

### Air Operator Certification— Part 119

Revision 7  
4 February 2014

#### General

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

An acceptable means of compliance is not intended to be the only means of compliance with a rule, and 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.

This advisory circular also includes Interpretative and Explanatory Material where it has been shown that further explanation is required. Explanatory and Interpretative Material may also be used to clarify the intent of the requirement. An Interpretative and Explanatory Material must not be regarded as an acceptable means of compliance.

#### Purpose

This advisory circular provides methods, acceptable to the Director, and explanatory material for showing compliance with requirements relating to the certification of aircraft operators under Part 119 for air operations conducted in accordance with Civil Aviation Rules Parts 121, 125, and 135.

#### Related Rules

This advisory circular relates specifically to Civil Aviation Rule Part 119 but also refers to requirements in the operating rules of Parts 121, 125, and 135.

#### Change Notice

Revision 7 amends the reference to Annual Review of Airworthiness to the current term Review of Airworthiness.

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## Rule compliance

*Note: Only rules requiring compliance guidance and informative/explanatory material are included in this section. Where the rule is self-explanatory no information is given.*

### Definitions

**AOOC** means an Air Operator Certificate

**AAOC** means an Airline Air Operator Certificate

**GAAOC** means a General Aviation Air Operator Certificate.

**ATO** means an Air Transport Operation.

**CTO** means a Commercial Transport Operation.

## Subpart A — General

### IEM 119.1 Purpose

Air operations are conducted under the authority of an *Air Operator Certificate* issued under Part 119, that authorises operations under Part 121, Part 125, or Part 135. To conduct such operations the applicant must be domiciled in New Zealand.

Domiciled means that the organisation will have permanent residence within New Zealand, is registered in New Zealand and the principal base of operations is in New Zealand.

### IEM 119.3

This rule is self-explanatory and the definitions contained in Part 1 should also be consulted.

### IEM 119.5

This rule is self-explanatory.

### IEM 119.9 Application for certificate

When making application to operate under Part 135 the applicant has the option of seeking an Airline Air Operator Certificate (AAOC) **OR** a General Aviation Air Operator Certificate (GAAOC).

If the operator elects to apply for an AAOC the requirements of Part 119 Subpart A, B and D must be complied with.

If the operator elects to apply for a GAAOC the requirements of Part 119 Subpart A, C and D must be complied with.

**Note that the applicability of Subparts B and C depend upon the type of certificate being sought, it is not necessary to comply with both of these Subparts. For example an Airline Air Operator Certificate has the requirement for a full quality assurance system. A General Aviation Air operator Certificate will require an Organisational Management system when it is intended to operate more than three aircraft or from more than two bases.**

When preparing an application for a certificate the operator needs to make additional decisions in respect of training, competency and maintenance.

1. The operator may wish to conduct its training and competency checks (in house) under the privileges of its Part 119 certificate or:
2. Contract out the provisions of training and competency checks to a Part 141 organisation.
3. Depending on the size of the aircraft to be operated it is necessary to decide whether the aircraft will be maintained in accordance with the provisions of Part 43 or the provisions of Part 145.

The application form CAA24119/01 must be completed in full and must identify the full extent of the intended operation including any training and competency checks to be conducted under the certificate. This information will be used in determining the scope of the operation and the assessment and preparation of the limitations contained in the operations specifications.

The applicant is required to submit the application as described in Rule 119.9, not less than 90 days before the date of the intended operation. In special cases where the applicant can show substantiating evidence that the operation must start within 90 days, the CAA will assess these reasons and may accept that a shorter certification period can be achieved. For operators that apply without giving the preferred 90 days notice the CAA cannot offer any confirmation that the operation will be certificated in time to meet the operator's deadline.

A shorter period is considered an exception to the rule and should be treated as such by applicants. Operators should plan their certification programme in advance and early consultation with the CAA will ensure all issues are dealt with well before the planned start-up date.

Having said this, the time involved for certification is dependent on the quality and completeness of the application and exposition.

### **IEM119.11 Issue of certificate**

*Air Operator Certificates* are issued in accordance with section 9 of the Civil Aviation Act 1990. The Director has certain obligations when issuing certificates. These include:

1. a fit and proper person test on the nominated senior persons in the organisation; and
2. ensuring the applicant meets the applicable requirements of Subpart B or C of this part; (*the reference to "natural person" means a real human being and not a body corporate*) and
3. being satisfied that the exposition includes procedures detailing the organisation's methods of compliance with the relevant rule Parts; and
4. being satisfied that granting the certificate is not contrary to the interests of aviation safety.

### **IEM 119.13 Privileges of certificate holder**

When an AOC is issued it will list the privileges that the certificate holder is permitted to perform. The privileges are those specified in 119.13(b) (1) through to (4). In addition to the listing on the certificate, the supporting operations specifications amplify those privileges.

The holder of an AAOC may perform air operations and associated training covered by Parts 121, 125, and 135.

The holder of a GAAOC may only perform air operations and associated training in accordance with Part 135. In addition, the privileges may be both air transport and commercial transport operations or limited to only air transport operations or commercial transport operations.

## **IEM 119.15 Operations specifications**

The operations specifications form part of the certificate and are issued with the AOC. The Director may amend the operations specifications at any time as the operator changes and develops their operation. The operation specifications are automatically generated by the CAA database at the time of producing the certificate and are based on the data taken from the CAA 24119/01 application form. It is therefore important that the applicant ensures that the scope of the intended operation is clearly identified on this form.

The operations specifications will not list in detail the operations to be conducted, only the types of operation. The complexity of the information that must be addressed depends on the complexity of the planned operation. Where the operation is limited to specific kinds of air operation the limitations section may read something similar to the following—

1. for CTO – photography, remote area access, line inspection, or simply helicopter commercial transport operations
2. for ATO – scenic flights, joyrides, glider flights, charter flights, scheduled transport .
3. IFR or VFR.

For ATO the list can be more specific than that for CTO due to the nature of the operations. The list of CTO operations will be necessarily broad in description to cover the broad nature of the operations that may be conducted. The contents of the operations specifications will be assessed for each applicant and may not need to contain specific information to satisfy the requirements of subparagraph 119.15(6).

It should be noted that any authorisation of SEIFR passenger operations under Part 125 on the operations specifications might be granted for a period less than the period specified on the Part 119 certificate. Annotating “SEIFR” against individual aeroplanes in the operations specification signifies the SEIFR capability.

Where an applicant has been granted specific exemptions against the rules, these will also be listed on the operations specifications. General exemptions will not be printed on the operations specifications.

## **IEM 119.17 Duration of certificate**

### ***New Applicant***

The initial issue of a certificate will normally be for a period of six months to enable the operator to demonstrate compliance with their exposition and Part 119. Prior to the expiry of the certificate the CAA will conduct a compliance inspection of the operator and, if satisfactory, a longer duration certificate, usually two years, will be issued.

### ***Renewal***

Subsequent renewals will depend on the results of ongoing audits of the operator and the certificate period may be issued for up to five years. In line with the Swedavia McGregor report the operator will be subject to a reassessment of the exposition for compliance with the Rules at least every five years.

It should be noted that this rule also addresses circumstances when the certificate holder must surrender the certificate to the Director.

## **IEM 119.19 Notification of termination of operations**

This rule is self-explanatory.

**IEM 119.21 Renewal of certificate**

The rule specifies a period of 60 days before the certificate expires for application for renewal. The certificate holder should make some provision for this in the exposition.

## Subpart B — Airline Air Operator – Certification Requirements

### General

This Subpart covers the certification of operators for operations under Parts 121, 125, or 135.

Operators of helicopters or smaller aeroplanes may request certification under this Subpart. Operators of combined fleets that consist of aeroplanes that fall under Parts 121, 125 and 135 should request certification under this Subpart. The CAA will issue an Air Operator Certificate under Part 119 to conduct Air Operations under Parts 121,125 or 135 as appropriate to the scope of the operator's intended air operations.

An operator and the Authority working in harmony towards a common aim can achieve the safe conduct of air operations. Functions of the two bodies are different, well defined, but complementary. In essence the operator complies with the standards set through putting in place a sound and competent management structure. The Authority working within a framework of law (statute) applies the entry standards applicable to the operator and monitors the operator's compliance with those standards as detailed in the exposition.

Rule 119.51 makes provision for the applicant for the grant of an Airline Air Operator Certificate to employ, contract or otherwise engage any or all the nominated senior persons required under this rule. The CAA is aware that the functions required of senior nominated persons, in many cases, will not make it appropriate to employ a person on a full time basis but may require the expertise of a person on a more casual basis. This rule makes provision for engagement of personnel on an as needed basis. In the terms of this rule Employ, Contract and Otherwise engage all have the meaning to commit by prior arrangement, to provide services and expertise for an agreed period.

Rule 119.169(n) has made provision for 'grandfather-rights' for senior persons while the incumbent continues to be employed in an equivalent position by the certificate holder that held the Regulation 136 *Air Service Certificate* (now called a *Transitional Air Operator Certificate*).

### AMC 119.51 Personnel requirements

**119.51(a)** An operator must identify their Chief Executive and other key personnel whose required qualifications are specified in Part 119, Appendix A.

The applicant's nominated senior persons must be employed, contracted or otherwise engaged to work sufficient hours such that the individual can fulfil the management functions associated with the size and scope of the operator's business.

**119.51(a)(1),(2) & (3)** The rule identifies what are considered the safety critical members of an organisation who will exercise an appropriate level of control, direction, and responsibility, to ensure the continued effectiveness of the operation. Further, the applicant must have in their exposition that is required by 119.81(a)(5) an organisation chart showing the lines of responsibility extending from the CEO through to each location where operational staff are located.

An applicant may utilise any organisational structure as part of their overall business structure provided the applicant can satisfy the Director as to the effectiveness of the reporting lines and control required to be exercised. Applicants should note that approval of alternative organisation structures is not automatic.

**Part 119 Appendix A** This appendix prescribes the minimum experience and qualifications of persons nominated for senior positions. Within this appendix there are areas where the Director can make assessment of equivalent standards. Within the confines of this rule experience and currency are directly related to an AOC.



## **IEM 119.51 Personnel requirements**

**119.51(a)** It is recommended that the applicant consider, at the time of application, how they will deal with transfer of the senior person functions, to other suitable and qualified persons during periods of absence. Although the rule does not make provision for or have any requirement for the situation where a senior person may be absent for a prolonged period of time, or vacates the position it is advisable to provide for this in advance. Consideration should also be given to a situation where a senior person has been incapacitated. This would in effect cause the position to be vacant for the period of incapacitation and would require a substitute person to meet the requirements of this Part. In the event that the responsibilities and functions are transferred to another person they would also be required to be fit and proper, and meet the experience and qualifications set out in Part 119 Appendix A.

In the event an air operator chooses not to provide for the situation where a senior nominated person vacates a position, it should be remembered that the Director has to be notified of such a situation and the operator will also be called to provide details of the contingency arrangements to be implemented pending a permanent solution being achieved.

It should be noted that where a change is proposed rule 119.165(b) requires the prior notification of the change and acceptance by the Director.

In accepting such contingency arrangements, the Director may impose limitations or conditions of a temporary nature for the period of the contingency as provided for in part 119.165(d). The conditions or limitations imposed by the Director in all cases will be clearly stated to the operator in writing, and could be as simple as providing a time frame for events to take place or a total suspension of operations.

### **IEM 119.51(a)(1) Chief Executive**

The intent of the rule regarding the responsibility and authority of this person is to ensure that:–

1. the aviation activities carried out by the organisation can be financed
2. those activities are carried out in accordance with this Part 119
3. the organisation complies with the requirements of this Part 119.

It is clear that this person needs to have the authority to ensure the activities of the operation can be financed. A suggested method of demonstrating this could be by presenting an annual business forecast, or have as a part of compliance with rule 119.81(a)(3), the authority to finance the operation clearly defined as part of the Chief Executive responsibilities.

The Chief Executive must assure that the exposition complies with the rules. For example the exposition amendment procedures should cover this.

The Chief Executive must also be assured that the operation is conducted in compliance with the exposition. Ensuring compliance with the exposition is the responsibility of the senior persons under rule 119.51(a)(2) and the assurance that the Chief Executive requires could be shown through the medium of the internal audit reports or inspections.

This person will need to demonstrate during initial application and at any other time, that they have the knowledge to control the organisation.

**119.51(b)** For the *airline air operator* separate people are considered necessary for each of the roles listed in the rule. However, the rule does allow the Director some discretion if the size and scope of the operator's organisation indicates that combining of some responsibilities is acceptable. An applicant requesting this discretion should consult with the CAA during the initial meetings.

Where positions are combined the operator will be required to provide evidence to demonstrate the person has sufficient time and resources to be reasonably expected to fulfil the responsibilities for the positions, considering the size and scope of the operator's business.

Some functions should not be combined as they conflict with responsibilities assigned to the intended positions. For example:

The functions of Chief Executive and Quality Assurance.

The functions of Air Operations and Occurrence Investigation.

**119.51(d)** This clause permits a senior person, responsible for a function identified in 119.51(b)(1), to delegate that function to other staff member/s. However the rule is also very clear that the **responsibility** for the function still remains with the nominated senior person and that the planned delegation must be acceptable to the Director.

However, where these functions are combined it would only be acceptable to the Director provided the person responsible for the function does not personally carry out the internal audit.

### **AMC 119.53 Personnel competency requirements**

The rule requires the applicant to establish procedures in their exposition to initially assess and maintain the competence of personnel authorised by the operator to plan, perform, supervise, inspect or certify the air operations listed in the operator's exposition.

With regard to personnel who are required to "plan", this means the high level planning of the operation and would encompass the development of new routes, procedures, equipment requirements, staffing levels etc.

With regard to personnel who are required to "perform", this means any person that is required to accomplish or complete any function relating to an air operation. This could encompass management of the training programme, competency checking, quality assurance, management system or flight following. It will also cover the flight crew competency that is specified in the operational rules.

With regard to personnel who are required to "supervise", this means any person who is required to oversee or be in charge of any part of the air operation and includes those persons nominated as senior persons.

With regard to personnel who are required to "inspect", this means any person who is required to examine or investigate any part of the air operation and includes those persons nominated as senior persons.

With regard to personnel who are required to "certify", this means any person who is required to make a formal statement or attest to any function or part of the air operation including maintenance and could include those persons nominated as senior persons.

The applicant's procedures can be tailored around the size of their operation. Procedures should indicate how that person maintains their ability to safely perform the operations and may be along the lines of an annual competency check. This is not restricted to just the pilot competency requirements.

The procedures must ensure the crew member has been tested as being competent prior to commencing operations and thereafter remains competent. This means that after the crew member has been initially assessed, then ongoing competency may be conducted on a continuous basis over the required period, provided that during this period the entire check has been completed. Reference should be made to the grace provisions of rule 135.611.

The written authorisation is given to staff, after they have been assessed as competent, this should authorise them to perform the tasks for which they are employed. In the case of a *one person operation* the exposition may be, in effect, the authorisation.

### **IEM 119.53 Personnel Competency Requirements**

This rule has two aspects to be considered and the operator will need to make a choice as to the direction that is to be taken.

**119.53(a)** This option requires the operator to establish procedures to initially assess and to maintain the competence of personnel. In this case the operator will produce the programme in its entirety, and engage, contract or otherwise employ an appropriately qualified examiner to carry out the training and competency checks within the programme.

**119.53(b)** This option enables an air operator to contract to an organisation that is appropriately certificated under Part 141 to perform the functions of checking to assess, or training to maintain the competency of the applicant's personnel.

Part 141 organisation authorisations relate to the assessment and training of flight crew and may include maintenance personnel. Assessment and continuing competency of senior persons in their respective management responsibilities, as specified in the job descriptions, must be carried out under the Part 119 certification.

Where an organisation is not qualified to carry out this function relating to management responsibilities then suitability qualified persons will need to be engaged for this function. This could for example be carried out by a consultant that is expert in this field, through peer review and assessment of past performance, briefing sessions, seminars, symposiums or simply training courses.

**119.53(c)** This rule requires an air operator to include in the exposition details of the functions being transferred to a Part 141 organisation and the scope of the checking and training and the authority of that organisation in respect to those functions.

The rule correctly identifies that the assessment and training functions are the responsibility of the air operator. It then enables the air operator to transfer any or all the functions to a Part 141 organisation.

The rule asks for details to be included in the exposition and therefore this part should be very clear and concise as to the functions and the scope to avoid any confusion over who is to carry out each function.

The air operator must then authorise the Part 141 organisation to carry out the tasks and submit any reports that may be specified.

*The detail and authorisation required by this rule could be included in the form of a contract between the operator and contractor. See Appendix A for details on subcontracting in general.*

### **IEM 119.55 Resource requirements**

This rule requires the air operator to provide resources in support of the proposed air operation. These should include items such as accommodation, workshops, hangar, equipment, tooling, training aids, data and documentation.

Rule 119.81(a)(8) requires descriptions of the necessary resources of the applicant to be included in the exposition. The CAA will examine the types of operations proposed by the applicant and compare the proposed resources for applicability.

This consideration is not an exact science but applicants should carefully consider the suggestions of the CAA representatives who will have examined many different operators and therefore have a good knowledge of requirements. The rule provides for an ability to vary the requirements by stating *where appropriate* with regards to the listed resources. This variance allows operators to provide only those items considered appropriate to their operation. Some items, such as offices and documentation, will, however, be required by all operators, some low utilisation equipment may not be required to be held on a permanent basis provided there are arrangements for resources to be made available as and when they may be needed.

### **IEM 119.57 Proving Flights or Tests**

The intent of this rule is to satisfy the Director, that an operator can meet prescribed requirements by demonstration in a particular aircraft type.

An existing operator who makes a significant change to the type of aircraft or kind of operation may be required to demonstrate that the relevant requirements can be met.

The CAA will observe a proving flight and may require the applicant to demonstrate any or all the aspects of a typical flight that is within the proposed scope of the operator. The demonstration may start at the initial enquiry by a customer through to the final completion of the flight and including documentation. It is not intended to be a route check and may not require an actual flight.

### **IEM 119.61 Maintenance responsibilities**

The intent of this rule makes the operator responsible for determining what maintenance is required, when it has to be performed, by whom and to what standard, to ensure the airworthiness of the aircraft being operated.

An operator should therefore have adequate knowledge of the design status (type specification, operator options, ADs, modifications, operational equipment) and the required maintenance to be performed.

Procedures included in the exposition must detail how the applicant is going to control the airworthiness of their aircraft. Whilst the responsibility may not be delegated, there is scope to contract with other persons (a maintenance provider) for the provision of certain maintenance functions and services.

The procedures should provide for a maintenance management or planning system. This may take any form including computerised systems. However where computerised systems are used, provision must be made to protect the data (password protect etc.), provide back up on a daily basis and consider contingency plans for reversion to a paper system in the event equipment failure.

The maintenance provider, whether in house or contracted, will be assessed as part of the certification process. The level and depth of assessment will depend on the maintenance provider's known performance within the aviation system. The assessment will establish that the maintenance provider has the ability to support the operator's aircraft and proposed operation.

The rule uses the words scope, functions and authority when subcontracting. Explanation of these words are given by the following examples—

1. **Functions:** To carry out data assessment – service bulletins / letters / ADs / AOLs; defect reporting; maintenance control; reliability etc.
2. **Scope:** Details of the maintenance activity to be conducted by the maintenance provider eg. Heavy / line maintenance / avionics/ component overhaul.
3. **Authority:** Having transferred a function, the authority given to the other person in respect to the maintenance performed must identify what decisions that person can make on the operators behalf.

*Note: See Appendix A & B for details on subcontracting in general, and subcontracting maintenance activities.*

### **IEM 119.63 Maintenance programme**

The maintenance programme and its associated procedures can be quite complex. This is an important part of the exposition and expert industry advice may be necessary to compile the necessary information. Refer also to AC119-5 *Aircraft maintenance programmes* regarding the development and establishment of maintenance programmes. The minimum requirement in all the air operations rules – Parts 121, 125, 135 – is the manufacturer’s maintenance programme. The UKCAA BCAR’s and US AC’s also contain information on the development of a maintenance programme, these could be used as a basis for development of a maintenance programme. Apart from particular procedural requirements there are requirements relating to other maintenance aspects such as–

1. Maintenance trend analysis if the programme utilises condition monitored maintenance
2. Information derived from health and usage monitoring systems

*Note: Health and Usage Monitoring Systems (HUMS) are becoming increasingly more relevant to air operations as was suggested in the Part 135 Review. After industry negotiation the requirements were removed but have been retained for Single Engine IFR (SEIFR) passenger operations under Part 125.*

3. The deferral of deficiencies found during maintenance

*Note: The requirements are that all systems and equipment required by the operating rules be fully serviceable, however Part 121,125 and rule 135.353(a)(4) provides for the development and approval of a Minimum Equipment List (MEL) in accordance with rule 91.539 to provide for the continued operation of an aircraft with inoperative equipment on board.*

### **Maintenance Programme References**

Part 43 Subpart B, rule 43.53 Performance of Maintenance

Part 91 Subpart G Operator Maintenance Requirements

Part 119 Subpart B (rule 119.63)

Part 121 Air Transport Operations – Large A/C – Subpart G

Part 125 Air Operations – Medium A/C – Subpart G

Part 135 Air Operations – Helicopters and Small A/C – Subpart G

Part 145 Aircraft Maintenance Organizations – rule 145.59(b)(3)(ii) refers you back to the “Operators” Approved Maintenance Programme

The creation and then development/control of a Maintenance Programme requires the understanding of how the aircraft has been type certificated and what type of continuous maintenance system has to be used.

### **Maintenance Programme Source Documents**

Source Documents can be any or all of the following:–

1. Maintenance Review Board Document.
2. Maintenance Planning Document

3. Aircraft Maintenance Manual – Chapter 5
4. Airworthiness Directives and/or Mandated SB's
5. Ageing Fleet Requirements
6. Corrosion Control Manuals
7. Any Document Referenced within any of the above
8. Other Mandated Documents such as:
  - (a) Maintenance programme issued by the Manufacturer
  - (b) Requirements issued by the State issuing the Type Certification for the A/C or components.
  - (c) The aircraft manufactures reliability requirements.

### **Process of developing a Maintenance Specification for an Aircraft Type**

You can use a database or, for small operators, you could use Word tables.

List all requirements, such as the reference number, title, restraints and revision status. It is recommended that you use the Main source document numbers, and then create similar numbers for other documents so “like items” appear together within the listing and also refer back to the source.

Review and identify all maintenance requirements entering details of your method and means of compliance. If items are not applicable, enter “N/A” and the reason under compliance.

Once all maintenance requirements have been identified and compliance entered, they can be sorted by compliance and or requirements etc.

To allow for development, provision should be made for updating. This can be done within the database and/or the document and should allow for details from inception to present status to be reviewed and ref files.

The Maintenance Programme for Part 121 and 125 operators should be developed as a stand-alone document with its own revision and control processes.

### **Maintenance Programme**

Maintenance Programme – Requirements

1. Specify the maintenance philosophy used for the aircraft
2. Detail the make and model of aircraft that the programme covers
3. Detail who is responsible for the manual and the criteria for revision changes (changes in operating procedures, major schedule changes, etc) who, how, why and when revisions are carried out. (Refer Item 8(c) under source documents).
4. List source Documents. (Refer list of source documents). Detail how revisions to the source documents are carried out. Who, how and when.
5. Detail how an aircraft can be added to and or exited from the programme. Impact on sampling, fleet data regards reliability etc, all impact on the programme.
6. Reliability - Detail the who, how, when, etc.

7. Detail special requirements (Date controlled items, etc.)
8. Detail APU (and other) relationship/ratio controlled items and how and when these need to be reviewed.
9. Detail Shelf life requirements (Could just refer to another manual).
10. Maintenance Schedule –
  - (a) Detail how the maintenance requirements are to be carried out – packaged A, B, C, D checks, or A, B with phased C checks and then a D check, or phased C checks 1 to 60 or equalized 1 to 120 etc. and the restraint intervals they will be carried out at. Could also specify or reference a manufactures programme.
  - (b) Detail any non CRS checks required.
  - (c) Detail all the required tasks. Two main processes can be adopted.
    - (i) Use the Maintenance Specification (as created above) within the document as a chapter to show requirement to compliance. The total Maintenance Programme document would then require assessing & approval by the CAA at each revision.
    - (ii) Reference to the Maintenance Specification document (held and controlled as a separate document) and specify how, when, who and why revisions are required to the Maintenance Specification
11. List Definitions and Acronyms used in the MP and MS

### **IEM 119.65 Documentation**

The procedures required by this rule should consider all documentation required for use by the operator. They should include all relevant technical data such as *service bulletins, airworthiness directives, maintenance manuals, flight manuals* and operational data.

The procedure should describe how the individual documents are entered into the system, reviewed, authorised and where they replace other documents and how that obsolete documentation is purged. Some form of marking of the documents should be employed to show it has been through the control process.

Documents may be kept in hard copy or electronic form. The rule allows for other formats of information, however, the CAA will consider any other format on its merits.

*Note: Refer to Appendix C for information regarding electronic records and documentation considerations.*

### **IEM 119.67 Records Personnel**

The procedures required by this rule should consider all personnel records required for use by the operator. These will include all persons required to hold a licence or rating, a delegation from the Director, or is exercising an authorisation granted by the certificate holder. This may include the nominated senior persons. The record must contain the information required by the rule and be retained for the specified period. Documents may be kept in hard copy or electronic form. The rule allows for other formats of information, however, the CAA will consider any other format on its merits.

*Note: Refer to Appendix C for information regarding electronic records and documentation considerations.*

## **IEM 119.69 Records – Resources**

The procedures required by this rule should ensure all details of tests, checks, and calibration of safety-critical resources etc. required by the Rule are accurately recorded. Typical equipment requiring these tests could include scales used for weighing passengers, baggage or freight, refuelling equipment, meteorological equipment, strops and lifting equipment. It should not cover maintenance tooling as that is addressed by Part 43 or Part 145, unless the operator is conducting their own maintenance and combining the operator's and maintainer's expositions.

This particular rule is not intended to include any of those items that are already covered by the equipment requirements of Subpart F of the operational rules and maintained by the approved aircraft maintenance programme.

## **IEM 119.71 Flight authorisation and control**

The operator's procedures can be tailored to the size of their operation. An operator may utilise procedure to authorise personnel that create a blanket authorisation system for employees to perform air operations.

For Parts 121 or 125 scheduled operations, a pilot roster would be evidence of authorisation.

For unscheduled operations, likely to occur under Part 135, a daily duty roster could suffice or an operator may authorise a person to fly and determine which flights take place on an individual basis.

In some situations a letter of authorisation given to a flight crew member detailing the type of operation and operational conditions for each task permitted for that crew member would be more appropriate.

The holder of the certificate is at all times responsible for the operations that take place and the applicant for the certificate should consider the effect of any type of blanket authorisation system. In any case it must be clear that the nominated senior person has authorised all aspects of the flight or series of flights.

## **IEM 119.73 Flight following system**

The intention of this rule is to ensure that every flight is covered by some form of flight following service so that appropriate emergency activation action is taken if the aircraft becomes overdue.

This flight following and alerting service is normally provided by a Part 172 certificated Air Traffic Service organisation as most flights are required to submit a flight plan to an ATS Unit. However an operator operating under Part 125 conducting non-stop flights departing from and returning to the same aerodrome and remaining within 25 nm of the aerodrome can arrange their own flight following under rule 125.57(f) and (g). Also an operator operating under Part 135 conducting VFR flights can arrange their own flight following in accordance with rule 135.57(f).

Flight following is intended to enable a company's operational base to know that a flight is proceeding safely and to provide an emergency activation service. This should be linked to the operators emergency situation action plan required by rules 125.91 and 135.91. This does not override the requirement for submission of a flight plan under rules 91.307, 91.407, 121.59, 125.57, 135.57 to an appropriate ATS unit.

The operator must establish a flight following system and procedures to ensure that, for each flight for which a flight plan is not filed with an ATS organisation, the flight is monitored and notification of overdue or missing aircraft is made to an acceptable organisation.

*Note: Any flight that departs from, terminates at, or transits through controlled airspace, will require a flight plan to be submitted to an ATS unit certificated under Part 172.*



The operator must retain at the operating base at least the information required to be included in a VFR flight plan required under rule 91.307(b).

The operator should include a procedure in their exposition to cover situations when communications are not available. This procedure should require the flight authorising person to consider the operating area, tasks to be completed, and any alternative means of ensuring that the aircraft continues to operate safely.

The communications system should be switched on so that two-way communications are constantly available. When flying in an area with no radio coverage, a 30-minute window for re-establishing communications is acceptable. Regardless of the fact that a flight following system is used, it is recommended that a listening watch should be kept on the local FISCOM frequency while airborne.

### **AMC 119.73(a)(2) Flight following system**

**119.73(a)(2) Communications:** A cell phone is an acceptable means of communication if VHF or HF radio communication with the company's flight following provider or operations base is not available, provided cell phone coverage is reliable in the operating area at the operating altitude.

**119.73(a)(3) Acceptable organisation:** This may be an ATS organisation, NZ police, search and rescue centre or any other organisation that has been set up to provide this type of service.

The person responsible for following the flight should:

1. Be trained and the training shown on a training record.
2. Have immediately available the information required by rule 119.73.
3. Have immediately available the procedure to be followed for a missing or overdue aircraft.

*Note: The procedure for missing or overdue aircraft should provide for logging the time and details of action taken so that the incident is fully recorded and traceable.*

4. Confirm any cell phone number used and that the cell phone is switched on.

### **IEM 119.75 Air operator security programme**

This rule requires an Airline Air Operator Certificate holder that is providing a regular air transport passenger service to establish a security programme that meets the requirements of Part 108. Regular air transport service is defined in the definitions in Part 1.

### **IEM 119.77 Establishment of operations procedures**

The intent of this rule is to require the operator to think about how an operation will be carried out, and describe the basic procedure in the exposition for their employees to follow. The applicant should remember that their personnel will utilise the exposition and operations procedures in complying with a rule.

The requirements for procedures are spread amongst many Parts and operators should examine them all, **but develop procedures only for those requirements relevant to their operation and the rules that specifically require a procedure.**

Those rules that are not applicable to the operation should be shown in the compliance matrix as N/A so that the CAA assessor can establish that the operator has at least considered them.

An operator using a combination of large, medium, or small aircraft should write one set of procedures that encompasses all their operations in accordance with the higher Part. For example, if Part 121 requirements are met then generally Parts 125 and 135 will be met, and only the differences between the rules need to be checked. The exception would be if a fixed wing

operator also operates helicopters – then it is likely that there will be types of operation that are peculiar to Part 135 that need to be included in the exposition.

The CAA has produced rule matrices that are tailored to identify the options for certification of airline air operator, general aviation air operator, training and the maintenance options of Parts 145 and 43.

The CAA rule matrix fully covers the requirements of—

1. Part 12 regarding accidents, incidents, and statistics
2. Part 19 transition rules
3. Part 43 regarding maintenance requirements
4. Part 61 regarding pilot licensing
5. Part 91 regarding general operating and flight rules.
6. Part 92 regarding the carriage of dangerous goods
7. Part 119 regarding certification
8. Part 135, 125 or 121 as applicable
9. Part 141 regarding training organisations
10. Part 108 regarding security programmes

The rules contain prohibitions, mandatory requirements, matters that an operator must “ensure”, and areas where a procedure is required to be established.

Where a mandatory requirement or a prohibition is stated and the rule is clear, the operator is not required to reproduce the rule or any part of that rule in the exposition.

However the operator must be assured that the operation is conducted within the scope of the rules.

The operator is required to have in place training and competency testing programmes that should give the operator assurance that personnel have the knowledge of the rules and the ability to operate within the scope of these rules. The training and competency testing programmes could be utilised to satisfy the operator that the operation is conducted within the scope of the rules.

Where the applicant is required to ensure that a rule is complied with, this may need a procedure. Alternatively the training and competency testing programmes, supported by the quality assurance or management system of internal audits may be sufficient in themselves to ensure compliance with a rule.

When considering all the rule parts that an operator must ensure compliance with, or that are mandatory requirements, it is suggested that full utilisation is made of the training and competency testing programmes.

Where an operator intends to ensure elements of the rules are complied with through the training and competency checking programmes these items should be included in the training syllabus and in a question bank for competency checking. Where a large number of items have been transferred to the training and checking area the checking items should be broken down into manageable parts to be checked on a rotational basis.

### ***Developing procedures***

A procedure may take many forms and be as complex or brief as need be. There has been volumes written on this subject and the operator may use any form that is suitable for the purpose and these may:

1. Take the form described below:
2. Be in the form of a flow chart:
3. Be contained on a checklist or:
4. Be contained in a form to be completed.
5. Be in the form of audio or visual media. (video etc)

The level of training, experience or qualifications held by the individuals may also have a bearing on depth and extent of any procedure. In order for it to be effective the procedure should describe the *who, what, when, where, why* and *how*, as appropriate, to the task or action to be carried out. One method of presenting the components of a procedure can be described as follows—

#### **Who**

1. Who the procedure is speaking to
2. Who will accomplish the procedure
3. Who is responsible to see that the procedure is done – an individual, a position, an organisation

#### **What**

1. What the procedure is about
2. What the procedure is trying to accomplish
3. What the person performing the procedure should do

#### **When**

When the procedure is to be accomplished

#### **Where**

Where the procedure will be accomplished

#### **Why**

Why the procedure is required

#### **How**

1. How the procedure will be accomplished – identified manual, operator's programme, other document
2. How the person determines what procedure will be used and if it has been accomplished

Another method of establishing a procedure may take the following form that generally follows an ISO standard format. This may be varied as appropriate as for some parts using all the elements is not required.

1. **Policy:** This part would contain the company policy in regard to the subject area. This could become repetitive and in some cases a general policy statement of the Chief Executive may have covered this.
2. **Purpose:** This will state the purpose for the procedure or process.
3. **Scope:** This should cover the extent or limits of the procedure or process.
4. **Responsibility:** This should identify the person responsible for carrying out the procedure or process. Normally by position title.
5. **References:** This will make reference to any other documents or reference material that is required for the performance of the procedure or process and should include any exemptions.
6. **Records:** This will identify any record or forms that are to be completed. For example flight and duty records, load sheets or technical log etc.
7. **Process or Procedure:** This is the explanation or instructions to carry out the task that satisfies the purpose for the process or procedure.

Procedures may be ordered in this manner or in any other way that achieves the desired outcome for the operator. They may be very simple or quite complex and this will depend on the outcome that is to be achieved. They could be in the form of a written description, flow diagram or completion of a checklist. In the case of a flow diagram or checklist the instructions for use could be very simple.

In some cases it may be more appropriate to include some items such as rules 135.63 Cockpit Checks, 135.65 Passenger Safety or 135.75 in the training and competency programme. These rules do not require a procedure to be developed in themselves but they do require each person performing an air operation to ensure the intent of the rules is complied with.

The procedures should have sufficient information to satisfy regulatory compliance. This may mean that other related rule references and prohibitions are included in the primary procedure. For example planning for flight and preparation may include elements of rules 19, 91 Subpart B, C, D and E, 135 Subpart C and D that in themselves do not require a procedure but must be considered during the planning phase.

This should have the effect of condensing procedures into areas relating to operational functions, and overcoming the need to produce a procedure for each and every rule.

### **AMC 119.79 Internal quality assurance**

Rule 119.79(f)(2) specifically requires a level of independence and training for auditors. The internal auditor must be independent of those directly responsible for the activity being audited. Training of internal auditors should be through an organisation acceptable to the Director. Alternatively operators may conduct the training through their own training system. The outcome will remain the same with the person conducting the audit being competent in the area being audited and also being trained in audit skills.

Any course of training should include the following elements.

1. Quality system principals.
2. Management of quality systems.
3. Auditing quality systems.

### **IEM 119.79 Internal quality assurance**

The purpose of the internal quality assurance system is to provide assurance to the Chief Executive that the organisation is in compliance with its exposition, its safety objectives, and the exposition demonstrates compliance with all the applicable operating rules.

The internal quality assurance system requires basic quality management procedures and the creation of safety policies. Applicants should not be concerned with over-complicating the system or introducing features that are not relevant to the size and scope of their operation. The quality management system should not stand aside from the operations, but should form part of the operator's standard business practices.

AC119-5 provides guidance on the development of a quality assurance system required by this Part.

### **IEM 119.81 Airline air operator exposition**

#### ***General requirements***

Applicants should consider the exposition as a general description of how their operation works; a tool of management in the operation of the business; and a means of instructing staff in how they are to perform their tasks. A properly written exposition can be concise and very effective.

The purpose of an exposition is to express the Chief Executive's requirements for the conduct of the organisation and state how the organisation will meet the regulatory requirements. It sets out the procedures, means and methods of a certificated organisation. The philosophical benefits of the manual are considerable and important to the safe operation of commercial aviation. The complex nature of aviation may give rise to procedural areas an operator is unaware of including ongoing changes to rules, airspace, compliance requirements and they all require a follow up system that the exposition must provide.

The exposition is the means by which an organisation defines its operation, and shows both its employees and the CAA how it will conduct its day-to-day business and ensure compliance with the rules.

An exposition should commence with the corporate commitment by the Chief Executive. The remaining parts of the exposition may be produced as any number of separate procedures, sections or as one simple document depending on the extent of the operations proposed.

Depending on an organisation's structure and size, the parts of the exposition could be arranged as—

1. Management Policy
2. Operations
3. Training
4. Maintenance Procedures
5. Quality Assurance
6. Contractual Arrangements
7. Emergency Situation Action Plan

Separate manuals should be cross-referenced to the management part of the exposition.

While the CAA does not wish to tell an operator how to structure a manual suite, experience has shown that having an upper level management manual, generally a management policy manual,

makes for a more user friendly exposition. All of the other associated manuals link to this upper level manual, which would have all the organisational information such as—

1. Corporate Statement
2. Description of manual hierarchy
3. Identification of required senior personnel
4. Organisation chart
5. Duties and responsibilities of senior personnel
6. Exposition amendment processes
7. Scope of Operation
8. Quality Assurance/Management System

There should be no confusion between the contents of the expositions for Part 119 and any other Part, specifically Part 145. Where an operator has these two certificates, the maintenance manual requirements should stand alone within the Part 119 exposition and not be addressed in the Part 145 exposition.

Senior persons should hold copies of those parts of an exposition that affect their areas of responsibility, and staff must be familiar with those parts of an exposition that affect their area of employment.

***119.81(a)(1) Corporate commitment***

The statement by a Chief Executive is accepted by the CAA as a corporate commitment by the organisation. It should clearly state the goals and objectives of the organisation in respect of the safety standards prescribed by Part 119. It may also contain the organisation's goals and objectives in respect of its commercial activities. The exposition is intended to be a tool of management and is the means by which the organisation's operation is presented to its staff, its customers, and the CAA.

***119.81(a)(2) & (3) Senior persons***

The titles and names of the senior persons within the organisation must be listed in the exposition. Their duties and responsibilities, and the areas in which they are directly responsible for liaison with the Director must be clearly defined.

***119.81(a)(4) Scope of operations***

The organisation is required to identify each location at which it intends to carry out air operations and the scope of activity at those locations. The intent of this requirement is to identify the scope of operations where operations staff are normally based to conduct operations. This does not include temporary bases for ad hoc charter operations. It does include functions that are contracted out such as, ground handling, training, security, dangerous goods etc.

***119.81(a)(5) Organisational chart***

There must be an organisation chart showing the reporting lines of the organisation. The chart must show the lines of responsibility from the nominated senior persons to the Chief Executive. The exposition must show the staffing arrangements at each place where the organisation intends to carry out air operations.

***119.81(a)(6) Staffing structure***

Summary of staff at each location. This does not require the names of individuals but should identify staff numbers for functions and operations that are to be conducted.

**119.81(a)(7) Operational bases**

The intent of this rule is to identify the location of principal bases where operations staff and aircraft are normally based to conduct air operations. This does not include temporary bases for ad hoc charter operations. The location of the principal maintenance base must be identified, this does not require maintenance out stations to be identified by the operator.

**119.81(a)(8) Details of resources**

This requires details of the resources that the air operator must provide in support of the proposed operation. (Refer rule 119.55 for details). The rule provides for an ability to vary the requirements by stating *where appropriate* with regards to the listed resources. This variance allows operators to provide only those items considered appropriate to their operation. Some items, such as offices and documentation, will, however, be required by all operators, some low utilisation equipment may not be required to be held on a permanent basis provided there are arrangements for resources to be made available as and when they may be needed.

**119.81(a)(9) Detailed procedures**

The procedures are not listed in the rule but they should cover all rule requirements that require a procedure and that are relevant to the operator's organisation and proposed operations. The procedures should accurately describe the organisation's practices related to its operations.

These could take the form of written text, audio-visual, or be simplified by flow charts, forms, performance graphs, etc with a written explanation. The exposition's content with regard to air operations can be generalised into broad areas.

The wide range and variety of commercial transport operations prohibits the finer detail being included in the exposition. All applicants should address the requirements to the extent that they apply to the particular scope and intended activity.

**Operations procedures:** The operational procedures form a large section of the exposition. Examples of these are:

1. Planning for flight
2. Stowage of Baggage and Cargo
3. Passenger Briefing
4. Flight Following
5. Fuelling
6. Recording and Control of Defects

**Other procedures:** Procedures required elsewhere in Part 119, and generally more organisationally focussed include—

1. competence of personnel
2. operational, safety, and maintenance data, including the notification of changes in equipment and operating procedures to appropriate operations personnel
3. control of documentation

4. personnel records
5. resource records
6. flight authorisation and control of air operations
7. internal quality assurance of the organization
8. maintenance procedures

**Programmes:** As well as procedures there are requirements for programmes to be established, including, as appropriate to the operation–

1. security
2. maintenance, including personnel training and information, and the certifying of the maintenance review
3. operational competency assessment
4. the advance qualification programme
5. flight attendant training
6. flight crew training
7. flight and duty
8. maintenance programme

***119.81(a)(10) Details of maintenance***

This rule requires details of the maintenance procedures contained in Part 119 and other Parts to be included in the exposition. It also requires identification of the organisation that will perform the maintenance.

***119.81(a)(11) Details of programmes***

This rule requires details of the maintenance programme contained in other Parts to be included in the exposition.

***119.81(a)(12) Laws of foreign State***

Where an operator intends to operate to, from or within a foreign State then the operator is required to have a procedure that ensures the operation is conducted within the scope of rules of that State.

***119.81(a)(13) Exposition amendment***

A clear procedure is required to control, amend and distribute the exposition. This procedure needs to give consideration to the different processes required when dealing with the changes required by rule 119.165(b) and the routine changes that take place on a day-to-day basis.

***119.81(b) Exposition acceptance***

Operators should take ownership of, and responsibility for, their exposition. The exposition should work for the operator by being relevant to their operations and clearly written.

The acceptance of an organisation's exposition by the Director is one step in the process of certification. Unless the Director accepts an exposition a certificate cannot be issued.



***Multiple Certification***

When an organisation seeks certification under more than one Part – Parts 119, 141, and 145 for instance – which all require expositions, it may be possible for some sections of the exposition to be common to each certificate. For instance, if the same management set-up is used for each certificate, the management part of the exposition could be common. Equally all of the Quality Assurance procedures for one or more certificate could be placed in one manual.

Whatever exposition format is chosen, it must clearly show how each element of the applicable rule is satisfied. To reduce the cost of CAA assessment and to ensure that all required rules are addressed, a completed *CAA rule compliance matrix* should accompany the exposition. This matrix is available from the CAA or from the CAA web site, ([www.caa.govt.nz](http://www.caa.govt.nz)), under the heading ‘Operator Certification’. Any difficulty in establishing compliance will require more CAA investigation time, and this can only result in additional cost to the applicant.

## Subpart C — General Aviation Air Operator – Certification Requirements

### General

This Subpart covers the certification of operators for operations under Part 135.

Operators of helicopters or smaller aeroplanes may request certification under this Subpart. Operators of combined fleets that consist of aeroplanes that fall under Parts 121, 125 and 135 should request certification under Subpart B. The CAA will issue an Air Operator Certificate under Part 119 to conduct Air Operations under Parts 121, 125 or 135 as appropriate to the scope of the operator's intended air operations.

An operator and the Authority working in harmony towards a common aim can achieve the safe conduct of air operations. Functions of the two bodies are different, well defined, but complementary. In essence the operator complies with the standards set through putting in place a sound and competent management structure. The Authority working within a framework of law (statute) applies the entry standards applicable to the operator and monitors the operator's compliance with those standards as detailed in the exposition.

Rule 119.101 makes provision for the applicant for the grant of a General Aviation Air Operator Certificate to employ, contract or otherwise engage any or all the nominated senior persons required under this rule. The CAA is aware that the functions required of senior nominated persons, in many cases, will not make it appropriate to employ a person on a full time basis, but may require the expertise of a person on a more casual basis. This rule makes provision for engagement of personnel on an as needed basis. In the terms of this rule Employ, Contract and Otherwise engage all have the meaning to commit by prior arrangement, to provide services and expertise for an agreed period.

Rule 119.169(n) has made provision for 'grandfather-rights' for senior persons while the incumbent continues to be employed in an equivalent position by the certificate holder that held the Regulation 136 *Air Service Certificate* (now called a *Transitional Air Operator Certificate*).

### AMC 119.101 Personnel requirements

**119.101(a)** An operator must identify their Chief Executive and other key personnel whose required qualifications are specified in Part 119 Appendix B.

The applicants nominated senior persons must be employed, contracted or otherwise engaged to work sufficient hours such that the individual can fulfil the management functions associated with the size and scope of the operator's business.

**119.101(a)(1), (2) & (3)** The rule identifies what are considered the safety critical members of an organisation who will exercise an appropriate level of control, direction, and responsibility, to ensure the continued effectiveness of the operation. Further, the applicant must, where appropriate, have in their exposition an organisation chart showing the lines of responsibility extending from the CEO through to each location where operational staff are based (required by rule 119.125(a)(4)).

An applicant may utilise any organisational structure provided the applicant can satisfy the Director as to the effectiveness of the reporting lines and control required to be exercised. Applicants should note that approval of alternative organisation structures is not automatic.

**Part 119 Appendix B** This appendix prescribes the minimum experience and qualifications of persons nominated for senior positions. Within this appendix there are areas where the Director can make assessment of equivalent standards.

## **IEM 119.101 Personnel requirements**

**119.101 (a)** It is recommended that the applicant consider, at the time of application, how they will deal with transfer of the senior person functions to other suitable and qualified persons during periods of absence. Although the rule does not make provision for or have any requirement for the situation where a senior person may be absent for a prolonged period of time, or vacates the position it is advisable to provide for this in advance. Consideration should also be given to a situation where a senior person has been incapacitated. This would in effect cause the position to be vacant for the period of incapacitation and would require a substitute person that meets the requirements of this Part. In the event that the responsibilities and functions are transferred to another person they would also be required to be fit and proper and meet the experience and qualifications set out in Part 119 Appendix B.

In the event an air operator chooses not to provide for the situation where a senior nominated person vacates a position, it should be remembered that the Director has to be notified of such a situation and the operator will also be called to provide details of the contingency arrangements that are to be implemented pending a permanent solution being achieved.

It should be noted that where a change is proposed, rule 119.165(b) requires the prior notification of the change and acceptance by the Director.

In accepting such contingency arrangement the Director may impose limitations or conditions of a temporary nature for the period of the contingency as provided for in rule 119.165(d). The conditions or limitations imposed by the Director in all cases will be clearly stated to the operator in writing, and could be as simple as providing a time frame for events to take place or a total suspension of operations.

### **IEM 119.101(a)(1) Chief Executive**

The intent of the rule regarding the responsibility and authority of this person is to ensure that:-

1. the aviation activities carried out by the organisation can be financed
2. those activities are carried out in accordance with Part 119
3. the organisation complies with the requirements of Part 119.

It is clear that this person needs to have the authority to ensure the activities of the operation can be financed. A suggested method of demonstrating this could be by presenting an annual business forecast, or have as a part of compliance with rule 119.125(a)(3), the authority to finance the operation clearly defined as part of the Chief Executive responsibilities.

The Chief Executive must assure that the exposition complies with the rules. For example the exposition amendment procedures should cover this.

The Chief Executive must also be assured that the operation is conducted in compliance with the exposition. Ensuring compliance with the exposition is the responsibility of the senior persons under rule 119.101(a)(2) and the assurance that the Chief Executive requires could be shown through the medium of the internal audit reports or inspections.

This person will need to demonstrate, during initial application and at any other time, that they have the knowledge to control the organisation.

**119.101(b)** For the *General Aviation Air Operator* separate people are considered necessary for each of the roles listed in the rule for larger organisations. However, the rule does allow the Director some discretion if the size and scope of the operator's organisation indicates that combining some of the responsibilities is acceptable. An applicant requesting this discretion should consult with the CAA during the initial meetings.

Where positions are combined the operator will be required to provide evidence to demonstrate the person has sufficient time and resources to fulfil the responsibilities for the positions.

Some functions should not be combined as they conflict with responsibilities assigned to the intended positions. For example:

The functions of Chief Executive and organisational management system.

The functions of air operations and occurrence investigation.

However, where these functions are combined it would only be acceptable to the Director provided the person responsible for the function does not personally carry out the internal checking.

### **AMC 119.103 Personnel competency requirements**

The rule requires the applicant to establish procedures in their exposition to initially assess and maintain the competence of personnel authorised by the operator to plan, perform, supervise, inspect or certify the air operations listed in the operator's exposition.

It should be noted that there are two separate functions involved with this rule. One is the training of personnel and the other is the checking to assess competence.

With regard to personnel who are required to "plan", this means the high level planning of the operation and would encompass the development of new routes, procedures, equipment requirements, staffing levels etc.

With regard to personnel who are required to "perform", this means any person that is required to accomplish or complete any function relating to an air operation. This could encompass management of the training programme, competency checking, quality assurance or management system or flight following. It will also cover the flight crew competency that is specified in the operational rules.

With regard to personnel who are required to "supervise", this means any person who is required to oversee or be in charge of any part of the air operation and includes those persons nominated as senior persons.

With regard to personnel who are required to "inspect", this means any person who is required to examine or investigate any part of the air operation and includes those persons nominated as senior persons.

With regard to personnel who are required to "certify, this means any person who is required to make a formal statement or attest to any function or part of the air operation and may include maintenance and those persons nominated as senior persons.

The applicant's procedures can be tailored around the size of their operation. Procedures should indicate how that person maintains their ability to safely perform the operations and may be along the lines of an annual competency check. This is not restricted to just the pilot competency requirements.

The procedures must ensure the crew member has been tested as being competent prior to commencing operations and thereafter remains competent. This means that after the crew member has been initially assessed, then ongoing competency may be conducted on a continuous basis over the appropriate period, provided that over the appropriate period the entire check has been completed. Reference should be made to the grace provisions of rule 135.611.

Written authorisation is given to staff, after they have been assessed as competent, this should authorise them to perform the tasks for which they are employed. In the case of a *one-person operation* the exposition may be, in effect, the authorisation.

### **IEM 119.103 Personnel competency requirements**

This rule has three aspects to be considered and the operator will need to make a choice as to the direction that is to be taken. This rule provides for the initial assessment and the maintenance of the competency of the operator's personnel generally. The assessment and maintenance of competency of flight crew is specifically addressed in Part 135 Subpart J.

*119.103(a)* This option requires the operator to establish procedures to initially assess and to maintain the competence of personnel. In this case the operator will produce the programme in its entirety, and engage, contract or otherwise employ an appropriately qualified examiner to carry out the training and competency checks within the programme.

*119.103(b)* This option enables an air operator to contract to an organisation that is appropriately certificated under Part 141 to perform the functions of checking to assess, or training to maintain the competency of the applicant's personnel.

Part 141 organisation authorisations relate to the assessment and training of flight crew and may include maintenance personnel. Assessment and continuing competency of senior persons in their respective management responsibilities, as specified in the job descriptions, must be carried out under the Part 119 certification.

Where an organisation is not qualified to carry out this function relating to management responsibilities then suitability qualified persons will need to be engaged for this function. This could for example be carried out by a consultant that is expert in this field, through peer review and assessment of past performance, briefing sessions, seminars, symposiums or simply training courses.

*119.103(c)* This rule requires an air operator to include in the exposition details of the functions being transferred to a Part 141 organisation and the scope of the checking and training and the authority of that organisation in respect to those functions.

The rule correctly identifies that the assessment and training functions are the responsibility of the air operator. It then enables the air operator to transfer any or all the functions to a Part 141 organisation. The rule asks for details to be included in the exposition and therefore this part should be very clear and concise as to the functions and the scope to avoid any confusion over who is to carry out each function. The air operator must then authorise the Part 141 organisation to carry out the tasks and submit any reports that may be specified.

*119.103(d)* This is the third option and the intent of this rule is to permit an operator to utilise the training and checking programme of another operator or an acceptable programme held by someone else that has been tailored to the air operator's requirements.

The training and competency assessment programme will have to be presented in such a form that will identify the operator that it applies to. The Director must then assess the programme as suitable for the scope of that operator.

This option requires the operator to engage, contract or otherwise employ an appropriately qualified flight examiner and to carry out the training and checking under the operator's own Part 119 certificate.

### **IEM 119.105 Resource requirements**

This rule requires the air operator to provide resources in support of the proposed air operation. These should include items such as accommodation, workshops, hangars, equipment, tooling, training aids, data and documentation.

This consideration is not an exact science but applicants should carefully consider the suggestions of the CAA representatives who will have examined many different operators and therefore have a good knowledge of requirements. The rule provides for an ability to vary the requirements by stating “*where appropriate*” with regards to the listed resources. This variance allows operators to provide only those items considered necessary to their operation. Some items, such as offices and documentation, will, however, be required by all operators, some low utilisation equipment may not be required to be held on a permanent basis provided there are arrangements for resources to be made available as and when they may be needed.

### **IEM 119.107 Proving flights or tests**

The intent of this rule is to satisfy the Director, that an operator can meet prescribed requirements by demonstration in a particular aircraft type.

An existing operator who makes a significant change to the type of aircraft or kind of operation may be required to demonstrate that the relevant requirements can be met.

The CAA in observing a proving flight may require the applicant to demonstrate any or all the aspects of a typical flight that is within the proposed scope of the operator. The demonstration may start at the initial enquiry by a customer through to the final completion of the flight and including documentation. It is not intended to be a route check and may not require an actual flight.

### **IEM 119.109 Maintenance responsibilities**

**119.109(a)** The intent of this rule makes the operator responsible for determining what maintenance is required, when it has to be performed, by whom and to what standard, to ensure the airworthiness of the aircraft being operated.

An operator should therefore have adequate knowledge of the design status (type specification, operator options, ADs, modifications, operational equipment) and the required maintenance to be performed.

The exposition must contain detail of how the applicant is going to ensure the continued airworthiness of their aircraft. The procedures should provide for a maintenance planning and monitoring system that allows the operator to manage the airworthiness of the aircraft. Whilst the operator is not permitted to delegate the responsibility for ensuring continued airworthiness, scope does exist for the operator to contract with other persons (a maintenance provider) for the provision of certain maintenance functions and services.

**119.109(b)** When an operator contracts with another person for the provision of maintenance, the contracted maintenance provider will be assessed as part of the certification process. This assessment will determine the contracted maintenance provider’s ability to support the operator’s aircraft and proposed operations.

The rule uses the words functions, scope and authority when subcontracting. Explanations of these terms are given by the following examples.

1. **Functions:** To carry out data assessment – service bulletins / letters / ADs / AOLs; defect reporting; maintenance control; reliability monitoring etc.
2. **Scope:** Details of the level of maintenance that the operator has permitted the contracted maintenance provider to perform e.g. Heavy / line maintenance / avionics
3. **Authority:** When maintenance has been transferred to a contracted maintenance provider, the operator must identify what level of authority has been transferred in respect to decisions that the contracted maintenance provider is permitted to make on the operators behalf.

*Note: See Appendix A for details on subcontracting in general, and Appendix B for subcontracting maintenance activities.*

### **IEM 119.111 Maintenance Programme**

The maintenance programme and its associated procedures can be quite complex. In most instances the complexity of the maintenance programme will be proportional to the complexity of the aircraft being operated e.g. A single piston engine fixed wing aircraft will require a somewhat less complex maintenance programme than that applicable to a multi engine turbine powered helicopter.

This is an important part of the operator's exposition and AC119-5 *Aircraft maintenance programmes* contains information regarding the development and establishment of maintenance programmes. It may however be necessary to obtain expert industry advice in order to compile the required information.

In all of the air operations rules – Parts 121, 125 & 135 – the manufacturer's maintenance programme is the minimum standard acceptable for certification. Furthermore, each operator must include a number of items additional to those specified in Part 91 Subpart G when developing its maintenance programme under this Part.

For the operator of aircraft that are normally utilised by a Part 135 organisation the maintenance programme can be relatively simple with little change to what may be currently in place for the transitional air operator. The maintenance programme should contain all the elements specified in Parts 119, 135, 91 and 43 as appropriate. These rules contain general and specific requirements.

A Maintenance Programme is basically a document that brings together approved maintenance schedules, (usually the manufacturers') additional maintenance required by Parts 91 and 135, and the manufacturers of other installed equipment not covered by the aircraft manufacturer. It will also cover such items as finite lives and overhaul periods along with the process for induction of an aircraft into the programme.

The programme may be laid out in separate parts such as:

1. the general requirements that apply to all aircraft; and
2. the specific requirements for a particular aircraft type.

As a guide when developing maintenance programmes for a specific aircraft the following items should be covered.

1. The registration of each aircraft covered by the programme. These may be listed separately for ease of amendment or included in the programme.
2. Instructions and procedures for the conduct of aircraft maintenance including required inspections and tests. This falls into two parts.
  - (a) Those inspections required by Airworthiness Directive and Part 91 Subpart G. These may be covered in the general section and applicable to all aircraft types.
  - (b) Those inspections specific to an aircraft type and listed in the aircraft manufacturers maintenance schedule, maintenance manual and instructions for continued airworthiness.
3. Procedures for trend analysis if the programme utilises condition monitored maintenance. This could be included as a general requirement.
4. Procedures to ensure all inspections in the programme are performed. This could be included as a general maintenance planning section for all aircraft being operated.

5. Procedures for recording, rectification or deferral of deficiencies found during maintenance. This could be included as a general section for all aircraft. Maintenance should be viewed in its broadest terms to include pre-flight and after-flight inspections completed by the pilot.
6. Procedures for retention of a description of work performed including the name of the person releasing the aircraft to service. This could be included as a general section for all aircraft.
7. Instructions for exceeding an inspection interval and the conditions that are applied. This could be included as a general section for all aircraft.
8. Instructions for changing the inspection interval due to service experience. This could be included as a general section for all aircraft.

*Note: An example of a simple programme is included in Appendix D*

**IEM 119.111(a)(4)** If the maintenance programme utilises condition monitored maintenance or information from health and usage monitoring systems procedures must be developed to ensure that the required data is recorded, analysed and the results interpreted appropriately.

**IEM 119.111(a)(7)** The general requirement of rule 135.353 is that all instruments and equipment installed in the aircraft must be serviceable, however rule 135.353(a)(4) provides for the development of a minimum equipment list (MEL) to allow the continued operation of an otherwise unserviceable aircraft.

This rule requires an operator to include in the maintenance programme procedures for the recording and correction of deficiencies found during maintenance. This includes deficiencies found by the pilot, in service or during the normal pre-flight and after-flight inspections.

These procedures need to ensure that:

1. Any defect is recorded and the aircraft has been inspected to approved data by a qualified person:
2. A placard is attached to the defective item if applicable:
3. The defect is cleared in the technical log clearly advising the pilot of the maintenance status of the aircraft and any conditions or limitations that may apply:
4. A statement of release to service is made in the maintenance record certifying that the aircraft has been inspected or repaired to approved data and is released to service.

For the purposes of this part the term defect and discrepancy have the following meanings:

1. **Defect:** can be described as an item of equipment that has been identified and confirmed to be unfit for use.
2. **Deficiency:** can be described as an abnormality. The item may be un-airworthy, or may still be fit for its intended purpose and so still be airworthy. An authorised person must inspect the aircraft to approved data, assess the airworthiness of the aircraft, and release it to service if it is satisfactory.
3. **Discrepancy:** could be an abnormal condition, documentation or item of inoperative equipment found during maintenance. This term is normally associated with a Review of Airworthiness.



**IEM 119.111(a)(8)** This rule relates to retention of maintenance records, reference to data and the name of the person certifying the release to service. The rule has a direct relationship to Rules 43.69, 91.627, 91.629, 91.631, 91.633 and advisory circular 91.6 and can be broken into the following elements of a procedure:

1. A description of the work performed. This could be in the form of an entry in the technical log, a maintenance work sheet or a logbook entry. The detailed description of the work may be a complete description of the work or a brief description with reference to the acceptable data that was used to perform the work. This may be the instructions contained in a manufacturers service instruction, service bulletin, maintenance manual or the instructions contained in a supplementary type certificate. This is the requirement of rule 43.69.
2. Details of maintenance may be recorded in the technical log, this will usually be the case when a defect must be rectified away from the normal maintenance base. Additional work records will be used when there is too much detail to be included on the technical log or aircraft log book. In any case the defect will need to be cleared in the technical log.
3. Where work records or the technical log is used to record details of the maintenance task, reference to those records must be made in the aircraft logbook. When transferring maintenance information to a logbook from the technical log or work records that contain the release to service, no further release to service is required. However if the release to service certification is made by a person outside the air operator's organisation then the name of that person should be included.
4. Retention periods for maintenance records are specified in rule 91.631 and it is the air operator's responsibility to ensure they are kept for the prescribed period. In some cases the maintenance organisations have claimed maintenance records as their own property. This is not the case and all maintenance records generated during the life of the aircraft are considered to be a part of the aircraft and are therefore the property of the person who holds the Certificate of Registration for the aircraft.
5. Transfer of maintenance records is the responsibility of the holder of the Certificate of Registration when transferring the registration to another person. This is specified in rule 91.633.

### **IEM 119.113 Documentation**

The procedures required by this rule should consider all documentation required for use by the operator. They should include all relevant technical data such as *service bulletins*, *airworthiness directives*, *maintenance manuals*, *flight manuals* and operational data.

Documents may be kept in hard copy or electronic form. The rule allows for other formats of information to be presented, however the CAA will consider that format on its merits when presented in the operators manual.

*Note: Refer to Appendix C for information regarding electronic records and documentation considerations.*

### **IEM 119.115 Records personnel**

The procedures required by this rule should consider all personnel records required for use by the operator. These will include all persons required to hold a licence or rating, a delegation from the Director, or is exercising an authorisation granted by the certificate holder. This may include the nominated senior persons. The record must contain the information required by the rule and be retained for the specified period. Documents may be kept in hard copy or electronic form. The rule allows for other formats of information, however, the CAA will consider any other format on its merits.

*Note: Refer to Appendix C for information regarding electronic records and documentation considerations.*

### **IEM 119.117 Records – resources**

The procedures required by this rule should ensure all details of tests, checks, calibration of safety critical resources etc. required by the rule are accurately recorded. Typical equipment requiring these tests could include scales used for weighing passengers, baggage or freight, refuelling equipment, metrological equipment, strops and lifting equipment. It should not cover maintenance tooling as that is addressed by Part 43 or Part 145, unless the operator is conducting their own maintenance and combining the operators and maintainers expositions.

This rule is not intended to include any of those items that are already covered by the equipment requirements of Subpart F of the operational rules and maintained by the approved aircraft maintenance programme.

### **IEM 119.119 Flight authorisation and control**

The key word in this rule is *procedures*. The operator's procedures can be tailored around the size of their operation. For example an operator may utilise the procedure to authorise personnel and create a blanket authorisation system for employees to perform air operations. For unscheduled operations likely to occur under Part 135 a daily duty roster would suffice. In some situations a letter of authorisation given to a flight crew member detailing the type of operation and operational conditions for each task permitted for that crew member would be more appropriate.

For a one-person operation, the identification of the person in the exposition may be sufficient authorisation in itself.

The holder of the certificate is at all times responsible for the operations that take place and the applicant for the certificate should consider the effect of any type of blanket authorisation system. In any case it must be clear that the nominated senior person has authorised all aspects of the flight or series of flights.

### **IEM 119.121 Flight following system**

The intention of this rule is to ensure that every flight is covered by some form of flight following service so that appropriate emergency activation action is taken if the aircraft becomes overdue.

This flight following and alerting service is normally provided by a Part 172 certificated Air Traffic Service organisation as most flights are required to submit a flight plan to an ATS Unit. However an operator operating under Part 135 conducting VFR flights can arrange their own flight following in accordance with rule 135.57(f).

Flight following is intended to enable a company's operational base to know that a flight is proceeding safely and to provide an emergency activation service. This should be linked to the operator's emergency situation action plan required by rule 135.91. This does not override the requirement for submission of a flight plan under rules 91.307, 91.407, 135.57 to an appropriate ATS unit.

The operator must establish a flight following system and procedures to ensure that, for each flight for which a flight plan is not filed with an ATS organisation, the flight is monitored and notification of overdue or missing aircraft is made to an acceptable organisation.

*Note: This rule is very specific and applies to those VFR flights that are conducted outside controlled airspace in their entirety. That is, any flight that departs from, terminates at, or transits through controlled airspace, will require a flight plan that is submitted to an ATS unit certificated under Part 172.*

In the case of the one-person operator the flight following system may utilise the services of another person, or organisation that will track the operation and provide appropriate emergency activation action.

The operator must retain at the operating base at least the information required to be included in a VFR flight plan required under rule 91.307(b).

The operator should include a procedure in their exposition to cover situations when communications are not available. This procedure should require the flight authorising person to consider the operating area, tasks to be completed, and any alternative means of ensuring that the aircraft continues to operate safely.

The communications system should be switched on so that two-way communications are constantly available. When flying in an area with no radio coverage, a 30-minute window for re-establishing communications is acceptable. For commercial transport operations the operator having regard to the type of operation should determine the period. Regardless of the fact that a flight following system is used, it is recommended that a listening watch should be kept on the local FISCOM frequency while airborne.

### **AMC 119.121 Flight following system**

**119.121(a)(2) Communications:** A cell phone is an acceptable means of communication if VHF or HF radio communication with the company's flight following provider or operations base is not available, provided cell phone coverage is reliable in the operating area at the operating altitude.

**119.121(a)(3) Acceptable organisation:** This may be an ATS organisation, NZ police, search and rescue centre or any other organisation that has been set up to provide this type of service.

The person responsible for following the flight should:

1. Be trained and the training shown on a training record.
2. Have immediately available the information required by rule 119.121.
3. Have immediately available the procedure to be followed for a missing or overdue aircraft.

*Note: The procedure for missing or overdue aircraft should provide for logging the time and details of action taken so that the incident is fully recorded and traceable.*

4. Confirm any cell phone number used and that the cell phone is switched on.

### **IEM 119.123 Establishment of operations procedures**

The intent of this rule is to require the operator to think about how an operation will be carried out, and describe the basic procedure in the exposition for their employees to follow. The applicant should remember that their personnel will utilise the exposition and operations procedures in complying with a rule.

The requirements for procedures are spread amongst many Parts and operators should examine them all, **but develop procedures only for those requirements relevant to their operation and the rules that specifically require a procedure.**

Those rules that are not applicable to the operation should be shown in the compliance matrix as N/A so that the CAA assessor can establish that the operator has at least considered them.

The CAA rule matrices have been developed and are tailored to identify the options for certification of general aviation air operator, training and the maintenance options of Parts 145 and 43.

The CAA rule matrix fully covers the requirements of—

1. Part 12 regarding accidents, incidents, and statistics
2. Part 19 transition rules
3. Part 43 regarding maintenance requirements
4. Part 61 regarding pilot licensing
5. Part 91 regarding general operating and flight rules.
6. Part 92 regarding the carriage of dangerous goods
7. Part 119 regarding certification
8. Part 135, regarding operation of helicopters and small aeroplanes
9. Part 141 regarding training organisations

The rules contain mandatory requirements, prohibitions, the need for an operator to “ensure” an action, and requirements where procedures must be established.

Where a mandatory requirement or prohibition is stated and the rule is clear, the operator is not required to reproduce the rule or any part of that rule in the exposition. However the operator must be assured that the operation is conducted within the scope of the rules.

The operator is required to have in place training and competency checking programmes that should give the operator assurance that personnel have the knowledge of the rules. These programmes could address and satisfy the need of the operator to be assured that the operation is conducted within the scope of the rules.

Where the operator is required to ensure that a rule is complied with, this may require a procedure. Alternatively the training and competency checking programmes, supported by the quality assurance or organisational management system including internal audits and inspections may be sufficient in themselves to ensure compliance with a rule.

When considering all the rule Parts that an operator must ensure compliance with, or are mandatory requirements, it is suggested that full utilisation is made of the training and competency checking programmes.

Where an operator intends to ensure elements of the rules are complied with through the training and competency checking programmes these items should be included in the training syllabus and a question bank for competency checking.

Where a large number of items have been transferred to the training and checking area the checking items should be broken down into manageable parts to be checked on a rotational basis.

### ***Developing procedures***

A procedure may take many forms and be as complex or brief as need be. There has been volumes written on this subject and the operator may use any form that is suitable for the purpose and these may:

1. Take the form described below:
2. Be in the form of a flow chart:
3. Be contained on a checklist:

4. Be by means of a form to be completed.
5. Be in the form of audio or visual media. (Video etc)

The level of training, experience or qualifications held by the individuals may also have a bearing on depth and extent of any procedure. In order for any procedure to be effective the procedure should describe the, *who, what, when, where, why* and *how*, as appropriate, to the task or action to be carried out. These components of a procedure can be described as follows—

### **Who**

1. Who the procedure is speaking to
2. Who will accomplish the procedure
3. Who is responsible to see that the procedure is done – an individual, a position, an organisation

### **What**

1. What the procedure is about
2. What the procedure is trying to accomplish
3. What the person performing the procedure should do

### **When**

When the procedure is to be accomplished

### **Where**

Where the procedure will be accomplished

### **Why**

Why the procedure is required

### **How**

1. How the procedure will be accomplished – identified manual, operator's programme, other document
2. How the person determines what procedure will be used and if it has been accomplished.

Another method of establishing a procedure may take the following form that generally follows an ISO standard format. This may be varied as appropriate as for some parts using all the elements is not required:

1. **Policy:** This part would contain the company policy in regard to the subject area. This could become repetitive and in some cases a general policy statement of the Chief Executive may have covered this.
2. **Purpose:** This will state the purpose for the procedure or process.
3. **Scope:** This should cover the extent or limits of the procedure or process.
4. **Responsibility:** This should identify the person responsible for carrying out the procedure or process. Normally by position title.

5. **References:** This will make reference to any other documents or reference material that is required for the performance of the procedure or process and should also include exemptions.
6. **Records:** This will identify any record or forms that are to be completed. For example flight and duty records, load sheets or technical log etc.
7. **Process or Procedure:** This is the explanation or instructions to carry out the task that satisfies the purpose for the process or procedure.

Procedures may be ordered in this manner or in any other way that achieves the desired outcome for the operator. They may be very simple or quite complex and this will depend on the outcome that is to be achieved. They could be in the form of a written description, flow diagram or completion of a checklist. In the case of a flow diagram or checklist the instructions for use could be very simple.

In some cases it may be more appropriate to include some items such as rules 135.63 Cockpit Checks, 135.65 Passenger Safety or 135.75 in the training and competency programme. These rules do not require a procedure to be developed in themselves but they do require each person performing an air operation to ensure the intent of these rules are complied with.

The procedures should have sufficient information to satisfy regulatory compliance. This may mean that other related rule references and prohibitions are included in the primary procedure. For example planning for flight and preparation may include elements of Parts 19, 91 Subpart B, C, D and E, 135 Subpart C and D that in themselves do not require a procedure but must be considered during the planning phase.

This should have the effect of condensing procedures into areas relating to operational functions, and overcoming the need to produce a procedure for each and every rule.

### **IEM 119.124 Organisational management system**

Regardless of size, the operator must have a system of some sort to ensure that the organisation operates effectively. For the smaller organisations this system may already exist within their common business practices.

The rule requires that all organisations conducting air operations, air transport or commercial transport, provide a system of management to ensure that the organisation continues to exercise the privileges and responsibilities of the air operator certificate in a safe manner without direct CAA involvement.

Applicants should not be concerned with over-complicating the system or introducing features that are not relevant to their operation. The organisational management system should not stand aside from the operations, but should form part of the operator's standard business practices.

The rule identifies three aspects—

1. The small organisation, defined as an organisation operating three or less aircraft from two or less bases, requires a management system, but is not required to include the internal quality system requirements of rule 119.124(c)
2. The larger organisation, that is an organisation operating more than three aircraft and/or is operating from more than two bases, must have a documented system of management that includes internal quality system policies and procedures to ensure the required operation remains effective and safe
3. If a company changes in size from a smaller, to a larger operation, then it must embrace the full organisational management system.

Rule 119.165(c) requires an operator, that is not required to have a full organisational management system under rule 119.124, that extends the scope of its operation to the extent that it now requires a management system:

1. To amend their exposition to include an organisational management system specified in 119.124(c).
2. To engage a senior person as required by rule 119.101(b)(1)(iv).
3. To ensure the system is acceptable to the Director before commencing the increased level of air operations.

Where a General Aviation Air Operator certificate holder must extend the scope of its operation to complete unplanned operations and provided no more than a total of 5 aircraft are to be used, rule 119.165(g) effectively provides relief for up to seven days to complete the amendments required by rule 119.165(c).

For further guidance in establishing the procedures and policies required by rule 119.124(c) refer to AC00-3

### **IEM 119.125 General aviation air operator exposition**

Applicants should consider the exposition as a general description of how their business works; a tool of management in the operation of the business; and a means of instructing staff in how they are to perform their tasks. A properly written exposition can be concise and very effective.

The purpose of an exposition is to express the Chief Executive's requirements for the conduct of the organisation and state how the organisation will meet the regulatory requirements. It sets out the procedures, means and methods of a certificated organisation. The philosophical benefits of the manual are considerable and important to the safe operation of commercial aviation. The complex nature of aviation may give rise to procedural areas an operator is unaware of, ongoing changes to rules, airspace, compliance requirements and they all require a follow up system that the exposition must provide.

The exposition is the means by which an organisation defines its operation, and shows both its employees and the CAA how it will conduct its day-to-day business and ensure compliance with the rules.

An exposition commences with the corporate commitment by the Chief Executive. The remaining parts of the exposition may be produced as any number of separate procedures sections or as one simple document depending on the extent of the operations proposed. Depending on an organisation's structure and size, the parts of the exposition could be arranged as—

1. Management Policy
2. Operations
3. Training
4. Maintenance Procedures
5. Organisational Management System
6. Contractual Arrangements
7. Emergency Situation Action Plan

Separate manuals should be cross-referenced to the management part of the exposition.

While the CAA does not wish to tell an operator how to structure a manual suite, experience has shown that having an upper level management manual makes for a more user-friendly exposition. All of the other associated manuals link to this upper level manual, which have all the organisational information such as—

1. Corporate Statement
2. Description of manual hierarchy
3. Identification of required senior personnel
4. Organisation chart
5. Duties and responsibilities of Senior Personnel
6. Exposition amendment processes
7. Scope of Operation
8. Organisational Management System

There should be no confusion between the contents of the expositions for Part 119 and any other Part, specifically Part 145. Where an operator has these two certificates, the maintenance manual requirements should stand alone within the Part 119 exposition and not be addressed in the Part 145 exposition.

Senior Persons should hold copies of those parts of an exposition that affect their areas of responsibility, and staff must be familiar with those parts of an exposition, that affect their area of employment.

***119.125(a)(1) Corporate commitment***

The statement by a Chief Executive is accepted by the CAA as a corporate commitment by the organisation. It should clearly state the goals and objectives of the organisation in respect of the safety standards prescribed by Part 119. It may also contain the organisation's goals and objectives in respect of its commercial activities. The exposition is intended to be a tool of management, and is the means by which the organisation's operation is presented to its staff, its customers, and the CAA.

***119.125(a)(2) & (3) Senior persons***

The titles and names of the Senior Persons within the organisation must be listed in the exposition. Their duties and responsibilities, and the areas in which they are directly responsible for liaison with the Director must be clearly defined.

***119.125(a)(4) Organisational chart***

There should be an organisation chart showing the reporting lines of the organisation. The chart must show the **lines of responsibility** from the nominated senior persons to the Chief Executive where appropriate. The exposition must show the staffing arrangements at each place where the organisation intends to carry out air operations.

***119.125(a)(5) Operational bases***

The intent of this Part is to identify the location of principal bases, as appropriate, where operations staff are normally based to conduct air transport operations. This does not include temporary bases for ad hoc charter operations. The location of the principal maintenance base where appropriate.



**119.125(a)(6) Detailed procedures**

The procedures are not listed in this rule but they should cover all rules requiring a procedure relevant to the operator's organisation and proposed operations. The procedures should accurately describe the organisation's practices related to its operations.

These could take the form of written text supported by flow charts, forms, performance graphs, etc to simplify the procedure. The exposition's content with regard to air operations can be generalised into broad areas.

The wide range and variety of commercial transport operations prohibits the finer detail being included in the exposition. All applicants should address the requirements to the extent that they apply to the particular scope of intended activity.

**Operations procedures:** The operational procedures form a large section of the exposition. Examples of these are:

1. Planning for flight
2. Stowage of Baggage and Cargo
3. Passenger Briefing
4. Flight Following
5. Fuelling
6. Recording and Control of Defects

**Other procedures:** Procedures required elsewhere in Part 119, and generally more organisationally focussed include—

1. competence of personnel
2. operational, safety, and maintenance data, including the notification of changes in equipment and operating procedures to appropriate operations personnel
3. control of documentation
4. personnel records
5. resource records
6. flight authorisation and control of air operations
7. safety policy, personnel and customer feedback, corrective action, and organisational management
8. maintenance procedures

**Programmes:** As well as procedures there are requirements for programmes to be established, including, as appropriate to the operator's operation—

1. maintenance, including personnel training and information, and the certifying of the maintenance review
2. operational competency assessment
3. flight crew training

4. flight and duty
5. maintenance programme

***119.125(a)(7) Details of maintenance***

This rule requires details of the maintenance procedures contained in Part 119 and other Parts to be included in the exposition. It also requires identification of the organisation that will perform the maintenance.

***119.125(a)(8) Details of programmes***

This rule requires details of the programmes including the maintenance programme required by other Parts to be included in the exposition.

***119.125(a)(9) Exposition amendment***

A clear procedure is required to control, amend and distribute the exposition. This procedure needs to give consideration to the different processes required when dealing with the changes required by rule 119.165(b) and the routine changes that take place on a day-to-day basis.

***119.125(b) Exposition acceptance***

Operators should take ownership of, and responsibility for, their exposition. The exposition should work for the operator by being relevant to their operations and clearly written.

The acceptance of an organisation's exposition by the Director is one step in the process of certification. Unless the Director accepts an exposition a certificate cannot be issued.

***Multiple certification***

When an organisation seeks certification under more than one Part – Parts 119, 141, and 145 for instance – which all require expositions, it may be possible for some sections of the exposition to be common to each certificate. For instance, if the same management set-up is used for each certificate, the management part of the exposition could be common. Equally all of the Quality Assurance procedures for one or more certificates could be placed in one manual.

Whatever exposition format is chosen, it must clearly show how each element of the applicable rule is satisfied. To reduce the cost of CAA assessment and to ensure that all required rules are addressed, a completed *CAA rule compliance matrix* should accompany the exposition. This matrix is available from the CAA or from the CAA web site, ([www.caa.govt.nz](http://www.caa.govt.nz)), under the heading 'Operator Certification'. Any difficulty in establishing compliance will require more CAA investigation time, and this can only result in additional cost to the applicant.

## Subpart D — Operating Requirements

### **IEM 119.151 Continued compliance**

No further explanation required.

### **IEM 119.153 Flight operations requirements**

#### ***119.153(b) SEIFR***

A passenger carrying air transport operation conducted in a single engine aeroplane under IFR (SEIFR), may only be carried out by an organisation certificated under Part 125.

### **IEM 119.155 Flight crew qualifications**

No further explanation required.

### **IEM 119.157 Charter, cross hire and leasing New Zealand registered aircraft**

#### ***General***

It is recommended that any lease agreement will be comprehensive and include sufficient detail to identify the parties to the lease and persons responsible for any function under the lease. The period of the lease, with a commencement and termination date, training and competency requirements that may be necessary, control and direction of maintenance, maintenance providers and defect control all should be included.

Under a lease, Part 47 governs the limitation of the duration of the lease. A lease period exceeding 27 days will require the certificate of registration to be transferred into the air operator's name.

#### ***119.157(a)***

Regardless of the type of lease arrangement the pilot in command must be notified under which air operator certificate the operation is being conducted. This could be provided to the pilot in the form of the identification of the flight records that are to be used.

#### ***119.157(b)***

Where an air operator leases an aircraft with or without aircrew from any person who does not hold an air operator certificate, then the operation must be conducted under the certificate of the air operator. This will require the aircraft to be introduced into the operational and maintenance system of the air operator. When all the factors are considered the applicant may determine that it is not a practicable option as it will require amendments to the operator's exposition, operations specifications and maintenance actions to operate the aircraft.

Where the lease is from another air operator the lease agreement should make provision for training, operational competency, control and direction of maintenance and maintenance providers.

#### ***119.157(c)***

No further explanation required.

#### ***119.157(d)***

No further explanation required.

## **IEM 119.159 Use of non-New Zealand registered aircraft**

### **General**

Rule 119.159 enables a holder of an air operator certificate to use a non-New Zealand registered aircraft on its New Zealand air operator certificate. This provision is provided to enable the charter, lease, or similar arrangement of an aircraft for a short-term period (up to 182 days) when additional aircraft may be required for example during peak seasonal activity or when an existing aircraft is unavailable due to maintenance. It is not intended that this provision be used to enable an operator to use a permanent fleet of non-New Zealand registered aircraft.

The non-New Zealand registered aircraft should be approved by its State of Registry for air transport operations equivalent to the category to be operated on a New Zealand air operator certificate. In this regard, the aircraft must be maintained in accordance with a maintenance programme approved for the applicable air transport operation. In addition, the aircraft must be appropriately equipped for air transport operations. The aircraft is required to be maintained and equipped to a standard equivalent to those specified in the applicable sections of Parts 91, 119, 121, 125 and 135.+

A holder of an air operator certificate intending to operate a non-New Zealand registered aircraft should normally notify the Director of the details required by this rule at least 90 days prior to the intended operation. This should provide the CAA with sufficient time to process the application and conduct the necessary liaison with the applicant and the National Aviation Authority of the State of Registry. In special cases where the applicant can show substantiating evidence that the operation must start within these 90 days, the CAA will assess these reasons and may allow a shorter notification period. The shorter period is considered an exception to the requirement and should be treated as such by operators.

It must be remembered that the operation of a non-New Zealand registered aircraft will require agreements between the National Aviation Authority of the State of Registry and the CAA for the maintenance and flight operations safety oversight.

When considering an application to use a non-New Zealand registered aircraft on a Part 119 Air Operator Certificate, the following criteria must be used:

### **Application**

An application to operate a non-New Zealand registered aircraft on a New Zealand AOC must be made in writing to the Director 90 days prior to the intended use of the non-New Zealand registered aircraft. This should allow sufficient time for the CAA to assess the application and for the AOC holder to formulate the relevant procedures defining the operation of the aircraft.

An application to use a non-New Zealand registered aircraft on a New Zealand AOC where a previous application for the same type of aircraft from the same operator has been assessed and approved by the Director, must be notified in writing to the Director 30 days prior to the intended use of the aircraft.

### **Acceptable circumstances**

The following criteria are considered acceptable reasons for the use of a non-New Zealand registered aircraft on a New Zealand AOC:

- To maintain integrity of a pre-existing flight schedule during planned heavy maintenance.
- To provide provision for support of seasonal schedule variations which dictate additional aircraft capacity to cope with demand.

- To maintain integrity of the pre-existing flight schedule during an aircraft-on-ground (AOG) situation or AOG recovery situation.

### **State of registration**

An assessment of the National Aviation Authority of the non-New Zealand registered aircraft will be carried out by the CAA to ensure that an equivalent level of safety oversight is maintained.

### **Aircraft Type and Number Limitations**

The non-New Zealand registered aircraft must be of the same type and series as aircraft that are presently being operated by the AOC holder.

The total number of non-New Zealand registered aircraft to be operated under a New Zealand AOC at any one time must not exceed 20 percent of the total New Zealand-registered aircraft listed on the New Zealand AOC holder's Operations Specifications at the time of application.

### **Duration**

A non-New Zealand registered aircraft will normally only be listed on the Operations Specifications of a New Zealand AOC for a maximum period of 182 days in any 365 day-period.

If a holder of an air operator certificate wishes to use the non-New Zealand registered aircraft for a period in excess of 182 days the holder will need to make an application in writing to the Director detailing the reasons for the extension of this period.

### **Application assessment and approval**

When assessing and approving an application to operate a non-New Zealand registered aircraft under a New Zealand AOC, the Director will need to ensure that:

- there is a signed oversight agreement between the National Aviation Authority of the State of Registry of the non-New Zealand registered aircraft and the CAA that clearly defines the specific responsibilities accepted by the respective Authorities in regard to airworthiness and flight operational safety oversight:
- a signed charter, lease or similar arrangement, between the New Zealand AOC holder and the non-New Zealand registered aircraft AOC holder details the conditions of aircraft use and regulatory compliance responsibilities of each party:
- the non-New Zealand registered aircraft is maintained to air transport standards and is approved in its State of Registry for the type of operation intended under the New Zealand AOC e.g. Part 121 operations:
- the non-New Zealand registered aircraft continues to be maintained in accordance with a maintenance programme approved by the National Aviation Authority of the State of Registry suitable for the applicable air operation under the New Zealand AOC:
- the non-New Zealand registered aircraft, while being operated under a New Zealand AOC, is equipped to a standard equivalent to those specified in the applicable sections of Rule Parts 91, 119, 121, 125 and 135.

### **IEM 119.161 Business or Trading Name**

*119.161(a)* This is specific and no further explanation is required.

*119.161(b)* This is specific but an operator must provide some method of clearly indicating to the passenger, prior to boarding the aircraft, the business or trading name of the certificate holder.

**119.161(c)** This is specific and requires advertising to clearly display the business or trading name that appears on the operator's certificate.

### **IEM 119.163 Limitations of a general aviation air operator certificate**

No further explanation required.

### **IEM 119.165 Changes to a certificate holder's organisation**

As a certificate holder's operation changes, the operator has the responsibility of amending their documents accordingly. These changes may require amendment of the operator's *operations specifications*, and the operator has the responsibility of making appropriate application for any such required amendment. The required forms are available from the CAA or the CAA web site. At all times the exposition must remain a current description of the organisation.

**119.165(b)** Any change to the items listed in this rule require prior notification and the acceptance of the Director.

In the case of the listed senior persons, nomination of a suitability qualified person that may be delegated for short term absences of the principal person, could be accepted at the time of certification, or at any other time.

### **IEM 119.167 Changes to a maintenance programme**

No further explanation required.

### **IEM 119 Appendix A.1 & B.1 Senior person responsible for air operations**

**Managerial Experience:** This person must have held a management position within an operation under a Part 119 AAOC, GAAOC, TAOC or under an Air Service Certificate issued under Regulation 136. Management experience within an aviation organisation outside New Zealand will also be considered. The applicant must provide sufficient evidence of such experience to enable verification and assessment to be made.

### **IEM 119 Appendix A.2 & B.2 Senior person responsible for crew training and competency assessment**

**Experience for Crew Training and Competency Assessment:** This person must show required experience in both checking (competency assessment or equivalent under a Part 119 AAOC, GAAOC or TAOC.) and training, where training is conducted under a Part 119 AAOC, GAAOC or TAOC. Persons may be assessed as meeting the requirements if they have had equivalent experience in air transport operations conducted under an Air Service Certificate issued under Regulation 136 or equivalent.

### **IEM 119 Appendix B.3 Senior person responsible for control and direction of maintenance**

**Experience for Control and Direction of Maintenance:** Where the nominated person does not satisfy the required knowledge and experience then the Director will conduct written and oral tests to ensure the senior person is competent to perform the maintenance planning and control functions.

The examination may consist of a multi-choice paper on general maintenance requirements for an AOC holder and a series of oral questions specifically aimed at testing the senior person's knowledge in relation to the applicant's maintenance section of the exposition.

**IEM 119 Appendix A.4 & B.4 Senior person responsible for internal quality assurance or management systems**

***Experience:*** This person must provide sufficient evidence of such experience to enable verification and assessment to be made. The Quality Assurance experience within an aviation organisation outside New Zealand will also be considered.

## Appendix A— Subcontracting – General

### Introduction

This section details the considerations for any air operator when subcontracting activities to subcontractors who may, or may not, be certificated by the CAA.

This subcontracted work is considered to be an extension of the work carried out by the certificated air operator and under the control of its operational procedures and quality control systems.

The responsibility for providing the necessary documentation and liaison rests with the certificated operator.

### General Conditions

When activities are subcontracted, the subcontractor's facilities, personnel, and procedures related to the subcontracted activity should comply with Part 119 or other rule requirements for the duration of that activity.

As the rule does not specify that a CAA certificate is required, an operator may subcontract activities to a non-certificated organisation provided there is provision in the operator's exposition for subcontracting.

The operator should have their own expertise to decide whether the subcontractor meets the necessary standards and that any activity is carried out in accordance with the operator's instructions.

An operator may find it necessary to include several specialist subcontractors in their exposition to enable the training and maintenance activities supporting their operation. The organisation should provide the Director with evidence that it has the expertise and procedures to control the subcontractors.

The operator is responsible for all activities carried out by their subcontractors. Where an operator fails to control a subcontractor it may put at risk part or all of its own Part 119 certification.

The extent of the subcontracting is only limited by the expertise and procedures of the Part 119 organisation. Acceptance of the subcontract is shown by the Director accepting the exposition containing a specific section on the control of subcontractors and a list of those subcontractors.

### Procedures

When creating procedures for the control of subcontractors the following information should be considered—

- a pre-assessment procedure where the certificated organisation visits a prospective subcontractor before any activity is placed with the subcontractor. The visit will determine whether those parts of the subcontractor that it wishes to use meet the requirements of the Part 119 operator.
- if the sub-contractor does not meet the requirements, a procedure may be needed to ensure the upgrade, of the relevant parts of the subcontractor to meet the intent of Part 119,
- an assessment of the extent to which the Part 119 operator will use the subcontractor's services.
- procedures for the control of subcontractors, to record visits to subcontractors, to have a corrective action follow-up plan, and to show when subcontractors are being used.



- procedures, for the audit of the subcontractors, by the Part 119 operator's quality assurance personnel.

## Appendix B— Subcontracting Maintenance

### Introduction

This section details the procedures to be followed when an air operator wants to arrange with a maintenance organisation, for the maintenance organisation to carry out some or all of the operator's maintenance tasks. This information will also be of use to maintenance organisations certificated under Part 145 and wishing to carry out contracted maintenance tasks for air operators.

### Responsibilities

The aircraft operator is responsible for all aspects of the maintenance of their aircraft, including both planning and carrying out the maintenance. This includes responsibility for—

- properly planning all necessary maintenance
- providing adequate documentation, such as operator's maintenance manuals, aircraft maintenance, repair, and parts manuals, maintenance programmes and associated recording documents necessary to ensure that the planned maintenance can be properly carried out and recorded
- providing aircraft reliability programmes, and control of the development of maintenance programmes
- airworthiness occurrence control including reporting and control of defects
- complying with all applicable airworthiness directives
- assessing, and actioning as appropriate, all manufacturers' service bulletins or other service recommendations
- providing adequate and trained technical staff so that the maintenance can be properly carried out
- providing adequate accommodation, equipment, tools, calibration and facilities so that the planned maintenance can be properly carried out
- providing, accepting, and storing aircraft spares
- making the aircraft available to the persons who are to perform the maintenance whenever maintenance is due, and giving adequate technical direction for all work to be carried out
- carrying out necessary servicing of aircraft and aircraft components
- completing all required flight records and logbooks, and actioning any required entries
- maintaining all aircraft documents such as aircraft flight manuals and associated minimum equipment lists to their correct status

*Note: The operator may choose to contract other persons or organisations to carry out any or all of the above tasks. However, contracted arrangements for accomplishing these tasks do not absolve the operator from the final responsibility for ensuring the safe operation and continuing airworthiness of their aircraft.*

## General conditions

When establishing a contract between an air operator and a maintenance organisation to carry out any of the above listed tasks, the following general conditions should be considered by the air operator:

- conditions to satisfy the CAA that the maintenance organisations are able to satisfy the terms of the contract
- a formal agreement established between the two parties in accordance with this advisory circular defining which functions are to be contracted. This agreement should form a part of the exposition of each party as appropriate
- nomination of a senior person from within the operator's company to liaise with the contracting organisation on contract matters
- an arrangement, by which more than one maintenance organisation is nominated by an operator, in respect of a particular aircraft type, will not normally be acceptable to the CAA, other than for tasks carried out at route stations
- in its assessment of the arrangements made by the operator for the sub-contract of any of the listed tasks, the CAA may need to examine all technical agreements between the parties. The contract should form a part of the exposition of each organisation
- any proposal to significantly change the contract or technical agreements requires the prior acceptance of the CAA and should be notified as soon as practicable

*Note: This could be, for example, an intention to change to another maintenance organisation, or a significant organisational, procedural or technical change to an agreement. Delayed notification may result in the changes not being processed in time for the intended date of change.*

## Contracting to a foreign organisation

Where an air operator wishes to contract all or part of its maintenance tasks to a foreign maintenance organisation, the following items should be considered—

- a formal agreement should be established between the two parties, in accordance with this advisory circular, defining which tasks are to be contracted

*Note: Where the arrangements provide only for rectification of defects at route stations, a formal maintenance agreement need not be established.*

- the maintenance organisation which is to be used should be acceptable to the Director for the tasks to be contracted.
- the national airworthiness standard, under which the maintenance organisation has been certificated, must be known by the CAA to be comparable with that existing in New Zealand
- the arrangements should provide for the CAA to inspect the facilities at any of the nominated locations if it makes a request to do so
- details of the proposed maintenance arrangements should be forwarded to the CAA for acceptance. The operator's exposition should be amended to include this information
- the method of certifying individual maintenance tasks and the responsibilities of nominated signatories must provide equivalence to New Zealand certification

requirements. The signatories should be persons employed by the foreign maintenance organisation

- all work must be completed and certified in accordance with the New Zealand air operator's exposition
- all necessary maintenance manuals or equivalent technical literature should be provided.

### **Detailed content of the maintenance agreement**

*Note: Written agreements should clearly define what action is allowed by the maintenance organisation without prior consultation, and what tasks require operator agreement.*

*Note: Whenever an aircraft is presented for scheduled or unscheduled maintenance, it is essential that a precise indication is given of the inspections required. All known defects must be documented, together with any additional work required – after consultation with the maintenance organisation as necessary.*

The formal written agreement should consider the following items, as appropriate for the particular arrangement—

- organisational structure – the general divisions of responsibility between the two parties for the overall support of the aircraft, compliance with statutory regulations and other relevant requirements
- coordination between the two parties – contact points for the interchange of airworthiness matters
- responsibilities for any secondary authorisations and sub-contracted tasks such as NDT, aircraft weighing or painting
- provision of adequate numbers of suitably trained and qualified engineering personnel
- planning of maintenance manpower allocation and control
- procedures for developing and carrying out reviews and amendments to the maintenance schedule. Arrangements for authorising schedule variations
- preparation of documentation needed to implement schedule requirements
- procedures for the assessment and incorporation of Service Bulletins, modifications and manufacturers technical programmes
- management and operation of reliability programmes
- provision of covered accommodation for aircraft undergoing maintenance
- provision of tools and equipment for scheduled and unscheduled tasks
- component and material control – the provision of spares, their source, acceptance and storage. Particular attention must be paid to the provision of replacement parts and components, for defect rectification, and of spares pooling arrangements
- control, distribution and amendment of technical manuals, publications and drawings
- compilation and control of technical records, compliance with Airworthiness Directives, component life control, and completion of logbooks
- defect control and management – control of deferred and repetitive defects

- arrangements for line station support and the rectification of defects away from base
- provision of management and technical Engineering Instructions
- airworthiness occurrence control and reporting
- responsibilities for quality assurance, definition of the quality assurance programme. Responsibilities of both parties for effective follow-up of QA reports
- operator's name and *Air Operator Certificate* number. Name and CAA certificate number, if any, of the sub-contracting organisation
- title and reference number of the Exposition or Engineering Manual in which the sub-contracting arrangements are described

## Appendix C— Electronic records and documentation

### General information

Documentation and records are required to be kept in an easily accessible form, so that operations and other requirements can be assessed later, if required. These documents also form an important part of the reference material for other operations tasks, staff training, and continued air operator responsibilities.

Records can be kept electronically but systems should ensure information security, integrity, and retrieval. A system of backing up electronic data is considered vital. Procedures for electronic record and document keeping should consider—

- prevention of data loss in the event of power interruptions
- software control, including amendments and prevention of corruption
- prevention of unauthorised access
- audit trail facilities
- archiving of data in a similar manner to hardcopies, and for a similar period
- backup of critical information, preferably once a day, with storage for that backup information
- data verification, on entry and retrieval
- publication provisions
- staff training
- amendment of stored data
- problem report register including the problem details and solutions.

*Note: For ease of access records may also be microfilmed or magnetically stored but the original documents should be retained in a secure environment.*

## Appendix D

### Example programme

This maintenance programme layout combines the tabular format and a written format to describe the inspections required. The programme itself is relatively straightforward and common of smaller operators. The programme includes the descriptions of inspections, periods of inspections, and references to maintenance manuals and other maintenance standards.

#### Aircraft Maintenance Programme – PA32-260

- All relevant provisions of New Zealand CAA Airworthiness Directives shall be complied with.
- Components shall be overhauled / retired from service at the periods recommended by the manufacturer.
- All applicable periodic inspections and maintenance, except pre-flight, is to be released to service in accordance with Part 43.

The aircraft shall be inspected in accordance with the following:

Item	Periods	Standard
Pre-flight inspection	Daily and/or pre-flight/after-flight	Pilots handbook
Inspection Periods	50, 100, 500, 1000 flying hours	
Inspection Schedules	In accordance with Piper report 230, 210 <b>Note:</b> <i>If components have schedules that are not covered by the aircraft manufacturer then they should be listed here.</i>	
Overhaul Periods	Engine  Propeller	Lycoming SI 1009  Hartzell SL 61
Radio stations and Navigation equipment –	1 x Narco Comm – in accordance with rule 91.609 not to exceed 24 months	Part 43 Appendix B
Emergency locator transmitter	In accordance with rule 91.615(a) and (2) not to exceed 12 months	Part 43 Appendix F
Instruments	Altimeters – in accordance with rule 91.611(a)(1), (2), and (3) not to exceed 24 months	Part 43 Appendix D
Transponder	In accordance with rule 91.613 not to exceed 24 months	Part 43 Appendix E
Safety equipment First Aid Kit Fire Extinguisher Life Jackets Life Raft	<i>The periods here will be those of the equipment manufacturer or where there is no manufacturer's recommendations then in accordance with AC 43-6</i>	Manufacturer's manual or advisory circular AC43-6
Additional equipment	In accordance with manufacturer's	Manufacturer's

	requirements	manual
Maintenance review	12 monthly	Part 43 and advisory circulars
Abnormal occurrence	Piper maintenance manual	