is amended —
- (a) by deleting the words “, captive balloon, model aircraft or unmanned airship” in sub-paragraph (a) and substituting the words “or captive balloon,”; and
 - (b) by deleting the words “, model aircraft or unmanned airship” in sub-paragraph (b).

Amendment of paragraph 64H

10. Paragraph 64H of the principal Order is amended by deleting the words “paragraphs 64 to 64C” in sub-paragraph (a) and substituting the words “paragraphs 64, 64A and 64B”.

Amendment of paragraph 64I

11. Paragraph 64I of the principal Order is amended by deleting the definitions of “danger area”, “model aircraft”, “prohibited area” and “restricted area”.

New Part XA

12. The principal Order is amended by inserting, immediately after section 72C, the following Part:

“PART XA

UNMANNED AIRCRAFT OPERATIONS AND ACTIVITIES

Application of this Part

72D. Nothing in this Part applies to require a person in Singapore who operates —

- (a) an unmanned aircraft which is, or flies wholly, outside of Singapore;
- (b) an unmanned aircraft indoors —
 - (i) at a private residence for any purpose; or
 - (ii) at an experimental site in connection with the construction or testing of that unmanned aircraft;or

(c) a small unmanned aircraft that is not an airship outdoors for a recreation purpose or research purpose at an altitude not exceeding 200 feet above mean sea level and outside of the following areas:

(i) any restricted area or danger area;

(ii) any area within 5 kilometres of any aerodrome,

to obtain a UA operator permit or an activity permit before doing so.

Prohibited operation of unmanned aircraft

72E.—(1) A person must not operate an unmanned aircraft —

(a) outdoors within the boundaries of any prohibited area; or

(b) indoor or outdoors anywhere in Singapore in a manner likely to endanger the safety of any person, aircraft or property.

(2) To avoid doubt, a UA operator permit and an activity permit do not authorise the holder of the permit to act in contravention of this paragraph.

Operation of unmanned aircraft requires permit

72F.—(1) A person must not operate a large unmanned aircraft for any purpose except under the authority and in accordance with —

(a) a UA operator permit for operating the unmanned aircraft type corresponding to the large unmanned aircraft and for the purpose specified in that permit; and

(b) a Class 1 activity permit for flying the unmanned aircraft type corresponding to that large unmanned aircraft.

(2) A person must not operate outdoors a small unmanned aircraft for a recreation purpose or research purpose except under the authority and in accordance with a Class 2 activity permit for flying the unmanned aircraft type corresponding to that small unmanned aircraft.

(3) A person must not operate a small unmanned aircraft outdoors, or indoor in premises that are neither a private residence nor an experimental site for that aircraft, in the course of a business or for purpose that is neither a recreation purpose nor a research purpose, except under the authority and in accordance with —

- (a) a UA operator permit for operating the unmanned aircraft type corresponding to the small unmanned aircraft and for the purpose specified in that permit; and
- (b) a Class 1 activity permit for flying the unmanned aircraft type corresponding to that small unmanned aircraft.

Illustrations

- (a) A person who intends to fly indoors or outdoors a small unmanned aircraft in connection with advertising, farming or other agricultural activity, a survey or an inspection of any site or building, or to carry out surveillance or a search and rescue operation, or to deliver anything in the course of business, will need to apply for both a UA operator permit and a Class 1 activity permit.
- (b) A person who intends to conduct training or organise classes for a fee on the use or operation of unmanned aircraft will need to apply for both a UA operator permit and a Class 1 activity permit.

UA operator permit

72G.—(1) An application for or to renew a UA operator permit must be made to the Authority in accordance with this paragraph.

(2) An application for or to renew a UA operator permit must —

- (a) be in the form or manner required by the Authority;
- (b) be accompanied by a fee of the amount specified in paragraph 22 of the Twelfth Schedule; and
- (c) be accompanied by the following information:
 - (i) the type of unmanned aircraft to be operated;
 - (ii) the purpose for which the unmanned aircraft in the application is to be operated and the nature of

those operations (such as the schedule or frequency, and area of operation);

- (iii) the qualifications of the applicant and of every individual engaged or employed, or to be engaged or employed, by the applicant to fly the unmanned aircraft in the application, including the type of training (if any) the applicant and every such individual has undergone in operating unmanned aircraft;
- (iv) any other additional information that the Authority may require to decide on the application.

(3) The Authority may refuse to consider an application for or to renew a UA operator permit that is incomplete or not made in accordance with sub-paragraph (2).

(4) After considering any application for or to renew a UA operator permit, the Authority may —

(a) on payment of —

- (i) a UA operator permit fee (if prescribed in the Twelfth Schedule), grant the applicant a UA operator permit; or
- (ii) a renewal fee and (where applicable) a late renewal fee (if prescribed), renew the UA operator permit; or

(b) refuse to grant or renew the UA operator permit.

(5) For the purposes of section 4A(2)(a) of the Act, in deciding whether an applicant should be granted a UA operator permit, or whether the UA operator permit should be renewed, and the conditions to impose or modify, the Authority must be satisfied that —

(a) the applicant; and

(b) every individual named in the application as engaged or employed, or to be engaged or employed, by the applicant to fly the unmanned aircraft,

capable of ensuring the safe operation of the unmanned aircraft specified in the application.

(6) The conditions that may be imposed on a UA operator permit include requiring the holder of the UA operator permit —

- (a) to ensure the safe operation of the unmanned aircraft specified in the permit whenever it is flown; and
- (b) to adhere to any document issued by the Authority providing practical guidance on the safe operation of unmanned aircraft.

(7) A UA operator permit may be granted or renewed for such period specified in the permit, being a period not exceeding one year.

Activity permits

72H.—(1) An application for an activity permit must be made to the Authority in accordance with this paragraph.

(2) An application for an activity permit relating to an unmanned aircraft must —

- (a) be in the form or manner required by the Authority;
- (b) be accompanied by a fee of the relevant amount specified in paragraph 23 of the Twelfth Schedule; and
- (c) be accompanied by the following information:
 - (i) the type of flying activity to be carried out involving the unmanned aircraft specified in the application;
 - (ii) the intended time and date, or intended period, and the intended location and operating altitude of the flying activity;
 - (iii) the UA operator permit if the activity involves flying a large unmanned aircraft, or the activity involves flying a small unmanned aircraft in the course of a business or for purpose that is neither a recreation purpose nor a research purpose;

(iv) any other additional information that the Authority may require to decide on the application.

(3) The Authority may refuse to consider an application for an activity permit that is incomplete or not made in accordance with sub-paragraph (2).

(4) After considering any application for an activity permit, the Authority may —

(a) on payment of an activity permit fee (if prescribed in the Twelfth Schedule), grant the applicant an activity permit; or

(b) refuse to grant the activity permit.

(5) For the purposes of section 4A(2)(a) of the Act, in deciding whether an applicant should be granted an activity permit, and the conditions to impose or modify, the Authority must be satisfied that the applicant is capable of ensuring the safe conduct of the activity specified, or to be specified, in the permit.

(6) The conditions that may be imposed on an activity permit granted include requiring the holder of the activity permit —

(a) to fly the unmanned aircraft only for the activity or activities specified in the activity permit; and

(b) to fly the unmanned aircraft only at the time or period, location, and at an altitude below the maximum operating altitude, specified in the activity permit.

(7) An activity permit for an unmanned aircraft is valid only for the period specified in the permit.

Variation of permits

72I.—(1) A holder of a Class 1 or Class 2 activity permit may, at any time before the start of the activity specified in the permit, apply to the Authority to vary the activity permit because of a change in the date or time of the activity so specified.

(2) A holder of a UA operator permit may, at any time, apply to the Authority to vary the permit concerned because of —

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- (a) an addition or substitution of any unmanned aircraft type specified in the permit;
 - (b) a change in the persons who operate or are engaged or employed to operate any unmanned aircraft type specified in the permit; or
 - (c) a change to the area or purpose of operations specified in the permit.

(3) An application to vary an activity permit or a UA operator permit must be made to the Authority in the form and manner required by the Authority, and be accompanied by the fee (if prescribed in the Twelfth Schedule) for the application to vary.

(4) The Authority may refuse to consider an application to vary an activity permit or a UA operator permit —

- (a) that is incomplete; or
- (b) that is not made in accordance with sub-paragraph (1) or (2).

Notification in cases not requiring permit

72J. A person who intends to operate an unmanned airship must, before carrying out any such activity in relation to the unmanned airship, inform the Chief Executive in writing at least 7 working days before the date on which the activity starts.

Power to demand names and addresses, etc.

72K.—(1) An authorised person may require a person whom he has reasonable grounds to suspect is just about to contravene, has just contravened or is contravening any provision in this Part, to furnish his name, address or such other proof of identity on demand.

- (2) Any person who —
 - (a) refuses or, without reasonable excuse, fails to comply with sub-paragraph (1); or
 - (b) in furnishing any information so required under sub-paragraph (1), makes a statement which he knows

to be false, or recklessly makes a statement which is false,
shall be guilty of an offence.

Definitions of this Part

72L. In this Part, unless the context otherwise requires —

“activity permit” means a Class 1 or Class 2 activity permit granted under paragraph 72H;

“aerodrome” includes a military aerodrome;

“business” includes a profession or trade or an occupation or undertaking, whether or not conducted on a regular, repetitive or continuous basis and whether or not engaged in or carried on for a fee or profit;

“experimental site”, for an unmanned aircraft under construction or testing, means any enclosed premises or indoor area which, for the period the unmanned aircraft is constructed or to be tested —

(a) is used solely or mainly for the purpose of constructing or testing the unmanned aircraft; and

(b) is accessible only to individuals involved in the construction or testing of the unmanned aircraft;

“flying display” means the flying, as an exhibition or for entertainment, of one or more unmanned aircraft at an organised event which the organiser reasonably believes to be attended by more than 500 persons;

“large unmanned aircraft” means an unmanned aircraft with a total mass exceeding 7 kilogrammes;

“small unmanned aircraft” means an unmanned aircraft that is not a large unmanned aircraft;

“recreation purpose” means any pursuit or activity engaged in for enjoyment, relaxation or leisure, but not —

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-
- (a) a sporting activity that forms part of an organised group activity or organised competition or tournament (such as a flying display); or
 - (b) a recreational activity provided by a business, or in the course of business;

“research purpose” means —

- (a) any lecture, tutorial, seminar, demonstration, class or similar activity on unmanned aircraft provided by an educational institution referred to in section 72 of the Private Education Act (Cap. 247A); or
- (b) any research and development activity carried on by an educational institution referred to in section 72 of the Private Education Act with the object of acquiring knowledge that may be of use for the purpose of devising or developing a new or substantially improved product that is an unmanned aircraft;

“total mass” means the mass of the aircraft including the mass of any other thing that may be attached to the aircraft during its operation, such as any payload, battery or fuel;

“UA operator permit” means a permit of that name granted under paragraph 72G.”.

Deletion and substitution of paragraph 86

13. Paragraph 86 of the principal Order is deleted and the following paragraph substituted therefor:

“Application of this Order to certain types of aircraft

86.—(1) The provisions of this Order, other than paragraphs 2(1) and (5), 46 and 64 to 64I (as the case may be) do not apply to or in relation to —

- (a) any balloon or free flight aerial object which at any stage of its flight is not more than 2 metres in any linear

dimension including any object attached to the balloon or free flight aerial object;

- (b) any kite weighing not more than 2 kilogrammes; or
- (c) any parasail.

(2) The provisions of this Order, other than Part XA and paragraphs 2(1), (2),(3) and (5), 46, 77 and 80, do not apply to or in relation to any unmanned aircraft and any unmanned aircraft system.”.

Amendment of paragraph 87A

14. Paragraph 87A of the principal Order is amended —

(a) by deleting sub-paragraphs (1) and (2) and substituting the following sub-paragraphs:

“(1) Subject to sub-paragraphs (7) and (8), a foreign operator must not operate an aircraft into or out of Singapore for the purpose of public transport or aerial work unless —

- (a) the foreign air operator has in force an operations permit granted to him under sub-paragraph (5); and
- (b) the foreign air operator operates the aircraft in accordance with the conditions of that permit.

(2) Before the Chief Executive grants or renews an operations permit to a foreign air operator, the Chief Executive must be satisfied that —

- (a) if applicable, the foreign air operator has been granted an air operator certificate or an approval to conduct aerial work operations by a country or territory other than Singapore; and
- (b) the foreign air operator is capable of ensuring the safe operation of the foreign air operator’s aircraft.”; and

(b) by deleting sub-paragraph (9) and substituting the following sub-paragraph:

“(9) In this paragraph —

“foreign air operator” means an operator whose principal place of business is not in Singapore;

“non-scheduled journey” and “scheduled journey” have the same meanings as in the Air Navigation (Licensing of Air Services) Regulations.”.

Amendment of Part I of Eleventh Schedule

15. Chapter 1 in Part I of the Eleventh Schedule to the principal Order is amended by deleting the definitions of “*Danger area*”, “*Prohibited area*” and “*Restricted area*”.

Amendment of Twelfth Schedule

16. The Twelfth Schedule to the principal Order is amended by inserting, immediately after paragraph 21, the following paragraphs:

“*UA operator permit for unmanned aircraft (Paragraphs 72G and 72I)*

22.—(1) The total of the following fees must be paid for an application for the grant of a UA operator permit for one or more unmanned aircraft:

- | | |
|--|-------|
| (a) for the first type of unmanned aircraft | \$600 |
| (b) for each additional type of unmanned aircraft specified in the application | \$400 |

(2) The fee for an application to renew a UA operator permit is \$200, except that the fee in sub-paragraph (3) must be paid in addition if the application is also an application to vary the UA operator permit.

(3) The fee for an application to vary a UA operator permit because of an addition or substitution of any type of unmanned aircraft specified in the permit is \$400 for each type of unmanned aircraft added or substituted.

Activity permit for unmanned aircraft operations (Paragraph 72H)

23.—(1) The following fees must be paid for an application for the grant of a Class 1 activity permit for an unmanned aircraft:

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|-------------------------------|------|
| (a) for the first application | \$75 |
|-------------------------------|------|

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|--|------|
| (b) for any subsequent application without any change in the unmanned aircraft or type of unmanned aircraft or place of operation of that aircraft | \$25 |
|--|------|

(2) The following fees must be paid for an application for the grant of a Class 2 activity permit for an unmanned aircraft:

- | | |
|--|------|
| (a) for the first application | \$60 |
| (b) for any subsequent application without any change in the unmanned aircraft or type of unmanned aircraft or place of operation of that aircraft | \$20 |

”.

Amendment of Thirteenth Schedule

17. The Thirteenth Schedule to the principal Order is amended —

- (a) by deleting the words “Paragraph 64C.” in Part A;
- (b) by inserting, immediately below the words “Paragraph 72A(3).” in Part A, the following words:

“Paragraph 72E.
Paragraph 72F(1), (2) or (3).
Paragraph 72J.
Paragraph 72K(2).”; and

- (c) by inserting, immediately below the words “Paragraph 50D(1) and (2).” in Part B, the following words:

“Paragraph 50DA.
Paragraph 50DB.”.

Amendment of Part IV of Nineteenth Schedule

18. Part IV of the Nineteenth Schedule to the principal Order is amended —

- (a) by deleting the word “and” at the end of paragraph 2(1)(d);

(b) by deleting the full-stop at the end of sub-paragraph (e) of paragraph 2(1) and substituting the word “; and”, and by inserting immediately thereafter the following sub-paragraph:

“(f) every public postal operator (within the meaning of paragraph 50DB).”;

(c) by deleting the words “Tables 1-4 and 1-5” in paragraph 2(1A)(a) and substituting the words “Tables 1-4, 1-5 and 1-6, as may be relevant,”; and

(d) by inserting, immediately after the words “operator of a Singapore aircraft” in paragraph 2(2), the words “and every public postal operator (within the meaning of paragraph 50DB)”.

Saving and transitional provision

19.—(1) From 2 June 2015, any permit granted under paragraph 64C of the principal Order as in force immediately before 2 June 2015 and in force on that date (called the existing permit) remains valid and continues to have effect as if it is a Class 1 activity permit or a Class 2 activity permit granted under the principal Order as amended by this Order, corresponding to the purpose for which the existing permit was granted.

(2) Any application for a permit under paragraph 64C of the principal Order as in force immediately before 2 June 2015 and pending on that date (called the pending application) is to be regarded as if it is an application for a Class 1 activity permit or a Class 2 activity permit under the principal Order as amended by this Order, corresponding to the purpose for which the pending application is made, except that no fee is payable under the principal Order as so amended for any pending application.

*[G.N. Nos. S 573/91; S 49/92; S 60/92; S 180/92;
S 61/93; S 199/93; S 8/94; S 67/98; S 325/2000;
S 384/2000; S 166/2002; S 56/2003; S 440/2003;
S 581/2003; S 331/2005; S 781/2005; S 487/2006;
S 640/2006; S 299/2009; S 278/2010; S 423/2010;
S 729/2010; S 162/2011; S 570/2011; S 124/2012;
S 617/2012; S 348/2013; S 21/2015]*

Made on 2 June 2015.

LEE HSIEN YANG
Chairman,
Civil Aviation Authority of Singapore.

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