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AIR NAVIGATION ACT (CHAPTER 6)

AIR NAVIGATION (AMENDMENT) 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, hereby makes the following Order:

Citation and commencement

1. This Order may be cited as the Air Navigation (Amendment) Order 2015 and shall come into operation on 26 January 2015.

Amendment of paragraph 2

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

(a) by inserting, immediately before the definition of “accredited medical conclusion” in sub-paragraph (1), the following definitions:

““2D instrument approach operation” means an instrument approach operation using lateral navigation guidance only;

“3D instrument approach operation” means an instrument approach operation using both lateral and vertical navigation guidance;”;

(b) by inserting, immediately after the definition of “alerting service” in sub-paragraph (1), the following definition:

““alternate aerodrome” means an aerodrome to which an aircraft may proceed to when it becomes either impossible or inadvisable to proceed to, or to

land at, the aerodrome of intended landing and which meets all of the following requirements:

- (a) the necessary services and facilities are available;
 - (b) the aircraft performance requirements can be met;
 - (c) the aerodrome is operational at the expected time of use;”;
- (c) by inserting, immediately after the definition of “crew” in sub-paragraph (1), the following definition:
 - “ “decision altitude” or “DA”, or “decision height” or “DH”, in relation to the operation of an aircraft at an aerodrome, means a specified altitude or height in a 3D instrument approach operation at which the pilot-in-command must initiate a missed approach if the visual reference to continue the approach has not been established;”;
- (d) by inserting, immediately after the definition of “designated medical examiner” in sub-paragraph (1), the following definition:
 - “ “destination alternate aerodrome” means an alternate aerodrome at which an aircraft would be able to land in the event that it becomes either impossible or inadvisable to land at the aerodrome of intended landing;”;
- (e) by inserting, immediately after the definition of “engine” in sub-paragraph (1), the following definition:
 - “ “en-route alternate aerodrome” means an alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en-route;”;
- (f) by inserting, immediately after the definition of “gyroplane” in sub-paragraph (1), the following definition:

““heavier-than-air aircraft” means any aircraft deriving its lift in flight chiefly from aerodynamic forces;”;

(g) by inserting, immediately after the definition of “human performance” in sub-paragraph (1), the following definitions:

““instrument approach operation” means an approach and landing using instruments for navigation guidance based on an instrument approach procedure, executed either by a 2D or 3D instrument approach operation;

“instrument approach procedure”, as classified in the Eleventh Schedule, means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from —

(a) the initial approach fix; or

(b) the beginning of a defined arrival route, where applicable,

to a point from which a landing can be completed and thereafter, if a landing is not completed, to a point at which holding or en-route obstacle clearance criteria apply;”;

(h) by inserting, immediately after the definition of “military aircraft” in sub-paragraph (1), the following definition:

““minimum descent altitude” or “MDA”, or “minimum descent height” or “MDH”, means a specified altitude or height in a 2D instrument approach operation or circling approach operation below which the pilot-in-command must not continue the descent without the required visual reference;”;

(i) by inserting, immediately after the definition of “survival ELT” in sub-paragraph (1), the following definition:

““take-off alternate aerodrome” means an alternate aerodrome at which an aircraft would be able to land if landing becomes necessary shortly after take-off and it is not possible to use the aerodrome of departure;”; and

- (j) by inserting, immediately after sub-paragraph (8), the following sub-paragraph:

“(9) In this Order, for every standard where a value is prescribed in the International System of Units (SI) and an alternative value is prescribed in a non-SI alternative unit of measurement in parentheses, the relevant standard is to be regarded as reached when either value is obtained.”.

Amendment of paragraph 29

3. Paragraph 29 of the principal Order is amended —

- (a) by deleting sub-paragraph (3) and substituting the following sub-paragraph:

“(3) The requirements specified in Part D of the Ninth Schedule in respect of the meteorological conditions required for take-off, en-route, approach to landing and landing must be complied with in respect of every aircraft to which paragraph 25 applies.”; and

- (b) by deleting sub-paragraph (5) and substituting the following sub-paragraphs:

“(5) Except under and in accordance with any written permission granted by the Chief Executive to the operator, a Singapore aeroplane having 2 or more turbine engines must not be flown for the purpose of public transport on a route where the diversion time from any point on that route to an en-route alternate aerodrome exceeds the threshold time.

- (6) For the purpose of sub-paragraph (5) —

- (a) diversion time from any point to an en-route alternate aerodrome is calculated under

International Standard Atmosphere and still air conditions —

- (i) at the one-engine inoperative cruise speed, for aeroplanes with 2 turbine engines; and
 - (ii) at the all-engine operating cruise speed, for aeroplanes with more than 2 turbine engines; and
- (b) the threshold time is —
- (i) 60 minutes for aeroplanes with 2 turbine engines; and
 - (ii) 180 minutes for aeroplanes with more than 2 turbine engines.”.

Amendment of paragraph 50B

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

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

““consignment” means one or more packages of dangerous goods received and accepted as a single lot by an operator from a single shipper on a single occasion for conveyance from a single address to a single consignee at a single destination;”; and

- (b) by deleting the word “cargo” in the definition of “State of Origin” and substituting the word “consignment”.

Amendment of Sixth Schedule

5. The Sixth Schedule to the principal Order is amended —

- (a) by deleting paragraph 2 and substituting the following paragraph: