



WELLINGTON NEW ZEALAND

PURSUANT to Section 28 of the Civil Aviation Act 1990

I, MAURICE WILLIAMSON, Minister of Transport,

HEREBY MAKE the following ordinary rules.

SIGNED AT Wellington

This

15

day of

September

1994

by **MAURICE WILLIAMSON**

A handwritten signature in black ink, appearing to read 'M. Williamson', written over a horizontal line.

Minister of Transport

Civil Aviation Rules

Part 137

AGRICULTURAL AIRCRAFT OPERATIONS

Docket Nr. 1033



**Civil Aviation Rules
Part 137**

**AGRICULTURAL AIRCRAFT
OPERATIONS**

RULE OBJECTIVE, EXTENT OF CONSULTATION, AND COMMENCEMENT

The objective of Part 137 is to define a regulatory safety boundary for persons and organisations wishing to perform agricultural aircraft operations. The boundary prescribes certification requirements for those persons or organisations who wish to perform these operations for hire or reward, and requirements for the performance of agricultural aircraft operations.

In May 1990, the Air Transport Division of the Ministry of Transport published a notice of intention to carry out a complete review of the aviation regulatory system. This notice, in Civil Aviation Information Circular Air 3, listed the areas in which rules would be made and invited interested parties to register their wish to be part of the consultative process. The Register was identified as the Regulatory Review Consultative Group.

A draft document was developed by the rules rewrite team in consultation with the members of the consultative group. An informal draft was published and distributed for comment in April 1992.

A period of informal consultation followed. This included some written comments, telephone discussions and meetings with industry representatives. The informal consultative process culminated in the issue of Notice of Proposed Rule Making 92-7 under Docket No 1033 on 25 November 1992. The publication of this notice was advertised in the daily newspapers in the five main provincial centres on 25 November 1992.

The notice was mailed to members of the Regulatory Review Consultative Group and to other parties who were considered likely to have an interest in the proposal.

A period of 60 days was allowed for comment on the proposed Rule. Eight written submissions were received in response to this notice. Further meetings and discussions were held with members of the consultative group to address various aspects and, in particular, the request for certification of persons who perform agricultural aircraft operations for hire or reward. These included meetings at Taupo and Dunedin for industry members and at Wellington with executive members of the AAAONZ. All holders of an agricultural rating were also given the opportunity to comment on jettison capability by a questionnaire. These submissions and discussions were considered and where appropriate the proposed rules amended to take account of the concerns raised.

The rules as amended were then referred to and signed by the Minister of Transport.

Part 137 comes into force on 30 October 1994.

List of Rules

Subpart A — General

137.1	Applicability	3
137.3	Requirement for Ratings	3
137.5	Requirement for Certificate.....	3
137.7	Aircraft Equipment	3
137.9	Accidents and Incidents	4

Subpart B — Flight Rules

137.51	Applicability	4
137.53	Dispensing Agricultural Chemicals	4
137.55	Direction of Turns at Aerodromes	5
137.57	Height of Turns at Aerodromes.....	5
137.59	Operations Without Position Lights.....	6
137.61	Operations over Populous Areas.....	6
137.63	Operations over Non-populous Areas.....	6
137.65	Fuel Reserves.....	6

Subpart C — Special Flight Rules

137.101	Applicability	7
137.103	Maximum Take-off Weight	7
137.105	Take-off Distance and Flight Path - No Third Party Risk.....	8
137.107	Take-off Distance - Third Party Risk.....	8
137.109	Take-off Flight Path - Third Party Risk	9

Subpart D — Commercial Operations - General

137.151	Application for Certificate	9
137.153	Issue of Certificate	9
137.155	Display of Certificate	10
137.157	Duration of Certificate	10
137.159	Renewal of Certificate.....	10
137.161	Safety Inspections and Audits.....	11

137.163	Exemptions	11
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Subpart E — Commercial Operations - Operating Requirements

137.201	Records	11
137.203	Remote Base Operations	12
137.205	Operations over Populous Areas	12
137.207	Changes To Operations	12

Appendix A — Third Party Risk

Appendix B — Overload Weight Determination

Appendix C — Transitional Arrangements

Subpart A — General

137.1 *Applicability*

This Part prescribes—

- (1) rules, additional to the general operating and flight rules in Part 91, for pilots performing, or being trained to perform, an agricultural aircraft operation; and
- (2) exceptions from the general operating and flight rules in Part 91 for pilots performing, or being trained to perform, an agricultural aircraft operation; and
- (3) rules governing the certification and operation of persons performing a commercial agricultural aircraft operation.

[Until Part 91 comes into force the general operating and flight rules are prescribed in the Civil Aviation Regulations 1953]

137.3 *Requirement for Ratings*

Each pilot performing an agricultural aircraft operation shall hold —

- (1) a current and applicable agricultural rating issued under Part 61, Subpart I for the category of aircraft used unless —
 - (i) the pilot is training for an agricultural rating under the direct supervision of a holder of a current Category E flight instructor rating; or
 - (ii) the pilot is performing any of the following agricultural aircraft operations:
 - supply dropping or delivering farm materials;
 - agricultural, forest or water area surveying at a height of less than 500 feet above terrain;
 - feeding or transferring livestock; and
- (2) if dispensing an agricultural chemical, a current chemical rating issued under Part 61, Subpart J.

137.5 Requirement for Certificate

No person shall perform a commercial agricultural aircraft operation except under the authority of, and in accordance with the provisions of, an agricultural aircraft operator certificate issued under Subpart D.

137.7 Aircraft Equipment

Each person performing an agricultural aircraft operation shall ensure that the aircraft has, in addition to the equipment prescribed in Part 91, an approved and properly installed shoulder harness for each person.

[Until Part 91 comes into force the aircraft equipment requirements are prescribed in regulations 104 - 110 of the Civil Aviation Regulations 1953]

137.9 Accidents and Incidents

Each person performing an agricultural aircraft operation who is involved in an accident or incident shall notify the Director of the accident or incident in accordance with Part 3.

[Until Part 3 comes into force, the notification requirements for accidents and incidents are prescribed in regulation 59A and regulation 177 of the Civil Aviation Regulations 1953]

Subpart B — Flight Rules

137.51 Applicability

This Subpart prescribes additions to, and exceptions from, the general operating and flight rules in Part 91, for pilots performing, or being trained to perform, an agricultural aircraft operation.

[Until Part 91 comes into force the general operating and flight rules are prescribed in the Civil Aviation Regulations 1953]

137.53 Dispensing Agricultural Chemicals

(a) Except as provided in paragraph (b), each pilot dispensing an agricultural chemical on an agricultural aircraft operation shall dispense the agricultural chemical —

- (1) for its registered use; and
- (2) in accordance with the safety instructions or use limitations on its label.

(b) A pilot is not required to comply with paragraph (a) if the operation is for experimental purposes under —

- (1) the supervision of a Government department or Crown entity authorised by law to conduct research in the field; or
- (2) a permit from the applicable authority controlling such chemicals.

137.55 Direction of Turns at Aerodromes

Each pilot performing, or being trained to perform, an agricultural aircraft operation may turn in a direction other than that prescribed in Part 91, when approaching for a landing at, or after take-off from, an aerodrome if —

- (1) the aerodrome is used solely for agricultural aircraft operations; or
- (2) in any other case, the aerodrome displays the ground signal prescribed in Part 91 indicating that an agricultural aircraft operation is being conducted from that aerodrome.

[Until Part 91 comes into force, the direction of the turn is prescribed in regulation 91(2) of the Civil Aviation Regulations 1953 and the ground signal is prescribed in regulation 126(4) of the Civil Aviation Regulations 1953]

137.57 Height of Turns at Aerodromes

Each pilot performing, or being trained to perform, an agricultural aircraft operation may commence a turn after take-off from an aerodrome at an altitude other than that prescribed in Part 91 if —

- (1) the turn does not cause the aircraft to fly over a populous area; and
- (2) the aerodrome —
 - (i) is used solely for agricultural aircraft operations; or
 - (ii) has an aerodrome control service in operation and the turn is performed in accordance with an air traffic control clearance; or
 - (iii) in any other case, displays the ground signal prescribed in Part 91 indicating that an agricultural aircraft operation is being conducted from that aerodrome.

[Until Part 91 comes into force, the height requirements are prescribed in regulation 91(8) of the Civil Aviation Regulations 1953 and the ground signal is prescribed in regulation 126(4) of the Civil Aviation Regulations 1953]

137.59 Operations Without Position Lights

Notwithstanding Part 91, each pilot performing, or being trained to perform, an agricultural aircraft operation may operate at night without aircraft position lights if—

- (1) it is in the interests of safety to turn them off because of operating conditions; and
- (2) prominent unlighted objects are visible for not less than 1850 metres (1 nautical mile); and
- (3) take-offs and landings at aerodromes with an aerodrome control service are performed in accordance with an air traffic control clearance; and
- (4) take-offs and landings at other aerodromes are not made while other aircraft operations requiring position lights are in progress at that aerodrome.

[Until Part 91 comes into force, the requirement for position lights at night is prescribed in regulation 113(a), (b), and (c) of the Civil Aviation Regulations 1953]

137.61 Operations over Populous Areas

Each pilot performing an agricultural aircraft operation over a populous area may, for the proper accomplishment of the operation, fly below the minimum height prescribed in Part 91 if—

- (1) the pilot performs the operation on behalf of a Government department or Crown entity; and
- (2) the pilot performs the operation in accordance with conditions and limitations prescribed by the Director; and
- (3) the pilot performs the operation under the authority of an agricultural aircraft operator certificate issued under this Part; and
- (4) the holder of the agricultural aircraft operator certificate has complied with 137.205.

[Until Part 91 comes into force, the minimum safe height requirements over populous areas are prescribed in regulation 38 of the Civil Aviation Regulations 1953]

137.63 Operations over Non-populous Areas

Notwithstanding Part 91, each pilot performing, or being trained to perform, an agricultural aircraft operation may, during the operation or a reconnaissance before the operation, fly at any altitude and at any distance from an obstruction if—

- (1) the operation is not over a populous area; and

- (2) the operation is performed without creating a hazard to persons or property on the ground; and
- (3) the altitude and distance for all approaches, turnarounds, and departures are necessary for the operation.

[Until Part 91 comes into force, the minimum safe height requirements are prescribed in regulation 38 of the Civil Aviation Regulations 1953]

137.65 Fuel Reserves

Notwithstanding Part 91, each pilot performing, or being trained to perform, an agricultural aircraft operation shall ensure that the aircraft has the following minimum fuel reserves:

- (1) for aeroplanes, 30 minutes flight time;
- (2) for helicopters, 3 times the anticipated flight time or 30 minutes flight time, whichever is the lesser.

[Until Part 91 comes into force, fuel requirements are prescribed in regulation 86 of the Civil Aviation Regulations 1953]

Subpart C — Special Flight Rules

137.101 Applicability

This Subpart prescribes exceptions to the general operating and flight rules in Part 91, for pilots performing, or being trained to perform, an agricultural aircraft operation in an aeroplane issued with a restricted category airworthiness certificate under Part 21, Subpart H for the purpose of agricultural aircraft operations.

[Until Part 91 comes into force the general operating and flight rules are prescribed in the Civil Aviation Regulations 1953]

[Until Part 21, Subpart H comes into force, a restricted category airworthiness certificate for the purpose of agricultural aircraft operations shall be a certificate of airworthiness - agricultural category issued under regulation 161 of the Civil Aviation Regulations 1953]

137.103 Maximum Take-off Weight

(a) Notwithstanding Part 91 and subject to paragraph (b), each pilot performing, or being trained to perform, an agricultural aircraft operation may take-off at a weight greater than the MCTOW prescribed in the aeroplane's flight manual if the pilot complies with the procedures listed in Appendix B.

(b) Where there is a third party risk as defined in Appendix A, the pilot shall determine the maximum take-off weight from the requirements in 137.107 and 137.109.

[Until Part 91 comes into force, the aircraft performance requirements are prescribed in Civil Aviation Safety Order Nr 4]

137.105 Take-off Distance and Flight Path - No Third Party Risk

Notwithstanding Part 91, each pilot performing, or being trained to perform, an agricultural aircraft operation where there is no third party risk as defined in Appendix A, is not required to comply with the following:

- (1) the take-off distance specified in the aeroplane flight manual:
- (2) where applicable, the take-off flight path gradient specified in the aeroplane flight manual.

[Until Part 91 comes into force, the aircraft performance requirements are prescribed in Civil Aviation Safety Order Nr 4]

137.107 Take-off Distance - Third Party Risk

(a) Notwithstanding Part 91 and subject to paragraph (b), each pilot performing, or being trained to perform, an agricultural aircraft operation where there is a third party risk as defined in Appendix A, shall ensure that the take-off distance available is greater than the take-off distance specified in the aeroplane flight manual multiplied by a factor of 1.2.

(b) When calculating the take-off distance, the pilot shall take the following factors into account:

- (1) the weight of the aeroplane at the commencement of the take-off run:
- (2) the pressure altitude of the aerodrome:
- (3) the ambient temperature at the aerodrome:
- (4) the runway surface type and condition:
- (5) the runway slope in the direction of take-off:
- (6) not more than 50% of the headwind component or not less than 150% of the tailwind component.

[Until Part 91 comes into force, the aircraft performance requirements are prescribed in Civil Aviation Safety Order Nr 4]

137.109 Take-off Flight Path - Third Party Risk

(a) Notwithstanding Part 91 and subject to paragraph (b), each pilot performing, or being trained to perform, an agricultural aircraft operation where there is a third party risk as defined in Appendix A, shall ensure that the take-off flight path clears all obstacles by —

- (1) a vertical distance of at least 50 feet plus $0.025D$; or
- (2) a lateral distance of at least 30 metres plus $0.1D$ —

where D is the horizontal distance travelled by the aircraft from the end of the take-off distance available.

(b) When calculating compliance with paragraph (a), the pilot shall take the following factors into account:

- (1) the take-off flight path shall begin at a height of 50 feet above the take-off surface at the end of the take-off distance required by 137.107 and end at a height of 500 feet above the take-off surface:
- (2) the aircraft shall not be banked at an angle exceeding 20 degrees:
- (3) obstacles which have a lateral distance greater than 150 metres from the planned flight path may be disregarded.

[Until Part 91 comes into force, the aircraft performance requirements are prescribed in Civil Aviation Safety Order Nr 4]

Subpart D — Commercial Operations - General

137.151 Application for Certificate

An application for the grant of an agricultural aircraft operator certificate shall be made on form CAA 24137/01 and submitted to the Director.

137.153 Issue of Certificate

An applicant is entitled to an agricultural aircraft operator certificate if —

- (1) the applicant engages, employs or contracts —
 - (i) a senior person identified as the Chief Executive who is acceptable to the Director, and who has the authority to ensure that all activities can be financed and carried out in accordance with this Part; and

- (ii) a senior person identified as the Chief Pilot who is acceptable to the Director and who holds a Grade 1 agricultural rating issued under Part 61, Subpart I; and
- (2) the applicant, and the applicant's senior person or persons required by subparagraph (1) are fit and proper persons; and
- (3) the applicant pays any applicable fees or charges prescribed by regulations made under the Act; and
- (4) the granting of the certificate is not contrary to the interests of aviation safety.

137.155 Display of Certificate

The holder of an agricultural aircraft operator certificate shall display the certificate in a prominent place, accessible to the public, at the holder's principal place of operation and produce the certificate to the Director upon request.

137.157 Duration of Certificate

- (a) An agricultural aircraft operator certificate may be granted or renewed for a period of up to 5 years.
- (b) An agricultural aircraft operator certificate remains in force until it expires or is suspended or revoked by the Director.
- (c) An agricultural aircraft operator certificate shall expire if the certificate holder fails to perform an agricultural operation within a continuous period of 180 days.
- (d) The holder of an agricultural aircraft operator certificate that expires or is revoked shall forthwith surrender the certificate to the Director.
- (e) The holder of an agricultural aircraft operator certificate that is suspended shall forthwith produce the certificate to the Director for appropriate endorsement.

137.159 Renewal of Certificate

- (a) An application for the renewal of an agricultural aircraft operator certificate shall be made on form CAA 24137/01.
- (b) The application shall be submitted to the Director before the application renewal date specified on the certificate or, if no such date is specified, not less than 60 days before the certificate expires.

137.161 Safety Inspections and Audits

Each holder of an agricultural aircraft operator certificate is required under the Act to permit persons duly authorised by the Director to carry out inspections and audits of the holder's aircraft, facilities, documents, and records in accordance with the Act, to determine compliance with this Part.

137.163 Exemptions

The Director may exempt the holder of an agricultural aircraft operator certificate from any requirement in this Part in accordance with the Act.

Subpart E — Commercial Operations - Operating Requirements

137.201 Records

- (a) Each holder of an agricultural aircraft operator certificate shall maintain the following records at the certificate holder's principal place of operation:
- (1) the name and address of each client:
 - (2) the date of each agricultural aircraft operation:
 - (3) the name and quantity of the material that is dispensed on each agricultural aircraft operation:
 - (4) the name, address, flight crew licence number, and rating details of each pilot performing an agricultural aircraft operation:
 - (5) the date each pilot was issued with their agricultural rating or the date of the last successful completion by each pilot of the annual competency check required by 61.407(a), whichever occurred later:
 - (6) where applicable, the date each pilot was issued with their chemical rating or the date of the last successful completion by each pilot of the refresher course required by 61.457, whichever occurred later.
- (b) The records shall be retained for a period of not less than 12 months from the date of completion of the operation.

137.203 Remote Base Operations

Each holder of an agricultural aircraft operator certificate performing a commercial agricultural aircraft operation from a base, other than the principal place of operation, for a period of 14 or more consecutive nights shall appoint a base pilot who —

- (1) holds a current agricultural rating and, if applicable, a current chemical rating; and
- (2) is responsible for the operations from that remote base; and
- (3) may be responsible for arranging work rosters and maintaining records.

137.205 Operations over Populous Areas

Each holder of an agricultural aircraft operator certificate who wishes to perform an agricultural aircraft operation over a populous area shall —

- (1) prepare a plan of the operation, in conjunction with, and for the briefing of, all personnel and organisations involved in the operation, containing—
 - (i) consideration of obstructions to flight; and
 - (ii) the emergency landing capabilities of the aircraft used; and
 - (iii) any co-ordination necessary with the air traffic control service; and
- (2) give prior written notification to the territorial authority of the area over which the operation is to be performed; and
- (3) give notice of the operation to the public by an effective means; and
- (4) ensure maximum safety to persons and property on the ground, consistent with the operation; and
- (5) ensure that the aircraft has, within the preceding 100 hours of time in service —
 - (i) had an annual or 100-hour inspection in accordance with Part 43; or
 - (ii) been inspected under a progressive inspection programme.

[Until Part 43 comes into force, the inspection requirements are prescribed in section F.6 of the New Zealand Civil Airworthiness Requirements]

137.207 Changes To Operations

- (a) Each holder of an agricultural aircraft operator certificate shall notify the Director in writing of any amendments to the information required by form CAA 24137/01 as soon as practicable.
- (b) Where the certificate holder proposes to change the Chief Executive or the Chief Pilot, prior notification to, and acceptance by, the Director is required.

Appendix A — Third Party Risk

A third party risk exists where there is a third party or property of a third party within the defined area prescribed in Figure 1.

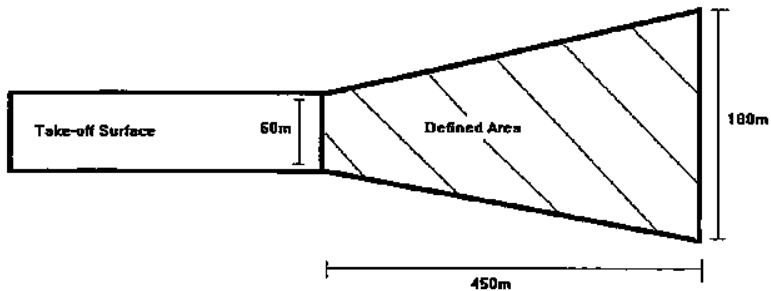


Figure 1.

Appendix B — Overload Weight Determination

(a) The pilot procedures required by 137.103(a) consist of —

- (1) finding the MCTOW in the aeroplane flight manual and the original aeroplane limit load factor; and
- (2) entering the graph at the 'original aeroplane load limit factor' on the horizontal axis of figure 2, going vertically up to the reference line and then horizontally to the vertical axis to read the 'maximum recommended percentage weight increase'; and

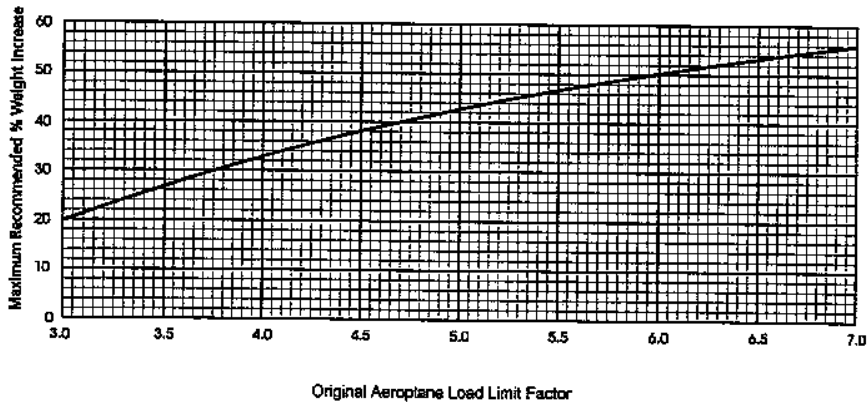


Figure 2.

- (3) increasing the original MCTOW by this percentage to find the new maximum take-off weight.
- (b) When considering whether to operate up to this new maximum take-off weight, the pilot shall take the following factors into account:
- (1) the pressure altitude of the aerodrome:
 - (2) the ambient temperature at the aerodrome:
 - (3) the runway surface type and condition:
 - (4) the runway slope in the direction of take-off:
 - (5) the headwind or tailwind component in the direction of the take-off:
 - (6) any other factors that may affect the performance of the operation.

Appendix C — Transitional Arrangements

An Aerial Work Certificate issued under regulation 136A of the Civil Aviation Regulations 1953 for the purpose of performing agricultural operations before this Part came into force shall be deemed to be an agricultural aircraft operator certificate for the purpose of these Rules until the certificate expires, is suspended or terminated, or until 31 December 1995, whichever occurs first.

CONSULTATION DETAILS

*(This statement does not form part of the rules contained in Part 137.
It provides details of the consultation undertaken in making the rules.)*

Background to the Rules

In April 1988 the Swedavia-McGregor Report on civil aviation regulation in New Zealand was completed. Following the recommendations contained in that report, the Air Transport Division of the Ministry of Transport commenced a complete review and rewrite of all existing civil aviation legislation and where necessary initiated new legislation for the areas not previously covered.

Considerable research was carried out to determine the format for the new legislation. It was decided that the most suitable legislative framework should incorporate the advantages of the system being developed by the European Joint Aviation Authorities and published as Joint Aviation Requirements (JAR), and of the Federal Aviation Administration (FAA) of the United States of America. The JAR are structured in a manner similar to the FAA's Federal Aviation Regulations (FAR) and aim to achieve maximum harmonisation while allowing for national variations.

New Zealand's revised legislation will be published as Civil Aviation Rules (CAR) divided into Parts. Each Part will convey a series of individual rules which relate to a particular aviation activity.

Accompanying each Part of the CAR will be at least one associated Advisory Circular (AC) which will expand, in an informative way, specific requirements of the CAR and describe an acceptable means of compliance. For example, an AC may contain the minimum acceptable practice or standard which would be necessary to meet a rule.

The CAR numbering system is based on the FAR system. As a general principle the subject matter of a Part will be the same or similar to the FAR although the title may differ to suit New Zealand terminology. Where a CAR does not readily equate with a FAR number code, a number has been selected that does not conflict with any existing FAR Part.

The FAR has been used as the starting point for the development of many CAR but there are likely to be significant differences in the content of the rule. The structure of Part 137 generally follows the content of the FAR. Changes have been made to conform to New Zealand legal practices and terminology.

The objective of the new rules system is to strike a balance of responsibility between the State authority and those who provide services and exercise privileges in the civil aviation system. This balance must enable the State authority to maintain continuing regulatory control and supervision while providing the maximum flexibility for participants to develop their own means of compliance.

Section 7 of the Civil Aviation Act 1990 (the Act) provides for the requirement to hold an aviation document for carrying out particular civil aviation activities. Section 12 of the Act requires the holders of such documents to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices.

Notice of Proposed Rule Making

To provide public notice of, and opportunity for comment on the proposed new rules, the Authority issued Notice of Proposed Rule Making 92-7 under Docket Number 1033 NR on 25 November 1992. This Notice proposed the introduction of Civil Aviation Rules Part 137 to provide a regulatory safety boundary for the certification of persons or organisations wishing to perform agricultural aircraft operations.

Supplementary Information

All comments made on the Notice of Proposed Rule Making are available in the rules docket for examination by interested persons. A report summarising each substantive contact with the Civil Aviation Authority contact person concerning this rule making has been filed in the docket.

Availability of the Document

Any person may view a copy of these rules at Aviation House, 1 Market Grove, Lower Hutt. Copies may be obtained from Publishing Solutions Ltd, PO Box 983, Wellington 6015, Telephone 0800 800 359.

Summary of comment to Docket Number 1033 NR NPRM

1. General Comments on the NPRM

From the eight submissions received, four general issues were raised. These are discussed as follows:

1.1 Operator Certification

The view was expressed by both the aviation industry and other bodies that agricultural aircraft operators should be certificated.

CAA response: The CAA has considered industry requests for operator certification and has amended the Part to provide for such a requirement.

The CAA approach was that outlined by the Swedavia-McGregor Review of Civil Aviation Safety Regulations and the Resources, Structure and Functions of the New Zealand Ministry of Transport Civil Aviation Division that was carried out in 1988. The concept outlined was that a commercial pilot licence (for the pilot) and a certificate of airworthiness (for the aircraft) were sufficient as entry criteria in this area of operations. The CAA has however agreed to accommodate the views of industry.

1.2 Statistical Data

One commenter queried why there were no requirements for statistical returns in Part 137.

CAA response: The requirement for statistical returns is to be promulgated in Part 3 and will require returns from a variety of operators, both commercial and private, corporate and individual.

1.3 Commercial Operations

One commenter requested that microlight aircraft and their pilots be permitted to conduct agricultural aircraft operations.

CAA response: The CAA does not agree with the commenters request, as the CAA is unsure as to how an equivalent level of safety could be achieved.

A further request from the commenter has since been received that goes some way to demonstrate how an equivalent or acceptable level of safety can be achieved. That matter will now be further consulted with industry. The suggestion will go through the normal rule making and consultation processes required by Part 11.

1.4 Chemical Safety

One commenter made considerable comment on the apparent lack of rules regarding the health and safety risk that may arise from agricultural aircraft operations. The commenter is seeking to have stricter controls on all spraying as well as the enforcement of accountability. The commenter noted that much of the existing legislation pertaining to agrochemicals and hazardous substances is about to be brought into the one piece of legislation under the proposed Hazardous Substances and New Organisms Bill.

CAA response: The CAA is aware of the concerns relating to aerial application of hazardous substances and of the proposed Hazardous Substances and New Organisms Bill. As part of the consultation process for Part 137, discussions were held with the Ministry of the Environment who are introducing the Hazardous Substances and New Organisms Bill, the Ministry of Agriculture and Fisheries and the Occupational Safety and Health division of the Ministry of Labour.

The CAA will continue to work with these authorities and will ensure that Part 137 is amended to reflect any requirements that are promulgated in the hazardous substances legislation.

2. Specific Comments on the NPRM

From the eight submissions received, three specific issues were raised. These are discussed as follows:

2.1 137.59 Pilot Qualifications - Chemical Ratings

Two commenters suggested that the holder of a Chemical Rating should either be assessed periodically or undergo regular update training appropriate to the Chemical Rating.

CAA response: The CAA accepts that the holder of a Chemical Rating needs to maintain an up-to-date knowledge of the industry and the resources used. Update training has recently become available for those using agrochemicals and the rule has been amended accordingly.

2.2 137.101 Maximum Take-off Weight

One commenter suggested that, where provision is made for operating at increased take-off weights, then the criteria on which such a determination is made should be clear, unambiguous and concise.

CAA response: The CAA agrees and has amended the rule to include such criteria.

However, the procedures included in this rule do not provide exhaustive criteria. It would be difficult, if not impossible, to produce a set of charts or other method of calculating the limiting AUV for a particular agricultural airstrip that would take account of all the criteria that must be considered for an agricultural maximum load take-off.

The agricultural pilot usually operates by starting at a take-off weight known to be well within the capabilities of the machine and its pilot and gradually increases the load to the maximum acceptable to the pilot under the existing conditions or the regulatory limit, whichever occurs first.

2.3 137.119(b)(1) Operations over a Congested Area

One commenter suggested that it was inappropriate for the CAA to require that an operator should obtain the approval of a local authority before conducting operations over a congested area. This should be the prerogative of the local authority.

CAA response: The CAA accepts the comment and has amended the rule accordingly.

Change to the NPRM

An item which regularly arose at consultation meetings, and the subject of the questionnaire was the jettison requirements. These have been transferred to Part 21 to be applied at the time the aircraft enters the aviation system by the issue of a type certificate. The final requirements in Part 21 will be —

'(d) Airworthiness design standards for aeroplanes to be certificated in the restricted category for the purpose of agricultural aircraft operations include —

- (1) the crew protection requirements prescribed in Section .35 of Appendix B of the United States of America Civil Aeronautics Manual 8 (dated 1 February 1965); and
- (2) for an aeroplane fitted with internal dispensing equipment, a placard indicating representative dump times, in full view of the pilot; and
- (3) for an aeroplane fitted with internal dispensing equipment, equipment capable of jettisoning not less than 80% of the aeroplane's maximum load of agricultural material within 5 seconds when configured for dispensing superphosphate or similar material.' "

Conclusion

The Authority concludes from this consultation that on balance the industry participants are in favour of the proposal. It also believes that Part 137 meets New Zealand's international obligations and is consistent with the recommendations of the Swedavia-McGregor Report of 1988.

