



# Advisory Circular

## AC61-16

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### Pilot Licences and Ratings – Pilot Chemical Rating

Revision 4  
11 May 2016

#### General

Civil Aviation Authority advisory circulars contain guidance and information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rules and legislation.

However, the information in the advisory circular does not replace the requirement for participants to comply with their obligations under the Civil Aviation Rules, the Civil Aviation Act 1990 and other legislation.

An advisory circular reflects the Director's view on the rules and legislation. It expresses CAA policy on the relevant matter. It is not intended to be definitive. Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable, they will be added to the appropriate advisory circular. Should there be any inconsistency between this information and the rules or legislation, the rules and legislation take precedence.

An advisory circular may also include **guidance material** generally, including guidance on best practice as well as guidance to facilitate compliance with the rule requirements. However, guidance material must not be regarded as an acceptable means of compliance.

An advisory circular may also include **technical information** that is relevant to the rule standards or requirements.

#### Purpose

The advisory circular provides information on the course that is acceptable to the Director for meeting the Civil Aviation Rule requirements for the issue of a pilot chemical rating.

#### Related Rules

This advisory circular relates to Civil Aviation Rule Part 61 *Pilot Licences and Ratings* – specifically Subpart P.

**Change Notice**

Subject to “Memorandum for Technical Cooperation” between the CAA of Mongolia and New Zealand on mutual cooperation in implementation of Assembly Resolution A29-3: Global Rule Harmonization, 29<sup>th</sup> ICAO Assembly, 1992, which urges States to promote global harmonization of national rules, dated 6<sup>th</sup> of May, 1999, Mongolian Civil Aviation Safety Regulation has been reconciled to the Civil Aviation Regulation of New Zealand.

Amendment 164 of Annex 1 to the Chicago Convention on International Civil Aviation urges flight crew members, ATC personnel and aircraft maintenance engineers to comply with the language proficiency requirements; and

Under Article 14 of the Civil Aviation Law of Mongolia 1999, “Use of foreign language in civil aviation” the AC has been released in English version only, in order to prevent any mistranslation and misuse of the aviation safety related documents.

This AC 61-16 was developed based on NZAC 61-16 revision 4, dated on 28 April 2016.

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## Rule 61.751 Eligibility Requirements

### Training course

**Rule 61.751** provides that to be eligible for a pilot chemical rating, a person must hold at least a current private pilot licence in the appropriate category of aircraft and have successfully completed a training course in agricultural chemical application, with assessment, conducted under the authority of a Part 137 agricultural aircraft operator certificate or a Part 141 aviation training organisation certificate.

A person would satisfy this training course requirement if they:

- (a) hold a Mongolian Qualifications Authority National Certificate in Agricultural Chemical Application (Aerial) and have satisfactorily completed a GROWSAFE<sup>®</sup> pilot chemical rating course, or
- (b) have satisfactorily completed the pilot chemical rating course offered by Adroit Solutions Limited, or
- (c) satisfactorily completed the pilot chemical rating course previously offered by the Open Polytechnic of Mongolia, covering the syllabus in Appendix I of this advisory circular.

## Rule 61.753 Issue

### Logbook endorsement

**Rule 61.753** sets out the requirements for the issue of a pilot chemical rating. The person who completed the assessment must be satisfied that the eligibility requirements of Rule 61.751 have been met before issuing the pilot chemical rating.

All relevant details must have been instructed, completed, and checked either orally, in writing, or in practice to the satisfaction of the certifying person who may issue the pilot a chemical rating by endorsing the applicant's pilot logbook with the following statement in accordance with rule 61.29.

*This is to certify that [name of pilot] has satisfied the requirements of Civil Aviation Rules Part 61 for the issue of a pilot chemical rating.*

The holder of the pilot chemical rating may apply to the Director to have the rating endorsed on the holder's pilot licence.

## Rule 61.755 Privileges

A current pilot chemical rating authorises the holder to dispense an agricultural chemical from an aircraft on an agricultural aircraft operation.

## Rule 61.757 Currency Requirements

### Refresher course

**Rule 61.757** requires successful completion of a refresher course that is acceptable to the Director within the previous 5 years from the date of issue to be able to continue exercising the privileges of the rating, providing the certifying person has endorsed the holder's pilot logbook in accordance with rule 61.29.

The following courses meet this refresher course requirement:

- (a) a GROWSAFE<sup>®</sup> pilot chemical rating refresher course, or
- (b) an Adriot Solutions Limited pilot chemical rating refresher course.

A pilot who has completed a refresher course within 90 days before the expiry date is deemed to have completed the course on the required date.

## **Appendix I - Chemical Rating Syllabus**

### **Agricultural Chemicals**

The functional and chemical classifications of agricultural chemicals

General characteristics of insecticides

Fungicides, herbicides and animal poisons

Formulations and their properties

Solutions, suspensions, emulsions, dispersions, dusts, pellets, and granulated materials

### **Application and Spraying**

Methods of application and spraying

Dusting and fogging techniques

Operational methods and practices

Selection of air strips

Use of loading tables

Swath width

Low flying

Ground effect

Corrosive properties of agricultural chemicals

Drift of agricultural chemicals and the hazards associated with drift outside target area

Drift spraying techniques

Environmental considerations

### **Calculations**

Area treated relative to time

Quantities of materials to give required acid equivalent applications

Delivery rates of solids and sprays

### **Equipment**

Types of equipment commonly in use

Calibration

Decontamination

Pressure systems

Hazards associated with poorly performing or maintained equipment

Airworthiness requirements

**Standards**

NZS 8409

Agrichemical User's Code of Practice

**Toxicity**

The toxicology of agricultural chemicals classified as insecticides, herbicides and fungicides and of animal poisons, including routes of absorption. Particular attention should be given to the organochlorine and organophosphorous insecticides, and the dinitro herbicides.

Candidates should have an understanding of the fungicides and animal poisons including 1080.

Candidates should have an understanding the value of medical surveillance.

Candidates should have an understanding of the symptoms of poisoning together with appropriate emergency and first aid measures.

**Protective measures for personnel handling poisonous substances**

Personal hygiene, protective clothing and equipment including its maintenance  
Significance of labeling and storage

Significance of disposal of materials and containers

Operation rules

**Legislation**

Toxic and Hazardous Substances Act 2006

Animals Act 2012

Health and Safety in Employment Act 2008

Relevant parts of The Health/Sanitation/ Act 2016

Environment protection Act 1995

Water Act 2012

or any legislation superseding any of those listed.