



## PRINCIPLE

# (OPS.133) Australian air transport operations—rotorcraft

December 2024



### Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and the places to which we travel for work. We also acknowledge the Traditional Custodians' continuing connection to land, water and community. We pay our respects to Elders, past and present.

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# Terminology

## Acronyms and abbreviations

Table 1. List of acronyms and abbreviations

Acronym/abbreviation	Description
133PC	133 proficiency check
AC	advisory circular
ACAS RA	airborne collision avoidance system resolution advisory
AFM	aircraft flight manual
AIP	Aeronautical Information Publication
AMC	acceptable means of compliance
AMOC	alternate means of compliance
AOC	air operator's certificate
ASIC	Australian Securities and Investment Commission
ATC	air traffic control
ATS	air traffic services
ATSB	Australian Transport Safety Bureau
AWI	airworthiness inspector
CASR	Civil Aviation Safety Regulations 1998
CEO	chief executive officer
C-EFB	cabin electronic flight bag
D&B	Dun and Bradstreet
DGI	dangerous goods inspector
EFB	electronic flight bag
FCOM	flight crew operating manual
FOI	flying operations inspector
FSTD	flight simulator training device
GM	guidance material
HF/NTS	human factors/non-technical skills
HOFO	head of flying operations

Acronym/abbreviation	Description
HOTC	head of training and checking
IFR	instrument flight rules
IMC	Instrument meteorological conditions
IOS	instructor operating stations
IPC	instrument proficiency check
MEL	minimum equipment list
MOC	management of change
MOS	manual of standards
MTS	medical transport specialist
NAA	national aviation authority
NAIPS	National Aeronautical Information Processing System
NAT HLA	North Atlantic High-Level Airspace
NVIS	night vision imaging system
OEI	one-engine inoperative speed
OEM	original equipment manufacturer
OPC	operator proficiency check
OV	operational variations
PED	portable electronic device
PIC	pilot in command
PPE	personal protective equipment
SM	safety manager
VFR	visual flight rules
WHS	work health and safety

## Definitions

**Table 2. List of definitions**

Term	Definition
air transport operation	A passenger transport operation, a cargo transport operation, or a medical transport operation, that is conducted for hire or reward, or is prescribed by an instrument issued under regulation 201.025.

Term	Definition
cargo transport operation	An operation of a rotorcraft that involves the carriage of cargo and crew only, but does not include the following: <ul style="list-style-type: none"> <li>i. an operation conducted for the carriage of the possessions of the operator or the pilot in command (PIC) for the purpose of business or trade</li> <li>ii. a medical transport operation.</li> </ul>
COMAT	Company materials which include dangerous goods of the operator – such as aircraft parts (e.g. batteries, chemical oxygen generators oxygen cylinders etc.)
medical transport operation	An operation the primary purpose of which is to transport one or more of the following: <ul style="list-style-type: none"> <li>1. medical patients</li> <li>2. medical personnel</li> <li>3. blood, tissue or organs for transfusion, grafting or transplantation.</li> </ul>
organisation	A product or service provider, operator, business, and company, as well as aviation industry organisations.
passenger transport	An operation of a rotorcraft that involves the carriage of passengers, whether or not cargo is also carried on the rotorcraft, but does not include the following: <ul style="list-style-type: none"> <li>1. an operation of a rotorcraft with a special certificate of airworthiness</li> <li>2. a cost-sharing flight</li> <li>3. a medical transport operation.</li> </ul>

## Reference to regulations

Unless specified otherwise, all subregulations, regulations, Divisions, Subparts and Parts referenced in this Principle are references to the *Civil Aviation Safety Regulations 1998* (CASR).



# Revision history

Amendments/revisions for this principle are recorded below in order of the most recent first.

**Table 3. Revision history table**

Version No.	Date	Parts / Sections	Details
1.6	December 2024	Various	Updates to exemption numbers, addition of DAMP, clarification of "over the high seas
1.5	August 2024	Various	Incorporation of (OPS.23) HF/NTS and dangerous goods amendments.
1.4	March 2024	Sections 3.3.4 and 3.4	Incorporated OPS.09 Electronic flight bag and OPS.18 Management of change.
1.3	September 2023	Various	Included WHS and added additional information to assess flight and duty time limitations, EFB and C-EFB, and dangerous goods. Content moved to new template.
1.2	July 2023	Various	Removed duplicate sections that are now contained in the Operations protocol framework.
1.1	May 2023	All	Post implementation review and inclusion of dangerous goods and safety case sections.
1.0	August 2022	All	First issue

# 1. Assessment scope

## 1.1 Assessment of an initial application

Inspectors use this protocol document suite to assess an application for, or transition to, an air operator's certificate (AOC) under Part 119 Australian air transport operators—certification and management to conduct Part 133 Australian air transport operations—rotorcraft. The assessment will also include relevant regulations in Part 91—General operating and flight rules and Part 92—Consignment and carriage of dangerous goods by air

Regulation 11.055 states that if an application is submitted for an authorisation in accordance with these regulations, CASA may grant the authorisation if the applicant meets the criteria specified in the regulations.

Some applications may involve an AOC across multiple operational Parts, for example Part 133 and Part 135. In this case, the inspector does not need to complete the entire worksheet for each operational Part. For example, the Part 119 sections of the worksheet apply to all air transport operators.

The worksheets for Parts 133 and 135 are almost identical except for slight variations specific to rotorcraft. The inspector can choose which worksheet to use as the primary, and only complete the required sections of the secondary worksheet where differences occur.

The assessment of the application will involve verification through a range of activities including:

- desktop assessments of the documentation provided
- site inspection of facilities
- assessment of key personnel
- a proving flight where required.

Before the issue of an AOC can be recommended, the CASA inspector will verify the application meets the requirements for the proposed operation.

## 1.2 Assessment of a significant change application

Inspectors will also use this protocol suite to assess a significant change or an approval that is not covered by its own specific protocol, such as addition of a rotorcraft or adding a new area or route. In this instance, the inspector will define the scope of the assessment in the *Assessment summary* tab of the worksheet (OPS.133). Only those sections of the worksheet that address the significant change need be completed.

## 1.3 Assessment worksheet user instructions

Typically, an AOC application will require a team of inspectors across different disciplines. A project manager will be appointed to manage the worksheet and ensure all tasks are completed.

This Principle provides guidance to the inspector when using the associated *Worksheet (OPS.133) - Australian air transport operations - rotorcraft*. The worksheet provides inspectors with a regulation-based tool for recording the outcomes of the assessment. It is set out as follows:

- User instructions
- Assessment summary
- Approval data sheet
- Assessment worksheets
  - Applicant
  - Rotorcraft operations
  - Training & checking system
- Additional assessment information
- Rev. history.

Some of the worksheet areas will point to another protocol suite to cover that matter. Once the inspector has completed that assessment the results can be recorded in the relevant section of this worksheet.

In this principle document, chapters 2-4 provide specific guidance that aligns to the associated sections (tabs) in the assessment worksheets.

## 1.4 AOC project management

The processes outlined in this section assumes a large and complex application. Smaller, less complex applications may not require the same level of resourcing. In small applications, the project team may consist of a flying operations inspector (FOI) and airworthiness inspector (AWI). In this case one of the inspectors shall be appointed as the project manager.

CASA assessment of an AOC application must be treated as a project. It means CASA must have:

- a formal and structured method of managing the certification activities
- activities that have specifically defined outputs that are to be delivered according to a set schedule agreed to by CASA and the applicant
- a clear definition of roles and responsibilities of the resources involved.

The processes outlined in this section assume a large and complex application. Smaller, less complex applications may not require the same level of resourcing. In small applications, the project team may consist of just an FOI and AWI.

There are 2 projects in the processing of an AOC application:

- the applicant's management of the process
- CASA's management of the process (including all applicable checklists).

Both of these projects are managed separately in order to achieve certification of the intended operations. It is important that the roles and responsibilities of both CASA and the applicant are clearly understood. It is not the role of the CASA project manager to manage the applicant's project.

### 1.4.1 Project manager

The project manager is responsible for managing the overall assessment process, coordinating project team members and ensuring that sufficient resources will be available for CASA to meet the project plan (formerly known as schedule of events). When the project manager is satisfied that the operator can meet the requirements of the *Civil Aviation Act 1988* (the Act) to hold an AOC, the project manager will make a recommendation to the national manager.

The project manager must:

- chair the pre-application and formal application meeting (if required)
- coordinate the creation of the task lists and hours for the estimate
- monitor the progress of work of all team members against projected delivery timeframes and availability of resources
- monitor progress of work of all team members against the estimated cost of work and ensure any projected or actual increase in cost to the applicant, above what was provided in the original estimate, is communicated to the applicant
- ensure the communication protocol enables a free flow of information between CASA and the applicant, including regular meetings with the applicant's project manager
- arbitrate in any dispute between CASA and the applicant
- provide a formal point of contact between CASA and the applicant
- coordinate the work done by the certification teams
- keep the certificate team manager informed on the progress of the project
- maintain records of all formal meetings

- consider the recommencement of initial assessment process should a significant change in the application occur
- following the document evaluation and inspection phases, review the recommendations of the project team, and complete the assessment summary and approval data sheet located in worksheet (OPS.133) - Australian air transport operations - rotorcraft. The project manager must review the draft AOC prior to making a final recommendation to the delegate on:
  - whether or not the certificate should be issued, and if not the reasons for not proceeding
  - if conditions in accordance with section 28BB of the Act are to be imposed on the AOC, the reasons for the conditions.
- advise the applicant if CASA is unable to meet the scheduled assessments.

## 1.4.2 Project team members

### Flying operations inspector (FOI)

If conducting an inflight assessment from a control seat the FOI must be listed on the national operations register and:

- be qualified under Part 61 for the rotorcraft type
- meet recent experience requirements.

The FOI will conduct the flight assessment in accordance with the requirements contained in the [Flying Qualification & Training Handbook](#).

If an FOI cannot meet the above requirements and there is no other person qualified, an FOI who has experience on a rotorcraft type which is substantially similar shall be used for the assessment. If there is no FOI that meets the requirements of 'substantially similar' the project manager will consult the national manager to determine who is the most appropriate FOI to conduct the flight assessment.

### Airworthiness inspector (AWI)

The AWI must be familiar with the rotorcraft types that the applicant proposes for the AOC.

Where the applicant requires Minimum Equipment Lists (MELs), System of Maintenance (SOM), Approved Maintenance Plan (AMP) or reliability programs approved by CASA:

- the AWI must assess those approvals in accordance with the applicable protocol suites
- the CASA inspector must have training or experience on the actual rotorcraft type or a similar type to carry out those assessments
- prior to carrying out these assessments the CASA inspector must have undertaken CASA training for these types of assessments.

If an AWI cannot meet the above requirements and there is no other person qualified, an AWI who has experience on a rotorcraft type which is substantially similar shall be used for the assessment. If there is no AWI that meets the requirements of substantially similar the project manager will consult the national manager to determine who is the most appropriate AWI to conduct the assessment.

### Dangerous goods inspectors (DGI)

Dangerous goods inspectors (DGIs) must be engaged when an application is received to add the consignment and carriage of dangerous goods by air. Applications for carriage of dangerous goods by the operator or COMAT, being company materials such as aircraft spare parts (e.g. aircraft batteries, chemical oxygen generators, oxygen cylinders etc.), also require assessment by a DGI.

Where the operator does not intend to consign or carry dangerous goods, or if the level of dangerous goods requested for the proposed operation is unclear, DGIs are available to assist the project manager in making an initial determination.

## Other inspectors

The project manager will determine the need for other disciplines in order to assess the application. Other disciplines which may need to be involved are:

- cabin safety
- ground operations
- aerodromes
- safety management system
- alcohol and other drugs.

### 1.4.3 Project team guidelines

It is in the best interest of CASA and the applicant to ensure that the assessment of the AOC application is conducted smoothly and expediently. The following must be observed:

- the CASA project team and the applicant must maintain ongoing contact to keep abreast of any changes that impact the project
- inadequacies must be documented in CASA records and communicated to the applicant at the earliest possible stage
- the applicant must inform CASA of any changes to the schedule of events, addressing deficiencies or ready for the verification and testing phase. CASA must remind the applicant that schedule changes can affect completion of necessary reviews and result in delays
- much of the communication between CASA and the applicant will be informal and verbal. Project team members must ensure that any commitments or deficiencies are notified and confirmed in writing in a timely manner. The CASA project manager must be notified of these actions
- the CASA project manager must keep the CASA project team members informed of negotiations and significant developments
- disputes must be arbitrated expeditiously. Where an agreement cannot be reached between CASA and the applicant, the matter, along with recommendations, must be documented and referred initially to the CASA project manager.

### 1.4.4 Project planning

Factors affecting project timelines include:

- quality of the applicant's submissions
- the nomination of suitable key personnel
- applicant's ability to meet requirements such as rotorcraft inspections and proving flights
- the applicant's timely response to CASA advice on identified deficiencies
- availability of the applicant's and CASA's resources
- unforeseen circumstances.

For CASA to allocate resources for the timely assessment of the application, the applicant must submit their proposed project plan to CASA, outlining in detail the schedule by which they will make their facilities, key personnel and rotorcraft available for CASA assessment and inspection.

Based on the information the applicant delivers, CASA will develop a project plan.

### 1.4.5 Project monitoring

Project monitoring is an essential aspect of project management. It covers both the areas of budget (estimate) and the tasks required to be completed by CASA.

It is the responsibility of the project manager to monitor and review the project plan and to track the overall actual costs against the estimate. The project manager must inform regservices of any cost variation likely to exceed the estimate.

A project diary must be used to track tasks, hours and who conducted the work. The purpose of the project diary is to ensure accurate final cost of the project and to be able to justify, in reasonable detail, the work that has been carried out by CASA. The project diary is to be maintained by the project manager (or by each inspector for a multi-member team) on a regular basis.

The actual total hours spent by the team must be monitored against the total estimate to determine if the original estimate is likely to be exceeded and a revised estimate needs to be issued by regservices.

## 1.5 Onsite inspections and verification

Section 27AC of the Act provides for CASA to undertake an inspection or test.

The requirement for an onsite inspection will depend on the nature and complexity of the system being assessed. To ensure a system is suitable the inspector may need to interview staff, observe a process or inspect facilities. Inspectors will use [Protocol suite \(OPS.26\) Checklists](#) for onsite inspections.

### 1.5.1 Work health and safety

Inspectors conducting an industry onsite visit must assess potential work health and safety (WHS) risks for the site and take steps to mitigate identified risks. If clarification is required on the site WHS risks or mitigations, confirm with site contacts prior to the visit. In addition, inspectors must receive a work health and safety briefing/induction to the location and confirm emergency procedures and access to first aid treatment. Identified risks must be documented on your worksheet, along with the steps taken to mitigate them. For a list of identified potential onsite WHS risks, and the controls that are part of CASA's WHS management system, refer to the [WHS Checklist for 3rd party workplaces](#) and consider which risks are relevant to the site being visited. Ensure you have appropriate personal protective equipment (PPE) where required.

## 1.6 Proving flight

### 1.6.1 General

Under sections 27AD and 28 of the Act CASA can require an AOC applicant to conduct a proving flight.

Proving flights are normally the last part of an assessment to occur before a recommendation is made to a delegate to issue a new AOC or add a rotorcraft to an existing AOC. CASA's approach to proving flights varies depending on the size and complexity of both the organisation and the rotorcraft. For Part 133 applicants the assessment is conducted by a multidisciplinary team.

The proving flight is the practical demonstration by the AOC applicant that the documented procedures and systems previously inspected can work together in real time to produce a safe operation, which complies with the legislation. It allows CASA to assess the O and E to ensure that what the operator has proposed will achieve the outcomes required by the legislation.

Proving flights need not be conducted for each separate authorisation on an AOC. Proof that the AOC applicant's organisation is suitable may be reasonably accomplished by inspecting appropriate samples of the proposed operations.

Where cabin crew are employed, the CASA project manager will determine the CASA project team members who will take part in the flight phase of the proving flight. Additional CASA inspectors may be required to observe activities associated with operational control, loading, and dispatch.

If the AOC applicant cannot successfully demonstrate their ability to implement their processes and procedures through a proving flight, the proving flight will need to be repeated.

The requirement for proving flights and what form a proving flight must take are at CASA's discretion. Use relevant [Protocol suite \(OPS.26\) Checklists](#) for onsite inspections.

## 1.6.2 Decision to conduct a proving flight

It is CASA policy that proving flights are required for the following:

- first issue of an AOC for Part 133 Operations
- AOC variation upgrading in type of power plant from turboprop to jet engine operations
- introduction of passenger operations
- introduction of an additional rotorcraft type.

It is CASA policy that proving flights may be required for the following:

- introduction of a new port
- significant change to the geographical area of operation (e.g. overseas operations).

If CASA determines that a proving flight is not warranted, CASA may require an FOI to conduct an inflight observation from the flight deck of the first flight – enroute inspection. Checklist (OPS.26) Flight operations - enroute inspection may be used as a guide until a specific Part 133 checklist developed.

## 1.6.3 Proving flight notification

If CASA determines that a proving flight is required the project manager will decide, after consultation with the assessment team, if the AOC applicant is ready. The proving flight must be conducted in accordance with the procedures outlined in the applicant's exposition, therefore, any outstanding issues in relation to the exposition must be resolved to CASA's satisfaction prior to the conduct of the proving flight.

CASA must provide written notice of the requirement for a proving flight; the notice will contain:

- proposed date for the conduct of the proving flight
- objectives of the proving flight
- process CASA will use to conduct the proving flight
- safety considerations and conditions that must be observed during the proving flight
- areas to be assessed – scope of assessment
- means of assessment including the use of test scenarios
- route the proving flight will follow.

After receiving the notice, the AOC applicant must provide a detailed plan for the conduct of the proposed proving flight. The plan should include specific schedules for the enroute phase, showing departure and arrival dates, times and destinations.

## 1.6.4 Scope of the proving flight

The AOC applicant is required to conduct the proving flight as if it were conducting a normal revenue flight to allow CASA to observe all the elements that made up the AOC assessment. Depending on the size, nature and complexity of the operation, more than one proving flight may be required.

The following conditions apply to proving flights:

- compliance with safety regulations always – if the CASA inspector believes that safety may be jeopardised, the exercise will be terminated
- proving flights must cover at least 2 route sectors, preferably with one sector, if applicable, conducted at night
- adequate time must be planned at each port to allow for inspection of the AOC applicant's:
  - ground staff, procedures and facilities
  - operational control
  - dispatch preparation
  - rotorcraft loading



- passenger processing
- rotorcraft servicing.
- a proving flight must include a representative selection of the destinations intended to be serviced
- carriage of passengers:
  - fare-paying passengers or revenue cargo must not be carried on proving flights. The operator will be required to carry non-fee paying passengers that could be company staff or invited guests to simulate a normal passenger load. Non-revenue company cargo or equipment may also be carried. In a proving flight, CASA expects a passenger load equivalent to at least 50% of normal capacity.
  - the CASA team may ask some passengers on the flight to actively participate in certain scenarios. They will be thoroughly briefed by CASA team members on the day.

The operator must provide the normal complement of regular flight and cabin crew to operate the flight.

The following functions must be demonstrated, where applicable, in accordance with the provisions of the operator's exposition during proving flights:

- compliance with an approved flight crew flight and duty time system
- usability of the safety management system
- scheduled turn-around times and on-time departures
- recording and rectification of defects encountered and where applicable the use of the maintenance release and the MEL
- refuelling
- in flight fuel management and recording in accordance with the AOC applicant's fuel policy
- load control including weight and balance
- ground operations including baggage and/or cargo loading and unloading
- passenger handling
- flight and cabin crew compliance with duties and company procedures
- capacity of port facilities to support the services
- rotorcraft pushback (when used)
- capacity to notify relevant persons of operational changes
- flight planning
- operational control
- suitability of rotorcraft performance information
- suitability of route qualification training
- demonstration of all operational planning
- ground support and communications
- pre-flight walk around
- flight dispatch
- flight and cabin crew decision making
- normal, and abnormal, situations
- critical system failures
- critical communication systems
- communication with Nav Services
- turn around procedures



- the management of the operation, including support from contracted parties.

## 1.6.5 Conduct of a proving flight

### CASA pre-proving flight meeting

All project team members participating in the flight phase and those involved at the operator's main base will attend a pre-flight meeting. The purpose of this meeting is to coordinate inspection activities to ensure that all the planned checks are accomplished during the proving flight phase with minimum distraction.

### Operator pre-proving flight team meeting

A combined meeting of the CASA project team and the AOC applicant's nominated staff will be held prior to the flight. The purpose of this meeting is to ensure that the AOC applicant's staff are fully aware of the process the CASA project team will follow and the objectives to be achieved during the proving flight. It is critical that agreed procedures are put in place to:

- identify a planned scenario from an actual emergency
- ensure the use of the term 'simulated' precedes each planned scenario
- ensure clear understanding of the pilot in command (PIC) authority to cancel any scenario
- identify procedures in the event of an actual emergency or abnormal operation.

The CASA project team will normally allow the proving flight to run without intervention, except where a pre-planned diversion is required to test operational control systems. In addition, CASA may plan for inflight scenarios to test emergency/abnormal procedures of the flight and/or cabin crew, however this does not extend to shutting down or switching off a rotorcraft system.

The PIC has the final authority on the conduct of the flight. If at any time the PIC determines an activity or scenario would compromise the safety of flight operations, they will announce 'STOP'.

The CASA inspector may request demonstrations of specific operations, such as a particular form of departure, arrival or instrument approach. The CASA Inspector may also ask questions of flight deck and cabin crew to confirm the crew members' knowledge and familiarity with company procedures. In addition, flight crew are expected to demonstrate adequate knowledge of the layout of airfields, parking and fuelling arrangements at the various destinations and air traffic control (ATC) requirements enroute.

Cabin crew are expected to demonstrate their familiarity with safety-related company procedures. Areas covered may include:

- passenger handling arrangements
- in-flight emergency procedures
- actions when encountering unexpected turbulence
- the handling of incapacitated passengers.

### Scenarios

As part of the testing process CASA will introduce scenarios, or simulated exercises, mainly related to cabin and passenger exercises that are typical with day-to-day passenger operations.

There will also be some abnormal exercises and an emergency exercise to test the cabin and flight crew's ability to implement appropriate actions. The operator's crew may be questioned on their actions and their knowledge of company procedures. None of these scenarios will impact on the profile, or progress of the flight.

The CASA project team must prepare suitable scenarios simulating unusual conditions that should be demonstrated—for example:

- the handling of disabled passengers
- passenger incapacitation in flight
- a cabin fire

- cabin crew knowledge on the location and operation of emergency equipment
- actions when encountering unexpected turbulence.

It is important that scenarios are pre-planned, realistic and achievable, and that all crew are aware of the simulated nature of the demonstration.

Safety is paramount and should any crew member or CASA inspector believe that safety may be jeopardised as a consequence of a scenario, it must be terminated. Similarly, if any person on the flight becomes distressed as a result of the conduct of a scenario, the exercise shall be terminated.

The PIC on the flight has absolute authority as PIC to take whatever action deemed appropriate, in consideration of the conduct and safety of the flight. The project team will ensure that this has been discussed and understood at the operator pre-proving flight team meeting.

CASA shall introduce each scenario with the words, 'This is a simulated exercise, or words to this effect. CASA shall conclude each scenario with the words, 'This simulated exercise is complete', or words to this effect. If a message relating to a scenario is passed down a line of communication, it shall be identified as a simulated exercise.

### 1.6.6 Assessment of the proving flight

At the completion of the proving flight, the CASA project team (FOI) will meet to decide whether further proving flights are required and the need for and extent of corrective action required by the AOC applicant.

The CASA project team must agree on the result and rate the AOC applicant against one of the outcomes listed below.

- The CASA project team finds deficiencies in the AOC applicant's compliance with exposition processes and procedures or regulatory requirements that do not demonstrate present and suitable (not compliant). If the CASA project manager determines the deficiencies are such that on-ground testing would not be appropriate to verify the AOC applicant has satisfactorily addressed the deficiencies, then the applicant will be deemed to have failed the proving flight and a further proving flight will be necessary.
- The CASA project team finds deficiencies in the AOC applicant's compliance with exposition processes and procedures or regulatory requirements that demonstrate procedures are present but not suitable (not compliant). If the CASA project manager determines a ground exercise can verify the outcome of remedial action additional proving flights may not be required. The AOC applicant will rectify the deficiencies and CASA will verify the deficiencies have been addressed satisfactorily before the AOC is issued.
- The proving flight demonstrated that the operator's procedures are both present and suitable and therefore compliant. Some deficiencies are to be expected during the proving flight and all deficiencies will require rectification. The project team will recommend the delegate issue the AOC.

### 1.6.7 Post proving flight

The CASA project team will meet with the AOC applicant to provide a debriefing on the outcome of the proving flight. The debriefing should allow the project team to deliver their findings against the measure of present and suitable. The CASA project team and the operator should agree on the corrective action required to address any deficiencies. If required, the CASA project team will discuss the time of verification activities to ensure corrective actions have addressed the deficiencies.

The operator should be given an opportunity to provide feedback on the conduct of the proving flight and clarify any concerns they may have with the process.

## 2. Applicant

### 2.1 General

The application form requires the nominee to make a statement about their history. The history should include any accidents or incidents or CASA enforcement action that occurred within the previous 5 years.

The concept of a 'fit and proper' person is a fundamental one in many professions, jurisdictions and organisations as it is used to determine a person's honesty, integrity and reputation in order to confirm that they are fit and proper for the role they are undertaking.

Subregulations 119.070(3) describe the matters CASA may consider in deciding whether a person is a fit and proper person.

#### 2.1.1 Fitness and propriety

CASA must be satisfied that each of the proposed key personnel are fit and proper persons to be appointed to the position.

In assessing fitness and propriety, CASA may take into account a number of matters including the following:

- the nominee's record of compliance with regulatory requirements (in Australia or elsewhere) relating to aviation safety and other transport safety
- the applicant's demonstrated attitude towards compliance with regulatory requirements (in Australia or elsewhere) relating to aviation safety and other transport safety
- the applicant's experience (if any) in aviation
- the applicant's knowledge of the regulatory requirements applicable to civil aviation in Australia
- the applicant's history (if any) of serious behavioural problems
- any conviction (other than a spent conviction, within the meaning of Part VIIC of the Crimes Act 1914) of the applicant (in Australia or elsewhere) for a transport safety offence
- any evidence held by CASA that the applicant has contravened:
  - the Act or these Regulations
  - a law of another country relating to aviation safety
  - another law (of Australia or of another country) relating to transport safety.
- any other matter relating to the fitness of the applicant to hold the authorisation.

If any matter is identified that raises concerns as to whether the nominee is a fit and proper person, the inspector must request a peer review by their manager and Legal, International, and Regulatory Affairs (LIRA) before proceeding with any action that would cancel or refuse the application.

#### 2.1.2 Proposed rotorcraft

For CASA to fulfill its obligations s28 of the CAA to issue an AOC, the applicant must provide CASA with a list of rotorcraft they propose to operate. To be suitable the list should include the number of each kind of rotorcraft proposed.

## 3. Rotorcraft operations

### 3.1 Organisation

#### 3.1.1 Organisational structure

Before a recommendation can be made for the issue of an AOC, CASA inspectors must verify that the AOC applicant is capable of satisfying all the matters referred to in subsection 28(1)(b) of the Act.

A sound and effective management structure, essential to the achievement of safe air operations will display the following organisational structure and features:

- the CEO of the organisation has appropriate experience to conduct or carry out AOC operations safely
- the duties and responsibilities of management or supervisory positions are clearly defined with lines of communication and areas of responsibility clearly established
- the number and nature of management or supervisory positions is appropriate to the size and complexity of the organisation
- the reporting lines for sub-organisations lead to the respective head of that organisation
- the number of managerial positions must be such that effective control and responsibility is clearly seen to rest with particular individuals
- flight and duty times of crewmembers holding management or supervisory positions should be reviewed to ensure that there is an appropriate balance between flying duties and managerial duties.

The CASA inspector should consider the potential impact on any person holding a managerial position who may be involved with any other legal entity and the impact that involvement may have on their ability to manage the AOC effectively.

#### 3.1.2 Chain of command

The organisational structure is the basis for the organisation's chain of command. The chain of command provides the reporting structure of the organisation and must be appropriate to ensure that the activities can be conducted safely.

The applicant's CEO should be positioned at the pinnacle of the organisational hierarchy, demonstrating the overall responsibility and accountability of the position.

The applicant should demonstrate that clearly defined reporting and communication lines exist between key personnel, management, supervisors and other personnel.

To ensure the SM is not subject to undue influence, the organisational structure should provide that the SM reports either directly to the CEO, or to senior management with a formal direct line of communication with the CEO. The SM should remain independent from operational departments.

The applicant should demonstrate that a formal communication line exists between the SM and the HOFO.

An organisational structure that incorporates departments and branches should show that the reporting lines for each branch manager lead to the manager of the associated department, and reporting lines for instructors and examiners lead to the associated branch manager.

To ensure that each managerial position has a suitable span of control, the applicant's organisational structure should demonstrate that the number of managerial positions is appropriate to the size and scope of the proposed operations.

For the chain of command to be effective, the delegation of responsibility and accountability should rest with personnel holding qualifications and experience that are relevant to the position.

#### 3.1.3 Managing continuing airworthiness

Part 42—Continuing airworthiness requirements for rotorcraft and aeronautical products applies to an operator of a registered rotorcraft used to conduct scheduled Part 133 air transport operations. A registered

operator may also elect that Part 42 applies to their rotorcraft for unscheduled Part 133 air transport operations. Use [CASR Subpart 42.G \(CAMO\) Technical Assessor Handbook](#) and the associated worksheet for the assessment.

Operators not required to manage continuing airworthiness under Part 42 of CASR must meet the requirements of Part 4, Part 4A and Part 4B of the Civil Aviation Regulations 1988 (CAR). Use [Protocol suite \(OPS.13\) Managing continuing airworthiness](#) for the assessment.

## Addition of a new rotorcraft type

The introduction of a new rotorcraft type will trigger the operator's management of change process. The operator will determine whether the change is significant or non-significant.

The operator's exposition should include a process for the introduction of new rotorcraft. From an airworthiness perspective, to be suitable, the process should include the following:

- ensuring that the CofA is valid for the intended operation
- ensuring that the rotorcraft is registered
- determining whether the operator is/needs to be the RO
- reviewing historical records of the rotorcraft
- ensuring that the maintenance schedule is appropriate and complete for rotorcraft and equipment
- inspecting the rotorcraft for obvious defects and ensuring that all defects are actioned appropriately
- verifying the rotorcraft equipment meets all regulatory requirements
- checking that any role, emergency and survival equipment is installed and included in the maintenance schedule
- ensuring that the (aircraft flight manual) AFM is current and contains the correct supplements
- verifying any modifications are approved, and the continuing airworthiness inspections are included in the maintenance schedule
- verifying all required placards and decals are fitted (refer to the AFM for the minimum requirements)
- ensuring that any maintenance training is completed
- ensuring that a maintenance provider has been selected
- ensuring that an MEL, if required, has been approved prior to commencing the use of the rotorcraft on an operation for which an MEL is required
- ensuring that a reliability program, if one is required, has been approved prior to commencing the use of the rotorcraft on an operation for which the program is required.

Section 27AC of the Act provides for CASA to undertake an inspection or test.

The requirement for a rotorcraft inspection will depend on the complexity of the rotorcraft and the operator's experience. Inspectors will use [Protocol suite \(OPS.26\) Onsite inspection checklists](#) for aircraft inspections

### 3.1.4 Key personnel absence

The exposition must include a process to ensure all key personnel positions are filled. Most operators will have alternate key personnel authorised to carry out the responsibilities of key personnel when the principle person is absent or cannot carry out their responsibilities. For a person to be authorised to carry out key personnel responsibilities, they must be approved as a significant change under regulation 119.095. Use [Protocol suite OPS.10 Key personnel assessment](#).

Key personnel absence refers to not being present, such as being on leave or out of the office temporarily. In this instance, if the key person intends and is still able to carry out their responsibilities, the position is still considered filled. Appendix D to Multi-part AC 119-07 and 138-03 provides further guidance.

The exposition must include a process to notify CASA in the event that a key person cannot, or is unlikely to be able to, carry out their duties for greater than 35 days. To be suitable, notification to CASA must be made as soon as the operator becomes aware that the key person cannot, or is unlikely to be able to, carry out

their responsibilities. The operator's process for notifying CASA of key personnel absence should demonstrate that:

- 35 days commences at the time the key personnel cannot carry out, or is likely to be unable to carry out, their key personnel responsibilities.
- as soon as the operator becomes aware, they notify CASA within either 24 hrs or 3 days – depending on whether there is an authorised alternate available to take-over the responsibilities.

The inspector should ensure that the operator has a process in place that prevents the CEO and SM or HOFO and SM holding the same position for no more than 7 days in unforeseen circumstances. When considering an unforeseen circumstance, the inspector should consider the events which lead to the absence. To be suitable, the operator's definition of an unforeseen circumstance should indicate that it was unforeseeable and beyond the operator's control.

An approval under regulation 119.025 must meet the requirements in the [Operations protocol framework](#).

### 3.1.5 Familiarisation training

An Australian air transport operator must ensure that, before a person appointed as any of the operator's key personnel begins to carry out the responsibilities of the position, the person has completed any training that is necessary to familiarise the person with the responsibilities. An operator must describe the conduct of this training in their exposition, including details of the training syllabus and how records of achievement are documented. To be suitable the training should include such matters as:

- outline of the regulations
- organisational structure
- safety management system
- training and checking system
- exposition structure
- type of air transport operations conducted.

### 3.1.6 Human factors principles and non-technical skills training (HF/NTS)

A HF/NTS training program, which covers both human factors (HF) principles and non-technical skills (NTS), must be appropriate for the size, the nature and complexity of its operations. Although not required by legislation, the operator may choose to manage its HF/NTS obligations through its training and checking system.

**Note:** Inspectors should refer to advisory circular (AC) 119-12 for guidance on a HF/NTS training program. Inspectors may also refer to ICAO Doc 9683—Human factors training manual for further guidance.

HF/NTS training is required for the following personnel:

- flight crew
- cabin crew
- aircrew
- medical transport specialists
- flight dispatchers
- other safety critical personnel.

**Note:** For simplicity this section will use the term 'safety critical personnel' to refer to all of the above personnel.

Although HF/NTS training applies to all of the above personnel, the application will vary depending on the persons role.

### Example

For flight crew, the competencies NTS1 and NTS2 are included in their Part 61 licencing requirements and recurrent training programs.

## HF/NTS components

To be suitable, the HF/NTS training program must cover both human factors principles, and non-technical skills.

### HF principles

Human factor principles are knowledge elements outlining how the performance of people is influenced by different factors. Knowledge and awareness of HF principles help shape, improve and maximise human performance within the aviation system.

An operator's HF/NTS training program must include training and assessment related to HF principles to maximise operational safety outcomes.

ICAO identifies HF principles as:

- **Principle 1:** People's performance is shaped by their capabilities and limitations.
- **Principle 2:** People interpret situations differently and perform in ways that make sense to them.
- **Principle 3:** People adapt to meet the demands of a complex and dynamic work environment.
- **Principle 4:** People assess risks and make trade-offs.
- **Principle 5:** People's performance is influenced by working with other people, technology and the environment.

To be suitable, the HF principles training program should include, but is not limited to:

- safety culture
- human performance principle basics
- stress/stress management
- fatigue/fatigue management
- workload management.

### Non-technical skills

Operators must also include appropriate operational behaviours and skills training – this is the NTS component of the training program. NTS is applied specific human competencies which may minimise human error in aviation.

To be suitable, the NTS training program should include, but is not limited to:

- communication
- teamwork
- situational awareness
- decision making



- threat and error management
- human information processing.

### Third party HF/NTS training program provider requirements

HF/NTS training activities conducted by a contracted third-party provider must meet the requirements mentioned in the operator's exposition. If contracted facilitators are used, the operator must be satisfied that the contracted personnel hold appropriate qualifications. The operator should have a documented process in place to ensure third party training organisations have appropriately trained and competent staff, in relation to HF/NTS course delivery.

### Contracted third party safety critical personnel

If the operator relies on a third party's HF/NTS training program to meet their obligations under the regulations, the inspector should ensure the operator has a process to validate the training. To be suitable, the inspector should consider the following:

- Does the exposition include a process for the operator to be able to assess any third-party provided HF/NTS training, to ensure it meets the requirements of the exposition and the operational environment?
- Does the exposition include a process to ensure third-party training organisations have appropriately trained and competent staff, in relation to HF/NTS course delivery?
- Do any third-party training materials appropriately address the identified human performance risk, relevant to the organisations operating environment?

#### Example

If an operator uses an external company for the delivery of operational flight plans, the third-party flight dispatchers are required to meet HF/NTS training requirements under regulation 119.180. In this case the operator should assess the external provider's HF/NTS training program to determine suitability.

### HF/NTS assessment process

To be suitable, the HF/NTS training program should include an assessment which may include both theoretical and practical assessments for HF/NTS competencies.

Assessment may be carried out using different methods, including:

- short answer or forced choice (multi-choice) exams
- observation of tasks (this may form part of competency assessment)
- demonstration during practical exercises
- informal assessment of participation by the instructor.

### Recognition of prior learning (RPL)

If an operator chooses to recognise a person's previous HF/NTS training, the operator must ensure the training meets their operational requirements. A suitable process would include a gap analysis, considering the following matters:

- Do assessment processes allow for confirmation of achievement of learning outcomes for both HF principles and NTS elements, with competencies mapped against both elements?
- Is the training assessment focused on learning and building expertise, rather than on rote memorisation of facts, rules or procedures?
- Does the training assessment assist in clarifying people's responsibilities in ensuring they continue to reflect best practice based on lessons learned?
- Does the training program allow students to reflect on their own performance and address any identified deficiencies.



### 3.1.7 Safety management system

Use [Protocol suite \(OPS.08\) Safety management system assessment](#).

### 3.1.8 Drug and alcohol management plan (DAMP)

Use Protocol suite (OPS.99) DAMP (under development)

## 3.2 Key personnel

### 3.2.1 Chief executive officer (CEO)

Use [Protocol suite \(OPS.10\) Key personnel assessment](#).

### 3.2.2 Head of flying operations (HOFO)

Use [Protocol suite \(OPS.10\) Key personnel assessment](#).

### 3.2.3 Head of training and checking (HOTC)

Use [Protocol suite \(OPS.10\) Key personnel assessment](#).

### 3.2.4 Safety manager (SM)

Use [Protocol suite \(OPS.10\) Key personnel assessment](#).

## 3.3 Exposition

An exposition is a document, or set of documents, which describes how an operator will conduct its operations safely. It sets out, both for CASA and for operator personnel involved in the operation, how to comply with all applicable legislative requirements and manage the safety of the operation, as well as details of each plan, process, procedure, program and system implemented.

If structured as a set of documents, the exposition might include a principal/primary document which contains all the common information applicable to operator activities. Separate manuals can then be established for specific aspects of certain activities, and the associated systems and procedures applicable to those activities. These separate manuals form part of the operator exposition.

In constructing the exposition content, the operator should refer specifically to the list of items in the regulation to ensure completeness of the exposition.

The exposition does not need to include Part 91 General operating and flight rules that are intrinsic to the operation of an aircraft and may rely on the Australian Aeronautical Information Publication (AIP) or foreign equivalent to provide that information.

#### Example

Regulation 91.265 prescribes the PIC obligations for minimum height rules for populous areas and public gatherings, the operator's exposition would not need to include specific instructions to the PIC. However, if the operator chooses to place additional obligations on its flight crew that exceeds the Part 91 requirements the exposition will contain those instructions.

To be suitable, the exposition must be managed under a document control system that allows personnel to readily identify the current version. When assessing the content of the exposition the inspector should ensure that the quality, readability and usability is fit for purpose.

### 3.3.1 Dangerous goods manual

If an operator intends to consign and carry dangerous goods by air, the assessment must be conducted by a dangerous goods inspector.

**Note:** The dangerous goods manual forms part of the operator's exposition under regulation 119.205. Regulation 92.055 does not require the dangerous goods manual to be a standalone document, the operator may choose to meet the requirements of the regulation as a chapter to a broader exposition document.

Part 92 of CASR applies to the consignment and carriage of dangerous goods by air. All operators are required to provide a detailed standalone dangerous goods manual, or section within the exposition, which in either case, forms part of their exposition. If the operator intends to carry general cargo, regulation 92.070 prescribes that the operator must have procedures to obtain a signed statement from the person who consigns the cargo, by either describing the contents of the cargo or stating that the cargo does not contain any dangerous goods. If this statement is already obtained from the person consigning the general cargo (i.e. by a freight forwarder), then regulation 92.075 states that the operator can rely on the initial statement made when accepting on forwarded cargo.

For operations involving the carriage of dangerous goods as cargo, including those goods intended as replacement items for company materials (COMAT) or dangerous goods of the operator, the assessment must be conducted by a DGI using *Protocol (OPS.28) Consignment and carriage of dangerous goods by air* (under development). Until Protocol (OPS.28) is published, the DGI will continue to use the following documentation:

- [Checklist \(OPS.26\) Dangerous goods manual evaluation](#)
- [Checklist \(OPS.26\) Acceptance of dangerous goods - onsite inspection](#)
- [Checklist \(OPS.26\) Dangerous goods - RAMP inspection](#)
- [Checklist \(OPS.26\) Ground operations – port inspection \(for passenger terminal inspection\)](#).

### Operations not involving carriage of dangerous goods in cargo

[Worksheet \(OPS.133\) Australian air transport operations - rotorcraft](#) has the components that a non-dangerous goods carrying operator requires in their manual. A future checklist may be developed to further assist the FOI in this assessment.

**Note:** The project manager may request a review and assessment of the dangerous goods manual if unsure about the complexity of the proposed cargo operation.

If the operator intends to carry non-dangerous goods 'general' cargo and/or the limited dangerous goods permitted for carriage by passengers or crew, the operator must still provide certain information (within their exposition) to address:

- dangerous goods that are permitted to be carried by passengers and crew (see section 3.7.7.4 of this principle); and
- general exceptions listed in ICAO Doc 9284 1;1.1.5 (if applicable); or
- exceptions for dangerous goods of the operator listed in ICAO Doc 9284 1;2.2.1 (see section 3.7.8.5 of this principle); or
- activities performed under regulations 91.170, 92.185 and 92.195, as they relate to air transport operations (as applicable).

Mail is separate from cargo, and may be carried by an operator not approved to carry dangerous goods in cargo. Mail may contain small amounts of low-risk dangerous goods (carried in accordance with ICAO Doc 9284 1;2.3); however, these postal items are scrutinised and screened by Australia Post as part of a CASA

approved process. Mail is presented to the operator in sealed mailbags without the requirement to provide specific information regarding any dangerous goods that may be present within. If the operator intends to carry mail, the operator must document the process for accepting and transporting mail bags within their exposition.

### 3.3.1.1 Dangerous goods training

Section 23B of the Act sets out that persons handling, or involved in handling, cargo in the course of the cargo being carried, or consigned for carriage, on an aircraft, are to undertake specified training relating to dangerous goods. This is expanded upon in regulations 92.085 to 92.115.

More specifically, Subpart 92.C prescribes requirements for organisations to provide dangerous goods training to all employees involved in the handling of cargo, passengers' baggage and mail. Regulation 92.085 defines the employee groups requiring dangerous goods training, and regulations 92.090 to 92.115 prescribe the requirements for:

- Australian aircraft operators to provide dangerous goods training to groups A, B, C, D and E employees performing duties in Australia, and groups C and D employees performing duties outside of Australia (CASR 92.095)
- ground handling agents to provide dangerous goods training to the groups A, B, C and E employees performing duties in Australia (CASR 92.110)
- Australian freight forwarders to provide dangerous goods training to the groups A, B and E employees performing duties in Australia (CASR 92.115)
- screening authorities to provide dangerous goods training to employees whose duties in Australia include handling, or supervising anyone who handles, checked baggage or carry-on baggage (CASR 92.115).

An operator's exposition must identify the employee groups applicable to their operation, including deemed employees (as defined in regulation 92.085), and prescribe the dangerous goods training requirements for each employee group. Regulation 92.095 requires that each group employee must have undertaken a dangerous goods training course before the employee first performs the relevant duties, and every 2 years after (while the employee continues to have those duties). The operator must include these requirements for initial and recurrent training in their exposition.

To be suitable, the exposition should also include:

- details of any CASA-approved dangerous goods training course(s) that are delivered or provided – whether that be that the operator holds a dangerous goods training course approval or training is provided by an external CASA-approved training course provider
- whether dangerous goods training undertaken by an employee for a previous employer would be acceptable.

**Note:** An operator may choose to either integrate dangerous goods training into their training and checking system, or provide a standalone course.

Operators must satisfy training requirements for all staff involved in the handling of cargo, mail, passengers or passengers' baggage, even if that operator does not carry dangerous goods as cargo. Employees who do not physically handle the cargo, mail, passengers or baggage may still be required to undertake dangerous goods training; regulation 92.085 includes persons supervising these employees performing these duties to also undertake dangerous goods training.

### Dangerous goods training records

Regulation 92.145 requires the operator to maintain up-to-date dangerous goods training records for at least 36 months, in accordance with ICAO Doc 9284 1;4.4. The training record must include, as a minimum:

- the name of each employee
- the names of the person and the organisation providing the training, and the date on which the training was undertaken

- a reference (e.g. CASA training course approval number) to the training material used to meet the training requirements

a copy of any certificate issued to an employee on the completion of a course of training required by CASR Part 92.

### 3.3.2 Reference library

The operator's exposition must include a reference library in accordance with regulation 119.040. An important part of the reference library is access to up-to-date sections of the AIP or its foreign equivalent (if required).

### 3.3.3 Aircraft leasing arrangements

Use [Protocol suite \(OPS.24\) Aircraft leasing arrangements](#).

### 3.3.4 Electronic flight bag (EFB)

CASR EX68/24 Part 2 (2)(3) includes a direction for the use of an EFB by flight crew.

**Note:** For detailed information on the use of an electronic flight bag (EFB) by flight crew members, refer to AC 91-17 Electronic flight bags.

The term electronic flight bag (EFB) refers to an information system for flight crew members that allows storing, updating, delivering and displaying, with or without computing, digital data to support flight operations.

The scope of the EFB will vary depending on the nature and complexity of the flight operations. Typical uses are:

- flight planning – including weather, NOTAMS and submission
- aircraft performance and weight and balance calculations
- maps and charts
- company exposition – including the rotorcraft flight manual /flight crew operating manuals (FCOMs)/MEL
- electronic checklists – including those for use during normal operations, abnormal and emergency situations
- mandatory occurrence reporting forms
- journey/technical logs – including defect reporting.

Operators may use EFBs for the provision of operational information to flight crew. EFB's can be either portable or installed as part of the aircraft equipment. Portable EFBs are not part of the aircraft configuration and are categorised as a portable electronic device (PED) under the regulations (see section 3.8.5 of this principle). The use of an EFB during air transport operations requires CASA approval (refer to CASA EX68/24 - Part 119 of CASR - Supplementary Exemptions and direction Instrument 2024).

For operators with an EFB installed as part of the aircraft equipment, the exposition must include the original equipment manufacturers (OEM) instructions and procedures required to operate and maintain the EFB.

For operators with a portable EFB, the exposition must include instructions on how flight crew will maintain the device—such as battery life.

### EFB limitations

The exposition should provide instructions as to how the EFB can be used in differing phases of flight. Operators may limit the use of the EFB during critical phases of flight. Flight crew members will be permitted to access information such as taxi charts and instrument departure and arrival charts during this phase;

however other functions, such as performance calculations or administrative functions, will not be conducted during this phase of flight.

## EFB-approved hardware

For portable EFB's, the operator must determine what portable electronic device (PED) is approved. Where an operator does not provide the EFB and relies on a 'bring your own' device, the exposition must state:

- the brand name and series of the approved hardware
- the minimum specifications, including memory and size of the approved hardware.

The exposition must describe how the EFB hardware is used. This can include handling and storage of the device, as well as maintenance of the device. For portable EFB's, the operator must outline considerations applicable to battery use, health and replacement. In many cases, the portable EFB will contain a lithium style battery. Lithium batteries have safety considerations to be aware of, and the operator must outline how the device will be managed in the case of an emergency—such as a fire.

EFBs with temporary mounts that attach to the aircraft (e.g. suction mounts, Velcro pads) are regarded as unsecured devices, and they should be stowed during critical phases of flight. These temporary mounts are unlikely to be considered airworthy and may constitute a hazard on the flight deck or crew station in certain circumstances. EFBs attached to kneeboard holders do not need to be stowed.

**Note:** All EFB mounts attached to the aircraft structure require airworthiness approval (Subpart 21.M).

## EFB-approved software applications

Operators should not use spreadsheet software to electronically convert paper performance charts into an application; often there are underlying certification data issues with this methodology which can lead (inadvertently) to operations being conducted outside of the aircraft limits.

The exposition must describe how the applicable software remains up to date and how updates will be carried out. For an installed EFB, this will be included in maintenance procedures. For a portable EFB, the operator may have a software application that automatically updates the EFB or some other method for flight crew to confirm their device is up to date. Whichever is the case, the inspector must be satisfied that flight crew have a method to confirm that the EFB has the most up to date operational data.

Where an operator uses software for items such as weight and balance or performance calculations, the inspector should ascertain that an appropriate certifying authority has approved this software.

### Example

If the EFB is used for aircraft performance, any software component should be appropriately certified by a performance engineering authority—such as the aircraft manufacturer.

Portable EFB's generally have self-contained power and may rely on data connectivity to achieve full functionality.

**Note:** Modifications to the aircraft to use a portable EFB requires airworthiness approval.

Inspectors should be cognisant that some installed EFB's permit the operator to load customised software applications. Where this occurs, the operator's exposition should describe how this software will be managed.

### 3.3.5 Cabin electronic flight bag (C-EFB)

Cabin electronic flight bags (C-EFBs) can perform a variety of functions, traditionally accomplished using paper references, by electronically storing and retrieving documents required for flight operations. C-EFBs may be authorised for use in conjunction with, or to replace, some of the hard copy material that cabin crew typically carry in their document library. C-EFBs can be either portable or installed as part of the aircraft equipment. Portable C-EFBs are not part of the aircraft configuration and are categorised as a PED under the regulations (see section 3.8.5 of this principle).

Typical uses for C-EFBs are:

- company exposition – including checklists
- passenger information list
- passenger announcements
- cabin defect log
- onboard sales.

The use of C-EFB is not subject to CASA approval. To be suitable, the inspector must ensure the operator has appropriate procedures that meet the requirements for the use of a PED. (AC 91-07 Cabin electronic flight bags provides further guidance)

## 3.4 Management of change

Operators who are engaged across multiple CASR Parts can construct a management of change (MOC) process that is applicable to all of their operations.

### Example

An operator may have sections of their company that hold authorisations under Parts 42, 119, 133, 142 and 145. If preferred by the operator, they could construct an MOC process that is common to all of their operations regardless of the CASR Part under consideration.

### 3.4.1 Significant change

The operator's exposition must detail a process for the identification of a significant change. To be suitable, if an operator uses their own definition of what constitutes 'significant change', the inspector must be satisfied that the operator's definition is not less restrictive than the regulation.

Paragraph 119.205(1)(h) requires that the operator's exposition includes '*details of each plan, process, procedure, program and system implemented by the operator to safely conduct and manage their Australian air transport operations in compliance with the civil aviation legislation*'. To address this requirement, the operator's documentation should detail how an application will be made to CASA, and who within the organisation is authorised to make such an application.

Except for key personnel changes under subregulation 119.090(2), a significant change cannot be implemented until CASA has approved the change. The operator must have a process for ensuring a significant change will not be implemented until CASA approval is received.

### 3.4.2 Non-significant change

By having a process that identifies significant changes, the operator will by default identify all other changes as non-significant changes. A common mistake is that operators may only consider the prescriptive components for the definition of significant change under subparagraph 119.020(a) and automatically classify all other changes as non-significant. To be suitable, the inspector must confirm the operator's management of change process adequately covers the requirements for the definition of significant change in subparagraphs 119.020(b) and (c).

Although the regulations require the operator to notify CASA of a non-significant change, they do not specify the timing of that notification. To be suitable, the inspector should confirm that the operator has developed a



process to ensure CASA is notified at the same time as the operators' personnel. However, in some circumstances, the method of communication to the operators' personnel may not coincide with the notification to CASA – due to the methods used.

### Examples

Some operators may use their rostering and scheduling system to communicate non-significant changes to their exposition, whereas CASA requires an operator to provide notification via the non-significant change form (CASA-04-5819).

Operators may choose to align their exposition amendments to coincide with the AIRAC cycle or, in the case of large expositions, an amendment cycle, and in the interim use an 'operational notice' (however named) to communicate a non-significant change. The associated section of the exposition would then be amended in accordance with the cycle.

Situations may require operators to make an immediate change to procedures via an 'operational notice' to address a risk in a timely manner. To be suitable, the inspector should confirm that an operational notice forms part of the exposition.

### 3.4.3 Communication of changes to operators' personnel

The method of notification to operators' personnel should be such that the operator is sure that the communication is reaching the intended audience in a timely and effective manner. Some operators will rely on e-mail systems, while others may use a more formal system that records whether each individual has read and acknowledged the information. To be suitable, it should be clear how and when the change will be communicated.

### 3.4.4 Key personnel changes

The regulations provide a means for operators to enact changes to key personnel in certain circumstances, without having received CASA approval prior to implementation of the change. To be suitable, the person appointed must have been previously authorised to carry out the responsibilities of the position. This relief cannot be used for other significant changes. If an operator elects to set a policy requiring CASA approval for all significant changes prior to implementation, this is also considered suitable.

### 3.4.5 Risk assessment

The MOC process, and associated risk assessment process, are required to be integrated with the operator's SMS. Any assessment of the SMS aspects should be conducted with reference to [Protocol suite \(OPS.08\) Safety management systems assessment](#).

## 3.5 Records and documents

The following material is to be read in conjunction with the Part 133 AMC/GM. Some operators may have legislative exemption from the requirements of certain CASRs. The current register of exemptions should be checked in determining the presence of these requirements.

### 3.5.1 Personnel records

The operator must maintain visibility of flight crew licence and medical records to ensure flight crew hold a valid licence and medical certificate when they conduct operations. The size and nature of the operation will dictate the method used, with possibilities ranging from a simple paper filing system through to an electronic data base.

To assess suitability the inspector should consider the number of:

- flight crew
- operating bases where flight crew are domiciled
- different qualifications that need to be tracked.

The operator may choose to track all crew qualifications in addition to flight crew licences and medicals in one system. Other qualifications may include, but are not limited to:

- dangerous goods training
- recurrent training and checking
- HF/NTS recurrent training.

To assess the suitability of the system the inspector should be satisfied that the system will provide alerts to the person responsible for rostering to prevent a crew member being assigned for duties when a qualification has expired.

CASA EX68/24 - Part 119 of CASR - Supplementary Exemptions and Directions Instrument 2024 provides relief from the requirement to maintain copies of flight crew licences and medicals. While actual copies are not required to be kept, an operator must keep up-to-date records of flight crew member qualifications and medical details for the flight crew member to operate the operator's aircraft. This means flight crew member qualifications obtained privately and not related to the operator's aircraft or operation do not need to be recorded by the operator. Flight crew members operating foreign registered aircraft are included in the exemption.

### 3.5.2 Operational and flight related documents

The operator must include certain information within their exposition about operational and flight related documents. The method for dealing with each item will vary with the size and complexity of the operation. The inspector should consider the following information when assessing suitability.

The exposition must list items of general documentation provided to flight crew to undertake their duties. It must also state which documents require a signed acknowledgement of receipt. It should clarify whether a physical signature is required, or whether an electronic acknowledgement is sufficient. The operator must also employ a system of management for these documents. The size and complexity of the operation will dictate the method. It may vary from a simple paper filing system to an electronic system with a dedicated information manager. The exposition should describe how information is distributed to crew.

The exposition should contain a directive from the HOFO stating that flight crew must follow procedures published in the rotorcraft flight manual, or FCOM, that forms part of the exposition. The operator is responsible for publishing any approved variations from the manufacturer's procedures. The statement should remind crew of a requirement to adhere to all legislation and operating manuals.

The exposition must include instructions for the provision of rotorcraft checklists to the flight crew members. Depending on the size and complexity of the operation, this may vary from provision of hard copy documents and amendments through to the use of electronic devices whereby amendments are pushed to crew. To be suitable, the exposition should describe how the flight crew use of the checklist and when. For multicrew operations the checklist normally involves a challenge and response process, whereas single pilot operations may be a 'read and do' process.

The checklist will be rotorcraft type (kind) specific and must include all the items in the rotorcraft flight manual and may also include operator specific requirements. Original Equipment Manufacturer (OEM) checklists may be in the form of a quick reference handbook (QRH) or part of the pilot operating handbook (POH). Some OEMs will provide 'expanded checklists' with additional detail explaining each checklist item. To be suitable the checklist must be easy to use and for multicrew operations define who completes the action. Checklists normally consist of:

- normal operations
- emergency operations
- abnormal operations

**Note:** Rotorcraft flight manual/POH for smaller rotorcraft may not address abnormal procedures. In this case the normal and emergency procedures are required to be included in the checklist.

Checklists should be regularly reviewed against the rotorcraft flight manual or supplements and any changes made in accordance with the operator's management of change process.



### 3.5.2.1 Documents to be carried

Operators must include procedures for maintaining and ensuring accessibility to the documents prescribed. A suitable method may be via hard copy or the use of electronic devices and will vary with the complexity and nature of the operation. The exposition may also include a statement that flight crew members share mutual responsibility for ensuring the presence of certain documents.

### 3.5.2.2 Flight crew licence and medical certificate

An exposition must include a procedure to ensure the operator's flight crew members carry both their medical certificate and licence with them on a flight. This will generally be via inclusion of a statement from the HOFO. Part of that statement should also contain a reminder to crew that if they have a reason for being unable to comply with the requirements, they must provide CASA written notice prior to the flight, or if dictated by unforeseen circumstances, within 24 hours of the flight's conclusion.

### 3.5.2.3 Additional documents for international flights

If an operator conducts operations that begin or end outside of Australian territory, the exposition must detail how the operator will ensure the additional documents are carried and maintained. The procedures should be suitable for the size of the organisation, and the frequency with which it operates internationally. In addition, the process must consider any requirements of foreign national aviation authorities (NAAs). For example, some foreign NAAs will only accept hard copies of documents. To be suitable, the procedure must also ensure the PIC is provided with the documents, or information on how to access them.

### 3.5.2.4 Journey log

The exposition must detail processes for the pre-flight and post-flight completion of a journey log. They must include a procedure for the PIC to verify each entry. Subregulation 133.075(3) lists the items that must be included in pre-flight entries. Subregulation 133.075(5) list the items that must be included in post-flight entries.

The journey log may be paper-based or electronic. The method used will depend on the complexity and nature of the operation. To meet suitable, an inspector should confirm the operator has a process to ensure any electronic document can be certified at the completion of the flight. If operators utilise an electronic system, such as an Aircraft Communications Addressing and Reporting System (ACARS), then they should also include a procedure for manual reversion when there is an outage of the electronic system.

Subregulation 133.75(6) allows an operator to meet the regulatory requirement if, prior to when the information must be recorded, either:

- the information is recorded in another document kept by the operator
- the information is readily available to the operator from another source.

### 3.5.2.5 Passenger list

The operator's exposition must include their process to ensure an up-to-date copy of the passenger list is provided to their operating crew and a person on the ground. To meet the requirement the inspector should consider the availability and completeness of the passenger list. Each passenger list must be clearly identified as belonging to a specific flight and may be stored as either a hard copy or as an electronic version.

### 3.5.2.6 Flight preparation form

The operator's exposition must include their process for the PIC of an international flight to certify via signature satisfaction with the listed items (on this worksheet line). To meet suitable, their exposition should describe a system appropriate to the size and complexity of their operation that ensures the information is correctly maintained and provided to their PIC.

### 3.5.2.7 Defect reporting

The exposition must detail a process of reporting the rotorcraft defects listed, including the generic item, a defect in the rotorcraft. To be suitable, it should include how their crew members notify all relevant parties of

the defects. The size and complexity of the operator will dictate this process. For example, it may involve use of the rotorcraft communication system while airborne followed by entering a record in the maintenance log, or it may be via use of the maintenance log only at the completion of a flight.

### 3.5.2.8 Incident reporting

The exposition must contain procedures for crew members to report incidents that endanger the safe operation of the operator's rotorcraft. This also includes incidents that endanger or could endanger the safety of people or property associated with the operation of their rotorcraft. The process will depend upon the size of the operation, and the complexity of their Safety Management System. It should address how these reports are escalated to ensure follow up action is completed. A suitable exposition should also include a list of Immediately Reportable Matters and Routine Reportable Matters from the Transport Safety Investigation Regulations 2003 to ensure crew follow reporting obligations.

## 3.5.3 Flight-related documents retention

An operator must include in its exposition a process for retaining certain records for the specified period of time. A suitable process may be electronic or physical and will depend upon the size and complexity of the operator. However, the process must ensure each document is retained for its specified period.

If an operator has accessed planning information via a system such as the National Aeronautical Information Processing System (NAIPS) and chooses to store records electronically, a suitable process must ensure the information accessed for a flight is still available for at least 3 months subsequent to that flight.

Regulation 119.240 directs certain operators to regulation 133.290 to monitor and record flight and cabin crew member cosmic radiation exposure. A suitable exposition should provide some guidelines about shared responsibility in monitoring and maintaining records of exposure. However, the exposition must include a process to ensure records of exposure are retained for 5 years after an employee ceases employment.

## 3.6 General flight limitations

### 3.6.1 Foreign registered rotorcraft

If an operator intends using foreign registered aircraft for air transport operations in Australia, the exposition must include procedures to ensure the foreign registered aircraft is not used for more than 90 days in any rolling 12-month period. It is not acceptable that the operator reach the 90-day limit, not operate the aircraft for some time and then recommence another 90 day period inside the original 12-month period. The 12-month period commences from the first day of operations. The underlying intent of this regulation is to provide for the short-term use of a foreign registered aircraft during circumstances such as the operator's Australian registered aircraft undergoing maintenance such as repairs, or where the operator needs to add capacity for peak periods.

Subregulation 119.260(2)(b) provides the ability for CASA to issue an approval under regulation 119.025 for a period longer than 90 days. Before considering an application for approval the inspector should confirm that the operator is unable to either:

- place the foreign registered rotorcraft or rotorcraft on the Australian Part 47 register, thus placing the airworthiness of the aircraft under solely Australian oversight
- arrange for Australia and the State of registry to enter into an article 83 bis agreement whereby Australia and the State of registry would agree to transfer regulatory responsibility to ensure the safe operation and maintenance of the aircraft, for example by agreeing to treat the aircraft as if it were an Australian aircraft. Please note there may be a significant lead in time for such an agreement to be entered into.

An AOC cannot be issued authorising the operation of a foreign aircraft unless CASA and the state of registry have entered into an agreement under section 28A of the Act that sets out the areas of responsibility of the parties in relation to the supervision of flight operations, maintenance and airworthiness of the aircraft.

To ensure the operator maintains each foreign registered aircraft in accordance with the foreign country's laws, to be suitable exposition must include:

- a system that manages the maintenance and continuing airworthiness applicable to the laws of the foreign country in which the aircraft is registered

- appoint a maintenance controller to control the maintenance of the aircraft
- how scheduled and unscheduled maintenance will be controlled
- where the maintenance will be carried out
- how compliance with the airworthiness requirements of the foreign country will be complied with, including any airworthiness directives and service bulletins.

Refer to [Protocol suite \(OPS.13\) Managing continuing airworthiness](#) for more information.

### 3.6.2 Operations in foreign airspace and on the high seas

If an operator conducts operations in an Australian rotorcraft outside Australia its exposition must provide instructions for PICs to operate their rotorcraft in accordance with the rules of the foreign country airspace. A suitable exposition may include those rules, or it may refer PICs to foreign regulation documents.

Regulation 91.140 requires that an Australian rotorcraft operated over the high seas must be operated in accordance with ICAO Annex 2— Rules of the air. The ICAO rules of the air are applied to operations outside the 12-mile territorial limit where they are in addition to or consistent with Australian legislation. If there is inconsistency, the ICAO rules have priority (regulation 91.015). If an operator conducts operations over the high seas the exposition must include detailed instructions for flight crew to comply with ICAO Annex 2. A suitable exposition may include those rules, or it may refer PICs to source documents published by third party providers (such as Jeppesen or LIDO).

Regulation 91.695 (1) and chapter 23 of the Part 91 MOS prescribes the requirements for the interception of an aircraft. For operations over the high seas the operations manual should include the procedures mentioned in:

- ICAO Annex 2 – Appendix 1 – Signals – Section 2 – Signals for use in the event of interception; and
- ICAO Annex 2 – Appendix 2 – Interception of Civil Aircraft, Attachment A – Interception of Civil Aircraft.

#### Note:

Where an operator intends to conduct application operations over the high seas, the AOC should include the following condition:

"International operations are limited to operations that do not transit or enter the territory of a foreign state."

### 3.6.3 Search and rescue services

An operator must provide its flight crew members with information about search and rescue services relevant to a flight. Depending upon the size and complexity of the operator, an exposition may include a route guidance section providing flight crew with detailed information about the relevant areas of its operation. Some operators may choose to include search and rescue service guidance within this section. Other operators may subscribe to a flight information provider (for example, Jeppesen or Lido), and refer flight crew to the search and rescue services contained in these documents. To meet present and suitable, an inspector must determine that an operator's flight crew will have access to the relevant search and rescue information during a flight.

### 3.6.4 Information about emergency and survival equipment

The Division 2 of Chapter 3 of the Part 133 Manual of Standards (MOS) prescribes information about specific items of emergency and survival equipment the operator must detail if the equipment is required to be carried on their rotorcraft. To meet suitable, the operator may include within its exposition:

- a written list of the equipment and its details
- a rotorcraft map labelling and providing details of the equipment
- a complete section dedicated to emergency and survival equipment.

The operator must include in their exposition how they make this information available to parties involved in a flight's operational control, for relay to a rescue coordination centre.

### 3.6.5 Sterile flight deck

The exposition must include a policy to ensure crew only conduct activities associated with the safe operation of the flight during take-off, initial climb, final approach, and landing. To be suitable, it may consist of a 'sterile flight deck' policy, or similar, and include both flight crew and air crew when applicable. The inspector should confirm the sterile flight deck policy details the period when the sterile flight deck phase commences and ends. The policy should include instructions when contact with the flight crew during the sterile flight deck phase is permissible.

Regulation 91.175 prohibits crew members from operating a PED at any time in a flight when it will distract from their duties. If an operator uses an EFB the exposition will need to include procedures to ensure compliance (see section 3.8.5 of this principle).

### 3.6.6 Flight crew seat authorisation and briefing

If the operator allows persons other than flight crew, aircrew, an authorised officer or other person identified in their exposition to occupy a flight crew seat they must provide instructions to the PIC to include the following:

- matters that should be included in the safety brief for persons occupying flight crew seat include: the acceptable method to enter and exit the crew seat/cockpit and when to do so
- the importance of remaining clear of rotorcraft controls and where/what they are
- the operation of the seat belts/harnesses and how to fasten and remove them
- the operation of any emergency equipment or exits and when to use them
- the acceptable method for communicating with the crew
- the requirements relating to sterile cockpit procedures developed by the operator to comply with regulation 133.110.

Refer to regulation 133.240 and the Part 133 MOS for requirements regarding safety briefings and instructions for passengers.

**Note:** The inspector should also consider the requirements of the Aviation Transport Security Regulations 2005.

### 3.6.7 Causing or simulating abnormal/emergency operations/instrument meteorological conditions

The exposition must provide instructions to prevent the following during air transport operations:

- the simulation of emergency and abnormal operations during a flight
- the simulation of instrument meteorological conditions (IMC) during a flight.

The instructions may be contained within a statement by the HOFO or sections of the exposition specific to that part of operator policy. To be clear, training and checking activities are not an air transport operation.

The operator's exposition should contain a statement prohibiting the deliberate or simulated failure of the instruments listed in paragraph 91.715(1)(a) in flight. Regulation 91.715 provides for some exceptions to this requirement. Inspectors should check that if an operator's exposition allows for deliberate or simulated failure of those instruments in flight, it clarifies that the circumstances must be in accordance with subregulation 91.715(2).

Subregulation 91.720(1) prohibits the simulation of IMC in flight unless the exceptions at subregulation 91.720(2) are met. Some operators may include a policy in their exposition prohibiting the simulation of IMC in flight at any time. Inspectors should check that if an operator's exposition allows for the simulation of IMC in flight, it clarifies that the circumstances must be in accordance with the items at subregulation 91.720(2).

Subregulations 91.725(1), (2) and (4) specify the limitations for conducting training activities in the rotorcraft. An exposition must contain a section describing the circumstances under which training activities may take place on flights, including the persons permitted to be onboard. The exposition should also clarify the type of training that is permitted during air transport operations.

The operator's exposition must include a statement that prohibits PICs from deliberately shutting down an engine in flight at night or in IMC.

Regulations 91.735 and 91.740 apply to operators of single-engine rotorcraft who undertake air transport operations. A suitable exposition must contain a statement prohibiting PICs from shutting the engine down or simulating engine failures unless:

- in day visual flight rules (VFR) flight, it is conducted as part of approved training or checking, and in accordance with specific conditions – refer subregulation 91.735(2)
- at night or in IMC flight, unless conducted as part of approved training or checking, and in accordance with specific conditions – refer subregulation 91.740(2).

Regulations 91.745 and 91.750 apply to operators of multi-engine rotorcraft.

A suitable exposition must contain a statement prohibiting PICs from simulating engine failures in a large air transport rotorcraft unless one of the conditions at subregulation 91.745(2) is met. This may involve the operator holding an approval under regulation 91.045 to simulate engine failures in the rotorcraft. The exposition should clarify this.

Paragraph 91.745(2)(a) is one requirement specifying 2 parameters, both of which must be met (see AMC/GM 91 General operating and flight rules). For example, if a rotorcraft is type certified to carry not more than 9 passengers and has a maximum take-off weight (MTOW) of more than 8618kgs. Because it exceeds the MTOW, paragraph 91.745(2)(a) does not apply. In this case an approved flight simulator must be used for the conduct of proficiency checks.

Further conditions apply for a PIC to be allowed to conduct simulated failure of an engine in the rotorcraft in IMC or at night. This must only be as part of training, checking or testing. Subregulation 91.750(2) contains each of the necessary conditions. To be suitable, an inspector should determine that the exposition clarifies each of these conditions without ambiguity.

## 3.7 Operational procedures

### 3.7.1 Operational control

#### 3.7.1.1 Authority of PIC

The exposition must contain a statement clarifying the authority of the PIC, including reference to the items specified in regulation 91.215. This may form part of the PIC duties statement and include additional details regarding the duties and responsibilities of the PIC, as determined by the operator.

#### 3.7.1.2 Powers to restrain and arrest

The exposition must include instructions regarding the authority of a commander over persons and other items onboard the operator's rotorcraft. The nature of the operation will dictate the level of detail an operator chooses to include in its exposition. To be suitable, an exposition should contain a brief explanation of the powers of the PIC for the items listed in regulation 91.220.

An exposition must include an explanation about a crew member's authority to 'arrest' a passenger under regulation 91.225. To be suitable, the exposition should specify a process the PIC and crew undertake in the event of arresting a passenger. This should include the following:

- the crew are to follow onboard prior to landing, and how they deliver a passenger to local authorities on arrival
- instructions on the use of restraint equipment

- suitable locations on the rotorcraft to place a passenger under restraint and where to place any seized items.

The level of detail will depend upon the nature of the operation and whether the operation is wholly domestic or includes international flights.

The exposition must contain guidance for crew members in how to deal with difficult passengers. It should define behaviour the operator considers disorderly or offensive. The level of detail included in the exposition will depend upon the size and complexity of the operation.

### **3.7.1.3 Fitness for duty**

An exposition must contain a statement specifying that crew members are fit to undertake their duties. It should contain procedures and guidance to assist crew on how to determine their fitness for duty. A suitable policy will include details on what prescription medications should not be taken prior to or while on duty. It must also contain information clarifying regulatory requirements about alcohol consumption prior to duty commencement, and a statement prohibiting crew members from consuming alcohol while on duty. The level of detail included in the exposition will depend upon the nature of the operation.

### **3.7.1.4 Smoking on board the rotorcraft**

The exposition must contain guidance on when an operator prohibits smoking onboard its rotorcraft. The level of detail included in the exposition will depend upon the nature of the operation.

### **3.7.1.5 Crew member safety during turbulence**

The exposition must include a policy of how the PIC will ensure the safety of crew members during turbulence encounters. To be suitable, the exposition should provide guidance to the PIC on when crew are required to return to the crew stations and fasten their seat belts. Guidance should include the use of the public address system to advise the crew of the requirement to discontinue cabin service. Guidance should also include a process for the pre-flight briefing to include the expected flight conditions.

### **3.7.1.6 Crew member to occupy crew station**

The exposition must state when flight crew members are to be present on the flight deck, and when they must wear a seatbelt or a seatbelt and shoulder harness.

The exposition must also state when other crew members are to occupy their assigned crew stations with seatbelt and harness secured. The level of detail included in the exposition will depend upon the nature of the operation.

### **3.7.1.7 Operational control**

The exposition must include procedures for determining how operational control of a flight is exercised within the operator's organisation. The procedures will vary depending upon the size and complexity, and the nature of the operation. In some cases, an operator may employ a third party to undertake certain functions required of operational control.

**Note:** FAA advisory circular (AC) 120-101 provides guidance on items a suitable exposition should include. Inspectors should be aware that the FAA requires dispatchers to be licensed, which differs from Australian regulatory requirements. However, the concepts remain relevant.

## **3.7.2 Flight preparation**

### **3.7.2.1 Weather assessment**

The exposition must detail the procedures an operator uses to obtain weather assessments for flight planning. Section 91.7 of the Part 91 MOS prescribes the specific information required for planning. The size and complexity of the operation will dictate how an operator meets this requirement. Suitable methods may



vary from the use of NAIPS through to the employment of specialists within a dispatch department liaising with international meteorological information providers.

An operator may choose to delegate the weather assessment process to a person other than the flight crew. In this case, the exposition must also include a requirement for a PIC to validate the information prior to take-off.

Section 91.7.03 of the Part 91 MOS specifies requirements for the PIC in the event an authorised weather forecast cannot be obtained prior to a flight's departure. The operator's exposition must clarify PIC actions under these circumstances.

### 3.7.2.2 Alternate aerodromes

Chapter 8 of the Part 91 MOS prescribes requirements relating to flight preparation and alternate aerodromes. The alternate aerodrome requirements can be divided essentially into requirements for:

- weather
- navigation
- aerodrome lighting.

The exposition must describe how the operator meets the requirements with regard to each of these sections of Chapter 8 of the Part 91 MOS. This should include publishing the alternate minima as set out in the table at paragraph 8.08(1) of the Part 91 MOS.

For the operators who use foreign aerodromes, their exposition must also include a description of planning requirements of the section 8.09 of the Part 91 MOS.

### 3.7.3 Flight planning

The exposition must include details and procedures about the preparation of flight plans and if required, how they are notified to a relevant authority or person. Regulation 133.135 prescribes information regarding when flight plans must be submitted, along with generic requirements about the information contained within a flight plan.

The exposition must detail the system the operator uses to provide the flight planning information to the PIC and any person involved with the dispatch and operational control of a flight. The size and complexity of the operation may determine the method an operator chooses to meet the requirement. Operators may choose to use NAIPS or contract a third party to provide dispatch information and exercise operational control. To meet present and suitable, an inspector must check that the operator has a reliable system for making the information available to each person involved with the operational control of the flight, and providing the information to flight crew during flight. The operator may choose to use an off the shelf system such as OZRWYS or AVPLAN to meet their obligations. In this case the exposition will provide instructions on the use of such systems, including a process to manage system failures.

If the operator is engaged in international operations, suitable procedures should include how the information is accessed at international locations.

To determine present and suitable, inspectors should consider the following:

- for an air transport operation under the VFR, the operator must include a process to ensure that the rotorcraft disposition is known either by a competent authority or through a process managed by the operator. The exposition should describe the preferred method of notification including either:
  - submitting a full flight notification to ATC
  - nominating a SARTIME with ATC
  - leaving a flight note with a responsible person.
- the exposition may include a sample flight plan
- some operators may also include decodes of the information to assist flight crew or delegated individuals in flight plan preparation.

The complexity and nature of an operation will determine the level of detail in the information. An inspector must determine whether the information provided in the exposition is suitable for the operation.

The exposition must include procedures for recording the time the rotorcraft flew over each way point and the fuel remaining at that point. If this is not practical inflight then the exposition must include a requirement to complete the flight plan as soon as practical after the flight ends.

To be suitable, the exposition may also include a procedure whereby the information is recorded in another document other than the flight plan or is made available to the operator's records from another source for example an EFB.

### 3.7.4 Flight rules

An operator may rely on the AIP or foreign equivalent to ensure flight crew comply with the requirements of airspace listed in the Chapter 11 of the Part 91 MOS. Some operators may provide additional instructions to flight crew or impose additional operating restrictions on their rotorcraft during Part 133 air transport operations within specific airspace. If an approval involves North Atlantic High-Level Airspace (NAT HLA), use [Protocol suite \(OPS.07\) NAT HLA](#).

A suitable exposition should also contain a statement authorising PICs to deviate from a clearance where rotorcraft and/or occupant safety is compromised by the clearance and include subsequent follow up actions.

#### 3.7.4.1 Navigation and altimetry requirements

The operator will normally rely on the AIP or other approved documentation for the provision of information that is basic instrument flight rules (IFR) knowledge requirements. However, the exposition should include the specific procedures required to operate in PBN airspace. The inspector will use [Protocol suite \(OPS.04\) Navigation authorisation](#) to assess the suitability of the exposition. If operations are planned within the North Atlantic high-level airspace use [Protocol suite \(OPS.07\) NAT HLA Flight Operations](#) to complete the assessment.

If operations will be conducted above the transition altitude, the exposition should provide instructions to flight crew on the selection of standard QNH across all altimeters when passing the transition altitude on climb and the area or destination QNH when passing the transition level on descent. To be suitable, the procedure should include a cross check function to ensure:

- the correct QNH has been set on each altimeter
- the altimeter meets the accuracy requirements.

The exposition must include the procedures to be followed in the event of an airborne collision avoidance system resolution advisory (ACAS RA). Normally the flight crew will follow the OEM instructions. To be suitable there must be a clear instruction to flight crew that compliance with an ATC clearance is not required during an ACAS RA event, however they should advise ATC as soon as possible and return to the clearance when safe to do so.

The exposition should also provide guidance to flight crew on contingency procedures in various airspaces in the event of a radio communication failure. The operators may provide specific route briefing cards detailing such procedures or rely on NAA approved documentation such as Jeppesen.

#### 3.7.4.2 Take-off and landing minima

The exposition must detail how the operator calculates the minima it uses for both take-off and landing at destination and alternate aerodromes. To determine present and suitable, the inspector must ensure each item that relates to rotorcraft listed in Chapter 15 of the Part 91 MOS for qualifying rotorcraft is included. In addition to the requirements prescribed in the Part 91 the exposition must address the items mention in regulation 133.145. If the operator states within the exposition that they do not conduct certain procedures such as circling, or they do not hold specific approval for a procedure such as low visibility operations, they will not necessarily include information in the exposition regarding calculation of minima for those procedures. To be suitable the inspector should ensure the exposition considers:

- operating environment
- flight crew experience
- rotorcraft equipment
- rotorcraft normal and OEI performance
- abnormal and emergency operations.



If international operations are conducted in countries where the local regulations specify different criteria for the take-off and landing minima, then the operator's exposition should detail how the amended criteria have been used to establish the operator's minima.

### 3.7.4.3 Instrument approach procedures

An operator who conducts IFR flights to and from foreign countries where the aerodrome instrument approach and departure procedures are not based on ICAO Document 8168 (PANS-OPS) or to aerodromes that do not have authorised instrument approach procedures published in the AIP must include the instrument approach and departure procedures that will be used at those aerodromes in their exposition. To meet present and suitable, the inspector must determine that the operator has procedures to ensure:

- the departure and approach procedures are approved by the NAA of the country where the aerodrome is located
- the departure and approach procedures are amended and current.

### 3.7.4.4 Low visibility operations

Use [Protocol suite \(OPS.12\) Low visibility operations](#) for the assessment.

The exposition must include instructions for the PIC regarding an IFR approach ban as described in section 91.16 of the Part 91 MOS. To determine present and suitable, an inspector should ensure the operator includes the following:

- the definition of an IFR approach ban
- approach ban procedures the PIC must follow.

Approach ban definitions may vary between NAAs. International operators should include instructions in the exposition for the PIC to follow the approach ban of the respective NAA.

### 3.7.4.5 IFR flight without a destination alternate

A PIC must take certain actions in the event a flight has been planned without a destination alternate, but while the flight is airborne, an updated weather report indicates a destination alternate is now required. In this case the flight can continue to the planned destination if it had sufficient fuel to divert to a suitable alternate.

However, if there is insufficient fuel to continue to the planned destination and then an alternate, the exposition should include inflight contingency procedures providing for the safe continuation of the flight. To be suitable procedures could include:

- diversion to an enroute alternate where a safe landing can be made or
- if within 30 minutes of the planned destination aerodrome an authorised weather forecast indicates the weather is above the landing minima, the flight may continue to the planned destination or
- the rotorcraft has sufficient fuel to hold near the planned destination until 30 minutes after the weather improves above the alternate weather minima.

### 3.7.4.6 Minimum height rules and lowest safe altitudes

It is not expected the operator repeat the information provided in the AIP, but rather, how they comply on certain routes.

#### Example

For a multi-engine rotorcraft when considering the minimum height the operator must consider the one-engine inoperative speed (OEI) service ceiling for the prevailing conditions to determine that the particular route is suitable for the flight.

Where required an exposition should describe how the operator determines the lowest safe altitudes for its flight planned routings. To determine present and suitable, an inspector needs to ensure the exposition includes procedures for establishing the following:

- the lowest safe altitudes for routes where lowest safe altitudes are published
- the lowest safe altitudes for routes where lowest safe altitudes are not published.

International operators may choose to use procedures for calculating lowest safe altitudes prescribed in the AIP of the controlling NAA of that route. A suitable exposition should describe this process.

If an operator uses Flex Tracks or User Preferred Routes, then a suitable exposition should describe the calculation of lowest safe altitudes on those route segments.

Note: Part 173 MOS contains guidance.

### Medical transport operation

For medical transport operations in a rotorcraft, if the exposition includes procedures to meet the requirements prescribed in Division 2 of Chapter 5 of the Part 133 MOS, then the Part 91 minimum height rules do not apply. To be suitable the inspector should consider:

- instructions provided to flight crew on how to conduct the descent
- crew member and rotorcraft equipment requirements including night vision imaging system (NVIS) where applicable
- method of conducting the risk assessment when required
- operations into other than a medical transport operating site performance class 2 with exposure or higher performance class
- operations into a medical transport site the appropriate risk consideration, monitoring and management procedures
- flight crew training and checking requirements
- flight over a populous area or public gathering
- pre-flight and inflight risk assessments.

### 3.7.5 Aerodromes

The exposition must include procedures for the assessment of aerodromes to ensure they meet the requirements of the regulations and operations can be conducted safely. In determining that sufficient information is provided the inspector should consider the following for each rotorcraft type operated:

- a statement of the performance category of each type of rotorcraft
- a statement that flight crew operate the rotorcraft within the specified performance category or higher, unless the operator holds an approval under regulation 91.045 to operate in a lower performance category at an aerodrome
- if the operator holds an approval under regulation 91.045 to operate a rotorcraft in a lower performance category at an aerodrome, details and conditions of the approval
- a procedure to ensure the aerodrome is suitable for the operator's rotorcraft to take-off and land
- a procedure to ensure the aerodrome complies with the Part 139 MOS.

An exposition must include procedures to confirm the suitability of aerodromes an operator uses. It should ensure the aerodrome complies with the Part 139 MOS or meets the other requirements subregulation 91.410(2). The operator should take into account the following when considering the suitability of an aerodrome:

- prevailing weather and effect of temperature
- rotorcraft performance, weight and engine/propeller output
- length or distance available
- obstacles.

- safety of persons or property
- the rotorcraft flight manual.

The exposition must also include procedures for determining that rotorcraft is parked in such a way as not to create a hazard. Operator procedures should consider the apron survey and marked parking positions to ensure they are suitable and provide sufficient wing-tip clearance. Apron surfaces, entry and exit taxiways must be suitable for the rotorcraft performance classification number.

**Note:** Part 139 no longer defines registered aerodromes. Most of the previously registered aerodromes have become certified aerodromes.

### 3.7.5.1 Information for operation at aerodromes

The operator must include procedures within their exposition for obtaining information listed in subregulation 133.170(2) to allow the PIC to operate to or from aerodromes. It applies to:

- departure aerodromes
- planned destination aerodromes
- any required destination alternate aerodromes.

The inspector should ensure the procedures allow the PIC to plan take-offs and landings. This may be addressed by including authorised aeronautical information such as the ERSA or Jeppesen Airways Manual as part of the exposition. The operator may also elect to have an aerodrome or airstrip guide for locations not shown in their authorised aeronautical information documents. If the operator has such guides for flight crew, procedures and instructions for maintaining and controlling the guide, these must be included in their exposition. For aerodromes the operator uses that are not included in those documents, their exposition must include an appropriate process that allows the PIC to determine the information.

### 3.7.5.2 Passenger safety

The operator's exposition needs to provide instructions to personnel on the management of passengers while boarding or disembarking from the rotorcraft.

To be suitable the procedures should cover at a minimum the following:

- supervision of the passengers by the operator's personnel, including:
  - passengers follow the correct pathways to and from the rotorcraft
  - assisting passengers with special needs
  - compliance with no smoking areas
  - ensure the passengers are not intoxicated or affected by psychoactive substances
  - ensure carryon baggage limitations
  - weather conditions
  - downwash from the rotors
- procedures to manage passengers, animals or things when the rotors are turning
- ensure passengers take their assigned seats.

### 3.7.6 Fuel requirements

An exposition must include procedures to ensure its rotorcraft are only refuelled with the approved type of fuel (e.g. JetA, JetA1, AVGAS 100 and AVGAS 100LL) and not with any fuel that is prohibited for use by the manufacturer. It must also include procedures to ensure that its rotorcraft is not loaded with contaminated or degraded fuel. If required, for example polar operations, the procedures should take into account different fuel freezing temperatures and procedures to manage fuel temperatures in flight. If fuel checks are conducted by a person other than the PIC then the procedure must include how the person advises the PIC that fuel checks have been completed.

### 3.7.6.1 Oil requirements

The exposition must include instructions to the PIC on the minimum oil quantity required to complete a flight safely. If the flight crew are required to refill oil then the exposition should provide instructions for the servicing of the oil quantity. The pilot maintenance program should include training for a flight crew member required to service engine oil.

### 3.7.6.2 Fuel monitoring

The section 6.03 of the Part 133 MOS specifies acceptable methods an operator can use for fuel consumption data to calculate the fuel load for a flight. An inspector must determine that the exposition uses these sources. To be suitable, the exposition should also include a statement that if manufacturer data as presented in the rotorcraft flight manual is used, then the data must be used exactly as per manufacturer instructions.

An exposition must include a policy that complies with regulation 133.190 and the Chapter 6 of the Part 133 MOS in calculating the fuel load for a flight and monitoring the fuel remaining while airborne. Section 6.02 of the Part 133 MOS prescribes the definitions and requirements of components and considerations for fuel carriage. An operator must address each of the following:

- the amount of fuel that must be carried onboard a rotorcraft for a flight
- procedures for monitoring the amount of fuel onboard the rotorcraft during a flight
- procedures to be considered in determining whether a rotorcraft has sufficient fuel to complete a flight to the destination safely with the required reserve amount remaining
- procedures to be followed when the fuel reaches certain specified amounts in flight
- the regulatory requirement for a PIC to adhere to the approved operator fuel policy.

A suitable exposition should also include components such as, but not limited to:

- definitions of phases of a flight
- definitions of types of alternate aerodromes and their effective minima when used as a take-off or destination alternate aerodrome
- definitions of each component of the fuel requirements
- an indication of how the fuel consumption data is obtained, including climb, cruise and holding data
- details of any in-flight replanning calculations and procedures the operator uses
- details of any special planning procedures that an operator uses.

To be suitable, the inspector must ensure that an operator's procedures are appropriate for the nature of their operation. The inspector should check that the procedures account for each of the requirements prescribed in the Chapter 6 of the Part 133 MOS. The inspector must ensure that the overall procedures are in accordance with all regulatory requirements.

The operator may apply for operational variations (OVs) to the Part 133 MOS fuel requirements. The section 6.07 of the Part 133 MOS prescribes when OVs are permissible. They must include evidence of documented in-service experience, or a permissible safety risk assessment, as part of the submission when applying for an OV. The inspector must ensure that the OV will maintain or improve the level of safety of the Part 133 MOS requirements.

**Note:** Each of the flight operations rule parts that contain fuel instructions are slightly different. If an operator operates under multiple Parts, the exposition will need to be assessed to ensure the fuel determination procedures meet each Part, or the most restrictive section of any relevant Part.

### 3.7.6.3 Procedures for refuelling

An exposition must include procedures to ensure rotorcraft are fuelled safely. Rotorcraft refuelling may be conducted from either:

- a fixed refuelling station and bowser
- a refuelling tanker
- drums.

The instructions should ensure that the requirements of regulations 91.470 through to 91.490 are met.

Where fuelling operations are conducted from drums the exposition will include instructions to ensure the firefighting equipment required by regulation 91.475 is available at the location. Specific instructions must include how to position the drum and ensure that there are no fire hazards.

An operator may fuel a rotorcraft while non-crew members are boarding, onboard, or disembarking. The exposition must include both normal and emergency communication procedures associated with the rotorcraft fuelling crew members and ground handling personnel are to follow. To be suitable, an inspector should ensure the procedures are appropriate for maintaining the safety of all persons onboard and in the vicinity of the rotorcraft, along with the rotorcraft itself. The exposition must also include procedures to meet regulation 91.515, regarding detection of fuel vapour in a rotorcraft during fuelling. To be suitable, the procedures must include more than a directive to cease fuelling. They should address:

- communication with ground handling personnel
- actions required of ground personnel
- cessation and removal of ground handling equipment in close proximity to the rotorcraft
- disembarkation of non-crew members onboard
- operation of an auxiliary power unit if fitted
- communication with ATC and aerodrome fire services in the event of a fire risk.

Finally, the exposition must include a policy for the operation of low-risk electronic devices in accordance with subregulation 133.195(c). This may vary from prohibiting the use of such devices through to an appropriate method of communicating to persons in the cabin the types of devices the operator permits and when their operation must cease.

### **HOT refuelling**

The rotorcraft flight manual must permit HOT refuelling. Before authorising the hot fuelling of a rotorcraft, the operator must develop procedures to ensure that the fuelling can be carried out safely. To be considered suitable procedures should include:

- how the refuelling will be conducted considering the rotorcraft position in relation to the refuelling point
- any specific requirements in the rotorcraft's flight manual or equivalent data
- any requirements of the aerodrome operator
- procedures for communication between the PIC and the person refuelling the rotorcraft.

## **3.7.7 Passenger and medical transport operations**

### **3.7.7.1 Passenger and crew member restraint**

An exposition must include instructions for crew members to ensure that any seat on the rotorcraft that is to be occupied by a person has a seatbelt or shoulder harness. If the operator conducts medical transport operations, the inspector must ensure the operator provides instruction to crew members in accordance with section 20.01 of the Part 91 MOS. To be suitable, the exposition should include procedures for crew members to check on the presence and serviceability of the seatbelt and/or shoulder harness during a pre-flight inspection. The procedures should be appropriate to the nature of the operation.

An exposition must include procedures to ensure any infant or child carried on the rotorcraft is restrained. Section 20.03 of the Part 91 MOS prescribes instructions on how an infant or child must be restrained. To be suitable, the exposition should include the CASA definition of an infant and a child, along with procedures for crew members to ensure that the infant or child is restrained in accordance with the section 20.03 and 20.04 of the Part 91 MOS. The procedures should be appropriate to the nature of the operation.

The exposition must include procedures to ensure the PIC issues safety directions for passengers before taxiing, take-off or landing to ensure they have:

- their seatbelt or shoulder harness fastened
- their seat back upright or in a designated position permitted by the rotorcraft flight manual
- attachments such as tray tables or footrests stowed, or in a designated position permitted by the rotorcraft flight manual.

The procedures should be appropriate for the complexity and nature of the operation. A suitable procedure may include the use of illuminated signs. The procedures may be within a tailored standard operating procedure manual, or they may be included within a cabin policy and procedures manual. However, they must address how the PIC conveys the required information to the passengers.

### **3.7.7.2 Passenger service equipment**

Regulation 91.595 applies to the operator that carries passenger service equipment on their rotorcraft which includes medical transport special equipment and containers.

The exposition must include procedures and directives to ensure that during taxi, take-off, and landing:

- a piece of passenger service equipment that could interfere with an emergency evacuation remains secured in a stowed position
- an item of galley equipment, a serving cart or item of medical transport equipment is secured to prevent it from moving in the emergency landing conditions set out in the rotorcraft's type certification basis.

To be suitable, the inspector should determine the procedures are appropriate, considering:

- the rotorcraft type
- the design of the galley and passenger service equipment, and its stowage areas
- the complexity of the operation
- the nature of the operation.

### **3.7.7.3 Consumption of alcohol and psychoactive substances**

The exposition must include guidance for crew members to ensure that a passenger does not consume alcohol onboard the rotorcraft except in the following circumstances:

- alcohol has been provided to them by crew members
- there are no other crew members onboard, and the PIC has permitted the passenger to consume the alcohol.

The exposition must also include directions that a crew member must not provide alcohol to a passenger if there are reasonable grounds to suspect that the passenger's behaviour may present a hazard to the rotorcraft or other occupants onboard.

The inspector should ensure that the procedures are in accordance with the size, complexity, and nature of the operation. For some complex operations, the procedures may be contained within a cabin policy and procedures manual.

The operator must have a policy included in the exposition prohibiting passengers from boarding the rotorcraft if they are suspected of being affected by alcohol or psychoactive substances. Although the regulation refers specifically to crew members, if ground staff are employed to assist in the boarding process, the policy should also extend to the ground staff. To be suitable the exposition should provide guidance to crew members and ground staff on what observed behaviours indicate the passenger is affected by alcohol or psychoactive substances.

### 3.7.7.4 Dangerous goods

If an operator intends to consign and carry dangerous goods by air, the assessment must be conducted by a dangerous goods inspector (DGI).

Note:

- Regulations 92.020, 92.025, 92.030 and 92.035 make it a requirement for operators and persons to follow the *Technical Instructions for the safe transport of dangerous goods by air* (ICAO Doc 9284).
- For the inspection of the passenger terminal, inspectors should use [Checklist \(OPS.26\) Ground operations – port inspection](#).

#### Provision of information to passengers and crew

An operator's exposition must include a process to notify passengers about the dangerous goods they are forbidden to carry onboard an aircraft. If the ticket purchase and/or issuance of a boarding pass can be completed by a passenger without involvement of company personnel, the operator's notification system must include an acknowledgement by the passenger that they have been presented with information about dangerous goods they are forbidden to carry onboard the aircraft. The information must be provided to passengers:

- at the point of ticket purchase or, if this is not practical, made available to passengers in another manner prior to being issued with a boarding pass; and
- when issued the boarding pass or, if no boarding pass is issued, prior to boarding the aircraft.

Note: The information may be provided in text or pictorial form, electronically or verbally, as described in the exposition.

#### Dangerous goods signage in passenger terminals

The operator, the operator's handling agent, or the owner or operator of an airport terminal, must ensure that information on the types of dangerous goods that passengers are forbidden to carry on board an aircraft is communicated effectively to them. This information, or notices, must be sufficient in number and prominently displayed in visible location(s) at each of the following places at an airport:

- where tickets are issued
- where boarding passes are issued
- where passenger baggage is dropped off and collected
- where aircraft boarding areas are maintained
- at any other location where passengers are issued boarding passes and/or checked baggage is accepted.

This information must include visual examples of dangerous goods forbidden from transport onboard an aircraft, including batteries.

#### Dangerous goods carried by passengers and crew

The exposition should include information about the dangerous goods that are permitted to be carried by passengers and crew. To be suitable, the exposition must include a statement advising crew that passengers and crew are forbidden to carry dangerous goods as carry-on baggage, checked in baggage, or on their person, unless the dangerous goods are permitted in accordance with Table 8-1 of ICAO Doc 9284 and for personal use only.



**Note:** The exposition should include a copy of the current version of Table 8.1 from ICAO Doc 9284 or some other method of providing equivalent information (e.g. the industry equivalent Table 2.3.A contained within the International Air Transportation Association (IATA) Dangerous Goods Regulations (DGR)).

### **Passenger check in procedures**

Passengers may carry certain dangerous goods, with the approval of the operator, some of which will require the PIC to be notified. The exposition should articulate the process by which the operator approval is given.

Check-in staff must be adequately trained to assist passengers in identifying and detecting dangerous goods, other than those permitted to be carried onboard the aircraft.

Check-in staff should seek confirmation from a passenger that they are not carrying dangerous goods that are not permitted to be carried onboard the aircraft. Where there are suspicions that an item may contain dangerous goods, check-in staff should seek further confirmation about the contents of the item. Many innocuous-looking items may contain dangerous goods.

If excess baggage is consigned as cargo, check-in staff should seek confirmation from the passenger, or a person acting on behalf of the passenger, that the excess baggage does not contain dangerous goods that are not permitted.

#### **3.7.7.5 Carriage of a restricted person**

The operator's exposition must include procedures for:

- carrying a restricted person on their rotorcraft
- informing the PIC about the carriage of a restricted person on the flight.

The exposition should provide guidance as to who is considered a restricted person and where required, the person who is responsible for supervising them. To be suitable procedures should address such matters as the consumption of alcohol by the restricted person and if required the supervising person. The procedures will depend on the nature of the operation. The inspector must determine that the procedures are suitable for the type of air transport operation.

#### **3.7.7.6 Carry-on baggage**

The exposition must include procedures regarding carry-on baggage for each of the following:

- how to determine its size and weight
- where it may be stowed
- how it may be securely stowed
- provision of instructions to passengers about securely stowing the carry-on baggage before take-off, before landing, and at other times as directed by the pilot.

Suitable procedures will depend upon the operator's rotorcraft and the nature of the operation, however, will include instructions for personnel supervising passenger boarding on how to assess carry-on baggage and what to do with baggage that does not meet the operator requirements.

#### **3.7.7.7 Emergency exits**

Unless the emergency exit is obstructed by a stretcher during a medical transport operation, the exposition must provide procedures to ensure emergency exits are clear during taxi, take-off, and landing. To meet this requirement the exposition may include a passenger seating plan and instructions for the carriage of cargo in the cabin which addresses the requirements.

The exposition must include procedures to ensure that a crew member is satisfied that each passenger assigned emergency exit row seat will assist in an evacuation if required. To be suitable the exposition should provide guidance to crew members on how to assess the suitability of a passenger. For the passenger to be considered suitable the exposition should provide instructions that consider:

- English language proficiency
- passenger mobility
- passenger agreement to assist in the event of a rotorcraft evacuation.

The operator may have a procedure to assess suitability of a passenger to be assigned an emergency exit row seat at the time of passenger check in, however the final assessment should be made by the responsible crew member. The exposition should include instructions to the responsible crew member to brief the passenger on the operation of the emergency exit.

### **3.7.7.8 Carriage of passengers with reduced mobility**

The exposition must include procedures and instructions for the carriage of passengers with reduced mobility. To determine present and suitable, the inspector should confirm the exposition includes procedures to ensure:

- the passenger does not occupy a seat such that they will hinder crew members from safety duties, access to emergency equipment, or hinder the emergency evacuation of the rotorcraft
- the PIC or the senior cabin crew member is informed that the passenger will be carried on the rotorcraft before the flight begins
- a crew member asks the passenger, or a person accompanying the passenger, before the flight begins, the best way to help the passenger in an emergency evacuation.

Suitable procedures will depend upon the operator's type of rotorcraft and the nature of the operation.

### **3.7.7.9 Passenger briefing cards**

The exposition must include procedures to ensure that safety briefing cards are available to all passengers on the rotorcraft when a flight begins. Suitable procedures will depend upon the crew members carried on the rotorcraft, and the configuration of the rotorcraft.

The inspector must also determine that the briefing cards are suitable by ensuring they include the information prescribed in section 7.01 of the Part 133 MOS. They may also contain other information, but it is limited to an item relevant to the type and model of the rotorcraft, and an item relevant to the safety of the rotorcraft and its passengers.

### **3.7.7.10 Passenger briefing**

The operator's exposition must include the following:

- procedures to ensure that passengers receive safety briefings and instructions or demonstrations before take-off
- procedures for briefing passengers on what they should do if an emergency occurs on the rotorcraft during flight.

To determine present and suitable, an inspector must ensure that the safety briefings, instructions, or demonstrations:

- meet the requirements of sections 7.02 and 7.03 of the Part 133 MOS.
- do not include other information irrelevant to the type and model of the rotorcraft, or irrelevant to the safety of the rotorcraft and its passengers and
- include information for a passenger seated in an exit row who will be required to operate the emergency exit and assist in the use of the exit.

An inspector must ensure that the procedures are suitable for the complexity and nature of the operation, and the type of rotorcraft and its cabin configuration.

## 3.7.8 Carriage of cargo

### 3.7.8.1 Cargo restraint

Regulation 91.585 applies to operators who intend carrying cargo on flights, other than the items listed under subregulation 91.585(1). The operator's exposition must include procedures to ensure that the cargo is either:

- restrained by equipment approved under regulations 21.305 or 21.305A
- securely stowed in a place on the rotorcraft designed and approved under Part 21
- for a foreign registered rotorcraft operating in Australian territory, restrained or stowed in accordance with requirements under the law of the rotorcraft's State of registry or State of the operator.

An exposition should also include a statement that the PIC is responsible for ensuring the cargo is restrained in accordance with the regulations.

To determine suitable, an inspector should ensure the procedures are appropriate for the size and complexity of the operation, and also appropriate for the type of rotorcraft operated.

### 3.7.8.2 Where cargo maybe loaded

Regulation 91.600 applies to operators who carry cargo on flights. An operator must include procedures in its exposition to ensure that cargo is not carried in a position on its rotorcraft that will:

- damage, obstruct, or cause the failure of controls, wiring, pipelines, or other equipment essential to the safety of the rotorcraft
- exceed the load limitations for the floor structure or other load bearing components as set out in the flight manual instructions or a placard on the rotorcraft
- obstruct an aisle (other than passenger service or galley equipment on a temporary basis)
- obstruct or restrict access to an emergency exit.

An exposition should also include a statement that the PIC is responsible for ensuring the cargo is carried in accordance with the regulations including Part 92 dangerous goods regulations.

To determine suitable, an inspector should ensure that the procedures are appropriate for the size and complexity of the operation, and also appropriate for the type of rotorcraft operated.

**Note:** An operator may apply for or hold an approval under regulation 91.045 to carry cargo in a manner that obstructs or restricts access to an emergency exit.

### 3.7.8.3 Cargo carried in a compartment requiring crew access

Regulation 91.605 applies to a flight that:

- requires more than one flight crew member in accordance with the rotorcraft flight manual instructions or other regulatory requirements
- carries cargo in a compartment that would require crew member access to enter and extinguish a fire if one occurred in the compartment.

An operator must include instructions in its exposition to ensure that a crew member can enter and access all areas of the compartment to extinguish any fire with a hand-held fire extinguisher. An inspector should determine suitable based on the operator's type of rotorcraft, the nature of the operation, and whether the instructions are appropriate for a crew member at any time during a flight.

### 3.7.8.4 Cargo carried on an unoccupied seat

Regulation 91.610 applies to a flight that carries cargo on an unoccupied seat in the rotorcraft. An operator must include a procedure or instruction in its exposition to ensure that any cargo carried on the seat does not exceed 77kg or the manufacturer's seat weight limit and is restrained so that it doesn't interfere with the safe

operation of the rotorcraft. An inspector should determine suitable based on the operator's type of rotorcraft, the nature of the operation, and whether the instructions are appropriate for the persons involved with loading the cargo onto the rotorcraft.

Regulation 91.615 applies to cargo other than carry-on baggage weighing less than 9kg that is stowed under a seat or in a place designed for its carriage, or cargo carried on an unoccupied seat in accordance with regulation 91.610. The operator must include instructions in its exposition to ensure the cargo is only carried in a place on the rotorcraft that has a placard with instructions for carrying cargo in that place. An inspector should determine suitable based on the operator's type of rotorcraft, the nature of the operation, and whether the placard instructions are clear.

### 3.7.8.5 Dangerous goods

If an operator intends to consign and carry dangerous goods by air, the assessment must be conducted by a dangerous goods inspector (DGI).

Where an operator does not intend to carry dangerous goods consigned as cargo, the exposition must provide guidance as to what is permitted to be carried on the aircraft. This may include the carriage of certain items that are 'excepted' from complying with all of the requirements of ICAO Doc 9284 – such as the exceptions for dangerous goods of the operator, or the general exceptions.

Consult a DGI to assist with the review of any dangerous goods exceptions detailed in an operator's exposition.

#### Exceptions for dangerous goods of the operator

There are a number of exceptions for dangerous goods of the operator (more commonly known as company materials/COMAT), refer ICAO Doc 9284 1;2.2.

They include:

- articles and substances which would otherwise be classified as dangerous goods but are required to be aboard the aircraft in accordance with pertinent airworthiness requirements and operating regulations, or are authorised by the State of the operator to meet special requirements
- aerosols, alcoholic beverages, perfumes, colognes, liquefied gas lighters (excluding non-refillable gas lighters and those lighters liable to leak when exposed to reduced pressure) and portable electronic devices containing lithium metal or lithium ion cells or batteries (provided that the batteries meet the provisions of item 1 in Table 8.1 of ICAO Doc 9284) that are carried aboard an aircraft by the operator for use or sale on the aircraft during the flight, or series of flights
- dry ice intended for use in food and beverage service aboard the aircraft
- alcohol-based hand sanitizers and cleaning products that are carried aboard an aircraft by the operator for use on the aircraft during the flight, or series of flights, for the purposes of passenger and crew hygiene
- electronic devices (such as EFBs), PEDs and credit card readers containing lithium metal or lithium ion cells or batteries, as well as spare lithium batteries for such devices, that are carried aboard an aircraft by the operator for use on the aircraft during the flight, or series of flights (provided that the batteries meet the provisions of item 1 in Table 8.1 of ICAO Doc 9284). Spare lithium batteries must be individually protected to prevent short circuits when not in use. Conditions for the carriage and use of these electronic devices, and for the carriage of spare batteries, must be provided in the operations manual and/or other appropriate manuals that will enable flight crew, cabin crew and other employees to carry out the functions for which they are responsible

Unless CASA approves otherwise, articles and substances intended as replacements to any of the above must be transported in accordance with ICAO Doc 9284. An operator must be authorised to carry dangerous goods as cargo to transport any replacement items of dangerous goods of the operator or COMAT.

#### General exceptions

In accordance with ICAO Doc 9284 1;1.1.5, there are some general exceptions for dangerous goods that may apply to air transport operations and therefore carried under specific circumstances provided that the

operator meets certain criteria. The specific circumstances that dangerous goods may be carried under the general exceptions are when the dangerous goods:

- provide, during flight, medical aid to a patient, or to preserve tissues or organs intended for use in transplantation, when those dangerous goods have been placed on board with the approval of the operator or form part of the permanent equipment of the aircraft when it has been adapted for specialised use, providing that:
  - gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas
  - equipment containing wet cell batteries is kept and, when necessary, secured in an upright position to prevent spillage of the electrolyte
  - lithium metal or lithium ion cells or batteries meet the provisions of ICAO Doc 9284 2;9.3 and spare lithium batteries are individually protected so as to prevent short circuits when not in use
- are required for the propulsion of the means of transport or the operation of its specialized equipment during transport (e.g. refrigeration units) or that are required in accordance with the operating regulations (e.g. fire extinguishers) (as per ICAO Doc 9284 1;2.2)
- are contained within items of excess baggage being sent as cargo, provided that:
  - the excess baggage has been consigned as cargo by or on behalf of a passenger
  - the dangerous goods are only those that are permitted by, and in accordance with, ICAO Doc 9284 8;1.1.2 and Table 8-1 dangerous goods permitted to be carried in checked baggage by passenger or crew
  - the excess baggage is marked with the words 'Excess baggage consigned as cargo'.

Dangerous goods transported for the purposes of providing medical aid to a patient, or to preserve tissues or organs for transplantation, may be carried on flights made by the same aircraft for other purposes (e.g. training flights and positioning flights, prior to or after maintenance), provided the operator has documented, specific information in the exposition regarding::

- stowage and securing of the dangerous goods transported during take-off and landing and at all other times when deemed necessary by the PIC
- the requirement for dangerous goods to be under the control of trained personnel during the time when they are in use on the aircraft (e.g. Doctors, Nurses etc).

Where the operation or activity requires positioning of the dangerous goods to and/or from the location of intended use, the dangerous goods may be carried on a flight (if it is impracticable to load or unload the dangerous goods immediately before or after the flight). However, the following additional conditions should be detailed within the operator's exposition or dangerous goods manual:

- The dangerous goods:
  - must be capable of withstanding the normal conditions of air transport (i.e. not listed as forbidden for air transport in Table 3-1 of ICAO Doc 9284 or, in the instance of excess baggage, the dangerous goods are permitted in accordance with ICAO Doc 9284 8;1.1.2 and Table 8-1)
  - must be appropriately identified (e.g. by marking or labelling)
  - may only be carried with the approval of the operator
  - must be inspected for damage or leakage prior to loading
  - are loaded under the supervision of the operator
  - must be stowed and secured in the aircraft in a manner that will prevent any movement in flight which would change their orientation
  - loading, and the location of, is notified to the PIC (including procedures in the event of a crew change, to ensure that the loading information is passed on to the next crew)
  - are handled by personnel with appropriate task specific training and commensurate with the functions for which they are responsible.
- Instructions to be taken in the event of an emergency, detailing actions provided to personnel.

- Requirement to report any accidents or incidents to CASA (in line with the dangerous goods reporting requirements within CASR 92.065).

### **Dangerous goods signage at cargo acceptance points**

An operator, or the operator's handling agent, must ensure they have a sufficient number of notices about the transport of dangerous goods that are prominently displayed and located in visible location(s) at the cargo acceptance points to alert shippers/agents about any dangerous goods that may be contained in their cargo consignment(s). These notices must include visual examples of dangerous goods, including batteries. Inspectors should use [Checklist \(OPS.26\) Ground operations –port inspection](#).

The exposition must include a process to:

- ensure that all consigned cargo is accompanied by a declaration that the item(s) do not contain dangerous goods
- report a dangerous goods incident or accident, normally done through its SMS.

## **3.7.9 Instruments, indicators, equipment and systems**

### **3.7.9.1 Flight data recorder**

The exposition must include guidance for operator personnel or contractors to make the instructions for the preservation of a flight data recorder or combination recorder fitted to the operator's rotorcraft and when requested made available for the Australian Transport Safety Bureau (ATSB).

The exposition must include guidance on the requirements under regulation 91.650 regarding flight data and voice recorder information. To be present and suitable, the exposition should include:

- information about ATSB reportable matters
- when recordings must be preserved
- the duration recordings must be preserved, when required
- when recordings are not required to be preserved
- guidance on the preservation of recordings as opposed to the recorders
- a directive that crew members and other personnel are prohibited from switching off or erasing flight data recorders or cockpit voice recorders.

### **3.7.9.2 Navigation authorisation**

Use [Protocol suite \(OPS.04\) Navigation authorisation](#) to complete the assessment.

### **3.7.9.3 Weather radar**

The operator must include procedures within the exposition for the use of the airborne weather radar.

To meet present and suitable, an inspector should determine that the exposition includes the following:

- instructions or other detailed information explaining the operation of the weather radar system
- specific operator procedures for the use of the weather radar, including operation prior to take-off
- procedures to be followed in the event the weather radar is unserviceable prior to commencement of a flight or becomes inoperative during a flight.

Operator procedures for rotorcraft dispatch without a weather radar may be contained in the approved operator rotorcraft MEL. Suitable procedures will depend on the complexity of the operation, along with the nature of the flying an operator undertakes.

### **3.7.9.4 Head-up display, enhanced vision system, synthetic vision system, NVIS**

The operator must include procedures within the exposition for the use of such equipment whether or not the operator utilises an operational credit for flight crew to use the equipment.



To meet present and suitable requirements, the inspector should determine that the exposition includes the following:

- instructions or other detailed information explaining the operation of the equipment
- specific operator procedures for the use of the equipment
- procedures to be followed in the event the equipment is unserviceable prior to commencement of a flight or becomes inoperative during a flight.

Operator procedures for rotorcraft dispatch without an item of the equipment may be contained in the approved operator rotorcraft MEL. Suitable procedures will depend on the complexity of the operation, along with the nature of the flying an operator undertakes.

### **3.7.9.5 Lifesaving and survival equipment**

Regulation 133.360 applies to operators who must carry life rafts onboard their rotorcraft in accordance with Subpart 133.K. An exposition must include a list of the minimum life-saving equipment carried on the rotorcraft for each life raft.

Regulation 133.260 and section 11.11 of the Part 133 MOS prescribe when survival equipment must be carried on flights:

- within or over remote areas as defined in Division 15 of Chapter 26 of the Part 91 MOS
- over water, where life rafts must be carried in accordance with Subpart 133.K.

An operator who conducts flights in either or both of the above areas must include the following in their exposition:

- a list of the minimum life-saving equipment carried on the rotorcraft for each life raft
- procedures for determining survival equipment appropriate for sustaining life in the area of operation
- for operators whose rotorcraft must carry life rafts, procedures for determining the pyrotechnic signalling devices required to ensure distress signals can be made as set out in ICAO Annex 2.

To be suitable, an inspector must determine that life-saving equipment and survival equipment is appropriate to the nature and location of the operation, and that any requirements for pyrotechnic devices are met.

### **3.7.9.6 Operations using NVIS**

Reserved.

### **3.7.9.7 Requirements for the equipment carried**

Chapter 11 of the Part 133 MOS prescribes requirements relating to equipment that must be fitted to or carried on a rotorcraft. The equipment must comply with, or be approved under, Part 21. An operator's exposition must include details of the procedures it uses to ensure the specified equipment meets this requirement. To meet suitable, an inspector should determine that the operator's procedures are appropriate for the complexity of its operation, and the type of rotorcraft operated. The procedures should also account for any contracted maintenance and engineering services that the operator is approved to use.

Inspectors should also note:

- paragraph 11.02(2) of the Part 133 MOS includes a list of equipment exempted from the requirements
- paragraph 11.02(3) of the Part 133 MOS provides that before a foreign-registered rotorcraft begins a flight, the equipment fitted to, or carried on, the rotorcraft must have approval from the NAA of its State of registration
- paragraph 11.02(4) of the Part 133 MOS provides additional details about equipment that is fitted to a rotorcraft, but is not required under section 11.02.

If any equipment must be fitted to, or carried on, a rotorcraft for a pilot's manual or visual use in or from the cockpit, the exposition must include procedures to ensure it is visible to and usable by the pilot, from the pilot's seat in the rotorcraft. To be suitable, an inspector should determine that the operator's procedures are appropriate for the nature of the operation, and the type of rotorcrafts operated. This may require a physical inspection of the rotorcraft.



Any emergency equipment that must be fitted to or carried on the rotorcraft for a flight must be easily accessible for immediate use in the event of an emergency. To be suitable, an inspector should determine that the operator's procedures are appropriate for the complexity of the operation, and the types of rotorcrafts operated. This may require a physical inspection of the rotorcraft.

An operator must have procedures within its exposition to ensure any equipment required to be fitted to a rotorcraft under Chapter 11 of the Part 133 MOS (for a flight) is operative, unless:

- allowed by a section within section 11.04
- the equipment
  - is inoperative because of a defect that has been approved as a permitted unserviceability
  - is fitted or carried in accordance with a permitted unserviceability.

Equipment contained in a MEL as required by regulation 133.035 cannot be unserviceable for a period of time longer than that prescribed for the equipment in the section 11.04 of the Part 133 MOS.

### 3.7.9.8 Equipment – general

Subpart 133.K and Chapter 11 of the Part 133 MOS prescribes the equipment requirements for a rotorcraft operating under Part 133. The requirements include that all the equipment is serviceable unless operations are permitted under an MEL or permissible unserviceability (PU).

To be suitable the exposition will include the airworthiness requirements for prescribed equipment usually through their approved maintenance plan or system of maintenance. Use [Protocol suite \(OPS.13\) Managing continuing airworthiness](#) for the assessment.

The inspector must be satisfied the rotorcraft is fitted with the required equipment and the operator's exposition ensures the rotorcraft meets the requirements prior to flight. This will usually involve a physical inspection of the rotorcraft.

## 3.8 Miscellaneous

### 3.8.1 Instruction to the PIC

The exposition must include the following instructions to the PIC:

- Report any hazard to air navigation to air traffic services (ATS) and/or the aerodrome operator, unless the hazard has previously been reported. To be suitable, it should include guidance on the types of information to report, and a format for reporting.
- Report an emergency situation that threatens the safety of the rotorcraft or its occupants to ATS as soon as practicable. The report must also inform ATS of the carriage of any dangerous goods. To be suitable, the exposition should include the types of reports and reporting format.
- For a multi-engine rotorcraft, to land at the nearest suitable aerodrome in the event of an emergency that threatens the safety of the rotorcraft or its occupants. Inspectors should be aware that the types of emergencies are not restricted to engine failures. Rotorcraft flight manuals and FCOMs may contain checklists and guidance for PICs to land at the nearest suitable aerodrome in the event of a system failure or emergency.
- To submit a written report to CASA, using approved form, within 2 business days when a pilot flying a rotorcraft has taken action contravening the regulations as a result of an emergency threatening the safety of the rotorcraft or its occupants. Some operators may include this instruction within their safety reporting procedures and specify a reduced time for submission as an operator requirement.
- Action to take if intercepted by another aircraft in flight. Section 23.02 of the Part 91 MOS states that in the event of intercept by another aircraft in flight, a PIC must comply with the applicable procedures as set out in ICAO Annex 2. An exposition must include this requirement. To be suitable, the exposition may contain this information, or the operator may refer PICs to the information contained in AIP or a similar source document.

- Action to cancel any distress signal made from the rotorcraft as soon as practicable after the reason for declaring the distress signal no longer exists. To be suitable, an exposition may contain this information, or an operator may refer PICs to the information contained in the AIP or a similar source document.

### 3.8.2 Rotorcraft not certified for flight in icing conditions

Regulation 91.710 applies to operators of rotorcraft that are not type certified for flight in icing conditions. An exposition should include information about the type certification of its rotorcraft for flight in icing conditions. To be present and suitable, the exposition must contain statements prohibiting PICs of those rotorcraft types from:

- beginning a flight into known or suspected (forecast) icing conditions
- flying into icing conditions during the flight and not, as soon as practicable, altering the flight path to avoid the icing conditions.

**Note:** Some MELs may include operational procedures prohibiting flight in icing conditions by rotorcrafts that are type-certificated for flight in icing conditions.

### 3.8.3 Maintenance test flights

Sub regulations 91.725(1) and (3) specify the limitations for conducting maintenance test flight activities in the rotorcraft. If the operator conducts maintenance test flights, the exposition should contain a section describing the circumstances under which maintenance test flight activities are permitted, including the persons permitted to be onboard.

### 3.8.4 Rotorcraft certified for flight in icing conditions

An exposition must contain procedures to ensure PICs do not commence flight in a rotorcraft unless it is free from frost, ice or snow. This is referred to as the 'clean rotorcraft' concept. To be present and suitable, the exposition should include a statement prohibiting PICs from take-off unless the rotorcraft meets the 'clean aircraft' concept, an explanation of the 'clean aircraft' concept, and information about when formation of frost and ice on rotorcraft surfaces may occur. It must also include any rotorcraft manufacturer instructions about commencing flight with frost, ice or snow on the rotorcraft surfaces, noting that these procedures may differ from, and override, the requirements of subregulation 91.705(1) and (2). See subregulation 91.705(3).

**Note:** Subregulation 91.705(2) allows for frost, ice or snow on the top of the fuselage, unless the rotorcraft has rear mounted engines, or the presence of the frost, ice or snow presents a hazard to flight.

Regulation 91.705 precludes a PIC from commencing flight in a rotorcraft unless it is free from frost, ice or snow, unless they are in compliance with rotorcraft flight manual instructions. Regulation 133.275 clarifies requirements to ensure a rotorcraft is free of frost or icing prior to flight. An exposition must contain procedures for ensuring PICs inspect a rotorcraft for contamination prior to flight if frost or icing conditions exist. To be suitable, the exposition should include one of the following:

- a statement precluding rotorcraft operations when ground icing is present, (unless in accordance with rotorcraft flight manual instructions), along with advice for PICs on understanding the conditions that may lead to icing conditions precluding commencement of a flight
- appropriate procedures for the operator's personnel to carry out ground de-icing and/or ground anti-icing of the rotorcraft before flight when required. The procedures should account for all regions where the operator conducts its operations.

An exposition must also include procedures for the use of any anti-ice or de-ice systems fitted to the rotorcraft. A suitable exposition may have these procedures included as part of the rotorcraft flight manual or FCOM, or they may be included separately within another part of the exposition.

If the operator has a program to conduct de-icing/anti-icing the inspector must use [Protocol suite \(OPS.22\) De-icing/anti-icing program](#) for the assessment of the exposition.

Note: ICAO Doc 9640 Manual of Rotorcraft Ground De-icing/Anti-icing operations contains additional guidance.

### 3.8.5 Use of portable electronic devices

The operator's exposition must include policies and procedures for the carriage and operation of PEDs. To be suitable, the instructions should include:

- which PEDs are permitted to be used during flight
- when PEDs are permitted to be used during flight
- the stowage of a PED when not permitted to be used
- procedures in the event of an emergency involving the PED (such as a battery fire or smoke)
- instructions to ensure crew members are not distracted during the critical stages of flight (such as take-off and landing).

### 3.8.6 Carriage of animals

The operator must include guidance in their exposition for the carriage of animals on its rotorcraft. This has relevance for the carriage of assistance animals, especially in relation to the Disability Discrimination Act 1992. A suitable exposition should include procedures for carrying the animal to best ensure it has no adverse effects on the safety of the rotorcraft or its occupants. It should also clarify that the operator or PIC may refuse carriage of the animal, despite the Disability Act, if one of them has reasonable grounds to believe that having the animal on the rotorcraft might adversely affect safety.

### 3.8.7 Polar operations

Note: Polar region means north of 78°N or south of 60°S.

Regulation 133.290 applies to operators who intend operating flights in the polar region.

To meet present and suitable requirements, the inspector must determine that the operator's exposition includes information on each of the following:

- procedures for monitoring and resolving fuel freezing issues. Suitable procedures may involve reference to the manufacturer's rotorcraft flight manual or FCOM, or they may be constructed by the operations department. The procedures must be appropriate for the type of rotorcrafts operated, and the complexity of the operation
- procedures to ensure the crew has communication capability within the polar region. The procedures must be appropriate for the rotorcraft types so that contact with Air Traffic Services is maintained. It should also involve consideration of the type of operational control undertaken by the operator
- details of specific training that flight crew must undertake prior to conducting operations in the polar regions. An inspector should determine that the procedures are appropriate for the complexity of the operation, including the polar region of intended operation, and the types of rotorcraft operated
- procedures to mitigate risks to both crew and passengers from cosmic radiation associated with solar flare activity. Suitable procedures should include how the operator determines the occurrence of these periods
- procedures for the carriage of at least 2 cold weather anti-exposure suits during times of the year when extreme cold weather conditions are expected at any of the potential alternate aerodromes an operator may use while transiting the polar region. Suitable procedures will depend upon the complexity of the operation, and the alternate aerodromes the operator chooses to nominate.

### 3.8.8 External load operation conducted during medical transport operation

Chapter 5 of the Part 133 MOS prescribes the requirement for a medical transport operation involving external loads. If the operation involves winching a person, the exposition must include:

- procedures to ensure the safe conduct of the operation
- the processes to be followed by the PIC to consider and monitor the risk
- procedures to ensure the flight crew members, air crew members, and any medical transport specialists (MTS), for the flight, are familiar with the risks considered, and safe risk strategies developed, for the operation.

To be suitable the inspector must confirm that the rotorcraft meets the performance requirements prescribed section 5.03(1) of the Part 133 MOS. The inspector should confirm that the risk assessment process detailed in the exposition takes into consideration:

- both flight crew and air crew experience
- weather conditions
- nature of the terrain.

The inspector should also confirm that the equipment used must meet the requirements of or be approved under Part 21.

Note: CASA EX70/24 exempts the operator and PIC from the requirements of regulations 91.195 and 91.200

## 3.9 Performance

Refer to [AC 133-01 Performance class operations](#) for guidance on the assessment.

## 3.10 Weight and balance

An operator must include instructions and procedures within the exposition to ensure that its rotorcraft are loaded in accordance with its weight and balance limits. The instructions and procedures must be available to all personnel involved with the loading of the rotorcraft, including any contracted parties, along with the PIC. To meet suitable, an inspector should determine the exposition specifies that a rotorcraft must be loaded in accordance with its approved loading systems and any other applicable regulatory requirements. It will also involve having appropriate flight crew procedures to ensure that flight of a rotorcraft does not commence with incorrect load and trim data entered into its computer systems.

An exposition must also include instructions and procedures for the PIC to ensure the rotorcraft is maintained within weight and balance limits throughout the flight. This may include instructions to the cabin crew for passenger seating requirements, along with any fuel transfer requirements in accordance with manufacturer checklist procedures.

### 3.10.1 Rotorcraft loading procedures

Regulation 133.350 specifies the requirements for loading a rotorcraft. The exposition must address each of the following:

- procedures to determine the weight of:
  - crew members and their carry-on baggage.
  - passengers and their carry-on baggage
  - cargo including baggage loaded in the hold
  - fuel.

- procedures to ensure a rotorcraft is loaded:
  - in accordance with the loading instructions for the flight prepared by the person responsible for planning the loading
  - under the supervision of the person responsible for supervising the loading.
- procedures surrounding last minute changes to the load, including ensuring the rotorcraft remains within weight and balance limits
- procedures for confirming weight and balance documents
- procedures of offloading passengers and/or cargo ensuring the rotorcraft remains within weight and balance limits.

An operator must include within the exposition its method of determining the weights of crew, passengers, and carry-on baggage.

An operator must include in its exposition methods of calculating the weight of fuel loaded on a rotorcraft. These may be via either:

- reference to the actual fuel density
- reference to a standard density value.

To be suitable, the procedures should include using the density of the fuel and the volume loaded, compared with the fuel load sensed by the aircraft. The procedures should offer methods of resolving any discrepancies between the calculated weights. If a standard density value is used, the operator must account for any different types of fuel loaded on the rotorcraft, as per the region of operation.

### 3.10.2 Weight and balance documents

Regulation 133.355 prescribes the information on the weight and balance documents that a PIC must have prior to commencing a flight. An exposition must include procedures to ensure that a PIC is provided with this information. It must also have procedures to ensure that the person responsible for loading the rotorcraft certifies the load and distribution are in accordance with the documents provided to the PIC, and the PIC (or co-pilot) certifies that they accept the rotorcraft has been loaded as specified in accordance with the weight and balance documents. To be suitable the weight and balance documents must contain information that identifies it with a specific flight on a specific date time. Each edition of the document should be identified so that the PIC can ensure they have the latest version.

## 3.11 Flight crew

### 3.11.1 Assignment of a flight crew member to a duty

The operator must develop a process to ensure that before a flight commences all flight crew are appropriately qualified. Depending on the size scope and complexity of the operation, this may be as simple as a manual tracking tool such as a white board detailing each crew members qualification through to an automated software based rostering system and qualification tracking sys that ensures flight crew are qualified for a flight.

For a manual tracking system to be suitable the inspector should consider the number of flight crew employed and number of different activities conducted. The inspector should consider 10 flight crew across a simple operation not involving multiple approvals as suitable for a manual tracking tool.

In the case of complex operators with more than 10 flight crew or multiple types there are a number of software programs designed to Manage flight crew rostering available on the market. To be considered suitable the inspector should ensure the software:

- has been tailored to the operator's requirements
- has the ability to flag a flight crew member approaching and or exceeding a defined qualification or recency requirement
- has the ability to prevent an unqualified flight crew member being rostered for a duty.

In either case the inspector needs to understand the system in place to ensure compliance.

The inspector will need to confirm that the exposition includes a procedure to assign the PIC for each flight. The person assigned as PIC must be qualified by the training and checking system for the role. Where more than 1 PIC qualified person is assigned a duty for the same flight, the rostering system must be able to identify who was assigned as PIC.

Subregulation 133.370(1) states that an operator must meet the requirements for a rotorcraft for a flight. For flight crew to be qualified they must meet the training and checking requirement prescribed in subregulation 133.370(2)(f). The Chapter 12 of the Part 133 MOS details the requirements for flight crew training and checking.

## Experience requirements

Subregulation 133.370(5) requires an exposition to detail the requirements for new or inexperienced flight crew. To be suitable the operator should define the minimum flight hours required for each aircraft type they operate.

Regulation 133.385 prescribes the flight hours a PIC must meet for an 'rotorcraft of that kind'. To be suitable the inspector must consider all 5 items in the flight hours required table to determine if the PIC has the experience to qualify them for Part 133 operations. The flight hours gained while operating as pilot in command under supervision count towards the flight hours required.

To understand the requirements its important to understand the definition of 'kind'

"for an aircraft that is covered by an aircraft type rating—the aircraft type rating; and  
for an aircraft that is not covered by an aircraft type rating—the type of aircraft."

The 'type of aircraft' is defined as:

for an aircraft, aircraft engine or propeller, means a design and make of aircraft, aircraft engine or propeller and, where appropriate, refers to a group of essentially similar aircraft, aircraft engines or propellers which, although possibly existing in different models, stem from a common basic design.

The definition of 'type of aircraft', does not collectively group together 'aircraft, aircraft engine and propeller'. Where a rule used the words 'type of aircraft', this means that when reading this definition, you remove all words about aircraft engines and propellers. The definition, in practice, would read like this:

'type' for an aircraft, means a design and make of aircraft and, where appropriate, refers to a group of essentially similar aircraft which, although possibly existing in different models, stem from a common basic design.

Note: The term 'aircraft' includes rotorcraft.

Based on the above interpretation, for a pilot to fly under the IFR in a multi-engine rotorcraft of that kind the inspector should consider the following:

1. for a rotorcraft that is covered by a type rating, the 15 hours experience has to be accomplished in an rotorcraft within that type rating.
2. for an rotorcraft that is not covered by a type rating, the answer relies upon whether the rotorcraft in question "is a member of a group of essentially similar rotorcraft which, although possibly existing in different models, stem from a common basic design".



### Example 1

For a PIC who flies the following multi-engine rotorcraft kinds under the IFR, do they require 15 hours experience on each rotorcraft?

- EC145
- EC155
- EC175

Yes, each rotorcraft is a different type of aircraft.

### Example 2

For a PIC who flies the following multi-engine rotorcraft kinds under the IFR, do they require 15 hours experience on each rotorcraft?

- A109E
- A109S
- A109SP

No, each rotorcraft is the same 'type of aircraft'

To be suitable the inspector must consider all 5 items in the flight hours required to qualify as PIC table to determine the PIC experience required.

## 3.11.2 Flight and duty time limitations

The exposition must include a process to ensure that, before a flight commences, all flight crew comply with Civil Aviation Order 48.1 Instrument 2019 (CAO 48.1 Instrument 2019). The CAO 48.1 instrument 2019 is divided into 7 appendices.

Whilst no specific approval is granted for operators wishing to be compliant with CAO 48.1 Instrument 2019 Appendices 1 to 6, the inspector must be satisfied that the operator has suitable procedures and practices to ensure that operations can be conducted safely. As such, CASA must be satisfied that the operator has complied with at least one appendix that is appropriate for their operations.

For operations under appendices 1 to 6, inspectors must use the [CAO 48.1 Instrument 2019 - Appendix 1-6 Technical Assessor Handbook](#) and [CAO 48.1 Instrument 2019 Appendices 1-6 - Technical Assessor Worksheet](#).

If the operator intends to use appendix 7 – fatigue risk management system, inspectors must refer to the [Fatigue Risk Management System Handbook](#).

## 3.11.3 PIC route and aerodrome knowledge

In addition to the requirements of section 3.11.1 of this principle, to be suitable the inspector must determine that the exposition details the PIC knowledge requirements and that they are appropriate for the complexity and nature of the operation.

## 3.11.4 Operation of rotorcraft of different type ratings

If an operator intends to roster flight crew to operate rotorcraft of different type ratings, the exposition will need to describe how this will be accomplished safely. To be suitable the inspector needs to determine that



the operator has considered all the risks associated with operating a rotorcraft of different type ratings and develop appropriate risk mitigation strategies. The inspector should consider the following:

- the similarities between the rotorcraft of different type ratings
- the number of rotorcrafts of different type ratings the flight crew can be assigned
- the flying experience, checks and training before being assigned duties on rotorcraft of more than one type rating
- the rostering requirements to ensure the flight crew member has sufficient time between operating rotorcraft of different type ratings.

### 3.11.5 Recent experience

Division 133.N.4 prescribes the recent experience requirements for operators and flight crew members. It's important to remember that recent experience requirements are a joint obligation between the operator and flight crew. The operator's exposition must detail how recent experience will be tracked and what happens if the flight crew member does not meet the recent experience requirements. To be suitable, the exposition will describe how the flight crew member will regain recency. Most operators will include training and checking activities that must be completed depending on the length of time the flight crew member has not operated the rotorcraft.

**Note:** A regulation 61.040 approval does not provide relief against the recency requirement of Part 133.

## 3.12 Crew members other than flight crew

### 3.12.1 Assignment of cabin crew or air crew member to a duty

The operator must develop a process to ensure that before a flight commences crew members, when required to be carried, are appropriately qualified and competent. Depending on the size scope and complexity of the operation, this may be as simple as a manual tracking tool such as a white board detailing each crew members qualification through to an automated software based rostering system and qualification tracking system that ensures crew members are qualified for a flight.

For a manual tracking system to be suitable, the inspector should consider the number of crew members employed and number of different activities conducted. The inspector should consider 10 crew members across a simple operation not involving multiple approvals as suitable for a manual tracking tool.

In the case of complex operators with more than 10 crew members or multiple types there are a number of software programs designed to manage crew members rostering available on the market.

To be considered suitable, the inspector should ensure the software:

- has been tailored to the operator's requirements
- has the ability to flag a crew member approaching and or exceeding a defined qualification or recency requirement
- has the ability to prevent an unqualified crew member being rostered for a duty.

In either case the inspector needs to understand the system in place to ensure compliance.

### 3.12.2 Operations with more than 1 cabin crew

When operating with more than 1 cabin crew member the exposition must include a procedure to assign one of the cabin crew members as the senior cabin crew member for the flight. To be suitable, the inspector should determine that the exposition specifies the additional duties a senior cabin crew member should undertake and include reference to the position in the operating crew chain of command.

The training and checking system will need detail the training and checking requirements for a senior cabin crew member. The training should cover crew co-ordination in the event of an emergency.

### 3.12.3 Assignment of a medical transport specialist to a duty

MTS are crew members who carry out a specific function during a flight involving a medical transport operation such as doctors or nurses. MTS are not cabin crew, air crew or flight crew. The operator's exposition should detail processes to manage MTS in accordance with those required for air crew.

## 3.13 Minimum equipment list (MEL)

Use [Protocol suite \(OPS.01\) Minimum equipment list](#).

## 4. Training and checking system

### 4.1 General

#### 4.1.1 Suitable training and checking system

A Part 133 air transport operator must have a training and checking system to undertake the functions required by Part 119 in the context of Part 133 requirements. Other regulations also require training activities such as HF/NTS and dangerous goods. The operator can choose to include these within their training and checking system or provide that training separately. If the operator conducts part of the mandatory training outside the training and checking system (such as dangerous goods training for ramp, freight, check-in and other deemed employees), the inspector will need to verify that the training is managed to a level at least equivalent to that required by the training and checking system.

A suitable exposition will need to demonstrate that the operator has full oversight and responsibility for the training and checking system, even if certain activities are contracted out to a Part 142 flight training organisation or a third-party provider.

To be suitable, the inspector must determine that the training and checking system is appropriate for the size, nature, and complexity of the organisation. Items the inspector should consider include, but are not limited to:

- number of its operational safety-critical personnel
- number and kinds of rotorcraft it operates
- nature of activities the operator conducts
- location and distribution of the organisation's air transport activities.

Other items the inspector should consider include the organisational structure. A complex organisation may require management assistance for the HOTC to ensure obligations under regulation 119.150 are fulfilled. A simple operation where training and checking events occur predictably or infrequently may be able to demonstrate compliance using shared HOTC and HOFO duties.

The inspector should also consider the need for any support systems associated with the training and checking activities of an organisation. The use of administrative staff and an IT system to manage the operator's training and checking system may be appropriate for larger and more complex organisations.

#### 4.1.2 Training and checking system approved under regulation 61.040

An operator's training and checking system can be approved under regulation 61.040—approved training and checking system.

Under the approval, flight crew who are successfully participation in the operator's approved training and checking system may be granted relief from:

- subregulation 61.880(3)(d) instrument proficiency check (IPC)
- subregulation 61.800 flight review
- Part 61 recency provisions.

**Note:** The relief provisions provided by the regulation 61.040 approvals do not provide relief from the recency requirements under Part 133.

#### Relief from Part 61 IPC

For the operator proficiency check (OPC) to be approved under subregulation 61.880(3)(d) the operator must demonstrate how the requirements prescribed in the schedule 6, appendix 1 (IPC) of the Part 61 MOS

are addressed. To be suitable the operator may develop an OPC that addresses both the 133 proficiency check (133PC) and the IPC competencies, or a series of OPC's covering the competencies within 12-month period. The inspector must be satisfied the training and checking system meets both the IPC and 133PC competencies within the 12-month period.

## Relief from Part 61 recency provisions

An approved training and checking system may also provide relief from certain Part 61 recency provisions. The inspector must confirm the proposed training and checking activities using an acceptable means of compliance creates an equivalent level of safety to that provided by the regulations. The operator will need to determine what recency provisions will be relieved and how the training and checking systems ensures that flight crew are competent.

### Example

An operator who wants relief from the requirement for 3 instrument approaches (IAP) in 90 days must be able to demonstrate that the flight crew will maintain competency in the conduct of an IAP.

To be suitable the inspector should confirm the training and checking system includes:

- a granular method to measure the competency of flight crew
- a regular line operation review process to ensure flight crew are maintaining competency.

To grant relief from recency provisions would normally require a mature training and checking system preferable conducting training and proficiency checks in a qualified flight simulator training device (FSTD).

## Check pilot training and assessment

Flight crew operating within an approved training and checking system do not require an IPC and therefore the OPC can be conducted by a check pilot nominated by the operator. To be suitable the inspector must ensure that the check pilot training covers the same competencies required to issue a Part 61 flight examiner rating. In addition, the training and checking system should provide for an annual standardisation check to maintain check pilot proficiency. The exposition may detail the required competencies or refer to schedule 5 and 6 of the Part 61 MOS.

### 4.1.3 How is training and checking conducted

The operator's exposition must include a description of how it fulfills the requirements of its training and checking obligations. The description should include a high-level view of training and checking system organisational structure and the details of how the training and checking is conducted.

If the operator utilises contracted training and or checking personnel or a Part 142 flight training organisation, their description must include how these are incorporated into their operator's activities, as well as how oversight of the training activities is managed.

Other items that should be included are:

- scheduling of events
- administrative process including the use of forms
- personnel able to conduct the event
- training syllabuses
- assessment process including checking topics
- platform for the event; ground facility, FSTD, or rotorcraft
- threat and error management and risk mitigation for in-rotorcraft activities
- simulation devices, if any, used in air crew and MTS training and checking
- if used, suitability of third-party facilities for the operator's rotorcraft types
- oversight and monitoring processes.

The size and complexity of an organisation, and the specific nature of the training and checking events, must be considered when determining suitability.

#### 4.1.4 Personnel training and checking records

The operator must have an appropriate system that maintains records of training and checking events conducted, and results of the events. The system must be constructed so that the operator can conduct auditing of the records for quality assurance purposes. The system may be designed so a third party can similarly conduct an audit of the events. To be suitable, the inspector should determine that the operator's exposition describes the operation of this system and clearly defines the administrative processes involved in maintenance of the records and access to the data when required.

The operator's exposition must include a description of how the operator ensures their personnel complete training and checking in accordance with their approved training and checking system, refer to section 4.1.1 of this principle. The description should focus on the administrative tasks to ensure personnel comply with all regulatory requirements. Specific personnel or position holders should be nominated to conduct required actions. These should include items such as:

- personnel or position holder assignment to specific duties
- responsibilities and accountabilities for ensuring activities are conducted in accordance with the exposition
- a process to ensure only appropriately trained and checked personnel are released for duty.

To be suitable, the inspector must determine that the procedures are appropriate for managing the amount of training and checking events conducted, the operations conducted, and the fleet composition and disposition of the operator. In addition, the system must be capable of preventing personnel being assigned a duty when a training or checking activity has not successfully been completed. The inspector should verify that if a person does not complete a training or checking activity, there is a process to ensure they are not available for line operations until the activity is completed.

#### Making training and checking records

The operator's exposition must detail a process to ensure training and checking records are made within 21 days of a training and checking activity. Records may be paper based or electronic and the process should ensure correct completion, including proper signoff by training and checking personnel. Incomplete records should be returned to personnel for completion.

#### Storing training and checking records

The design of the training and checking records must make sure all the records required by regulations are completed and stored for the period required by the regulations. The process may include a policy on the destruction of records at the end of the storage period. If the training and checking records are electronic the operator should provide for a data backup system, remote from the primary system to preserved records in the event of an IT system corruption. Whether paper based or electronic, training and checking records should be stored securely to prevent unauthorised access.

If the operator receives a request in writing from another air transport operator for a copy of a person's training and checking records, they must be provided within 7 days. To be suitable, the exposition should include clear guidelines on the provision of the records. Matters for consideration should include:

- verification of the veracity of the other air transport operator, e.g., why are the records requested
- how the records will be provided securely
- confirmation from the person whom the record refers to that they authorise the release.

#### 4.1.5 Supervision during training and checking

The operator must describe in its exposition how effective supervision is provided to its personnel undergoing training and checking.

To be present and suitable, the inspector should determine that the system describes:

- specific supervision of personnel through all phases of training and checking, including:
  - supervised flying training and checking in a rotorcraft
  - supervision administratively.
- performance management, including procedures to manage personnel whose progression is below expectations
- performance management when personnel do not meet the required standard for any check.

#### 4.1.6 Training and checking personnel

Some operators may elect to utilise Part 61 qualified instructors or persons who hold a Certificate IV or equivalent to conduct the training and assessment of personnel other than flight crew. In this case the exposition should include details on how such persons are inducted into the system.

To effectively supervise training and checking activities, training and checking personnel must be trained and assessed as competent to conduct the activity. If the training of training and checking personnel is conducted internally, the inspector must ensure that the course of training is adequate for the role of the person. To be suitable the course of training must include a theory component covering instructional techniques and a practical component covering competency assessment. At the completion of the training the process should include an assessment and internal approval process.

If the operator chooses to engage individuals (other than a Part 142 authorised organisation) to conduct training and checking duties, their exposition must include a description of how the operator ensures any training and checking personnel it engages meet the Part 133 MOS requirements. The operator must also nominate the individuals to CASA either within their exposition, or directly via an appropriate document. To determine present and suitable, the inspector must ensure that the exposition includes the following:

- a description of appropriate minimum experience and entry control requirements for an individual to be permitted to conduct training and/or checking duties
- a description of the operator's training programme, appropriate for the nature and complexity of the operation, to train an individual to conduct training and/or checking
- a process to ensure the individual has met all relevant recency and proficiency requirements prior to undertaking training and/or checking duties
- a process to ensure the individual conducting training and/or checking duties has been nominated to CASA, either via inclusion in the exposition, or another appropriate written method.

The inspector should also be aware that CASA may elect to test an individual who is nominated to conduct training and/or checking duties or emergency and safety equipment training for the operator, in accordance with Part 133 MOS. Refer to [Protocol suite \(OPS.21\) Check pilot assessment](#) and [Protocol suite \(OPS.15\) Emergency and safety equipment instructor](#) for guidance.

If the planned training and checking activity is to meet a requirement under Part 61, training and checking personnel must hold the relevant Part 61 qualifications. For example, if flight crew require training to meet regulation 61.385—Limitations on the exercise of privileges of pilot licences - general competency requirement, the person conducting the training must hold an instructor rating with the appropriate training endorsement.

#### 4.1.7 Assessment of competence

The operator's exposition must include a description of how the operator's crew members are assessed for competency. This could be a simple pass/fail assessment or competency-based assessment with a granular grading system (e.g. score of 1 to 5).

If a pass/fail system is used, the exposition must clearly define what constitutes a pass or fail assessment and may refer to the schedule 8 of the Part 61 MOS—Helicopter general flight tolerances - professional level. Other requirements such as HF/NTS may also utilise the Part 61 MOS competency standards.

The operator who chooses a more granular competency-based system will need to provide more guidance on how to make the assessment. To be suitable each grading score should be accompanied by a word picture description of the competency elements that make up each score which should be simple and concise to promote consistency of rating and ensure that crew being graded can easily understand their performance assessments.

**Note:** A competency-based grading system will require checking personnel to be appropriately training to ensure interrater reliability.

### 4.1.8 Remedial training

The operator must provide remedial training, followed by another check, to a flight crew member, air crew member, or MTS, who fails the operator's respective general emergency check of competency or the operator's respective proficiency check for the operator's rotorcraft. The operator's exposition must describe how the operator monitors the remedial training, successful completion of another check, and reinstatement of unsupervised operational status of the flight crew member, air crew member, or MTS. The inspector should determine that the system the operator uses is capable of fulfilling those requirements given the nature and complexity of the operation.

### 4.1.9 Contracting training and checking

The operator may contract a Part 142 flight training authorisation that includes contracted training and checking to conduct flight crew training and checking activities, including those required under Part 61. To be suitable the operator's exposition must include processes to demonstrate how the HOTC oversight the training and or checking activities including both:

- ensuring each person assigned by the Part 142 organisation to conduct training or checking activities for the operator is authorised under Part 61 to conduct the training and/or checking activities
- notifying the Part 142 organisation in writing any changes to the operator's exposition relating to the training and checking activities.

Operators are also able to contract third party providers who do not hold Part 142 flight training authorisation that includes contracted training and checking, to conduct certain training and checking for all personnel including:

- dangerous goods training
- HF/NTS training
- emergency and safety equipment training
- refresher training.

To be suitable, the inspector must determine that the operator's exposition describes how the operator manages the following requirements:

- details of any person who is contracted to conduct training and checking activities
- specific details of the training and checking activities each contracted person is authorised to conduct
- procedures to ensure that any contracted person is complying with the operator's approved training and checking system.

The complexity and nature of the operations will generally influence suitability criteria. Operators may have levels of management within the organisation to assist in managing these regulatory requirements, or an HOTC may undertake these management functions as an individual. See section 4.1.1 of this principle. The operator's exposition should also ensure that any training and checking functions that fall outside the area of responsibility of the HOTC (the flight crew responsibilities) are managed appropriately, understanding that the CEO is responsible for ensuring all training and checking, apart from the flight crew training and checking, is conducted in accordance with the operator's exposition.



### 4.1.10 Operational safety-critical personnel

The operator must provide operational safety critical personnel who are not flight crew with specific training. Examples of operational safety critical personnel in a Part 133 air transport operation are:

- ground handling personnel other than those engaged in providing airworthiness management services
- personnel with position descriptions/functions that may have an impact on the weight and balance of an aircraft
- MTS who may be engaged in an air transport operation.

The operator must provide these personnel with specific training, their operator's exposition must include:

- a description of both the initial and recurrent training and checking given to the personnel, whether by the operator's own employees or a contractor
- details of when training must be provided to these personnel to familiarise them with their duties.

To be suitable, the inspector must determine that the system is appropriate for the complexity of the operation, the number of personnel employed, the areas of operation, and the type of rotorcraft.

## 4.2 Flight crew

### 4.2.1 Flight crew – training and checking requirements

Detailed information is provided under each sub-heading of Division 2 of Chapter 12 of the Part 133 MOS prescribing items that must be trained or checked for flight crew to operate unsupervised. The operator's exposition must describe how it will fulfill these requirements for the type of operation they conduct. The nature and complexity of the operation must be taken into account when the operator designs a training and checking system to meet these requirements, refer to section 4.1.1 of this principle.

#### Example

If the operator conducts IFR flights, or VFR flights at night, then the training and checking system will have to ensure that the flight crew meet Part 61 regulatory requirements before undertaking such duties.

It may also include ensuring that, if the operator conducts flights in a foreign registered rotorcraft, the flight crew meet the regulatory requirements of the State of the rotorcraft's registry. To meet present and suitable, the inspector must ensure the operator's exposition covers each of the requirements under Division 2 of Chapter 12 of the Part 133 MOS sub-headings in a way that is appropriate for the type of operation.

### New or inexperience flight crew

The exposition must include the requirements that must be met for new and or inexperienced flight crew. To be suitable, instructions may include:

- required Part 61 qualifications
- minimum flight hours on a particular type or class of aircraft conducting specific operations
- operational limitations until the person has completed certain experience with the operator.

See section 3.11.1 for further detail on the interpretation of 'type of rotorcraft'

### Supervised line flying and check

The flight crew member supervised line flying and line check requirement must be completed during line operations for the rotorcraft. The flight crew member supervised line flying and line check cannot be

completed in an FSTD. Line operations experience is designed to expose flight crew to the real-world environment and the processes and procedures used by the operator.

Flight crew member supervised line flying and line check is not a Part 61 activity and will not fulfill the requirements of a flight crew member proficiency check.

## Use of approved simulators

Regulation 91.745 limits a PIC conducting a simulated engine failure in a multi-engine rotorcraft. See section 3.6.7 of this principle for guidance.

Some operators may choose to use of a qualified FSTD to conduct conversion training and the flight crew member proficiency check specifically for the conduct of operations which involve emergency and abnormal activities.

To use a qualified FSTD for training and checking purposes, the operator (other than a Part 142 operator) must apply for approval to use the device under regulation 60.055. The FSTD the operator is seeking approval to use must be qualified under either:

- regulation 60.035 for a device located in Australia
- if located outside of Australia, under the regulations of the foreign State overseeing the operation of the device. In this case, the operator will need to:
  - provide CASA with a copy of a qualification certificate that meets the requirements of regulation 60.010
  - include details of the device in the exposition, including how they ensure the device continues to remain qualified by the regulator of the foreign State.

The operator's exposition should list the approved flight simulators and what training and checking activities can be conducted in the FSTD. To be suitable, the exposition should include a process to make sure the FSTD is qualified at the time of the training and checking event. The exposition should include instructions to ensure that check pilots/examiners verify that any defects on the FSTD will not affect its qualification for the conduct of the training and checking activities.

## Operations on more than 1 rotorcraft type

The operator who has flight crew that operate more than one rotorcraft type can receive credit for training or checking on one type to be applied to another type. The check and training system may be established so that successful completion of checks, qualifications, or training by its flight crew in one type, counts as being successful in another type. To be suitable the inspector must be satisfied that:

- rotorcrafts are sufficiently similar in technology, procedures, and handling
- checks, qualifications, or training in one type is sufficiently similar to the checks, qualifications, or training in the other type.

To be suitable the inspector should confirm that the training and checking system provides for a flight crew member proficiency check alternating on each aircraft type in a defined period.

The inspector must be satisfied the proposed training and checking program will ensure that flight crew are competent on each rotorcraft type.

## Differences training

Some operators have rotorcraft that require flight crew members to undergo differences training. There are two possibilities as to why differences training may be required.

- a. Differences training in accordance with regulation 61.200 due to a requirement of the rotorcraft type rating. This must be conducted as a Part 142 activity, or by an individual employed by the operator who is authorised under regulation 142.040 to conduct differences training.
- b. A requirement for familiarisation purposes with a rotorcraft covered by the type rating, and not required by regulation 61.200. An example of this would be an operator having passenger and cargo

variations of a rotorcraft type. In this case, a person approved by the operator may conduct the differences training between the passenger and cargo versions of the rotorcraft.

If an operator requires flight crew members to undergo differences training as per item b above, their exposition must include differences training for the following:

- the rotorcraft the flight crew members will be flying
- any equipment fitted to or carried on the rotorcraft in accordance with Subpart 133.K of CASR that flight crew members may use in connection with operating the rotorcraft.

To meet the present and suitable requirements, the inspector must determine that the exposition includes differences training on both of the above items. The inspector must also ensure the training the operator provides is appropriate and sufficiently comprehensive to enable flight crew to operate the rotorcraft and equipment safely. Items that may be covered include, though not be limited to:

- performance differences
- weight and balance differences
- engine operation differences
- emergency and safety equipment differences.

## **Emergency and safety equipment training and checking**

The operator must provide both annual and 3-yearly emergency and safety equipment training and check. The annual and 3-yearly training may be conducted concurrently every third year. The training may be conducted in the rotorcraft or a training facility or device.

If emergency and safety equipment training and checking is conducted in a rotorcraft, the operator's exposition should contain policies and procedures to ensure that the activity can be conducted safely and effectively, and that the rotorcraft continues to meet airworthiness requirements following the activity. The operator should consider the following:

- If emergency and safety equipment is removed from its stowage position and used for training and checking activities, the operator should detail how that equipment will be handled safely and indicate who is responsible for ensuring the equipment is restowed and serviceable.
- If emergency and safety equipment is removed from its stowage position and replaced with 'dummy' equipment, then an entry should be made in the aircraft technical log. Following the training and checking activity, the technical log must be certified once the equipment is correctly restowed and serviceable.
- If emergency exits are operated, the procedures will need to ensure that the activity is conducted safely and with no damage to the rotorcraft.
- Where escape slides/rafts can be armed for automatic deployment, the procedure will need to include how the system is made safe to prevent accidental deployment. In this instance, approved maintenance staff may need to be involved in deactivating and reactivating the system.

Practical training in emergency and safety equipment may be conducted using representative training devices instead of the actual aircraft and equipment. The effectiveness of crew member training and checking can be enhanced using cabin training devices, emergency exit trainers, underwater escape trainers, and fire-fighting training devices, etc.

There is no formal approval process for the use of such devices. The exposition must detail the policies and procedures for the use of the device, and the training and checking activities that can be conducted.

Training and checking personnel who use the device need to be trained and qualified by the operator to conduct the activities.

The exposition should outline maintenance procedures and describe when the device is considered unserviceable and the process that personnel must follow to report the unserviceability.

Whether the training is conducted in rotorcraft or utilising training devices, the inspector should conduct an onsite inspection to confirm suitability.

The operator may choose to combine the emergency and safety equipment training with HF/NTS training to enhance awareness between air crew, MTS and flight crew. When the training and assessment is combined the inspector must confirm that the sessions are properly managed by the instructor.

### 4.2.2 Pilot in command training

Flight crew must meet the minimum flight hours required to qualify as pilot in command (PIC). Flight crew may commence the operator's training program as a PIC prior to attaining the required flight hours, provided the exposition includes a process to prevent them conducting unsupervised line flying until they reach the required flight hours.

Section 12.13 of the Part 133 MOS prescribes the command training requirements a flight crew member must complete before they can operate as PIC in a Part 133 operation. The requirements are relatively generic. As such, the operator must include details in its exposition of a command training program designed to:

- train PIC responsibilities for the type or class of rotorcraft; and
- provide supervised line flying as PIC for a number of flight hours (also taking into account the number of flight sectors) that is appropriate for the nature and complexity of the operation.

To meet present and suitable, the inspector should determine that each item above is appropriate to the type of operation the operator conducts.

The inspector should check that the syllabus of training in responsibilities of the PIC includes some of the following, as deemed appropriate for the operation:

- leadership and teamwork building skills
- communication
- application of knowledge
- powers of the PIC
- operator obligations of the PIC
- workload management.

Application and further development of these skills should be included in the simulator (if used) and rotorcraft modules of the command training course. The syllabus should include non-technical skills training and development within the command training events, including the line flying as pilot in command under supervision. The nature and complexity of the operation will determine the level of detail the operator includes in this training.

### 4.2.3 PIC operating from non-command seat

PICs must hold a valid flight crew member proficiency check conducted in the non-command pilot's seat to operate a rotorcraft from the non-command pilot's seat, conduct co-pilot duties, or carry out training or examining duties from the non-command pilot's seat. This means they must successfully complete a relevant part of the operator's flight crew member proficiency check from the non-command seat as PIC or pilot in command under supervision. The operator's exposition must describe the procedures to meet this requirement, along with how the operator ensures a pilot will not be scheduled for PIC duties from the non-command seat unless they have met these requirements.

## 4.3 Cabin crew and air crew

Cabin crew member training and checking requirements are the same as the requirements prescribed for air crew members. In this section the term crew member will refer to both.

### 4.3.1 Crew member – training and checking requirements

Detailed information is provided under each sub-heading of Division 2 of Chapter 13 and Chapter 14 of the Part 133 MOS prescribing items that must be trained or checked for a crew member to operate unsupervised. The operator's exposition must describe how it will fulfill these requirements for the type of

operation they conduct. The nature and complexity of the operation must be taken into account when the operator designs a training and checking system to meet these requirements (refer to section 4.1.1 of this principle). The training and checks should be tailored to the specific crew member role the person will undertake. To meet present and suitable, the inspector must ensure the exposition covers each of the requirements under the sub-headings in a way that is appropriate for the type of operation.

## Line training and check

A crew member line training and line check requirement must be completed during line operations for the rotorcraft. Line operations experience is designed to expose crew members to the real-world environment and the processes and procedures used by the operator.

## Differences training

Differences training may be required for familiarisation purposes where there are differences between rotorcraft in the operator's fleet. Differences training should include, where relevant:

- safety and emergency equipment, including its location
- emergency exit operation, including location of the exits
- normal or emergency procedures.

To be suitable, the inspector should determine that the operator's exposition includes differences training procedures where applicable. The training should focus on the location and use of safety equipment, and the normal and emergency procedures for the rotorcraft variant.

The exposition should also outline procedures to ensure crew members aren't assigned unsupervised flying duties on a rotorcraft that requires differences training until they have successfully completed both differences training and a differences training check.

## Emergency and safety equipment training and checking

The operator must provide both annual and 3-yearly emergency and safety equipment training and check. The annual and 3-yearly training may be conducted concurrently every third year. The training may be conducted in the rotorcraft or a training facility or device.

If emergency and safety equipment training and checking is conducted in a rotorcraft, the operator's exposition should contain policies and procedures to ensure that the activity can be conducted safely and effectively, and that the rotorcraft continues to meet airworthiness requirements following the activity. The operator should consider the following:

- If emergency and safety equipment is removed from its stowage position and used for training and checking activities, the operator should detail how that equipment will be handled safely and indicate who is responsible for ensuring the equipment is restowed and serviceable.
- If emergency and safety equipment is removed from its stowage position and replaced with 'dummy' equipment, then an entry should be made in the aircraft technical log. Following the training and checking activity, the technical log must be certified once the equipment is correctly restowed and serviceable.
- If emergency exits are operated, the procedures will need to ensure that the activity is conducted safely and with no damage to the rotorcraft.
- Where escape slides/rafts can be armed for automatic deployment, the procedure will need to include how the system is made safe to prevent accidental deployment. In this instance, approved maintenance staff may need to be involved in deactivating and reactivating the system.

Practical training in emergency and safety equipment may be conducted using representative training devices instead of the actual aircraft and equipment. The effectiveness of crew member training and checking can be enhanced using cabin training devices, emergency exit trainers, underwater escape trainers, and fire-fighting training devices, etc.

There is no formal approval process for the use of such devices. The exposition must detail the policies and procedures for the use of the device, and the training and checking activities that can be conducted.

Training and checking personnel who use the device need to be trained and qualified by the operator to conduct the activities.

The exposition should outline maintenance procedures and describe when the device is considered unserviceable and the process that personnel must follow to report the unserviceability.

Whether the training is conducted in rotorcraft or utilising training devices, the inspector should conduct an onsite inspection to confirm suitability.

The operator may choose to combine the emergency and safety equipment training with HF/NTS training to enhance awareness between crew members, MTS and flight crew. When the training and assessment is combined the inspector must confirm that the sessions are properly managed by the instructor. Use [Protocol suite \(OPS.15\) Emergency and safety equipment instructor](#).

### 4.3.2 Senior cabin crew – training and checking requirements

The Chapter 13 of the Part 133 MOS does not prescribe requirements for the training and checking of a senior cabin crew member. However under regulation 133.450 the operator must set out in its exposition the training and checking requirements. When assessing suitability of the content of the training and checking program the inspector should consider:

- the delivery of briefings regarding normal, abnormal and emergency situations
- communication, cooperation and coordination with the crew and other personnel
- the operator's procedures and the requirements of the civil aviation legislation
- the administrative tasks required by the operator
- reporting systems and requirements
- fatigue management.

## 4.4 Medical transport specialist

### 4.4.1 Medical transport specialists – training and checking requirements

Detailed information is provided under each sub-heading of Division 2 of Chapter 15 of the Part 133 MOS prescribing items that must be trained or checked for an MTS to operate unsupervised. The operator's exposition must describe how it will fulfill these requirements for the type of operation they conduct. The nature and complexity of the operation must be taken into account when the operator designs a training and checking system to meet these requirements, refer to section 4.1.1 of this principle. The training and checks should be tailored to the specific MTS role the member will undertake. To meet present and suitable, the inspector must ensure the exposition covers each of the requirements under the sub-headings in a way that is appropriate for the type of operation.

#### Line training and check

The MTS line training and line check requirement must be completed during line operations for the rotorcraft. Line operations experience is designed to expose the MTS to the real-world environment and the processes and procedures used by the operator.

#### Differences training

Differences training may be required for familiarisation purposes where there are differences between rotorcrafts in the operator's fleet. Differences training should include, where relevant:

- safety and emergency equipment, including its location
- emergency exit operation, including location of the exits
- normal or emergency procedures.



To be suitable, the inspector should determine that the operator's exposition includes differences training procedures where applicable. The training should focus on the location and use of safety equipment, and the normal and emergency procedures for the rotorcraft variant.

The operator's exposition should also outline procedures to ensure the MTS aren't assigned unsupervised flying duties on a rotorcraft that requires differences training until they have successfully completed both differences training and a differences training check.

## **Emergency and safety equipment training and checking**

The operator must provide both annual and 3-yearly emergency and safety equipment training and check. The annual and 3-yearly training may be conducted concurrently every third year. The training may be conducted in the rotorcraft or a training facility or device.

If emergency and safety equipment training and checking is conducted in a rotorcraft, the exposition should contain policies and procedures to ensure that the activity can be conducted safely and effectively, and that the rotorcraft continues to meet airworthiness requirements following the activity. The operator should consider the following:

- If emergency and safety equipment is removed from its stowage position and used for training and checking activities, the operator should detail how that equipment will be handled safely and indicate who is responsible for ensuring the equipment is restowed and serviceable.
- If emergency and safety equipment is removed from its stowage position and replaced with 'dummy' equipment, then an entry should be made in the aircraft technical log. Following the training and checking activity, the technical log must be certified once the equipment is correctly restowed and serviceable.
- If emergency exits are operated, the procedures will need to ensure that the activity is conducted safely and with no damage to the rotorcraft.
- Where escape slides/rafts can be armed for automatic deployment, the procedure will need to include how the system is made safe to prevent accidental deployment. In this instance, approved maintenance staff may need to be involved in deactivating and reactivating the system.

Practical training in emergency and safety equipment may be conducted using representative training devices instead of the actual aircraft and equipment. The effectiveness of crew member training and checking can be enhanced using cabin training devices, emergency exit trainers, underwater escape trainers, and fire-fighting training devices, etc.

There is no formal approval process for the use of such devices. The exposition must detail the policies and procedures for the use of the device, and the training and checking activities that can be conducted.

Training and checking personnel who use the device need to be trained and qualified by the operator to conduct the activities.

The operator's exposition should outline maintenance procedures and describe when the device is considered unserviceable and the process that personnel must follow to report the unserviceability.

Whether the training is conducted in rotorcraft or utilising training devices, the inspector should conduct an onsite inspection to confirm suitability.

The operators may choose to combine the emergency and safety equipment training with HF/NTS training to enhance awareness between air crew, MTS and flight crew. When the training and assessment is combined the inspector must confirm that the sessions are properly managed by the instructor.