# Civil Aviation Amendment Order (No. R31) 2004

I, WILLIAM BRUCE BYRON, Director of Aviation Safety, on behalf of CASA, issue the following Civil Aviation Order under subregulations 5.22 (1) and (2) and subregulation 5.23 (1) of the *Civil Aviation Regulations 1988*.

### [signed by Bruce Byron]

Bruce Byron
Director of Aviation Safety and
Chief Executive Officer

2 December 2004

#### 1 Name of Order

This Order is the Civil Aviation Amendment Order (No. R31) 2004.

#### 2 Commencement

This Order commences on gazettal.

#### 3 Replacement of section 40.1.0 of the Civil Aviation Orders

Section 40.1.0 of the Civil Aviation Orders is omitted and a new section substituted as set out in Schedule 1.

## Schedule 1 Substitution of section 40.1.0 of the Civil Aviation Orders

#### **SECTION 40.1.0**

#### AIRCRAFT ENDORSEMENTS — AEROPLANES

#### **1A INTERPRETATION**

A reference in this section to a subregulation identified by a numerical code (for example, 5.22 (1)) is a reference to a subregulation in the *Civil Aviation Regulations 1988* identified by that code.

#### 1 PRESCRIPTION OF ENDORSEMENTS

- 1.1 For the purposes of subregulation 5.22 (1), the type endorsements set out in column 1 of Appendix I are prescribed for aeroplanes.
- 1.2 For the purposes of subregulation 5.22 (1), the class endorsements set out in Appendix IA are prescribed for aeroplanes.
- 1.3 For the purposes of subregulation 5.22 (1), the following special design feature endorsements are prescribed:
  - (a) manual propeller pitch control;
  - (b) tail wheel undercarriage;
  - (c) retractable undercarriage;
  - (d) ski landing gear;
  - (e) float alighting gear;
  - (f) floating hull;
  - (g) pressurisation system.

#### 2 CLASSIFICATION OF AEROPLANES

2.1 For the purposes of subregulation 5.22 (2), the types of aeroplane specified in column 3 of an item in Appendix IB are included in the class specified in column 2 of that item.

#### 3 AUTHORITY GIVEN BY TYPE ENDORSEMENT

- 3.1 A type endorsement mentioned in column 1 of Part 1, 2 or 4 of Appendix I authorises the holder of the endorsement to fly an aeroplane of the type set out in column 2 of Appendix I opposite the endorsement as pilot in command, or as co-pilot.
- 3.2 A type endorsement mentioned in column 1 of Part 3 or 5 of Appendix I authorises the holder of the endorsement to fly an aeroplane of the type set out in column 2 of Appendix I opposite the endorsement as co-pilot.

3.3 A command endorsement or co-pilot endorsement, for a type of aeroplane specified in column 2 of an item in Appendix VI, authorises a person to fly an aeroplane of a type or class specified in column 3 of that item, as pilot in command or co-pilot, as the case may be.

#### 4 AUTHORITY GIVEN BY CLASS ENDORSEMENT

- 4.1 A class endorsement specified in Part 1, 1A, Part 3 or Part 5 of Appendix IA authorises the holder of the endorsement to fly an aeroplane included in that class as pilot in command, or as co-pilot.
- 4.2 A class endorsement specified in Part 2, Part 4 or Part 6 of Appendix IA authorises the holder of the endorsement to fly an aeroplane included in that class as co-pilot.
- 4.3 A command endorsement or co-pilot endorsement, for a class of aeroplane specified in column 2 of an item in Appendix VI, authorises a person to fly an aeroplane of a type or class specified in column 3 of that item, as pilot in command or co-pilot, as the case may be.
- 4.4 The holder of a class endorsement must not fly as pilot in command or co-pilot of any aeroplane included in the class unless he or she:
  - (a) is familiar with the systems, the normal and emergency flight manoeuvres and aircraft performance, the flight planning procedures, the weight and balance requirements and the practical application of take-off and landing charts of the aeroplane to be flown; and
  - (b) has sufficient recent experience or training in the aeroplane type, or in a comparable type, to safely complete the proposed flight; and
  - (c) if an aeroplane in that class has a special design feature, holds a special design feature endorsement referred to in paragraph 5.1 for that design feature.

Note: The owner and operator of an aeroplane included in a class of aeroplane should:

- (a) ensure that a person who proposes to fly as pilot in command or co-pilot of the aeroplane complies with subparagraph 4.4 (a); and
- (b) where necessary, require the person to provide evidence of recent experience or training in the aeroplane type or in a comparable aeroplane type; and
- (c) if the aeroplane has a special design feature, ensure that the person holds a special design feature endorsement for that design feature.

#### 5 AUTHORITY GIVEN BY SPECIAL DESIGN FEATURE ENDORSEMENT

- 5.1 A special design feature endorsement authorises a pilot who holds the endorsement to fly an aeroplane that has that special design feature as pilot in command, or as co-pilot.
- 5.2 A pilot is not required to have the "floating hull" special design feature endorsement to fly an aeroplane with that special design feature, if he or she holds an endorsement for that type or class of aeroplane that includes the words LAND ONLY.

5.3 A pilot who holds an aeroplane endorsement that includes the words LAND ONLY must not, while using that endorsement to fly an aeroplane, alight on, or take off from, water.

#### 6 REQUIREMENTS FOR ISSUE OF TYPE ENDORSEMENTS

- 6.1 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 1 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and
    - (ii) undertake training in the operating limitations, procedures and systems of the type of aeroplane for which the endorsement is sought; and
    - (iii) undertake flying training, or training in an approved synthetic flight trainer appropriate to the type of aeroplane, in normal and emergency flight manoeuvres and procedures in that type of aeroplane; and
    - (iv) satisfy the person who conducted the training mentioned in sub-subparagraphs (ii) and (iii) that the first-mentioned person can safely fly that type of aeroplane; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the type endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 6.2 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 2 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and

- (ii) be awarded a pass in a theory examination on the subjects set out in the syllabus set out in Appendix II that are relevant to the type of aeroplane for which the endorsement is sought; and
- (iii) undertake training in the operating limitations, procedures and systems of that type of aeroplane; and
- (iv) undertake flying training or training in an approved synthetic flight trainer appropriate to the type of aeroplane, in normal and emergency flight manoeuvres and procedures in that type of aeroplane; and
- (v) satisfy the requirements of the syllabus of flying training set out in Appendix III; and
- (vi) satisfy the person who conducted the training mentioned in sub-subparagraphs (iii) and (iv) that the first-mentioned person can safely fly that type of aeroplane as pilot in command; or
- (b) the person seeking the endorsement must:
  - (i) hold a co-pilot endorsement for the type of aeroplane for which the endorsement is sought; and
  - (ii) satisfy the requirements of sub-subparagraphs (a) (i), (iii), (iv), (v) and (vi); or
- (c) the person seeking the endorsement must hold or have held a pilot qualification:
  - (i) that CASA is satisfied is at least equivalent to the type endorsement sought; and
  - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
- (d) the person seeking the endorsement must hold or have held an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought; or
- (e) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 6.3 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 3 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence or a certificate of validation that has effect as if it were an aeroplane pilot licence; and

- (ii) be awarded a pass in a theory examination on the subjects set out in the syllabus set out in Appendix II that are relevant to the type of aeroplane for which the endorsement is sought; and
- (iii) undertake training in the operating limitations, procedures and systems of that type of aeroplane; and
- (iv) undertake flying training, or training in an approved synthetic flight trainer appropriate to that type of aeroplane, in normal and emergency flight manoeuvres and procedures in that type of aeroplane; and
- (v) satisfy the requirements of the syllabus of flying training set out in Appendix V; and
- (vi) satisfy the person who conducted the training mentioned in sub-subparagraphs (iii) and (iv) that the first-mentioned person can safely fly that type of aeroplane as co-pilot; or
- (b) the person seeking the endorsement must hold or have held a pilot qualification:
  - (i) that CASA is satisfied is at least equivalent to the type endorsement sought; and
  - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
- (c) the person seeking the endorsement must hold or have held an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought; or
- (d) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 6.4 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 4 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane licence; and
    - (ii) be awarded a pass in a theory examination on the subjects set out in an approved syllabus that are relevant to the type of aeroplane for which the endorsement is sought; and
    - (iii) undertake training in the operating limitations, procedures and systems of that type of aeroplane; and
    - (iv) undertake flying training, or training in an approved synthetic flight trainer appropriate to that type of aeroplane, in normal and

- emergency flight manoeuvres and procedures in that type of aeroplane; and
- (v) satisfy the requirements of the syllabus of flying training set out in Appendix III and of an approved syllabus of flying training; and
- (vi) satisfy the person who conducted the training mentioned in sub-subparagraphs (iii) and (iv) that the first-mentioned person can safely fly that type of aeroplane as pilot in command; or
- (b) the person seeking the endorsement must:
  - (i) hold a co-pilot endorsement for the type of aeroplane for which the endorsement is sought; and
  - (ii) satisfy the requirements of sub-subparagraphs (a) (i), (iii), (iv), (v) and (vi); or
- (c) the person seeking the endorsement must hold or have held a pilot qualification:
  - (i) that CASA is satisfied is at least equivalent to the type endorsement sought; and
  - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
- (d) the person seeking the endorsement must hold or have held an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought; or
- (e) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 6.5 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 5 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and
    - (ii) be awarded a pass in a theory examination on the subjects set out in an approved syllabus that are relevant to the type of aeroplane for which the endorsement is sought; and
    - (iii) undertake training in the operating limitations, procedures and systems of that type of aeroplane; and
    - (iv) undertake flying training, or training in an approved synthetic flight trainer appropriate to that type of aeroplane, in normal and

- emergency flight manoeuvres and procedures in that type of aeroplane; and
- (v) satisfy the requirements of the syllabus of flying training set out in Appendix V and of an approved syllabus of flying training; and
- (vi) satisfy the person who conducted the training mentioned in sub-subparagraphs (iii) and (iv) that the first-mentioned person can safely fly that type of aeroplane as co-pilot; or
- (b) the person seeking the endorsement must hold or have held a pilot qualification:
  - (i) that CASA is satisfied is at least equivalent to the type endorsement sought; and
  - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
- (c) the person seeking the endorsement must hold or have held an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought; or
- (d) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the type endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.

Note: Training must be given by a person who holds a grade of flight instructor (aeroplane) rating that authorises him or her to give the training, or by a person approved under regulation 5.21 to give the training.

- 6.5.1 For the purposes of subregulation 5.23 (1), the requirements for the issue of a type endorsement specified in Part 6 of Appendix I are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and
    - (ii) have acted as pilot in command in an aeroplane of the type during a flight conducted for the purpose of testing the aeroplane in accordance with a permission given under regulation 5.50; or
  - (b) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and
    - (ii) have passed a theory examination on the subjects set out in an approved syllabus that are relevant to the type of aeroplane for which the endorsement is sought; and

- (iii) undertake training in the operating limitations, procedures and systems of that type of aeroplane; and
- (iv) undertake flying training, or training in an approved synthetic flight trainer appropriate to that type of aeroplane, in normal and emergency flight manoeuvres and procedures in that type of aeroplane; and
- (v) satisfy the requirements of the syllabus of flying training set out in Appendix V and of an approved syllabus of flying training; and
- (vi) satisfy the person who conducted the training mentioned in sub-subparagraphs (iii) and (iv) that the first-mentioned person can safely fly that type of aeroplane as co-pilot; or
- (c) the person seeking the endorsement must hold or have held a pilot qualification:
  - (i) that CASA is satisfied is at least equivalent to the endorsement sought; and
  - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
- (d) the person seeking the endorsement must hold or have held an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the endorsement sought; or
- (e) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 6.6 CASA may approve a synthetic flight trainer for the purposes of sub-subparagraphs 6.1 (a) (iii), 6.2 (a) (iv), 6.3 (a) (iv), 6.4 (a) (iv) and 6.5 (a) (iv).
- 6.7 CASA may approve:
  - (a) a syllabus for the purposes of subparagraph 6.4 (a) (ii) or 6.5 (a) (ii); and
  - (b) a syllabus of flying training for the purposes of subparagraph 6.4 (a) (v) or 6.5 (a) (v).
- 6.8 In deciding whether an overseas aeroplane endorsement is equivalent to a type endorsement for an aeroplane, CASA must take into account:
  - (a) what the endorsement authorises the holder to do; and
  - (b) the training required for the issue of the endorsement; and
  - (c) any other matter that it thinks relevant in the interests of the safety of air navigation.

- 6.9 In this subsection:
  - *co-pilot endorsement* means a type endorsement set out in Part 3 or Part 5 of Appendix I.
  - *overseas aeroplane endorsement* means a qualification (whether it is called an endorsement, rating or authority, or is known by some other name):
  - (a) that authorises its holder to fly a particular type of aeroplane, or aeroplanes included in a class of aeroplanes; and
  - (b) that was issued by the responsible authority of a Contracting State.

#### 7 REQUIREMENTS FOR THE ISSUE OF CLASS ENDORSEMENTS

- 7.1 For the purposes of subregulation 5.23 (1), the requirements for the issue of a class endorsement specified in Part 1 or 1A of Appendix IA are:
  - (a) the person seeking the endorsement must satisfy the requirements set out in subparagraph 6.1 (a) for a type of aeroplane included in the class; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 7.2 For the purposes of subregulation 5.23 (1), the requirements for the issue of a command class endorsement specified in Part 3 of Appendix IA are:
  - (a) the person seeking the endorsement must satisfy the requirements set out in subparagraph 6.2 (a) or (b) for a type of aeroplane included in the class; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or

- (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
- (d) both the following conditions are satisfied:
  - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
  - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 7.2.1 For the purposes of subregulation 5.23 (1), the requirements for the issue of a co-pilot class endorsement specified in Part 2 of Appendix IA are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were an aeroplane pilot licence; and
    - (ii) undertake training in the operating limitations, procedures and systems of an aeroplane included in the class for which the endorsement is sought; and
    - (iii) satisfy the person who conducted the training mentioned in sub-subparagraph (ii) that he or she can safely fly aeroplanes included in the class as a co-pilot; or
  - (b) the person seeking the endorsement must hold, or have held, a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold, or have held, an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.

- 7.2.2 For the purposes of subregulation 5.23 (1), the requirements for the issue of a co-pilot class endorsement specified in Part 4 of Appendix IA are:
  - (a) the person seeking the endorsement must satisfy the requirements set out in subparagraph 6.3 (a) for a type of aeroplane included in the class; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 7.2.3 For the purposes of subregulation 5.23 (1), the requirements for the issue of a command class endorsement specified in Part 5 of Appendix IA are:
  - (a) the person seeking the endorsement must satisfy the requirements set out in subparagraph 6.4 (a) or (b) for a type of aeroplane included in the class; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.

- 7.3 For the purposes of subregulation 5.23 (1), the requirements for the issue of a co-pilot class endorsement specified in Part 6 of Appendix IA are:
  - (a) the person seeking the endorsement must satisfy the requirements set out in subparagraph 6.5 (a) for a type of aeroplane included in the class; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the class endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas aeroplane endorsement that CASA is satisfied is at least equivalent to the class endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas aeroplane endorsement in that State.
- 7.4 In deciding whether an overseas aeroplane endorsement is equivalent to a class endorsement for a class of aeroplanes, CASA must take into account:
  - (a) what the endorsement authorises the holder to do; and
  - (b) the training required for the issue of the endorsement; and
  - (c) any other matter that it thinks relevant in the interests of the safety of air navigation.
- 7.6 In this subsection:

*command class endorsement* means a class endorsement specified in Part 1, Part 3 or Part 5 of Appendix IA.

*command type endorsement* means a type endorsement specified in Part 1, Part 2 or Part 4 of Appendix I.

*co-pilot class endorsement* means a class endorsement specified in Part 2, Part 4 or Part 6 of Appendix IA.

*co-pilot type endorsement* means a type endorsement specified in Part 3 or Part 5 of Appendix I.

*overseas aeroplane endorsement* means a qualification (whether it is called an endorsement, rating or authority, or is known by some other name):

- (a) that authorises its holder to fly a particular type of aeroplane, or aeroplanes included in a class of aeroplanes; and
- (b) that was issued by the responsible authority of a Contracting State.

## 8 REQUIREMENTS FOR THE ISSUE OF SPECIAL DESIGN FEATURE ENDORSEMENTS

- 8.1 For the purposes of subregulation 5.23 (1), the requirements for the issue of a special design feature endorsement are:
  - (a) the person seeking the endorsement must:
    - (i) hold a student pilot licence, an aeroplane pilot licence, or a certificate of validation that has effect as if it were such a licence; and
    - (ii) undertake flying training, or training in an approved synthetic flight trainer, in the operating limitations, procedures and systems of an aeroplane fitted with the special design feature for which the endorsement is sought; and
    - (iii) satisfy the person who conducted the training mentioned in sub-subparagraph (ii) that the first-mentioned person can safely fly an aeroplane fitted with the special design feature; or
  - (b) the person seeking the endorsement must hold or have held a pilot qualification:
    - (i) that CASA is satisfied is at least equivalent to the special design feature endorsement sought; and
    - (ii) that was issued to the person by someone other than CASA for the purposes of the person's service in the Defence Force of Australia; or
  - (c) the person seeking the endorsement must hold an overseas special design feature endorsement that CASA is satisfied is at least equivalent to the special design feature endorsement sought; or
  - (d) both the following conditions are satisfied:
    - (i) the person seeking the endorsement has successfully completed training for the issue of an overseas special design feature endorsement that CASA is satisfied is at least equivalent to the special design feature endorsement sought;
    - (ii) the responsible authority of the Contracting State where the training was completed has given CASA a written statement to the effect that the training would qualify a person for the issue of the overseas special design feature endorsement in that State.
- 8.2 In deciding whether an overseas special design feature endorsement is equivalent to a special design feature endorsement for an aeroplane, CASA must take into account:
  - (a) what the endorsement authorises its holder to do; and
  - (b) the training required for the issue of the endorsement; and
  - (c) any other matter that it thinks relevant in the interests of the safety of air navigation.
- 8.3 In this subsection:
  - *overseas special design feature endorsement* means a qualification (whether it is called an endorsement, rating or authority, or is known by some other name):
  - (a) that authorises the holder of the qualification to fly aeroplanes fitted with a special design feature; and

(b) that was issued by the responsible authority of a Contracting State.

#### 8A CONDITIONS ON AIRCRAFT ENDORSEMENTS

- 8A.1 For the purposes of regulation 5.25, it is a condition of each command endorsement that authorises the holder of the endorsement to fly an aeroplane with a maximum take-off weight of more than 5 700 kg that the holder of the endorsement must not act as pilot in command of such an aeroplane if:
  - (a) the aeroplane is engaged in charter operations, or regular public transport operations; and
  - (b) the aeroplane's flight manual specifies that it may be flown under the I.F.R.;

unless the holder satisfies the aeronautical experience requirements set out in paragraph 8A.2.

- 8A.2 Unless CASA otherwise approves, the endorsement holder's aeronautical experience must consist of:
  - (a) at least 50 hours of flight time as pilot acting in command under supervision in the type of aeroplane concerned; or
  - (b) at least:
    - (i) 25 hours of flight time as pilot acting in command under supervision in the type of aeroplane concerned; and
    - (ii) the successful completion of an approved training course conducted in an approved synthetic flight trainer.

Note: The circumstances in which a person may fly an aircraft as pilot acting in command under supervision are set out in regulation 5.40.

- 8A.3 Unless CASA otherwise directs, the flight time mentioned in subparagraph 8A.2 (a) and sub-subparagraph 8A.2 (b) (i) must include at least 10 flights each of at least 45 minutes.
- 8A.4 CASA may approve:
  - (a) a training course; and
  - (b) a synthetic flight trainer;

for the purposes of sub-subparagraph 8A.2 (b) (ii).

8A.5 In this subsection:

command endorsement means a type endorsement specified in Part 2 or Part 4 of Appendix I or a class endorsement specified in Part 1, Part 3 or Part 5 of Appendix IA.

#### 9 LOG BOOKS

- 9.5 For the purposes of subregulation 5.52 (2), the information about each flight must include:
  - (a) the date of each flight; and
  - (b) the type of aeroplane flown; and
  - (c) the registration marks of the aeroplane flown; and

- (d) the point of departure and the destination of each flight; and
- (e) the nature of each flight; and
- (f) the time flown on instruments; and
- (g) time flown in single and multi-engined aeroplanes by day and by night; and
- (h) in accordance with subsection 10, the capacity in which the person flew the aeroplane.

#### 10 LOGGING OF FLIGHT TIME

- 10.2 Flight time during which a pilot is under dual instruction shall be entered in his or her log book as "dual" and the pilot giving the instruction shall make entries in the log book of the pilot under instruction showing the nature of the instruction given.
- 10.3 The holder of a student pilot licence may log as time in command only that time during which he or she is the sole occupant of an aeroplane in flight.
- 10.4 The holder of a private pilot (aeroplane) licence may log as time in command only that time during which he or she is the sole manipulator of the controls of an aeroplane.
- 10.5 The holder of a commercial pilot (aeroplane) licence may log as time in command the total time elapsed during his or her command, in flight, of an aeroplane. He or she may log as co-pilot the total time during which he or she serves as co-pilot.
- 10.7 The holder of an air transport pilot (aeroplane) licence must log his or her flight time in accordance with whichever of the following is applicable:
  - (a) any flight time during which the licence holder acts as pilot in command must be entered in his or her log book as time in command;
  - (b) any flight time during which the licence holder acts as pilot in command under supervision must be entered in his or her log book as time in command under supervision;
  - (c) any flight time during which the licence holder acts as co-pilot must be entered in his or her log book as time as co-pilot.
- 10.8 The holder of a flight instructor (aeroplane) rating may log as time in command the total flight time during which he or she is acting as an instructor, but log entries shall show that the flight time was as an instructor.
- 10.9 Instrument flight time may be logged by the pilot monitoring or providing input to the autopilot/auto-stabilisation equipment when it is engaged or by the pilot manually manipulating the controls when the aircraft is flown by reference to instruments under either actual or simulated instrument flight conditions.

Note: Instrument flight time shall only be logged by 1 pilot at a time.

#### **APPENDIX I**

#### TYPE ENDORSEMENTS

#### PART 1

COLUMN 1 COLUMN 2

ENDORSEMENT
ANSON
AVRO 652A MK1
BEAGLE 206
BEAGLE B206C

BE-76 BEECH 76 (DUCHESS)
BN-2T BRITTEN NORMAN BN-2T

BN-3 BRITTEN NORMAN B-2A MK III-I

CATALINA (LAND ONLY) CONSOLIDATED PBY-6A

AERO 145 CZECHOSLOVAK AUTOMOBILE AND AIRCRAFT

AERO 145

L200 CZECHOSLOVAK AUTOMOBILE AND AIRCRAFT

L200A

DH89A DE HAVILLAND DH-89A

DHC2/A1 DE HAVILLAND CANADA DHC-2/A1

DHC3-T DE HAVILLAND CANADA DHC-3 (TURBINE

OTTER)

G21 GRUMMAN G-21 (GOOSE)

G44 GRUMMAN G-44A G73 GRUMMAN G-73

G73T GRUMMAN G-73 (ALL TURBINE MODELS)

GA7 GRUMMAN GA-7

FU-24 STALLION AIRPARTS FU-24 STALLION

L12 LOCKHEED 12-A L18 LOCKHEED 18

SM-1019 MARCHETTI SM-1019 (all Allison powered models)

P166 PIAGGIO P.166

PC-6 (TURBINE) PILATUS TURBO PORTER
CRESCO PACIFIC AEROSPACE CRESCO

REIMS F406 REIMS F406

SOCATA TBM 700 SOCATA TBM 700

#### PART 2

COLUMN 1 COLUMN 2

ENDORSEMENT AEROPLANE TYPE

ATR 42 AVIONS DE TRANSPORT REGIONAL ATR 42

HS125-700B BRITISH AEROSPACE BAe-125-700B

CESSNA 650 CESSNA 650

DHC4 DE HAVILLAND CANADA DHC-4A

F-VIIB/3M FAA F-VIIB/3M

GRUMMAN HU-16A GRUMMAN ALBATROSS HU-16A

L-10A LOCKHEED L-10A

NORD 262A NORD 262A

TWIN PIONEER SCOTTISH AVIATION TWIN PIONEER

SC-7 SHORTS SC-7 SKYVAN

SD3-30 SHORTS SD3-30

#### PART 3

COLUMN 1 COLUMN 2

ENDORSEMENT AEROPLANE TYPE

CO-PILOT ATR 42 AVIONS DE TRANSPORT REGIONAL ATR 42

CO-PILOT HS125-700B BRITISH AEROSPACE BAe-125-700B

CO-PILOT CESSNA 650 CESSNA 650

CO-PILOT DHC4 DE HAVILLAND CANADA DHC-4A

CO-PILOT F-VIIB/3M FAA F-VIIB/3M CO-PILOT GRUMMAN HU-16A GRUMMAN HU-16A CO-PILOT L-10A LOCKHEED L-10A

CO-PILOT NORD 262A NORD 262A

CO-PILOT TWIN PIONEER SCOTTISH AVIATION TWIN PIONEER

CO-PILOT SC-7 SHORTS SC-7 SKYVAN

CO-PILOT SD3-30 SHORTS SD3-30

PART 4

COLUMN 1 COLUMN 2
ENDORSEMENT AEROPLANE TYPE

A300 AIRBUS INDUSTRIES A300-B4-203

B707-300 BOEING 707-300 SERIES B717-200 BOEING 717-200 SERIES B747-400 BOEING 747-400 SERIES CL-65 CANADAIR CL-600-2B19

(CANADAIR REGIONAL JET)

CONVAIR 580 CONVAIR TURBO PROP 580

DHC7-100 DE HAVILLAND DHC7-100 (DASH 7)

DC8-62 **DOUGLAS DC8-62** DC8-71 **DOUGLAS DC8-71** DC9-82 **DOUGLAS DC9-82** DC9-83 **DOUGLAS DC9-83** MD-11 **DOUGLAS MD-11** FK-50 FOKKER F27 MK 50 G-III **GULFSTREAM G-III** G-IV **GULFSTREAM G-IV** J-41 **JETSTREAM J-41** 

SF 2000 SAAB 2000

#### PART 5

**COLUMN 1 COLUMN 2 ENDORSEMENT AEROPLANE TYPE** CO-PILOT A300 **AIRBUS INDUSTRIES A300-B4-203** CO-PILOT B707-300 **BOEING 707-300 SERIES** CO-PILOT B717-200 **BOEING 717-200 SERIES** CO-PILOT B747-400 **BOEING 747-400 SERIES** CO-PILOT CL-65 CANADAIR CL-600-2B19 (CANADAIR REGIONAL JET) **CO-PILOT CONVAIR 580 CONVAIR TURBO PROP 580** CO-PILOT DHC7-100 DE HAVILLAND DHC7-100 (DASH 7) CO-PILOT DC8-62 DOUGLAS DC8-62 CO-PILOT DC8-71 **DOUGLAS DC8-71** CO-PILOT DC9-82 **DOUGLAS DC9-82** CO-PILOT DC9-83 **DOUGLAS DC9-83** CO-PILOT MD-11 **DOUGLAS MD-11** CO-PILOT FK-50 FOKKER F27 MK 50 CO-PILOT G-III **GULFSTREAM G-III** CO-PILOT G-IV **GULFSTREAM G-IV** CO-PILOT J-41 **JETSTREAM J-41** 

Column 1 **ENDORSEMENT** 

CO-PILOT SF 2000

No endorsements under

Part 6 at present

PART 6

Column 2

**SAAB 2000** 

**AEROPLANE TYPE** 

#### **APPENDIX IA**

#### CLASS ENDORSEMENTS

#### PART 1

**AERO COM** 

AN-2

**AYRES TURBO (PT6)** 

AYRES TURBO (TPE 331)

**TURBO COM** 

**HS65** 

TWIN BONANZA

BARON/TRAVELAIR

BE-18

BE-60

BE-65\*

BE-90

BE-200

BE-300\*

BN-2\*

C208

C303

C310/340

C337

C402/421

C425

C441

C525

DH84

DH104

DHA 3

DHC 6

**BANDEIRANTE** 

**HARBIN** 

**NOMAD** 

**PN68** 

PA23

PA30/39

PA31

PA31T

PA34

PA36-PT6A

PA42

**PA44** 

PA 46-500TP

PC 12

PZL M-18 (TPE 331)

SINGLE ENGINE AEROPLANES NOT EXCEEDING 5 700 KG MAXIMUM TAKE-OFF

**WEIGHT** 

**AEROSTAR 600** 

**SOLOY 206** 

Note: The endorsements marked with an \* are given an extended effect by Appendix VI.

#### PART 1A

L39

**AVENGER** 

**BOOMERANG** 

CESSNA A37

L-29

FIAT G59

**FURY** 

**HUNTER** 

**ISKRA** 

**KITTYHAWK** 

ME109

**MIG 15** 

**MIG 17** 

**MIG 21** 

MUSTANG SABRE SPITFIRE STRIKEMASTER TROJAN VAMPIRE YAK 3

#### PART 2

CO-PILOT BANDEIRANTE CO-PILOT BE-18 CO-PILOT BE-90 CO-PILOT BE-200 CO-PILOT BE-300\* CO-PILOT DHC 6

Note: The endorsement marked with an \* is given an extended effect by Appendix VI.

#### PART 3

MAGISTER
METRO 3\*
MERLIN III/METRO II
MU-2
B-25
BEAUFORT
CANBERRA
CATALINA
FIREFLY
TRACKER
HUDSON
METEOR
NEPTUNE
VENTURA

Note: The endorsement marked with an \* is given an extended effect by Appendix VI.

#### PART 4

CO-PILOT METRO 3\*
CO-PILOT MERLIN III/METRO II
CO-PILOT B-25
CO-PILOT CATALINA
CO-PILOT TRACKER
CO-PILOT NEPTUNE
CO-PILOT VENTURA

Note: The endorsement marked with an \* is given an extended effect by Appendix VI.

#### PART 5

**ASTRA 1125** BE-1900 BE-400 B727-100/200 B737-100/200 B737-300 to 800 B747 B757/767 BAe 125-800 BAe 125-1000 HS125-F400 HS125-600 BAe 31/32 BAe 146 HS 748 BBD-700 **BRASILIA** CL-600/601 CL-604 C500 C550/560\* C560XL C750 CASA212 **FALCON 20/200** FALCON 50/900 FALCON 10/100 DH114 DHC 8 DC3 DC-4 DC9 DO228-200 EMB 135/145 FK-27 FK-28 FK-70/100 LR 24/25 LR 31/35/36 LR 45 LR 60 L-188 L-1049 **GULFSTREAM I GULFSTREAM II** 

**WESTWIND** 

A300/310 A320 A330 SF340

SD3-60

Note: The endorsement marked with an \* is given an extended effect by Appendix VI.

#### PART 6

CO-PILOT A300/310

CO-PILOT A320

CO-PILOT A330

**CO-PILOT ASTRA 1125** 

CO-PILOT BE-1900

CO-PILOT BE-400

CO-PILOT B727-100/200

CO-PILOT B737-100/200

CO-PILOT B737-300 to 800

CO-PILOT B747

CO-PILOT B757/767

CO-PILOT BAe 125-800

**CO-PILOT BAe 125-1000** 

CO-PILOT HS125-F400

**CO-PILOT HS125-600** 

CO-PILOT BAe 31/32

CO-PILOT BAe 146

**CO-PILOT HS 748** 

CO-PILOT BBD-700

**CO-PILOT BRASILIA** 

CO-PILOT CL-600/601

CO-PILOT CL-604

CO-PILOT C500

CO-PILOT C550/560\*

CO-PILOT C560XL

CO-PILOT C750

**CO-PILOT CASA212** 

CO-PILOT FALCON 20/200

CO-PILOT FALCON 50/900

CO-PILOT FALCON 10/100

CO-PILOT DH114

**CO-PILOT DHC 8** 

CO-PILOT DC3

CO-PILOT DC-4

CO-PILOT DC9

**CO-PILOT DO228-200** 

**CO-PILOT EMB 135/145** 

CO-PILOT FK-27

CO-PILOT FK-28

CO-PILOT FK-70/100

CO-PILOT LR 24/25

CO-PILOT LR 31/35/36

CO-PILOT LR 45

CO-PILOT LR 60

CO-PILOT L-188

CO-PILOT L-1049 CO-PILOT GULFSTREAM I CO-PILOT GULFSTREAM II CO-PILOT WESTWIND CO-PILOT SF340 CO-PILOT SD3-60

Note: The endorsement marked with an \* is given an extended effect by Appendix VI.

## APPENDIX IB

## **AEROPLANES INCLUDED IN CLASSES**

Note: For form of endorsement see Appendix IA

ITEM	COLUMN 2 CLASS	COLUMN 3 AEROPLANES INCLUDED IN CLASS
1.	AERO COM	AERO COMMANDER 500 (all models) AERO COMMANDER 560 (all models) AERO COMMANDER 680 (all models including pressurised, except turbine engines) ROCKWELL 685
2.	TURBO COM	AERO COMMANDER 680 (all turbine engine models) AERO COMMANDER 681 (all models) AERO COMMANDER 690 (all models GULFSTREAM 695 (all models) ROCKWELL 690 (all models)
2A.	A300/310	AIRBUS INDUSTRIES A300-600R AIRBUS INDUSTRIES A310-304
2B.	A320	AIRBUS INDUSTRIES A319-100 SERIES AIRBUS INDUSTRIES A320-200 SERIES AIRBUS INDUSTRIES A321-100 SERIES AIRBUS INDUSTRIES A321-200 SERIES
2C.	A330	AIRBUS INDUSTRIES A330-200 SERIES AIRBUS INDUSTRIES A330-300 SERIES
3.	HS65	ARMSTRONG WHITWORTH AW650-101 ARMSTRONG WHITWORTH AW650-222
3A.	AN-2	ANTONOV AN-2 (all models) PZL-MIEL AN-2 (all models)
3B.	BBD-700	BOMBARDIER BD-700-1A10 (GLOBAL EXPRESS)
4.	TWIN BONANZA	BEECH 50 (TWIN BONANZA) (all models)
5.	BARON/TRAVELAIR	BEECH/RAYTHEON 58 (all models including pressurised) BEECH/RAYTHEON 95 (all models, including 55, 56 and 95)
5A.	BE-18	BEECH 18 (all models)
6.	BE-60	BEECH 60 (all models)
7.	BE-65	BEECH 65 (QUEEN AIR) (all models) BEECH 70 (QUEEN AIR) (all models)
8.	BE-90	BEECH/RAYTHEON 90 (KING AIR) (all models) BEECH/RAYTHEON 99 (all models) BEECH/RAYTHEON 100 (KING AIR) (all models)

9.	BE-200	BEECH/RAYTHEON 200 (SUPER KING AIR) (all models) BEECH /RAYTHEON 300 LW (SUPER KING AIR)
9A.	BE-400	BEECH/RAYTHEON 400 (all models) MITSUBISHI MU-300 (all models)
<b>9AA.</b>	BE-300	BEECH/RAYTHEON 300 (SUPER KING AIR 350) (all models except 300LW)
10.	BE-1900	BEECH/RAYTHEON 1900 (all models)
10A.	B727-100/200	BOEING B727-100 SERIES BOEING B727-200 SERIES
11.	B737-100/200	BOEING 737-100 SERIES BOEING 737-200 SERIES
12.	B737-300 to 800	BOEING 737-300 SERIES BOEING 737-400 SERIES BOEING 737-500 SERIES BOEING 737-600 SERIES BOEING 737-700 SERIES BOEING 737-800 SERIES BOEING BBJ SERIES
13.	B747	BOEING 747-100 SERIES BOEING 747-200 SERIES BOEING 747-300 SERIES BOEING 747SP
13A.	B757/767	BOEING 757-200 SERIES BOEING 767-200 SERIES BOEING 767-300 SERIES
14.	HS125-F400	BRITISH AEROSPACE 125-F400 BRITISH AEROSPACE 125-F400A
15.	HS125-600	BRITISH AEROSPACE 125-600 BRITISH AEROSPACE 125-600B
15A.	BAe 125-800	BAe 125-800 (all models) BEECH/RAYTHEON HAWKER 800 XP
15AA.	BAe 125-1000	RAYTHEON/BAe 125-1000 (all models)
16.	BAe 146	BAe AVRO 146 RJ70 (all models) BAe AVRO 146-RJ100 BAe 146-100 series BAe 146-200 series BAe 146-300 series
16A.	HS748	BAe HS 748 (all models)
17.	BN-2	BRITTEN NORMAN BN2 (ISLANDER) (all models except BN-2T (TURBINE) and BN2-A Mk III (TRISLANDER))

17A.	C208	CESSNA 208 (all models)
18.	CL-600/601	CANADAIR 600 (CHALLENGER) CANADAIR 601 CANADAIR 601-3A CANADAIR CL 601-1A11
18A.	CL-604	CANADAIR 604 (CHALLENGER) CANADAIR 600-2B16
19.	C303	CESSNA 303 (all models)
20.	C310/340	CESSNA 310 (all models CESSNA 320 (all models) CESSNA 340 (all models)
21.	C337	CESSNA 336 CESSNA 337 (SKYMASTER) (all models including pressurised)
23.	C402/421	CESSNA 401 (all models) CESSNA 402 (all models) CESSNA 404 (TITAN) (all models) CESSNA 411 (all models) CESSNA 414 (all models) CESSNA 421 (GOLDEN EAGLE) (all models)
25.	C425	CESSNA 425 (CONQUEST I) (all models)
26.	C441	CESSNA 441 (CONQUEST II) (all models)
27.	C500	CESSNA 500 (CITATION) (all models) CESSNA 501 (CITATION I) (all models)
27A.	C525	CESSNA 525 (CITATION JET, CJ1 and CJ) (all models)
28.	C550/560	CESSNA 550 (CITATION II and BRAVO) (all models) CESSNA S550 (CITATION S/II) (all models) CESSNA 560 (CITATION V) (all models)
28A.	C560XL	CESSNA 560XL (Excel)
28B.	C750	CESSNA 750 (Citation X)
29.	CASA212	CONSTRUCCIONES AERONAUTICAS SA CASA C212 (all models)
29A.	DO228-200	DORNIER 228-201 DORNIER 228-202
30.	FALCON 20/200	DASSAULT FALCON C DASSAULT FALCON D DASSAULT FALCON E DASSAULT FALCON F DASSAULT FALCON G DASSAULT MYSTERE-FALCON 20 (all models) DASSAULT MYSTERE-FALCON 200 (all models)
30A.	<b>FALCON 50/900</b>	DASSAULT MYSTERE-FALCON 50 (all models)

## DASSAULT MYSTERE-FALCON 900 (all models)

31.	FALCON 10/100	DASSAULT FALCON 10 (all models) DASSAULT FALCON 100
32.	DH84	DE HAVILLAND DH 84 DE HAVILLAND DH 84A (DRAGON)
33.	DH104	DE HAVILLAND DH 104 (DOVE/DEVON) (all models)
34.	DH114	DE HAVILLAND DH 114 (HERON and SEA HERON) (all models)
35.	DHA 3	DE HAVILLAND DHA 3-2
36.	DHC6	DE HAVILLAND DHC 6-100 SERIES DE HAVILLAND DHC 6-200 SERIES DE HAVILLAND DHC 6-300 SERIES DE HAVILLAND DHC 6-320 SERIES
37.	DHC 8	DE HAVILLAND DHC8-100 DE HAVILLAND DHC8-200 DE HAVILLAND DHC8-300
38.	DC3	DOUGLAS DC3 (all models) DOUGLAS C47 (all models)
38A.	DC4	DOUGLAS DC 4 (all models) DOUGLAS C54 (all models)
39.	DC9	DOUGLAS DC9-31 DOUGLAS DC9-33F
40.	BANDEIRANTE	EMBRAER EMB 110-P1 EMBRAER EMB 110-P2 (BANDEIRANTE)
41.	EMB 135/145	EMBRAER 135 (all models) EMBRAER 145 (all models)
42.	FK-27	FOKKER F27-100 FOKKER F27-200 FOKKER F27-400 FOKKER F27-500 FOKKER F27-600 FOKKER F27-700
43.	FK-28	FOKKER F28-1000 FOKKER F28-3000 FOKKER F28-4000
44.	FK-70/100	FOKKER F28-0700 FOKKER F28-0100
45.	LR 24/25	GATES LEARJET 24 (all models) GATES LEARJET 25 (all models) GATES LEARJET 28 (all models) GATES LEARJET 29 (all models)
45A.	LR 45	LEARJET 45

45B.	LR 60	LEARJET 60 (all models)
46.	LR 31/35/36	GATES LEARJET 31 (all models) GATES LEARJET 35 (all models) GATES LEARJET 36 (all models)
46A.	L-188	LOCKHEED L-188A LOCKHEED L-188C
46B.	L-1049	LOCKHEED L-1049 LOCKHEED C-121C
47.	NOMAD	GOVERNMENT AIRCRAFT FACTORY N22 (all models) GOVERNMENT AIRCRAFT FACTORY N24 (all models)
48.	GULFSTREAM I	GRUMMAN G159 (all models)
49.	GULFSTREAM II	GRUMMAN G1159 (all models)
49A.	HARBIN	HARBIN Y-12 (all models)
50.	WESTWIND	ISRAEL AIRCRAFT INDUSTRIES 1124 (WESTWIND) (all models)
50A.	ASTRA 1125	ISRAEL AIRCRAFT INDUSTRIES 1125 (all models) ISRAEL AIRCRAFT INDUSTRIES ASTRA (all models)
51.	MU-2	MITSUBISHI MU 2B (all models)
52.	PN68	PARTENAVIA P68 (all models)
52A.	PC 12	PILATUS PC-12 (all models)
53.	PA23	PIPER PA23 (APACHE) (all models) PIPER PA23 (AZTEC) (all models)
54.	PA30/39	PIPER PA30 (TWIN COMMANCHE) (all models) PIPER PA39 (TWIN COMMANCHE) (all models)
55.	PA31	PIPER PA31 (NAVAJO and CHIEFTAIN) (all models including pressurised models, except turbine powered) EMBRAER EMB-820 (all models)
56.	PA31T	PIPER PA31 (CHEYENNE and CHEYENNE I, CHEYENNE II, and CHEYENNE IIXL) (all PA 31-T (turbine powered) models)
57.	PA34	PIPER PA34 (all SENECA models)
57A.	PA36-PT6A	PIPER PA-36 (all PT6A powered models)
58.	PA42	PIPER PA42 (CHEYENNE III and CHEYENNE 400) (all models)
58A.	PA44	PIPER PA44 SEMINOLE (all models)

58B.	PA46-500TP	PIPER PA46-500TP (MALIBU MERIDAN TURBOPROP) (all PT6A powered models)
59.	AEROSTAR 600	PIPER PA60 AEROSTAR (all models, including pressurised) TED SMITH AIRCRAFT AEROSTAR (all models, including pressurised)
60.	PZL M-18 (TPE 331)	PZL M-18 (all TPE 331 powered models)
61.	SF340	SAAB 340 (all models)
62.	SD3-60	SHORT BROTHERS SD3-60 (all models)
63.	MERLIN III/METRO II	FAIRCHILD SA 226 (MERLIN IIIB, MERLIN IVB, METRO II) (all models) SWEARINGEN SA 226 (MERLIN IIIB, MERLIN IVA, METRO II) (all models)
63A.	METRO 3	FAIRCHILD SA227 (METRO III and 23) (all models) SWEARINGEN SA227 (METRO III and 23) (all models)
64.	AYRES TURBO (PT6)	AYRES S2R (all PT6A models) AIR TRACTOR AT 400 (all PT6A models) AIR TRACTOR AT 401 (all PT6A models) AIR TRACTOR AT 402 (all PT6A models) AIR TRACTOR AT 502 (all PT6A models) AIR TRACTOR AT 602 (all PT6A models) AIR TRACTOR AT 802 (all PT6A models)
64A.	AYRES TURBO (TPE 331)	AYRES S2R (all GARRETT TPE 331 models) AIR TRACTOR AT 301 (all GARRETT TPE 331 models) ROCKWELL S-2 (all GARRETT TPE 331 models)
65.	SOLOY 206 (TURBINE)	CESSNA 206 (TURBINE) SOLOY 206 (TURBINE)
67.	SINGLE ENGINE AEROPLANES NOT EXCEEDING 5 700KG MAXIMUM TAKE-OFF WEIGHT	All single engine aeroplanes not exceeding 5 700 kg maximum take-off weight, except for those listed elsewhere in an Appendix to this Order as requiring a specific type or class endorsement
68.	BAe 31/32	BRITISH AEROSPACE 3100-3107 BRITISH AEROSPACE 3200-3207
70.	BRASILIA	EMBRAER EMB-120RT EMBRAER EMB-120ER
71.	AVENGER	GRUMMAN TBM (AVENGER) (all models)
72.	TRACKER	GRUMMAN S-2 (all models)
73.	BEAUFORT	BEAUFORT (all models)

74.	BOOMERANG	CAC CA-12 (all models) CAC CA-13 (all models) CAC CA-19 (all models)
75.	CANBERRA	HANDLEY PAGE CANBERRA TT 18 ENGLISH ELECTRIC CANBERRA (all models)
76.	CATALINA	CONSOLIDATED PBY-5 (all models) CONSOLIDATED PBY-6 (all models)
77.	CESSNA A37	CESSNA A37 (DRAGONFLY) (all models)
78.	L-39	AERO VODOCHNYODY L-39 (ALBATROS) (all models)
<b>79.</b>	L-29	AERO VODOCHNYODY L-29 (DELPHIN) (all models)
80.	FIREFLY	FAIREY FIREFLY (all models)
81.	FIAT G59	FIAT G59 (all models)
82.	FURY	HAWKER SEA FURY (all models) HAWKER FURY (all models)
83.	HUNTER	HAWKER HUNTER (all models)
84.	ISKRA	PZL TS-11 (ISKRA) (all models)
85.	KITTYHAWK	CURTISS P-40 (all models)
86.	HUDSON	LOCKHEED 414 HUDSON (all models)
87.	NEPTUNE	LOCKHEED SP-2H (all models)
88.	VENTURA	LOCKHEED PV-1 (all models)
89.	ME109	MESSERSCHMIT BF 109 (all models)
90.	METEOR	GLOSTER METEOR (all models)
91.	MIG 15	MIKOYAN MIG-15 (all models)
92.	MIG 17	MIKOYAN MIG-17 (all models)
93.	MIG 21	MIKOYAN MIG-21 (all models)
94.	B-25	NORTH AMERICAN B-25 (MITCHELL) (all models)
95.	MUSTANG	CAC CA-17 (all models) CAC CA-18 (all models) NORTH AMERICAN P51 (all models)
96.	SABRE	CAC CA-27 (all models) NORTH AMERICAN F86 (all models)

97.	SPITFIRE	SUPERMARINE SPITFIRE (Marks 1-25) SUPERMARINE SEAFIRE (all models)
98.	STRIKEMASTER	BAC 167 (all models) BAC JET PROVOST (all models)
99.	TROJAN	NORTH AMERICAN T28 (all models)
100.	VAMPIRE	DE HAVILLAND DH-115 VAMPIRE (all models)
101.	YAK 3	YAKOVLEV YAK 3 (all models)
102.	MAGISTER	FOUGA CM-170

#### APPENDIX II

#### THEORY EXAMINATION SYLLABUS

- 1. An applicant shall pass a written examination on engineering details in accordance with the following syllabus insofar as it is applicable to the particular type of aeroplane concerned:
  - (a) **Fuel System**: Layout and management cross feed system fuel dumping capacities schematic diagram of systems;
  - (b) **Hydraulic System**: Layout and management Hydraulic source and operating pressure units or services operated emergency operation likely faults and remedies;
  - (c) **Electrical Systems**: Type of system and batteries number and output of generators circuit protection location of fuses or circuit breakers emergency operation precautions to be observed when using electrical services electrically operated instruments;
  - (d) **Oil System**: Number of tanks and capacities schematic diagram of system propeller feathering oil source operation of oil cooler shutters;
  - (e) **Auto Pilot**: Principles of operation operating pressures or voltages methods of ensuring gyros are functioning normally method of engaging auto pilot method of disengaging auto pilot (normal and emergency) pre-flight check for serviceability limitations of the gyro units;
  - (f) **Anti-icing and De-icing Systems**: Aerofoils propeller carburettor operation and management of systems;
  - (g) **Heating, Ventilation and Pressurisation Systems**: Operation and management emergency operation any special precautions to be observed:
  - (h) **Pilot Static System**: Schematic diagram of system operation;
  - (i) **Suction System**: Schematic diagram of system source of suction and operating pressure instruments operated by suction system;
  - (j) **Oxygen System**: Type of system installed pressure operation and management with special attention to any peculiarities of the particular system diagram of system;
  - (k) **Fire Extinguisher System**: Number of fire extinguisher bottles fitted and contents, number, type and location of hand-held fire extinguishers parts of aeroplane where fire extinguisher service is available automatic fire-warning devices operation procedure to be followed in case of engine fire during flight any special precautions to be observed when operating either hand-held or automatic systems;
  - (l) **Engines**: Manufacturer's designation take-off power rated power starting order power combination for take-off climb and normal cruise generator operation engine oil specification supercharger operation on ground and in flight RPM setting for approach and landing under varying conditions interpretation of fuel flow indicator torquemeters RPM drop on magneto test engine idling speed oil pressure range precautions to be observed when

- unfeathering an extremely cold engine any special precautions to be observed when operating the particular engine concerned;
- (m) Weight and Balance: C of A requirements for loading, use of Load Charts, items of load which are taken into calculation in relation to observance of C of G limits relation of MAC to loading, fuel used and retraction or extension of undercarriage, reference point and turning moment in mm/kg calculation of take-off and landing weights and the use of the appropriate charts.

#### APPENDIX III

## SYLLABUS OF FLYING TRAINING FOR A TYPE ENDORSEMENT SPECIFIED IN PART 2 OR PART 4 OF APPENDIX I OR A CLASS ENDORSEMENT SPECIFIED IN PART 3 OR PART 5 OF APPENDIX IA

1. An applicant shall complete a conversion course on the type or class of aeroplane in conformity with the following syllabus or an approved schedule of training, each of which shall be of at least 5 hours' duration. The aeroplane used for this training shall be loaded as far as practicable to a weight which will give a positive indication of its flight and handling characteristics.

#### **Syllabus:**

(a) General handling to include:

Stalling power off — wheels and flaps up;

Stalling power on — wheels and flaps up;

Stalling power off — wheels and flaps down;

Stalling power on — wheels and flaps down.

- (b) **Take-off**: Circuit and landing (at least 5) cockpit drill use of check list going around again after a missed approach cross-wind take-off and landing management of aeroplane systems (fuel, fire extinguisher, pressurisation, etc.).
- (c) **Instrument Flying**: Power setting flaps settings speed and rate of descent for use on aerodrome, runway or precision approach systems. Operation and use of special equipment fitted.
- (d) **Asymmetric flight**: The attainment of optimum performance following a simulated engine failure on take-off (at least twice). The speed at which the failure is simulated must be as follows:
  - (i) in the case of an aeroplane for which the take-off performance is predicated on the establishment of a  $V_1$  failure of the engine must be simulated at a speed greater than  $V_1$ ;
  - (ii) in the case of any other aeroplane failure of the engine must be simulated at a speed greater than:
    - (A) the 1 engine inoperative best rate of climb speed; or
    - (B) the take-off safety speed plus 10 knots;

whichever is the higher.

If the aeroplane is capable of the manoeuvre, going around again with 1 or more engines simulated failed (at least twice). Cruising flight with 1 or more engines inoperative — feathering and unfeathering propellers. Medium and steep turns with and against live engines.

- (e) **Night Flying**: Take-off circuit and landing (at least 4). Going around again after a missed approach.
- (f) **Water Handling**: (in the case of seaplanes) taxiing upwind, downwind and crosswind; and without use of drogues. Mooring and slipping, anchoring and weighing anchor.

#### APPENDIX V

## SYLLABUS OF FLYING TRAINING FOR A TYPE ENDORSEMENT SPECIFIED IN PART 3 OR PART 5 OF APPENDIX I OR A CLASS ENDORSEMENT SPECIFIED IN PART 4 OR PART 6 OF APPENDIX IA

An applicant shall complete a flight training course on the type or class of aeroplane in conformity with the following syllabus which shall be of at least 3 hours' duration. The aeroplane used for this training shall be loaded as far as is practicable to weight which will give a positive indication of its flight and handling characteristics.

#### **Syllabus:**

- (a) **Take-off**: Circuit and landing (at least 5) cockpit drill, use of check list management of aeroplane systems (e.g. fuel, fire extinguisher, pressurisation, etc).
- (b) Medium and Steep turns.
- (c) **Asymmetric Flight**: Flight with 1 engine inoperative in cruising flight. Feathering and unfeathering propellers.
- (d) **Night Flying**: Take-off circuit and landing (at least 3).
- (e) **General Flying**: Check best power settings flap settings speed and rate of descent for use on aerodrome, runway or precision approach systems. Operation and use of special equipment fitted.
- (f) **Water Handling**: (in the case of seaplanes) taxiing mooring and slipping.

## APPENDIX VI

## EXTENDED EFFECT OF CERTAIN ENDORSEMENTS

ITEM	COLUMN 2 TYPE OR CLASS	COLUMN 3 ADDITIONAL TYPE OR CLASS
1.	B65	TWIN BONANZA
2.	C550/560	C500
3.	BE-300	BE-200
4.	METRO 3	MERLIN III/METRO II
5.	BN-2	BN-2T (if the pilot holds an endorsement on an Allison 250 powered multi-engine aeroplane)