Australian Government
Civil Aviation Safety Authority

PRINCIPLE

(OPS.131) Balloon transport operations

September 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 their continuing connection to land, water and community, and pays respect to Elders past, present and emerging.

Inside front cover artwork: James Baban.

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Acronyms and abbreviations

Table 1. List of acronyms and abbreviations

Acronym/abbreviation	Description
ABTO	authorised balloon testing officer
AFM	aircraft flight manual
AIP	Aeronautical Information Publication
AMC	acceptable means of compliance
AOC	air operator's certificate
ASIC	Australian Securities and Investment Commission
ATS	air traffic services
AWI	airworthiness inspector
CAO	Civil Aviation Order
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CEO	chief executive officer
DGI	dangerous goods inspector
EFB	electronic flight bag
FCOM	flight crew operating manual
FOI	flight operations inspector
FQTH	Flying qualification and training handbook
GM	guidance material
HOFO	head of flying operations
LPG	liquefied petroleum gas
MEL	minimum equipment list
MOC	management of change
MOS	Manual of Standards

Acronym/abbreviation	Description
NAA	National Aviation Authority
NAIPS	National Aeronautical Information Processing System
OV	operational variations
PED	portable electronic device
PIC	pilot in command
PPE	personnel protective equipment
SM	safety manager
SMS	safety management system
WAC	World Aeronautical Charts
WHS	work health and safety

Definitions

Table 2. List of definitions

Term	Definition
authorised weather forecast	(a) other than in a foreign country—a weather forecast made by the Bureau of Meteorology for aviation purposes; or (b) in a foreign country—a weather forecast made by a person or body that holds an authorisation (however described), granted by an authority of the country, to provide weather forecasts for aviation purposes.
authorised weather report	(a) other than in a foreign country—a weather report made by: (i) the Bureau of Meteorology for aviation purposes; or (ii) an individual who holds a certificate from the Bureau of Meteorology to give weather reports for aviation purposes; or (iii) an automatic weather station at an aerodrome that is approved by the Bureau of Meteorology as an automatic weather station for the aerodrome; or (iv) an automatic broadcast service published in the AIP; or (v) an individual who holds a pilot licence; or (vi) a person appointed by an aerodrome operator to make runway visibility assessments under the Part 139 Manual of Standards; or (vii) a person included in a class of persons specified in the AIP for this subparagraph; or (b) in a foreign country—a weather report made by a person or body that holds an authorisation (however described), granted by an authority of the country, to provide weather reports for aviation purposes.
balloon transport operation	An operation is a balloon transport operation if the operation is: (a) a passenger transport operation conducted using a Part 131 aircraft that is a registered aircraft or a foreign registered aircraft; and

Term	Definition
	(b) conducted for hire or reward; and (c) undertaken wholly within Australia; and (d) not undertaken as part of a flight into or out of Australian territory.
infant	a person who has not turned two years of age
organisation	a product or service provider, operator, business, and company, as well as aviation industry organisations.
Part 131 aircraft	is any of the following: (a) a manned free balloon (b) a hot air airship.

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).

1. Assessment scope

1.1 Assessment of initial application

Inspectors use this protocol document suite to assess an application for, or transition to, an air operator's certificate (AOC) under Part 131—Balloon transport operations. The assessment also includes relevant regulations in Part 91—General operating and flight rules, Part 5 of the *Civil Aviation Regulations 1988* (CAR)—Balloon flight crew licencing, and Civil Aviation Order (CAO) 40.7—Aircraft endorsements (balloons) and flight instructors (balloons) ratings.

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.

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 an aircraft 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.131). 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 assessor when using the associated *Worksheet (OPS.131) Balloon transport operations*. The worksheet provides assessors 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
  - Balloon transport operations
- Additional assessment information
- Revision 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 and 3 provide specific guidance that aligns to the associated sections (tabs) in the assessment worksheets.

1.4 AOC project management

CASA assessment of an AOC application must be treated as a project. This 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.

CASA's workflow management system may be used as an effective management tool to assist in achieving these requirements.

There are two projects for processing an AOC application:

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

Both 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 the 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 project team members against projected delivery timeframes and availability of resources
- monitor progress of work of all project 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 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 the *Worksheet (OPS.131) Balloon transport operations*. 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

Flight operations inspector (FOI)

If conducting an inflight assessment, the FOI must be listed on the national operations register and:

- be qualified under CAR Part 5 for the Part 131 aircraft type
- meet recent experience requirements.

The FOI will conduct the flight assessment in accordance with the requirements contained in the Flying Qualification Training Handbook (FQTH).

If an FOI cannot meet the above requirements and there is no other person qualified, an FOI who has experience on an aircraft type which is substantially similar should 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 aircraft types that the applicant proposes for the AOC.

Where the applicant requires minimum equipment lists (MELs), a system of maintenance, an approved maintenance plan 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 aircraft 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 an aircraft type which is substantially similar should 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:

- ground operations
- 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 aircraft 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 aircraft 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 project 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 operating and effective, the inspector may need to interview staff, observe a process or inspect facilities.

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 WHS 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 an aircraft to an existing AOC. CASA's approach to proving flights varies depending on the size and complexity of both the organisation and the aircraft.

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.

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

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.

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 131 balloon transport operations
- an AOC variation upgrading in balloon class.

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

- a significant change to the geographical area of operation.

If CASA determines that a proving flight is not warranted, CASA may require an FOI to conduct an inflight observation from the Part 131 aircraft of the first flight.

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
- location of the flight.

After receiving the notice, the AOC applicant must provide a detailed plan for the conduct of the proposed proving flight.

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.

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
- adequate time must be planned to allow for inspection of the AOC applicant's:
  - ground staff, procedures and facilities
  - operational control
  - dispatch preparation
  - aircraft loading
  - passenger processing
  - aircraft servicing.
- a proving flight must be conducted in the intended area of operation
- 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 project team may ask some passengers on the flight to actively participate in certain scenarios. They will be thoroughly briefed by CASA project team members on the day.

The operator must provide the normal compliment of regular flight and ground support personnel 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
- recording and rectification of defects encountered and where applicable the use of the aircraft logbook for release to service and the MEL (if applicable)
- refuelling
- in flight fuel management and recording in accordance with the AOC applicant's fuel policy
- load control
- ground operations
- passenger handling
- flight and ground support personnel compliance with duties and company procedures
- capacity to notify relevant persons of operational changes
- flight planning
- operational control

- suitability of aircraft performance information
- suitability of area qualification training
- demonstration of all operational planning
- ground support and communications
- pre-flight inspection
- flight and ground support personnel decision making
- normal, and abnormal, situations
- critical system failures
- critical communication systems
- communication with air traffic services (ATS)
- 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 project team will follow and the objectives to be achieved during the proving flight.

The CASA project team will normally allow the proving flight to run without intervention—that is, the crew will not normally be required to divert from the flight plan. The CASA inspector may, however, request demonstrations of specific operations, such as a particular form of departure or arrival. The CASA inspector may also ask questions of flight deck and ground crew to confirm the crew members' knowledge and familiarity with company procedures.

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

- passenger handling arrangements
- in-flight emergency procedures
- the handling of incapacitated passengers.

Scenarios

As part of the testing process CASA will introduce scenarios, or simulated exercises, mainly related to 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 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 fire

- 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 immediately or as soon as practicable. Similarly, if any person on the flight becomes distressed as a result of the conduct of a scenario, the exercise must be terminated immediately or as soon as practicable.

The PIC on the flight has absolute authority 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 should introduce each scenario with the words, 'This is a simulated exercise', or words to this effect. CASA should 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 should 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.

a. The CASA project team finds deficiencies in the AOC applicant's compliance with exposition processes and procedures or regulatory requirements that do not demonstrate operating and effective. 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.

b. The CASA project team finds deficiencies in the AOC applicant's compliance with exposition processes and procedures or regulatory requirements that demonstrate procedures are operating but not effective. 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.

c. The proving flight demonstrated that the operator's procedures are operating and effective. 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 operating and effective. CASA 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.

Subregulation 131.080(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 Financial viability assessments

Section 28(2) of the Act allows CASA to consider the financial position of an applicant in assessing the AOC application.

A financial assessment is conducted as part of the AOC application process. CASA will notify the applicant if additional information is required.

The financial position of the applicant is one of the matters that CASA considers in assessing the competence of operators applying for an AOC.

Financial management of the applicant's organisation also is relevant to paragraph 28(1)(a) and 28(1)(b) of the Act. Financial assessment procedures have been implemented to assist the CASA inspector when taking account of the financial position of AOC applicants.

Financial assessments are conducted by review of:

- cashflow projections and additional information provided by the operator

- financial statements and other company information lodged with Australian Securities and Investment Commission (ASIC) by the operator
- financial risk reports from Dun and Bradstreet (D&B).

The assessment will seek to determine if the operator has shown adequate information or a process exists to monitor resources required for compliance with the AOC. It will include:

- analysis of ownership based on information lodged with ASIC. The purpose is to assess the level of financial risk relating to ownership structure
- analysis of management and control based on information lodged with ASIC. The purpose is to:
  - identify any persons who may be able to influence strategic direction or day-to-day management of the operator
  - assess a level of financial risk associated with the management arrangements having regard to the nature and scale of operations.
- D&B Payment Predictor Reports that are based on a number of factors including late payments reported in surveys of creditors by D&B, court actions and company characteristics such as age of the company and corporate structure. Other information reported by D&B includes a number of court actions or collection activities.

Information required

If a CASA financial assessment is required, AOC applicants will be asked to provide the following information:

- details of any person, company or entity or organisation that has potential to control or influence the day-to-day operations or the strategic direction of the applicant/AOC holder, including but not limited to:
  - the names of the companies/organisations/persons involved
  - shareholdings or equity interests (if applicable)
  - the names of directors, officers or persons involved.
- the extent to which directors or officers in these organisations or companies or other persons can control or influence the operational direction and the day-to-day operations of the applicant
- any other information essential for CASA to understand the organisational and personnel inter-relationships impacting upon the applicant
- a 3-year cash-flow forecast which discloses:
  - a breakdown of receipt and payment items with estimates for each item (refer to examples of items in Figure 1 and Table 3 below).
  - any relevant explanatory notes including details of projected annual flying hours
- if the AOC applicant is a corporate entity:
  - a copy of the latest financial statements (preferably audited) for the AOC applicant including profit and loss statement and balance sheet together with any accompanying notes or qualifications
  - if the corporate entity is part of a larger corporate group, a copy of the latest consolidated financial statements (preferably audited) for the group of companies including profit and loss statement and balance sheet together with any accompanying notes or qualifications.
- if the applicant is not a corporate entity and is applying, for example, as a sole trader or member of a partnership:
  - details of any competing demands that will be placed upon the applicant's funds in the aviation operation. Some of the information may be already available and can be provided in some other form for example as part of an existing Business Plan.

CASA will verify that the applicant has identified significant types of safety-related expenditure and the respective amounts that the applicant intends to expend so as to comply with the safety requirements of the Act, Regulations and Orders.

Applicants must indicate the basis upon which key forecast assumptions have been made, in particular whether any market research has been carried out, or other investigations made, into market demand, revenue and expenditure aspects of the proposed AOC operation, and if so, the findings.

Financial assessment process

Regservices, in consultation with the CASA project manager, will determine if a financial assessment is required.

If required, the CASA project manager must involve the senior risk assessor when forming the project team. The senior risk assessor will liaise directly with the applicant and send a report on the assessment to the project manager.

For applications that only require an applicant self-assessment, Regservices will forward the applicant assessment form to be completed by the applicant. The senior risk assessor will determine if the applicant self-assessment has been properly completed or if any further action is needed.

The senior advisor is contactable via FVA@casa.gov.au.

Confidentiality of information provided

Financial and organisational information provided by an applicant will be treated as commercial-in-confidence and will not be disclosed to any other party for any other purpose, other than for a lawful purpose.

Figure 1. Example of cashflow summary

			Months											
CASH FLOW SUMMARY		Notes*	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total
VARIABLE	CASH INFLOW	A	25,000	26,000	30,000	30,000	20,000	26,000	25,000	25,000	26,000	28,000	29,000	30,000	320,000
	CASH OUTFLOW	B	12,500	13,000	15,000	15,000	40,000	13,000	12,500	12,500	13,000	14,000	14,500	15,000	190,000
	NET CASH FLOW	C = A – B	12,500	13,000	15,000	15,000	-20,000	13,000	12,500	12,500	13,000	14,000	14,500	15,000	130,000
FIXED	CASH INFLOW	D	100	100	100	100	100	100	100	100	100	100	100	100	12,00
	CASH OUTFLOW	E	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	102,000
	NET CASH FLOW	F = D – E	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-8,400	-100,800
TOTAL MONTHLY	NET CASH FLOW	G = C + F	4,100	4,600	6,600	6,600	-28,400	4,600	4,100	4,100	4,600	5,600	6,100	6,800	29,200
CUMULATIVE	NET CASH FLOW	H	4,100	8,700	15,300	21,900	-6,500	-1,900	2,200	6,300	10,900	16,500	22,600	29,200	

* See notes on next page.

Note by Applicant:

Cash outflow for engine overhaul.

Current bank balance is $12,000 and our bankers have agreed to provide overdraft facilities for $30,000.

Carry forward to next year Month 1

Table 3. Cashflow summary explanatory notes

Note		Explanation and examples of items included. This is only a guide. It is recommended that applicants use items that best suit their operation.
A	VARIABLE CASH INFLOW	Receipts from sales which vary according to the flights flown each month
B	VARIABLE CASH OUTFLOW	Payments which vary according to the hours flown. For example: Fuel Repairs and maintenance Casual pilots Landing fees Part 131 aircraft hire Net amount of GST paid to ATO
C	VARIABLE NET CASH FLOW	This is the amount available each month to cover fixed cost and is calculated by subtracting 'B' from 'A'.
D	FIXED CASH INFLOW	Sales receipts which do not depend on hours flown. For example: Management fees Interest or rents Sale of aircraft
E	FIXED CASH OUTFLOW	Payment which does not depend on flights flown. For example: Rent Interest Aircraft purchase (interest, loan repayment) Employees (wages, tax, superannuation, worker's compensation) Insurance Documents and subscriptions Pilot training, renewals and endorsements Equipment
F	FIXED NET CASH FLOW	This is the net amount of fixed costs to be covered each month calculated by subtracting 'E' from 'D'.
G	TOTAL MONTHLY NET CASH FLOW	This is calculated by subtracting 'F' from 'C'.
H	CUMULATIVE NET CASH FLOW	This is calculated by adding the monthly amount in 'G' onto the cumulative amount from the previous month.

3. Part 131 aircraft 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 can satisfy 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 chief executive officer (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 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 flight crew members 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.

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 authorised balloon testing officers (ABTOs) 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

Operators that are not required to manage continuing airworthiness under Part 42 of CASR must meet the requirements of CAR Part 4, Part 4A and Part 4B. Use Protocol suite (OPS.13) Managing continuing airworthiness for the assessment.

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 131.105. Use Protocol suite OPS.10 Key personnel assessment. (to be updated to include Part 131 Balloon transport operations)

> Note: An approval under regulation 131.035 must meet the requirements in the Operations protocol framework.

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 C to AC 131-04 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.

3.1.5 Familiarisation training

A balloon 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. The 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 (if any)
- training and checking (as applicable)
- exposition structure
- type of Part 131 aircraft operations conducted.

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)

Reserved

3.2.4 Safety manager (SM)

Reserved

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 91.260 prescribes the pilot in command (PIC) obligations for avoidance or flight into a prohibited or restricted area, 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

Part 92 of CASR applies to the consignment and carriage of dangerous goods by air. If the operator intends to carry dangerous goods in cargo, regulation 92.055 prescribes the requirement for an operator to provide a detailed dangerous goods manual. 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, either describing the contents of the cargo or stating that the cargo does not contain any dangerous goods.

The dangerous goods manual (or section within the exposition) forms part of the operator's exposition under regulation 131.195. 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.

Although unlikely for Part 131 Balloon transport operations, if the flight involves the carriage of dangerous goods as cargo, in mail, 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:

- Form 1441 – Dangerous goods manual evaluation checklist
- Form 1444 – Acceptance of dangerous goods checklist
- Checklist (OPS.26) Dangerous goods - RAMP inspection

Note: The project manager may request a review and assessment of the dangerous goods manual (or section within the exposition) if unsure about the complexity of the proposed cargo operation.

Where the operator does not intend the consign and carry dangerous goods by air, the exposition will still require instructions to address:

- general exceptions listed in ICAO Doc 9284 1;1.1.5
- exceptions for dangerous goods of the operator listed in ICAO Doc 9284 1; 2.2; or
- activities performed under regulations 91.170, as they relate to balloon transport operations.

For dangerous goods that are permitted to be carried by passengers or crew, see section 3.7.7.9 of this principle for further information regarding the assessment required for this section of the exposition.

3.3.2 Reference library

Operators may choose to use an electronic flight bag (EFB) to provide their reference library. There are commercial products that will keep these documents up to date or the operator may develop their own EFB program. In either case the exposition must explain how the reference library will be maintained. The operator's exposition must include a reference library in accordance with regulation 131.050. An important part of the reference library is access to up-to-date information.

3.3.3 Aircraft leasing arrangements

Use Protocol suite (OPS.24) Aircraft leasing arrangements.

3.3.4 Electronic flight bag (EFB)

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.

Regulation 91.175 prohibits crew members from operating a portable electronic device (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.

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 aircraft flight manual (AFM) / flight crew operating manual (FCOM)/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. EFBs 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 PED under the regulations (see section 3.6.2 of this principle).

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 World Aeronautical Charts (WAC); however other functions, such as flight preparation or administrative functions, will not be conducted during this phase of flight.

EFB-approved hardware

For portable EFBs, the operator must determine what 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 EFBs, 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).
- Part 131 aircraft operators do not require approval to use EFBs.

EFB-approved software applications

Caution

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 EFBs 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 require airworthiness approval.

3.4 Management of change

Operators can construct a management of change (MOC) process that is applicable to all of their operations.

Example

An operator may conduct other operations, such as balloon flying training. If preferred by the operator, they could construct an MOC process that is common to all of their operations.

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 131.195(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 balloon 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 131.100(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 131.030(a) and automatically classify all other changes as non-significant. To be suitable, the inspector must confirm the operator's MOC process adequately covers the requirements for the definition of significant change in subparagraphs 131.030(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 operator's personnel. However, in some circumstances, the method of communication to the operator's 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 the operator's 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 email 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, must be documented in the exposition. If the operator has a safety management system (SMS), then the risk assessment process should be included as part of the SMS. Any assessment of the SMS aspects should be conducted with reference to Protocol suite (OPS.08) Safety management systems assessment.

Note: A Part 131 balloon transport operator is not required to have an SMS.

3.5 Records and documents

The following material is to be read in conjunction with the Part 131 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 have an appropriate system that maintains records of training and checking events conducted, and results of the events. Personnel records must also include an up-to-date copy of the persons flight crew licence and medical.

The system must be constructed so that the operator can audit the records for quality assurance purposes. The system may be designed so a third party can similarly conduct an audit of the events. The inspector should determine that the operator’s exposition describes the operation of the system and clearly defines the administrative processes involved in maintenance of the records and access to the data when required.

To be suitable, the process 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 preserve 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 balloon 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 balloon 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.

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 operator's 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 AFM 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 Part 131 aircraft checklists to the flight crew members. Depending on the size 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 operator's exposition should describe when and how the flight crew use the checklist. For Part 131 aircraft operations, the checklist normally involves memorisation of the checklist and use of acronyms.

The checklist must include all the items in the AFM and may also include operator specific requirements. Checklists normally consist of:

- normal operations
- emergency operations
- abnormal operations (if applicable).

Note: The AFM for Part 131 aircraft 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 AFM or supplements and any changes made in accordance with the operator's MOC 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, this will vary depending on 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 Passenger list

The operator's exposition must include a process to ensure an up-to-date copy of the passenger list is provided to operating crew and a person on the ground. To be suitable, 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.

3.5.2.4 Reporting and recording information

The exposition must include a process to report and record the information outlined in Chapter 6 of the Part 131 MOS. If the information is recorded in an electronic format, the operator should have suitable procedures. The inspector should use section 3.3.4 (EFB) of this principle for verification of the process.

Defect reporting

The exposition must detail a process for reporting any aircraft defects. To be suitable, it should include how crew members notify all relevant parties of the defects. The size of the operator will dictate this process. For example, it may involve use of the aircraft in flight communication system while airborne followed by entering a record via use of the maintenance log at the completion of a flight.

Incident reporting

The exposition must contain procedures for crew members to report incidents that endanger the safe operation of the operator's aircraft. This also includes incidents that endanger or could endanger the safety of people or property associated with the operation of their aircraft. The process will depend upon the size of the operation. 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 *Routinely Reportable Matters* from the Transport Safety Investigation Regulations 2003 to ensure crew follow reporting obligations.

Weight documents

The exposition must contain procedures for the completion of weight documentation that meets the requirements of section 3.8 of this principle.

3.5.3 Flight-related document retention

The operator must include, in its exposition, a process for retaining certain records for the specified period. Records and documents may be electronic or physical and will depend upon the size of the operator. However, the process must ensure each document or record is retained for its specified period.

If the 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.

3.6 General flight limitations

3.6.1 Foreign registered aircraft

If the operator intends using foreign registered aircraft for balloon 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.

Paragraph 131.240(2)(b) provides the ability for CASA to issue an approval under regulation 131.035 for a period longer than 90 days. Before considering an application for approval, the inspector should confirm that the operator is unable to:

- place the foreign registered Part 131 aircraft on the Australian Part 47 register, thus placing the airworthiness of the aircraft solely under Australian oversight; or
- 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 (e.g. 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, the 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
- 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 airworthiness for more information.

3.6.2 Portable electronic devices

The 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).

3.6.3 Simulation of emergency or abnormal situations

The operator must include in their exposition instructions to the PIC to prevent the simulation of emergency and abnormal operations during a balloon transport flight.

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

3.6.4 Search and rescue services

The operator must provide their 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 guidance section providing flight crew with detailed information about the relevant areas of its operation. To be suitable, the inspector must determine that the operator's flight crew will have access to the relevant search and rescue information during a flight.

3.6.5 Information about emergency and survival equipment

Chapter 26 of the Part 131 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 Part 131 aircraft. To be suitable, the operator may include in its exposition:

- a written list of the equipment, its location and its details for each aircraft
- 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.

3.6.6 Minimum height rules

While the minimum height rules under Part 91 do not apply to a Part 131 aircraft, the requirement under Part 91 for an aircraft not to be operated in manner that creates a hazard does. The operator's exposition must include procedures to ensure the PIC meets their obligations under regulation 91.055 at all times.

3.6.7 Dropping things from aircraft

Similar to the minimum height rules, regulation 91.190 does not apply to a Part 131 aircraft which are subject to the requirements of Chapter 9 of the Part 131 MOS. The operator's exposition should provide instructions as to what may be dropped from a Part 131 aircraft inflight.

3.6.8 Flight above 10 000ft

To operate above 10 000ft, an operator requires an approval under regulation 131.035. To consider the approval, the inspector must ensure the exposition includes instructions to the PIC that comply with the requirements of Chapter 10 of the Part 131 MOS. To be suitable, the exposition should include:

- the quantity of oxygen that must be carried for flight crew
- the quantity of oxygen that must be carried for passengers
- when flight crew must use supplemental oxygen
- procedures for the use of oxygen equipment, including pre-flight serviceability checks
- guidance for the recognition of both flight crew and passenger impairment caused by hypoxia.

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 aircraft. The nature of the operation will dictate the level of detail the operator chooses to include in their exposition. To be suitable, the operator's exposition should contain a brief explanation of the powers of the PIC for the items listed in regulation 91.220.

The 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 aircraft 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 of the operation.

3.7.1.3 Fitness for duty

The 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.

3.7.2 Flight preparation – weather assessment

The exposition must detail the weather assessment procedures the PIC must follow prior to and during flight. Authorised weather forecasts and reports within the meaning of the CASR dictionary (see Table 2 definitions of this principle) must be used to support the weather assessment. Weather forecast must cover the period from commencement of the flight until 2 hours after the planned landing time.

In addition to an authorised weather forecast or report, the PIC is permitted to utilise any other available weather information that is relevant to the intended operation.

Example

The exposition may provide guidance on the use of non-authorised weather applications, such as 'WillyWeather', to provide localised wind information to support the selection of a suitable landing area.

Caution

The use of non-authorised weather reports does not replace the requirement for the PIC to make their weather assessment utilising an authorised weather forecast or report.

To be suitable, the exposition must make it clear that the available weather information is in addition to that supplied from an authorised source. The exposition should provide guidance to the PIC on what constitutes 'reasonably available weather' and which applications are considered suitable.

Note: Refer to AC 131-02 Manned free balloon operations for further information.

3.7.3 Flight notification

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. Chapter 13 of the Part 131 MOS prescribes information regarding when flight plans must be submitted, along with generic requirements about the information contained within a flight plan.

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 (e.g. an EFB).

3.7.4 Flight rules

For Chapter 15 and 16 of the Part 131 MOS, an operator may rely on the AIP to ensure flight crew comply with the requirements of airspace. However, the inspector needs to ensure the following additional requirements, not provided for in the AIP, are detailed in the exposition.

Note: Some operators may provide additional instructions to flight crew or impose additional operating restrictions on their Part 131 aircraft during Part 131 balloon transport operations within specific airspace.

A suitable exposition should also contain a statement authorising PICs to deviate from a clearance where the Part 131 aircraft and/or occupant safety is compromised by the clearance, and include subsequent follow up actions.

3.7.4.1 Altimetry requirements

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 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 the National Aviation Authority (NAA) approved documentation such as Jeppesen.

3.7.4.2 Additional right of way rules

Part 131 aircraft are required to comply with additional *right of way* rules that do not apply to other operations. To be suitable, the operator's exposition should provide instructions to the PIC on the application of those rules.

3.7.4.3 Avoiding collisions in the air

The operator will normally rely on the AIP or other approved documentation for the provision of information that is basic knowledge requirements.

If operations are conducted into non-controlled aerodromes, the inspector should consider the operator's procedures for managing traffic separation. Procedures may include specific speed and configuration requirements. Chapter 17 of the Part 131 MOS provides additional information when operating in and around non-controlled aerodromes.

3.7.4.4 Flights over water

Chapter 18 of the Part 131 MOS prescribes the risk considerations that must be considered if a Part 131 aircraft flight is planned over water, or an area where there is a reasonable possibility that the Part 131 aircraft may fly over water. To consider 'reasonably possible', an operator should review its area of operations in relation to:

- proximity of the area of operations to the body of water
- size of the body of water
- forecast wind conditions
- the likelihood of un-forecast wind conditions.

Based on the review the operator should provide instructions to the PIC to conduct a risk assessment. To be suitable, the exposition should include:

- the risk assessment process
- method of documenting the risk assessment (form)
- guidance on what safety and emergency equipment is required based on the final risk score.

Risk assessments are scalable according to the nature, size and complexity of the operation. The exposition must detail how a risk assessment is performed to determine the magnitude of risk and to establish what safety and emergency equipment is required to be carried.

The operator may choose to conduct a risk assessment for an area of operation or for specific flights. Where the PIC is required to conduct a risk assessment for a specific flight, the operator should maintain a risk register and record of risk assessments performed.

The risk assessment should inform mitigating actions that help limit risks to an acceptable or tolerable level. It is based on the evaluation of the following criteria:

- the severity/consequences of a hazard
- the likelihood of its occurrence
- tolerability of its effects.

To be suitable, the exposition should ensure that personnel are trained on the operator's risk assessment processes.

3.7.5 Taking off, landing and ground operations

The exposition must include procedures to ensure that, prior to take-off, the checks prescribed by Chapter 14 of the Part 131 MOS are carried out.

Regulation 91.410 applies to the operation of Part 131 aircraft and requires that the Part 131 aircraft must take-off and land at an aerodrome.

> Note: The term 'aerodrome' includes a place suitable for the take-off and landing of an aircraft.

Example

For Part 131 aircraft operations, a suitable aerodrome can refer to a clear space such as a sports recreational area or parkland where a safe take-off and/or landing can be made.

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.

To be suitable, the operator should take into account the following when considering the suitability of an aerodrome:

- prevailing weather and effect of temperature
- obstacles
- safety of persons or property
- AFM.

The exposition must also include procedures for determining that Part 131 aircraft are parked in such a way as not to create a hazard.

3.7.5.1 Passenger safety

The operator's exposition must provide instructions to personnel on the management of passengers while boarding or disembarking from the Part 131 aircraft launch site.

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

- supervision of the passengers by the operator's personnel, including:
  - ensuring passengers follow the correct pathways to and from the Part 131 aircraft
  - assisting passengers with special needs
  - compliance with no smoking areas
  - ensuring passengers are not intoxicated or affected by psychoactive substances
  - ensuring carryon baggage limitations
  - location of passengers with respect to the launch vehicles and inflation fan on the launch site.
- the number to board or disembark at any time
- ensuring passengers take their assigned positions (if applicable).

3.7.6 Fuel requirements

An exposition must include procedures to ensure its aircraft are only refuelled with the approved type of fuel (LPG) and not with any fuel that is prohibited for use by the manufacturer. It must also include procedures to ensure that its aircraft are not loaded with contaminated or degraded fuel. 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 Procedures for refuelling

An exposition must include procedures to ensure aircraft are fuelled safely. Aircraft refuelling may be conducted from one of the following:

- a fixed refuelling station and bowser
- a refuelling tanker
- gas cylinders.

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

When fuelling operations are conducted, the exposition must include instructions on how to position the fuelling equipment and ensure that there are no fire hazards.

The exposition must also include a policy for the operation of low-risk electronic devices in accordance with regulation 91.485.

3.7.6.2 Fuel monitoring

> Note: For a gas balloon that exclusively uses ballast to control the altitude of the aircraft, the PIC for the flight of the aircraft must, after taking into account the matters required by Chapter 21 of the Part 131 MOS in relation to amounts of fuel, ensure that the aircraft is carrying at least the amount of ballast that would achieve an equivalent outcome to the fuel requirements.

Section 21.03 of the Part 131 MOS specifies acceptable methods the operator can use for fuel consumption data to calculate the fuel load for a flight. The 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 AFM is used, then the data must be used exactly as per manufacturer instructions.

The operator's exposition must include a policy that complies with regulation 131.385 and section 21.04 and 21.05 of the Part 131 MOS in relation to calculating the fuel load for a flight and monitoring the fuel remaining while airborne.

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

- definitions of each component of the fuel requirements
- an indication of how the fuel consumption data is obtained
- details of any in-flight replanning calculations and procedures the operator uses
- details of any special planning procedures that the operator uses.

The operator may apply for operational variations (OVs) to the Part 131 MOS fuel requirements. Chapter 21.07 of the Part 131 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 131 MOS requirements.

3.7.7 Safety of persons and cargo requirements

3.7.7.1 Carriage of cargo

Carry-on baggage

For the purposes of Part 131 aircraft operations, carry-on baggage is considered as cargo. The exposition must include procedures regarding carry-on baggage (such as handbags/cameras etc.) for each of the following:

- 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 aircraft 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.

Cargo restraint

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

To be suitable, the inspector should ensure the procedures are appropriate for the type of aircraft operated.

Where cargo maybe loaded

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

- damage, obstruct, or cause the failure of controls, wiring, pipelines, or other equipment essential to the safety of the aircraft
- 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 aircraft.

The 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 be suitable, the inspector should ensure that the procedures are appropriate for the size and nature of the operation, and also appropriate for the type of aircraft operated.

3.7.7.2 Carriage of animals

Due to the nature of Part 131 balloon transport operations, the operator's exposition may, in the interests of safety, prohibit the carriage of animals on any flight. However, if the operator does permit the carriage of an animal, the exposition must include guidance for the carriage of animals on its aircraft.

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 aircraft or its occupants. It should also clarify that the operator or PIC may refuse carriage of the animal, despite the Disability Discrimination Act 1992, if one of them has reasonable grounds to believe that having the animal on the aircraft might adversely affect safety.

3.7.7.3 Consumption of alcohol and psychoactive substances

The operator’s exposition must include guidance for crew members to ensure that a passenger does not consume alcohol onboard the aircraft, 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 aircraft or other occupants onboard.

The inspector should ensure that the procedures are in accordance with the size and nature of the operation.

The operator must have a policy included in the exposition prohibiting passengers from boarding the aircraft 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 Smoking not permitted

The exposition must contain instructions to the PIC of when smoking is prohibited. To be suitable, the exposition will contain procedures to brief all passengers, prior to flight, that smoking is not permitted.

Although the regulation applies to a 'person', the operator's exposition should provide instructions for the control of passengers and ground crew who are within 15 meters of the aircraft, to prevent them from smoking when the aircraft is being:

- prepared for a flight
- fuelled for a flight

- deflated after a flight.

3.7.7.5 No smoking signs

Operators must provide sufficient *no smoking* signage, affixed to a Part 131 aircraft conducting balloon transport operations. The regulations allow the sign to be either written or graphical. To be suitable, the signs must be of a suitable size and clarity to ensure all passengers can easily understand the instructions not to smoke. The exposition must include instructions to the PIC to ensure all passengers understand the signage.

> **Caution**
>
> No smoking signs may not be understood by passengers from different languages or cultural backgrounds, or a person with a disability. The inspector must be satisfied that the operator's procedures make allowance for these situations.

3.7.7.6 Carriage of infants

The carriage of infants (see definition in Table 2 of this principle) on a Part 131 balloon transport operation is prohibited unless the operator holds an approval under regulation 131.035.

If an operator applies for an approval to carry an infant, the exposition must include procedures to ensure any infant on the aircraft is restrained. Division 20.2 of the Part 91 MOS prescribes instructions on how an infant must be restrained, while AC 91-18 provides further guidance. To be suitable, the exposition should include the CASA definition of an infant, along with procedures for the PIC to ensure that the infant is restrained.

> **Caution**
>
> Most restraint systems that meet current regulations are not suitable for Part 131 aircraft.

3.7.7.7 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 or position such that they will hinder crew members from safety duties, access to emergency equipment, or hinder the emergency evacuation of the aircraft
- the PIC is informed that the passenger will be carried on the aircraft 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.

3.7.7.8 Passengers—safety briefings and instructions

The operator’s exposition must include the following:

- procedures to ensure that passengers receive safety briefings and instructions, and/or demonstrations, before take-off and landing
- procedures for briefing passengers on what they should do if an emergency occurs on the Part 131 aircraft during flight.

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

- meet the requirements of sections 23.02 and 23.03 of the Part 131 MOS

- do not include other information irrelevant to the type and model of the Part 131 aircraft, or irrelevant to the safety of the Part 131 aircraft and its passengers.

If a person other than the PIC is authorised by the operator to give safety briefings and instructions, the exposition must include a description of the role and qualifications of the person.

3.7.7.9 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 this section the relevant reference is Doc 9284 TI Part 7.

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 Part 131 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 Part 131 aircraft in accordance with pertinent airworthiness requirements and operating regulations, or are authorised by the State of the operator to meet special requirements
- dry ice intended for use in food and beverage service aboard the Part 131 aircraft
- alcohol-based hand sanitizers and cleaning products that are carried aboard a Part 131 aircraft by the operator for use on the Part 131 aircraft during the flight, or series of flights, for the purposes of passenger and crew hygiene
- electronic devices (such as EFBs) and PEDs containing lithium metal or lithium-ion cells or batteries, as well as spare lithium batteries for such devices, that are carried aboard a Part 131 aircraft by the operator for use on the Part 131 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 exposition and/or other appropriate manuals that will enable flight crew 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. See section 3.3.1 of this principle for further information.

General exceptions

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

The specific circumstances are when the dangerous goods 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).

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 balloon transport (i.e. not listed as forbidden for balloon 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 Part 131 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 in regulation 92.065 of CASR).

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.

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 a Part 131 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 Part 131 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
- if no boarding pass is issued, prior to boarding the Part 131 aircraft.

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

Dangerous goods signage

The operator, or the operator’s handling agent, must ensure that information on the types of dangerous goods that passengers are forbidden to carry on board a Part 131 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 applicable to the operation:

- where tickets are issued
- where boarding passes are issued
- where passenger baggage is dropped off and collected
- where Part 131 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 a Part 131 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 cargo, 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 in 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.

The PIC must be adequately trained to assist passengers in identifying and detecting dangerous goods, other than those permitted to be carried onboard the Part 131 aircraft.

The PIC should seek confirmation from a passenger that they are not carrying dangerous goods that are not permitted to be carried onboard the Part 131 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.

3.7.8 Instructions to the PIC

The exposition must include the following instructions to the PIC:

- To submit a written report to CASA (in an approved form) within 2 business days if a pilot flying a Part 131 aircraft has taken action contravening the regulations as a result of an emergency threatening the safety of the aircraft or its occupants. Some operators may include this instruction in the safety reporting procedures and specify a reduced time for submission as an operator requirement.
- Action to take to cancel any distress signal made from the Part 131 aircraft as soon as practicable after the reason for declaring the distress signal no longer exists. 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.

3.8 Performance

The operator must include instructions and procedures in the exposition to ensure the Part 131 aircraft is loaded in accordance with the aircraft's weight limits. The instructions and procedures must be available to all personnel involved in loading the Part 131 aircraft, including any contracted parties and the PIC. To be suitable, the exposition should specify that a Part 131 aircraft must be loaded in accordance with its approved loading systems and any other applicable regulatory requirements.

The operator's exposition must also include instructions and procedures for the PIC to ensure the Part 131 aircraft's weight is maintained throughout the flight.

3.8.1 Aircraft loading procedures

Regulation 131.450 specifies the requirements for loading a Part 131 aircraft. The operator's exposition must address each of the following:

- procedures to determine the total weight of:
  - the crew members and any carry-on baggage of the crew members
  - any passengers and any carry-on baggage of the passengers
  - any cargo (other than carry-on baggage)
  - any usable fuel and fuel containers to be carried
  - any assembled Part 131 aircraft components.
- procedures to ensure the Part 131 aircraft 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 Part 131 aircraft remains within weight limits
- procedures for confirming weight documents
- procedures to offload passengers and/or cargo, ensuring the Part 131 aircraft remains within weight limits.

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

The operator must include, in its exposition, methods of calculating the weight of fuel loaded on a Part 131 aircraft.

3.9 Equipment

3.9.1 Use of radios on aeronautical frequencies

A suitable exposition must include a directive or procedure prohibiting anyone, other than a person qualified to do so, from transmitting a radio using a frequency that is:

- prescribed for ATS
- used for communications at an aerodrome
- used for emergency communications
- prescribed in the Part 91 MOS.

3.9.2 Lifesaving and survival equipment

Regulation 131.460 and sections 26.12, 26.15, 26.17 and 26.18 of the Part 131 MOS prescribe that survival equipment must be carried on flights:

- within or over remote areas (as defined in Division 26.12 of the Part 131 MOS)
- over water, where life jackets must be carried if it is considered a risk that the Part 131 aircraft may land or ditch in water in the event of an emergency.

An operator who conducts flights where either of the above are applicable must include the following in their exposition:

- a list of the minimum life-saving equipment to be carried on the Part 131 aircraft
- procedures for determining survival equipment appropriate for sustaining life in these areas of operation.

To be suitable, the inspector must determine that life-saving equipment and survival equipment is appropriate to the nature and location of the operation.

3.9.3 Requirements for the equipment carried

Chapter 26 of the Part 131 MOS prescribes requirements relating to equipment that must be fitted to, or carried, on a Part 131 aircraft. The equipment must comply with, or be approved under, Part 21 or Part 131 of CASR. The operator's exposition must include details of the procedures it uses to ensure the specified equipment meets this requirement.

The procedures should also account for any contracted maintenance and engineering services that the operator is approved to use.

Inspectors should also note that:

- section 26.02(2) of the Part 131 MOS includes a list of equipment exempted from the requirements
- section 26.02(3) of the Part 131 MOS provides that, before a foreign-registered Part 131 aircraft begins a flight, the equipment fitted to, or carried on, the Part 131 aircraft must have approval from the NAA of its State of registration
- section 26.02(4) of the Part 131 MOS provides additional details about equipment that is fitted to a Part 131 aircraft, but is not required under section 26.02 of the Part 131 MOS.

If any equipment must be fitted to, or carried on, a Part 131 aircraft for a pilot's manual or visual use, in or from the pilot's control position, the exposition must include procedures to ensure it is visible to, and usable by, the pilot from the pilot's position in the Part 131 aircraft. To be suitable, the inspector should determine that the operator's procedures are appropriate for the operation and the type of Part 131 aircraft operated. This may require a physical inspection of the Part 131 aircraft.

Any emergency equipment that must be fitted to, or carried on, the Part 131 aircraft for a flight must be easily accessible for immediate use in the event of an emergency.

To be suitable, the inspector should determine that the operator's procedures are appropriate for the operation and the types of Part 131 aircraft operated. This may require a physical inspection of the Part 131 aircraft.

The operator must have procedures within its exposition to ensure any equipment required to be fitted to a Part 131 aircraft under Chapter 26 of the Part 131 MOS (for a flight) is operative unless:

- permitted by a section within Chapter 26 of the Part 131 MOS
- the equipment:
  - is inoperative because of a defect that has been approved as a permitted unserviceability; or
  - is fitted or carried in accordance with a permitted unserviceability.

Equipment contained in an MEL (if any) cannot be unserviceable for a period of time longer than that prescribed for the equipment in their approved MEL.

3.10 Flight crew

3.10.1 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 and scope 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 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 up to 10 flight crew across a simple operation not involving multiple approvals as suitable for a manual tracking tool.

In the case of 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 is:

- tailored to the operator's requirements
- able to flag a flight crew member approaching and/or exceeding a defined qualification or recency requirement
- able 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 should 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 131.565(1) states that the operator and the PIC must meet the flight crew qualification and experience requirements for a Part 131 aircraft for a flight. For flight crew to be qualified, they must meet the training and checking requirements prescribed in subregulation 131.565(2) and (2A). Chapter 27 of the Part 131 MOS details the requirements for flight crew training and checking.

The exposition should include:

- 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 or aircraft)
- threat and error management and risk mitigation for in-aircraft activities.

The size of an organisation must be considered when determining suitability.

New or inexperienced 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 CAR Part 5 qualifications
- minimum flight hours on a particular type or class of Part 131 aircraft conducting specific operations
- operational limitations until the person has completed certain experience with the operator.

Assessment of competency

The exposition must include a description of how the operator’s personnel 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.

An 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.

3.10.2 Recent experience

Regulation 5.144 of CAR prescribes the recent experience requirements for 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 Part 131 aircraft.

3.10.3 Flight review

The operator should describe how crew members are trained and checked in accordance with regulation 5.143 of CAR and Chapter 27 of the Part 131 MOS.

3.10.4 General emergency and safety equipment training and checking

The operator must provide for general emergency training and an assessment of competency, before a flight crew member conducts balloon transport operations for the operator.

The operator must provide biennial emergency and safety equipment training and checking. The training may be conducted in the Part 131 aircraft, or a training facility or device. Practical training in emergency and safety equipment may be conducted using representative training devices instead of the actual Part 131 aircraft and equipment.

Whether the training is conducted in a Part 131 aircraft or utilising training devices, the inspector should conduct an onsite inspection to confirm suitability.

3.10.5 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 27.10 of the Part 131 MOS prescribes the command training requirements a flight crew member must complete before they can operate as PIC in a Part 131 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 Part 131 aircraft
- provide for an operator proficiency check.

To be 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 responsibilities of the PIC in the syllabus of training includes some of the following, as deemed appropriate for the operation:

- the duties and responsibilities of the operator's pilots
- the procedures relating to the operator's operations
- the normal and emergency procedures for the Part 131 aircraft used for the flight, other than those already mentioned in subsections 27.09 (2) and (3) of the Part 131 MOS
- the conduct of a passenger briefing and safety demonstration for the Part 131 aircraft being used for the flight.

3.10.6 Recurrent training and checking

The operator's exposition must include a program of recurrent training and checking for general emergency training, with the exception of the in-water element. To be suitable, the inspector must confirm the operator

has a process to ensure all flight crew have completed required recurrent training and been assessed as competent, prior to being rostered for line operations. Section 3.10.1 of this principle provides further guidance.

3.10.7 Individuals conducting training and checking

A Part 131 operator does not require a training and checking system; however, the exposition must detail how the operator will ensure all flight crew are qualified to conduct balloon transport operations. To meet this requirement, the operator must authorise persons to conduct the training and checking activities required by Subpart 131.N, Subpart 131.P and Chapters 27 and 28 of the Part 131 MOS.

To be suitable, the operator must describe, in the exposition, how effective supervision is provided to its personnel undergoing training and checking. 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 Part 131 aircraft
- performance management, including:
  - procedures to manage personnel whose progression is below expectations
  - management of personnel who do not meet the required standard for any check.

Some operators may elect to utilise a person who holds a flight instructor (balloon) rating 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.

If the operator's HOFO intends to conduct training and checking for the operator, the exposition needs to include the qualifications and experience required by the HOFO.

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
- 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 to conduct training and checking activities, the exposition must include a description of how the operator ensures any training and checking personnel it engages meet the Part 131 MOS requirements. To be 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 program, 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.

3.10.8 Flight and duty 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). CAO 48.1 is divided into 7 appendices.

Whilst no specific approval is granted for operators wishing to comply with Appendices 1 to 6 of CAO 48.1, 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 of CAO 48.1, inspectors must use the CAO 48.1 Instrument 2019 Appendix 1-6 – Technical Assessor Handbook and the 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 Operational safety-critical personnel

3.11.1 Competence of ground support personnel

The operator must provide operational safety critical personnel, who are not flight crew, with specific training. An example of operational safety critical personnel in a Part 131 balloon transport operation is a ground support person, other than those engaged in providing airworthiness management services. The operator must provide these personnel with specific training and ensure they are assessed as competent to carry out their ground support duties.

The 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 number of personnel employed, the areas of operation, and the type or class of Part 131 aircraft.

3.12 Minimum equipment list (MEL)

Use Protocol suite (OPS.01) Minimum equipment list.

4. Revision history

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

Table 4. Revision history table

Version No.	Date	Parts / Sections	Details
1.1	September 2024	All	Several editorial amendments Added links to forms in section 3.3.1 Added text section 3.3.4 Removal of text from sections 3.7.3 and 3.7.8 Heading change section 3.11.1
1.0	May 2024	All	First issue