

Civil Aviation Amendment Order (No. R28) 2004

I, WILLIAM BRUCE BYRON, Director of Aviation Safety, on behalf of CASA, issue the following Civil Aviation Order under regulation 157 of the *Civil Aviation Regulations 1988*.

[Signed 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. R28) 2004.

2 Commencement

This Order commences on gazettal.

3 Replacement of section 29.10 of the Civil Aviation Orders

Section 29.10 of the Civil Aviation Orders is omitted and a new section substituted as set out in Schedule 1.

Schedule 1 Substitution of section 29.10 of the Civil Aviation Orders

SECTION 29.10

AIR SERVICE OPERATIONS — AIRCRAFT ENGAGED IN AERIAL STOCK MUSTERING OPERATIONS — LOW FLYING PERMISSION

1 APPLICATION

This section shall apply to registered aircraft engaged in aerial stock mustering and related training operations.

2 DEFINITIONS

In this section, unless the contrary intention appears:

aerial stock mustering means the use of aircraft to locate, direct and concentrate livestock whilst flying below 500 feet above ground level.

approved pilot means a pilot experienced in aerial stock mustering who has been approved by CASA to conduct low flying training and aerial stock mustering operational training of other pilots.

chief pilot means a person approved to supervise the flying operations of the holder of an aerial work licence who is authorised for stock mustering operations.

direct supervision means the detailed personal direction of aerial stock mustering operations by a pilot approved to conduct aerial stock mustering operations.

kind of aircraft means 1 of the following, an aeroplane, a helicopter or a registered gyroplane.

registered means registered under the *Civil Aviation Regulations 1988*.

type of aircraft means the aircraft type endorsed in a pilot's licence or, in the case of the single engine aeroplane group endorsement, aeroplanes of the same basic model number.

3 CLASSIFICATION OF OPERATIONS

3.1 Where aerial stock mustering is classified as an aerial work operation an entry shall be made in an operator's aerial work licence authorising aerial stock mustering as a specific operation.

3.2 Aerial stock mustering may be conducted as a private operation over land occupied by the owner of the aircraft or as an aerial work operation.

Note: In the case of the private operations subregulation 2 (9) of the *Civil Aviation Regulations 1988* may be applicable in determining the ownership of the aircraft.

4 LOW FLYING PERMISSION

4.1 Pursuant to paragraph 157 (4) (b) of the *Civil Aviation Regulations 1988*, permission is hereby granted for aircraft to operate at lower heights than prescribed in paragraph 157 (1) (b) of those regulations whilst engaged in:

- (a) aerial stock mustering operations authorised by an aerial work licence or classified as a private operation in accordance with subparagraph 2 (7) (d) (iii) of those regulations; and
- (b) training flights in preparation for such operations.

4.2 The permission granted in paragraph 4.1 shall be subject to compliance with the requirements and limitations specified in this section.

4.3 Notwithstanding the permission granted in paragraph 4.1, aircraft engaged on aerial stock mustering operations and training relating thereto shall not be flown below a height of 500 feet above the terrain and within 600 metres horizontally of a building occupied by persons unless a notice in writing of such aerial stock mustering operations or training flights has been given to the residing owner, or the residing tenant of the building not less than 48 hours prior to the proposed flights and no objection to the flights is made.

4.4 Where operations are conducted in accordance with the conditions specified in paragraph 4.3, the pilot shall not operate the aircraft over or in proximity to the building unless it is operated in a pattern and at such an altitude that in the event of an emergency it can avoid endangering persons or property on the ground.

Note: Attention is directed to the fact that the permission granted in this paragraph does not confer on an operator any rights as against the owner of any land over which the operations may be conducted, or prejudice in any way the rights and remedies which any person may have at common law respect of any injury to persons or damage to property caused directly or indirectly by the operator.

5 OPERATIONAL LIMITATIONS

5.2 During aerial stock mustering operations a pilot shall not carry more than 1 other person, and that person must be essential to the successful conduct of the operations. Notwithstanding this provision, a passenger shall not be carried during the solo training specified at paragraph 7.2 of this section.

6 PILOT QUALIFICATION

A pilot shall not engage in aerial stock mustering unless he or she:

- (a) has been approved for the purpose by CASA; and

- (b) holds a valid pilot licence, appropriate to the class of operation and has gained the minimum experience prescribed in subsection 7.

7 AERONAUTICAL EXPERIENCE

- 7.1 An applicant for approval to conduct aerial stock mustering in an aeroplane, a helicopter or registered gyroplane shall have gained the total number of hours in aeronautical experience applicable to the grant of a commercial pilot licence. The aeronautical experience shall include:
 - (a) 100 hours as a pilot in command of an aircraft which shall include at least fifty hours in command of the kind of aircraft for which the approval is sought; and
 - (b) 5 hours low flying in the appropriate kind of aircraft in accordance with the syllabus at Appendix I; and
 - (c) 10 hours training in aerial stock mustering operations in the appropriate kind of aircraft in the preceding 90 days in accordance with the syllabus at Appendix I; and
 - (d) 5 hours experience in the type of aircraft to be used for mustering.
- 7.2 The 10 hours operations training specified at paragraph 7.1 shall consist of a minimum of 6 hours dual training and the remainder may, at the discretion of the approved pilot, be in command under supervision training or solo operations under his or her direct supervision.

8 EXEMPTIONS

- 8.1 In the case of an applicant who holds or has held an agricultural pilot rating in the kind of aircraft for which approval is sought, the requirement for the low flying training specified in subparagraph 7.1 (b) may be waived subject to the satisfactory completion of the flight test specified at paragraph 9.1.
- 8.2 Where an applicant for an approval to conduct aerial stock mustering in helicopters has logged a minimum of 500 hours in command of helicopters, the 5 hours low flying training specified at subparagraph 7.1 (b) may be reduced to 2 hours.
- 8.3 Where an applicant for an approval to conduct aerial stock mustering has in the previous 2 years held a similar approval in a different kind of aircraft, the operational training in aircraft relating to the approval being sought may be reduced at the discretion of CASA.

9 EXAMINATION AND CERTIFICATE OF COMPETENCY

- 9.1 An applicant for approval to conduct aerial stock mustering in an aeroplane, a helicopter or a registered gyroplane shall demonstrate to an approved pilot, his or her proficiency in low level flying and emergency

flight manoeuvres at the completion of the low flying training for the kind of aircraft specified at Appendix I and before commencing aerial stock mustering operational training.

- 9.2 On completion of the aerial stock mustering operational training and when the applicant has achieved a satisfactory standard, the approved pilot who conducted the training shall complete a certificate of competency as set out at Appendix II and forward this to CASA. Approval for the applicant to conduct aerial stock mustering will then be granted.
- 9.3 The examination in aeronautical skill specified at paragraph 9.1 shall be conducted at a place and time mutually convenient to the applicant and the approved pilot. The applicant shall provide a suitable aircraft of a type used for aerial stock mustering, fitted with dully functioning dual controls and a means of intercommunication.

10 DURATION

The approval for a person to conduct aerial stock mustering shall remain in force until suspended, cancelled or otherwise varied by CASA.

11 RECENT EXPERIENCE

The holder of an aerial stock mustering approval shall not engage in aerial stock mustering operations unless he or she has completed a minimum of 20 hours of aerial stock mustering operations in the preceding 12 months or until he or she has completed a flight test to the satisfaction of an officer approved for the purposes of this subsection or an approved pilot. The flight test shall be recorded in the holder's log book.

12 APPROVED PILOTS

- 12.1 A person shall not act in the capacity of an approved pilot unless he or she has been approved to do so by CASA.
- 12.2 A person seeking approval to act as an approved pilot shall apply in writing to CASA.
- 12.3 A person shall not be approved to act as an approved pilot unless that person:
- (a) has had extensive experience in aerial stock mustering on the type of aircraft for which approval is being sought; and
 - (b) has met the recent experience requirements specified in paragraph 11; and
 - (c) satisfactorily demonstrates to CASA, in the operational environment, his or her ability to impart the operational knowledge

and demonstrate the low flying techniques used in aerial stock mustering specified in Appendix I.

- 12.4 CASA may suspend, cancel or otherwise vary an approval for a person to act as an approved pilot but unless CASA has exercised such power the approval shall remain in force for a period of 12 months from the date of grant of the approval.
- 12.5 An approved pilot seeking to renew his or her approval must:
- (a) if the approval expires when the applicant's age is an even number:
 - (i) have in the preceding 12 months completed a minimum of 20 hours aerial stock mustering in the kind of aircraft for which renewal of the approval is sought; and
 - (ii) at least 14 days prior to the expiry of the approval forward to CASA a completed certificate in the form specified at Appendix IV; and
 - (b) if the approval expires when the applicant's age is an odd number:
 - (i) have in the preceding 12 months completed a minimum of 20 hours aerial stock mustering in the kind of aircraft for which renewal of the approval is sought; and
 - (ii) satisfactorily demonstrates to CASA, in the operational environment, his or her ability to impart knowledge and demonstrate the flying techniques used in aerial stock mustering.

APPENDIX I
AERIAL STOCK MUSTERING PERMISSION
SYLLABUS OF TRAINING

1 FLYING TRAINING

An approved pilot is to conduct 5 hours dual training. Where the kind of aircraft to be used is a helicopter, training may be conducted by the holder of a helicopter flight instructor rating. The training for aeroplanes and gyroplanes shall be divided into 2 parts:

- (a) AIRCRAFT HANDLING — to be conducted at a safe altitude; and
- (b) LOW FLYING — to be conducted only after the student has demonstrated he/she can perform safely all aspects of subparagraph (a).

Flying training is to be supplemented by ground briefings where appropriate.

2 TRAINING SYLLABUS — AEROPLANES AND GYROPLANES

(a) Aircraft Handling:

- (i) level, climbing and descending turns up to 60° angle of bank;
- (ii) review of stalling symptoms and recovery in both wings level and turning flight up to 60° angle of bank (Aeroplanes);
- (iii) recovery from high rates of descent at speeds below minimum straight and level speed (Gyroplanes);
- (iv) slow flying (including use of flap and the effect of changing flap settings);
- (v) methods of losing height;
- (vi) manoeuvring at varying airspeeds and angles of bank.

Note: Before starting low flying training the student is to demonstrate safe aircraft handling of subparagraph (i), (iii) and (iv) below 300 feet but not below 150 feet.

(b) Low Flying:

- (i) low flying (below 100 feet above ground level);
- (ii) slow flying (including use of flap);
- (iii) effect of wind (apparent change in speed in head/tail winds and apparent slip and skip in cross winds);
- (iv) action in the event of engine failure at low level;
- (v) methods of losing height;
- (vi) procedure turns, steep and climbing turns from a fixed ground reference combined with descending turns back to the reference. The obstructed visibility inherent in manoeuvring

high-wing aeroplanes in descending turns to be a fixed ground reference shall be demonstrated;

- (vii) low flying in hilly terrain;
- (viii) effect of false horizons;
- (ix) effect of the sun, under certain conditions, on visibility;
- (x) approach to high ground — use of escape routes;
- (xi) avoidance of obstacles.

3 TRAINING SYLLABUS — HELICOPTERS

(a) Aircraft Handling and Low Flying:

- (i) hovering and slow flight;
- (ii) manoeuvring in and out of effective translational lift in varying wind conditions;
- (iii) manoeuvring in and out of ground effect;
- (iv) low flying (below 100 feet);
- (v) quick stops (including review of vortex ring conditions);
- (vi) methods of losing height;
- (vii) steep and torque turns;
- (viii) autorotative landings from normal and low level flight;
- (ix) precautions for operating in ground effect in dusty conditions;
- (x) avoidance of obstacles;
- (xi) low flying in hilly terrain;
- (xii) effect on false horizons;
- (xiii) effect of the sun, under certain conditions, on visibility;
- (xiv) approach to high ground — use of escape routes.

4 OPERATIONAL TRAINING

An approved pilot is to conduct a comprehensive briefing, applicable to all kinds of aircraft, on the operational aspects of aerial stock mustering, followed by a minimum of 10 hours training on actual stock mustering. This flight training is to include:

- (a) aerial reconnaissance and operational planning; and
- (b) the effect on operational procedures by obstacles, sun, wind and cattle fatigue; and
- (c) all aerial stock mustering techniques used while working in open country and hilly and timbered terrain.

APPENDIX II

AERIAL STOCK MUSTERING PERMISSION TRAINING CERTIFICATE

1. This is to certify that.....
holder of a pilot licence type.....No.....
has completed.....hours
low flying training in:

*aeroplanes
helicopters
gyroplanes

as specified in subparagraph 7.1 (b) of section 29.10 of the Civil Aviation Orders.

Date.....Signed.....

(Name in block letters)

Approved Pilot

Licence No

2. This is to certify that the above named applicant for an aerial stock mustering approval has completed.....hours aerial stock mustering operational training in:

*aeroplanes
helicopters
gyroplanes

as specified in subparagraph 7.1 (c) of section 29.10 of the Civil Aviation Orders and is competent to engage in these operations in *aeroplanes / helicopters / gyroplanes without supervision.

Date.....Signed.....

(Name in block letters)

Approved Pilot

Licence No

*Delete as required.

APPENDIX III

**AERIAL STOCK MUSTERING PERMISSION
RENEWAL CERTIFICATE**

I certify that I.....
holder of pilot licence type Nohave
completed.....hours aerial stock mustering in:

*aeroplanes
helicopters
gyroplanes

in the 12 months preceding this date and request the renewal of my approval to
conduct aerial stock mustering in.....

Date of birth

Date.....
.....
(Signature)

Address
.....
.....
.....

*Delete as required

APPENDIX IV

**AERIAL STOCK MUSTERING APPROVED PILOT
RENEWAL CERTIFICATE**

I certify that I.....
holder of pilot licence type No.....have
completed.....hours aerial stock mustering in:

*aeroplanes
helicopters
gyroplanes

in the 12 months preceding this date and request the renewal of my approval to conduct
training in aerial stock mustering in.....

Date of birth

Date.....

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(Signature)

Address

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*Delete as required