

Advisory Circular AC43-10

Revision 8 5 April 2025

Aircraft radio station – form CAA 2129, Aircraft Radio Station Equipment Approval Levels

General

Civil Aviation Authority (CAA) Advisory Circulars (ACs) contain information about standards, practices, and procedures that the Director has found to be an **Acceptable Means of Compliance** with the associated rule.

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 AC.

Purpose

This AC provides methods acceptable to CAA for providing radio station approval level information to aircraft operators.

This material is intended for operators of aircraft and licensed aircraft maintenance engineers carrying out modifications and other maintenance requiring the replacement <u>or creation</u> of form CAA 2129, *Aircraft Radio Station Equipment Approval Levels*.

Note: Only communication equipment required for the intended operation needs to be captured in the 2129.

Related Rules

This AC relates specifically to Part 43, Subpart B, *Maintenance*, rule 91.111(3)(iii), *Documents to be carried*, and Part 91, Subpart F, *Instrument and Equipment Requirements*.

Change Notice

Revision 8 updates contact information for CAA and removes duplication.

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Version History

Revision No.	Effective Date	Summary of Changes
AC43-10	3 March 1997	Initial issue.
AC43-10A	8 September 1997	Updated Appendix B.
AC43-10C	8 March 1998	Deleted Appendix A, updated former Appendix B now Appendix A.
AC43-10D	5 January 1999	Updated Appendix A.
AC43-10, Rev 5	25 January 2000	Updated Appendix A and changed format of AC.
AC43-10, Rev 6	15 February 2002	Updated Appendix A.
AC43-10, Rev 7	8 May 2024	Provided clarification regarding content of the form CAA 2129, including the need to list communication equipment on it. Revoked Appendix A and provides alternative sources of this information. Added a Version History.
AC43-10, Rev 8	5 April 2025	Updates contact information for CAA.
		Removes duplication.

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Introduction

In accordance with Part 91, Subpart F, *Instrument and Equipment Requirements,* communication equipment of either Level 1 or 2, as applicable, is required for:

- VFR in controlled airspace or outside controller airspace when communication with ATS is required (rule 91.513, VFR communication equipment), or
- VFR over water (rule 91.515, *Communication and navigation equipment VFR over water*), or
- IFR operations (rule 91.519, *IFR communication and navigation equipment*).

It is the aircraft operator's responsibility to ensure that the communication equipment installed in the aircraft is of the appropriate level for the operation to be conducted.

The form CAA 2129, which must be carried on the aircraft (in accordance with rule 91.111), provides the flight crew with a record of the communication equipment installed on the aircraft, which are either Level 1 or 2.

In accordance with rule 91.111(3)(iii), "a completed form CAA 2129" means a form CAA 2129 which lists the communication equipment required for the intended operation under Parts 91, 121, 125 or 135.

Aircraft Radio Station Approval Levels – form CAA 2129

General

This AC contains acceptable practices for the completion of the form CAA 2129.

Aircraft operators are required to ensure that the aircraft is equipped with the appropriate quantity and level of radio and navigation equipment for the operation being flown. The equipment requirements are detailed in Subpart F of Parts 91, 121, 125 and 135, *Instruments and Equipment*, and Appendix A of Part 91, *Instrument and equipment specifications*.

Civil aviation rules require that communication equipment must be approved to:

- Level 1 standards for IFR operations (rule 91.519)
- Either Level 1 or Level 2 standards for VFR operations in controlled airspace or VFR over water (rules 91.513(a) and 91.515), and
- Either Level 1 or Level 2 standards for VFR operations outside controlled airspace and required to communicate with any air traffic services (rule 91.513(b)).

The form CAA 2129 is intended to provide the operator, and pilot, with a list of the communication equipment that is approved for Level 1 or 2.

Note: For the purposes of this AC, "radio-transmitting equipment", means all installed component boxes or portable equipment whose internal function is to communicate, and

• is intended to transmit electromagnetic signals, and

• is required for the intended operation by Parts 91, 121, 125 or 135.

Definitions

For the purposes of this AC the following definition applies:

Approval Level means a number allocated to a particular item of equipment with reference to Part 91 Appendix A.9.

Requirement for a new form CAA 2129

A new form CAA 2129 should be completed whenever:

- an aircraft is issued with an initial Certificate of Airworthiness (C of A) and/or
- there is a change to the transmitting and/or receiving equipment installed on the aircraft for Level 1 or Level 2 equipment.

Equipment to be included on the form CAA 2129

The form CAA 2129 should list all items of the following types of equipment in Section 2 of the form, that are either Level 1 or 2 (in accordance with Part 91 Appendix A.9):

• Communication equipment (e.g., VHF, HF, SATCOM)

Aircraft entertainment systems that are not transmitters or receivers (cassette tape player systems, CD players) and hand-held communication units as well as tablets do not have to be listed on the form CAA 2129.

Determination of approval levels

Approval levels are set by assessing the equipment's ability to meet the minimum performance standards of the relevant technical specifications contained:

- in Part 91 Appendix A.9, or
- in the CAA <u>Register of Alternative Specification Approvals</u> which can be found on the CAA website on the website page on <u>Aircraft Equipment and Minimum Equipment</u> <u>Lists.</u>

For equipment where the approval level cannot be determined, participants can contact CAA by emailing certification@caa.govt.nz or info@caa.govt.nz .

Recording of approval levels

The person authorised to certify the aircraft release to service should record communication equipment approval levels in Section 2 on form CAA 2129.

Form CAA 2129 — certification

On installation of an approved navigation or communication modification affecting the aircraft's form CAA 2129, the certifying person should:

- ensure that the form CAA 2129 has been completed, and
- certify the form CAA 2129 in Section 3, and
- ensure the completed new form is given to the operator or is placed in the aircraft.

The certification of form CAA 2129 indicates that the form contains the information and approval levels in accordance with the Part 91 Appendix A.9 or the CAA Register of Alternative Specification Approvals listed above.

Acceptable persons to certify a form CAA 2129

Although any person can certify a form CAA 2129, it would normally be certified by either:

- the person certifying a modification that affects the content of a form CAA 2129, or
- the person doing the Release to Service (RTS) for maintenance for the initial issue of a C of A.

Obtaining form CAA 2129

This form can be accessed from:

- CAA's website under the Forms tab.
- CAA at the email addresses in the section *Determination of approval levels*.

If unsure if a certain piece of equipment is acceptable, operators are encouraged to check:

- Part 91, Appendix A, A.9, or
- CAA's <u>Register of Alternative Specification Approvals</u>

or contact CAA at the email addresses in the section *Determination of approval levels*.

APPENDIX A

As of 8 May 2024, Appendix A has been revoked, as it was not the best document to keep pace with updates in common types of Level 1, 2, 3 and 4 equipment. CAA's website is better suited for this, specifically the <u>Register of Alternative Specification Approvals</u> on the CAA website page on <u>Aircraft Equipment and Minimum Equipment Lists</u>.