Australian Government

Civil Aviation Safety Authority

I, TERENCE LINDSAY FARQUHARSON, Acting Director of Aviation Safety, on behalf of CASA, make this instrument under paragraph 28BA (1) (b) and subsection 98 (4A) of the *Civil Aviation Act 1988,* subregulations 5 (1) and 209 (1) of the *Civil Aviation Regulations 1988*, and subsection 33 (3) of the *Acts Interpretation Act 1901*.

[Signed T. Farquharson]
Terry Farquharson
Acting Director of Aviation Safety

16 December 2014

Civil Aviation Order 82.0 Amendment Instrument 2014 (No. 2)

1 Name of instrument

This instrument is the *Civil Aviation Order 82.0 Amendment Instrument 2014 (No. 2)*.

2A Repeal

Civil Aviation Order 82.0 Amendment Instrument 2014 (No. 1) is repealed.

2B Commencement

(1) With the exception of section 2A, the provisions of this instrument commence on 1 January 2015.

(2) Section 2A commences on the day of registration.

3 Transitional application — aeroplanes with more than 2 engines

The amendments to Civil Aviation Order 82.0 in Schedule 1 of this instrument, other than the amendments to subsections 3B and 3BA, do not apply to an Air Operator's Certificate authorising the operation of an aeroplane with more than 2 engines until 1 July 2015.

Note *Civil Aviation Order 82.0 Amendment Order (No. 3) 2007* (the ***2007 amendment***) first created rules for EDTO. Under section 5 of the 2007 amendment, apart from subsections 3B and 3BA, the new EDTO rules do not apply to aeroplanes with more than 2 engines until 1 July 2015. Similarly, the amendments in Schedule 1 of *Civil Aviation Order 82.0 Amendment Instrument 2014 (No. 2)* do not apply to aeroplanes with more than 2 engines until 1 July 2015, except for the amendments to subsections 3B and 3BA, which apply to all aeroplanes on 1 January 2015. On 1 July 2015, when provisions as now amended take effect for aeroplanes with more than 2 engines, they will only apply to passenger-carrying operations in such aeroplanes — see paragraph 3BC.4 created by amendment number 20 of Schedule 1.

4 Transitional application of new definition — *threshold time*

Amendment number 7 in Schedule 1 of this instrument does not apply until 1 July 2015.

Note By virtue of amendment number 7 in Schedule 1, for a twin engine aeroplane certificated to carry more than 19 passengers, or having a maximum payload capacity exceeding 3 410 kg,

the threshold time is to be reduced from 90 minutes to 60 minutes. However, amendment number 7 in Schedule 1, which makes this reduction, does not take effect until 6 months after commencement of this instrument, namely, 1 July 2015.

5 Transitional application — omission of paragraphs 3BC.5 to 3BC.8

Amendment number 19 in Schedule 1 of this instrument does not apply until 1 July 2015.

6 Amendment of Civil Aviation Order 82.0

Schedule 1 amends Civil Aviation Order 82.0.

Schedule 1 Amendments

[1] Paragraph 2.1, after the definition of *adequate aerodrome*

insert

Note It is not necessary that an en route adequate aerodrome within the threshold time must meet the requirements for an EDTO alternate aerodrome unless the flight is dispatched as an EDTO flight.

[2] Paragraph 2.1, definition of *EDTO alternate aerodrome*, the Note

omit

[3] Paragraph 2.1, definition of *EDTO alternate aerodrome*, sub-subparagraph (c) (ii)

omit

30 minute's notice).

insert

30 minute's notice); and

[4] Paragraph 2.1, definition of *EDTO alternate aerodrome*, after subparagraph (c)

insert

(d) from the earliest to the latest time of landing at the aerodrome — has a meteorological forecast at or above:

(i) for flight planning and aeroplane dispatch — 1 of the aerodrome planning minima set out in Table 1 in clause 7 of Appendix 5 (**Standard EDTO alternate aerodrome planning minima**) as applicable for the facilities available at the aerodrome; and

Note A departure or destination aerodrome is not required to meet the relevant Standard EDTO alternate aerodrome planning minima unless it happens also to be an EDTO alternate aerodrome.

(ii) before passing the EDTO entry point — the approved aerodrome landing minima for the expected approach during the estimated period of use of the EDTO alternate aerodrome; and

(e) has a forecast cross-wind component, including gusts, for the landing runway expected to be used, of not more than whichever of the following is the lowest:

(i) the maximum demonstrated cross-wind component specified in the AFM;

(ii) the maximum demonstrated cross-wind component specified in the OEM operations manual;

(iii) the maximum operational cross-wind component specified in the OEM operations manual; and

(f) for the expected runway surface conditions, wind conditions, aeroplane landing configuration, and aeroplane landing weight, at the aerodrome — has a landing distance available that is not less than that required in accordance with subsection 11 of Civil Aviation Order 20.7.1B.

Note This definition applies for flight planning and does not limit the discretion of the pilot in command during flight.

[5] Paragraph 2.1, definition of *EDTO,* or *extended diversion time operation*

substitute

EDTO, or ***extended diversion time operation***, means a flight by a multi turbine-engined aeroplane where:

(a) for an aeroplane with 2 turbine engines — subject to subparagraph (b), the flight time from a point on the route to an adequate aerodrome, calculated in ISA and still air conditions at the approved OEI cruise speed, is greater than the threshold time; or

(b) for an aeroplane with 2 turbine engines and the CFSS as the most time-limiting EDTO significant system — the flight time from a point on the route to an adequate aerodrome, calculated in ISA and still air conditions at the AEO cruise speed, is greater than the threshold time; or

(c) for an aeroplane with more than 2 turbine engines — the flight time from a point on the route to an adequate aerodrome in ISA and still air conditions at the approved AEO cruise speed, is greater than the threshold time.

[6] Paragraph 2.1, definition of *threshold time*, subparagraph (a)

omit

certificated

insert

certified

[7] Paragraph 2.1, definition of *threshold time*, sub-subparagraph (a) (i)

omit

90 minutes

insert

60 minutes

[8] Paragraph 2.1, definition of *threshold time*, sub-subparagraph (a) (ii)

omit

2 engines

insert

2 turbine engines

[9] Paragraph 2.1, definition of *threshold time*, subparagraph (b)

substitute

(b) for an aeroplane with an MTOW in excess of 5 700 kg engaged in passenger-carrying operations but not certified to carry more than 19 passengers — 180 minutes.

Note 1 CASA will not approve an EDTO operation that has a maximum threshold time in excess of the applicable threshold time mentioned in this definition.

Note 2 In all cases, threshold time must not exceed maximum diversion time: see paragraph 4.2 (f), and subparagraph 7.2 (a) (iii), in Appendix 4.

[10] Paragraph 2.1

insert

ACARS means aircraft communication addressing and reporting system.

AEO means all engines operating.

AFM means aircraft flight manual.

approved AEO cruise speed, for an operator's aeroplane, means the AEO cruise speed, in accordance with the AFM, approved by CASA in safety operational specifications issued to the operator.

Note 1 See paragraph 4.1.

Note 2 The approved AEO cruise speed may differ from the speed used for the maximum diversion time and the threshold time.

approved OEI cruise speed, for an operator's aeroplane with 2 turbine engines, means the OEI cruise speed, in accordance with the AFM, approved by CASA in safety operational specifications issued to the operator.

Note 1 See paragraph 4.1.

Note 2 The approved OEI cruise speed may differ from the speed used for the maximum diversion time and the threshold time.

cockpit documentation means any document taken into, or downloaded in, the cockpit of an aeroplane by (or for) the pilot in command, for the purpose of flying and navigating the aeroplane, and includes, for example, a computerised flight plan.

CFSS means the cargo fire suppression system of an aeroplane.

CMP means configuration maintenance and procedures.

Note See the definition of ***configuration maintenance and procedures (CMP) standards document***.

GPS means Global Positioning System.

IAP means an instrument approach procedure.

MEL means minimum equipment list.

MTOW means maximum take-off weight.

OEI means 1 engine inoperative.

OEM means the original equipment manufacturer.

SATCOM means satellite communications.

[11] After paragraph 2.1

insert

2.1A For this Order, an aeroplane is dispatched, and aeroplane dispatch occurs, when the aeroplane first moves under its own power for the purpose of taking off.

[12] Subparagraph 2.4 (a)

omit

aircraft

insert

aeroplane

[13] Sub-subparagraph 2.4.1 (b) (i)

omit

aircraft's

insert

aeroplane's

[14] Subsection 3B, the heading

substitute

3B En route performance for 3 or 4 turbine-engined aeroplanes

[15] Paragraph 3BA.2

omit

1 engine inoperative cruise speed (in ISA and still air conditions)

insert

OEI cruise speed

[16] Subsection 3BB, the heading

substitute

3BB Distance limitations — 19 passengers or less and exceeding 5 700 kg MTOW

[17] Subparagraph 3BB.1 (a)

omit

certificated

insert

certified

[18] Paragraph 3BC.1

omit

certificated

insert

certified

[19] Paragraphs 3BC.5 to 3BC.8

omit

[20] Paragraph 3BC.9

substitute

3BC.4 The AOC holder may operate an aeroplane with more than 2 turbine engines in passenger-carrying operations on a route containing a point more than 180 minutes from an adequate aerodrome at the approved AEO cruise speed only if the aeroplane is operated in accordance with the requirements for an EDTO under paragraph 3BC.3.

[21] Subsection 4, the heading

substitute

4 General AOC conditions — safety operational specifications

[22] Paragraph 4.1, paragraph (e) of the Note

substitute

(e) the maximum diversion time for the applicable airframe/engine combination;

(f) the approved OEI cruise speed for the applicable airframe/engine combination;

(g) for aeroplanes with more than 2 turbine engines — the approved AEO cruise speed for the applicable airframe/engine combination.

[23] Paragraph 7.1, definition of *maximum certificated passenger seating capacity*

substitute

maximum certified passenger seating capacity means the maximum number of seats for persons (excluding flight crew and cabin crew) in an aircraft as specified in the aircraft's type certificate data sheet.

[24] Paragraph 7.1, definition of *passenger seating capacity*

substitute

passenger seating capacity means maximum certified passenger seating capacity.

[25] Appendix 3, the heading

substitute

Appendix 3

EDTO approval for turbine-engined aeroplanes not certified to carry more than 19 passengers and exceeding 5 700 kg MTOW

[26] Appendix 4, the heading

substitute

Appendix 4

EDTO approval for turbine-engined aeroplanes certified to carry more than 19 passengers or having a payload capacity exceeding 3 410 kg

[27] Appendix 4, clause 1, Definitions

insert

maximum diversion time means the time approved by CASA for an operator's airframe/engine combination, not exceeding:

(a) for an aeroplane with 2 turbine engines — the time limit of the most time-limiting EDTO significant system identified in the AFM, reduced by an operational safety margin of not less than 15 minutes; and

Note For certain twin turbine-engined aeroplanes, the CFSS is the most time-limiting EDTO significant system identified in the AFM.

(b) for an aeroplane with more than 2 turbine engines — the time limit of the most time-limiting EDTO significant system (if any) identified in the AFM or the OEM operations manual, reduced by an operational safety margin of not less than 15 minutes.

Note For certain aeroplanes with more than two turbine-engines, the CFSS may be the most time-limiting EDTO significant system identified in the AFM or the OEM operations manual.

[28] Appendix 4, after paragraph 2.2 (a)

insert

(aa) for aeroplanes with more than 2 turbine engines, the time limit of the most time-limiting EDTO significant system (if any) identified in the AFM or OEM operations manual.

[29] Appendix 4, paragraph 2.2 (c)

omit

1 engine inoperative cruise speed (in ISA and still air conditions)

insert

OEI cruise speed

[30] Appendix 4, clause 3

substitute

3 Twin turbine-engined aeroplane eligibility for EDTO

For the AOC holder of a twin turbine-engined aeroplane to be eligible for EDTO approval, each aeroplane for EDTO must have an EDTO type design approval contained in:

(a) the AFM or supplement; or

(b) the type certificate data sheet or supplemental type certificate.

[31] Appendix 4, clause 4, the heading

substitute

4 EDTO approval requirements — twin turbine-engined aeroplane eligibility for EDTO

[32] Appendix 4, subclause 4.1

omit

to conduct EDTO.

insert

to conduct EDTO in a twin turbine-engined aeroplane.

[33] Appendix 4, paragraph 4.2 (f)

substitute

(f) the threshold time is not greater than the maximum diversion time approved by CASA for the twin turbine-engined aeroplane.

[34] Appendix 4, clause 5, the heading

substitute

5 Additional requirements for EDTO approvals — 180 to 240 minutes, twin turbine-engined aeroplane

[35] Appendix 4, subclause 5.1

substitute

5.1 This clause applies to applications for EDTO approvals to conduct EDTO in twin turbine-engined aeroplanes on a route containing a point more than 180 minutes (in ISA and still air conditions) but not more than 240 minutes (in

ISA and still air conditions) from an EDTO alternate aerodrome at the approved OEI cruise speed.

[36] Appendix 4, paragraph 5.2 (a)

omit

1 engine inoperative cruise speed (in ISA and still air conditions)

insert

the approved OEI cruise speed

[37] Appendix 4, subparagraph 5.2 (b) (iv)

substitute

(iv) a communication system, in addition to any mentioned in the AIP, capable of providing effective direct communication, for example, by voice, SATCOM or ACARS, between the flight crew and air traffic services, and the flight crew and the operator.

Note If the application for EDTO approval involves polar operations, in considering whether or not to give the approval CASA will take into account the limitations of SATCOM as an additional communication system in the polar area. See also paragraph 2 (b) in Appendix 6.

[38] Appendix 4, clause 6, the heading

substitute

6 Additional requirements for EDTO approvals — more than 240 minutes, twin turbine-engined aeroplane

[39] Appendix 4, subclause 6.1

omit

approvals for EDTO

insert

approvals to conduct EDTO

[40] Appendix 4, subclause 6.1

omit

1 engine inoperative cruise speed (in ISA and still air conditions)

insert

the approved OEI cruise speed

[41] Appendix 4, clause 7, the heading

substitute

7 EDTO approval requirements — aeroplanes with more than 2 turbine engines with a maximum diversion time of more than 180 minutes

[42] Appendix 4, subclause 7.1

substitute

7.1 This clause applies to an application for EDTO approval to conduct EDTO in an aeroplane with more than 2 turbine engines on a route containing a point more than 180 minutes (in ISA and still air conditions) from an EDTO alternate aerodrome at the approved AEO cruise speed.

[43] Appendix 4, paragraph 7.2 (a)

substitute

(a) the following conditions are met:

(i) the AOC holder has an approved operations training program that specifically addresses significant operational factors with respect to the maximum diversion time requested;

(ii) the AOC holder has an approved MEL appropriate to the maximum diversion time requested;

(iii) the threshold time for the aeroplane is not greater than the maximum diversion time approved by CASA; and

[44] Appendix 4, subparagraph 7.2 (b) (ii)

substitute

(ii) if it is required for OEI or depressurisation procedures, or for the time-limiting EDTO significant system (if any) — the APU (including electrical and pneumatic supply to its designated capability);

[45] Appendix 4, subparagraph 7.2 (b) (iii)

substitute

(iii) a communication system, in addition to any mentioned in the AIP, capable of providing effective direct communication, for example, by voice, SATCOM or ACARS, between the flight crew and air traffic services, and the flight crew and the operator;

Note If the application for EDTO approval involves polar operations, in considering whether or not to give the approval, CASA will take into account the limitations of SATCOM as an additional communication system in the polar area. See also paragraph 2 (b) in Appendix 6.

(iv) the CFSS.

[46] Appendix 5, the heading

substitute

Appendix 5

General conditions for EDTO approval for turbine-engined aeroplanes certified to carry more than 19 passengers or having a payload capacity exceeding 3 410 kg

Note Except where otherwise stated, the requirements of this Appendix apply to both twin turbine-engined aeroplanes and aeroplanes with more than 2 turbine engines.

[47] Appendix 5, subclause 3.2

substitute

3.2 For an aeroplane with 2 turbine engines — the AOC holder must ensure that the aeroplane is dispatched on an EDTO only if it meets the requirements of the CMP standards document for the EDTO flight.

[48] Appendix 5, subclause 3.3

substitute

3.3 The AOC holder must ensure that:

(a) for an aeroplane with 2 turbine engines — the aeroplane is not dispatched on an EDTO unless the required take-off aerodromes, destination aerodromes and alternate aerodromes, including EDTO alternate

aerodromes to be used in the event of engine shutdown or aeroplane system failure, which require a diversion, are listed in the cockpit documentation; and

(b) for an aeroplane with more than 2 turbine engines — the aeroplane is not dispatched on an EDTO unless the nominated EDTO alternate aerodromes to be used in the event of a diversion are listed in the cockpit documentation.

[49] Appendix 5, subclause 3.5

substitute

3.5 The AOC holder must ensure that an aeroplane is only dispatched on an EDTO if the meteorological forecast for the period of time from the earliest to the latest time of landing at the aerodrome, meets the requirements for a nominated EDTO alternate aerodrome.

[50] Appendix 5, subclause 3.6

omit

[51] Appendix 5, subclause 4.1

substitute

4.1 The AOC holder must ensure that an aeroplane is only dispatched on an EDTO more than 180 minutes (in ISA and still air conditions) from an EDTO alternate aerodrome if an additional communication facility will be available, at all stages of the flight, to provide effective direct communication, for example by voice, SATCOM or ACARS, between the flight crew and air traffic services, and the flight crew and the operator.

Note If the application for EDTO approval involves polar operations, in considering whether or not to give the approval, CASA will take into account the limitations of SATCOM as an additional communication system in the polar area. See also paragraph 2 (b) in Appendix 6.

[52] Appendix 5, subclause 4.2

omit

[53] Appendix 5, paragraph 5.2 (b)

omit

paragraph 3.4 (a)

insert

subclause 3.5

[54] Appendix 5, subclause 5.4

omit

The AOC holder must

insert

For an EDTO of an aeroplane with 2 turbine engines — the AOC holder must

[55] Appendix 5, subparagraph 5.5 (b) (i)

substitute

(i) the meteorological forecast is subsequently revised below the landing minima for a designated EDTO alternate aerodrome; or

[56] Appendix 5, subparagraph 6.3 (a) (ii)

omit

1 engine inoperative cruise speed

insert

OEI cruise speed

[57] Appendix 5, subparagraph 6.3 (a) (iii)

omit

1 engine inoperative cruise speed

insert

OEI cruise speed

[58] Appendix 5, subparagraph 6.3 (a) (iii)

omit

1 engine inoperative cruise altitude

insert

OEI cruise altitude

[59] Appendix 5, clause 8

substitute

8 EDTO alternate aerodrome planning minima — GPS/RNAV and low-visibility approach and landing procedures

(1) CASA may approve an AOC holder to use GPS-based IAP minima at an EDTO alternate aerodrome.

(2) CASA may approve an AOC holder to use, at an EDTO alternate aerodrome, minima lower than the Standard EDTO alternate aerodrome planning minima if:

(a) the aerodrome has a serviceable precision approach runway, Category (***CAT***) II or CAT III; and

(b) the operator is permitted by CASA to conduct normal operations to or from a precision approach runway, CAT II or CAT III; and

(c) the aeroplane is capable of an OEI landing on a precision approach runway, CAT II or CAT III.

[60] Appendix 5, clause 11, the heading

substitute

11 Quarterly EDTO reports — twin turbine-engined aeroplanes

[61] Appendix 5, subclause 11.1

omit

An AOC holder

insert

Subject to subclause 11.3, an AOC holder

[62] Appendix 5, subclause 11.2

omit

The AOC holder

insert

Subject to subclause 11.3, the AOC holder

[63] Appendix 5, after subclause 11.2

insert

11.3 Subclauses 11.1 and 11.2 do not apply to an AOC holder if:

(a) the AOC holder has an EDTO Reliability Program, approved by CASA, that includes a requirement to provide CASA with a quarterly reliability report; and

(b) within the relevant time frames specified in the Program for the particular report, the AOC holder provides CASA with the following reports:

(i) each quarterly reliability report;

(ii) a report on each of the matters mentioned in paragraphs 11.1 (a) to 11.1 (i);

(ii) a report on any other information specified by the Program as information to be reported to CASA.

[64] Appendix 7, first column headed TAKE-OFF, item 1

omit

1. Pretake-off/line -up

insert

1. Pre take-off/line-up

[65] Appendix 7, each of the 2 cells immediately before the Additional comments cell at the end of the Appendix

omit

Handflown

insert

Hand flown