

136.04.2	REGULATION	N/A	Satisfactory	Not Satisfactory	Note no
1.	STRUCTURE OF OPERATIONS MANUAL				
	a.	An operator must ensure that the main structure of the Operations Manual is as follows:			
		Part 1: General			
	i.	This Part must comprise all operational policies, instructions and procedures needed for a safe operation and must comply with all relevant regulations.			
		Part 2: Balloon operating matters			
	ii.	This Part must comprise all instructions and procedures needed for a safe operation of the balloons.			
		Part 3: Training			
	iii.	This Part must comprise all training instructions for personnel required for a safe operation.			
	b.	An operator must ensure that the contents of the operations manual are in accordance with SA-CATS 136.04.2 2 and the manual contains at least the following introductory layout:			
	i.	title page			
	ii.	table of contents			
	iii.	record of amendments page			
	iv.	list of effective pages			
2.	CONTENTS OF THE OPERATIONS MANUAL				
2.1	PART 1: GENERAL				
2.1.	Administration and control of the operations manual				
		Introduction			
	1.	A statement that the manual complies with all applicable acts, regulations and associated technical standards			
	2.	the terms and conditions of the applicable operating certificate			
	3.	the authorisations, conditions and limitations of the operations specifications associated with the AOC			
	4.	a statement that, where any person is confronted with an operational situation not contemplated by the operations manual, such person will be expected to act in accordance with his or her most conservative discretion.			
	5.	A statement that the manual contains operational instructions that are to be complied with by the relevant personnel.			

		6. a list and brief description of the various parts, their contents, applicability and use (table of contents)				
		7. explanations and definitions of terms and words needed for the use of the manual.				
System of amendment and revision						
		1. who is responsible for the issuance and insertion of amendments and revisions				
		2. a record of amendments and revisions with insertion dates and effective dates				
		3. a description of the system for the annotation of pages and their effective dates				
		4. a list of effective pages				
		5. annotation of changes and temporary revisions				
		6. a description of the distribution system for the manuals, including the method for rapid dissemination and implementing of amendments and revisions				
2.1.2	ORGANISATION AND RESPONSIBILITIES					
	Organizational structure					
		A description of the organisational structure through the use of one or more organograms. The organogram(s) must depict the relationship between all functional areas related to the safety of operations (e.g. flight operations, maintenance, training, quality, safety and security), including their relationship to the chief executive officer. In particular, the subordination and reporting lines between the various office bearers				
	i.	Office Bearers				
		The name, functions and responsibilities of each office bearer shall be listed.				
	ii.	Responsibilities and duties of designated personnel				
		A description of the specific responsibilities and duties delegated by an office bearer to certain personnel within a functional area.				
	iii.	Authority, duties and responsibilities of the pilot-in-command (PIC)				
		A statement defining the authority, duties and responsibilities of the PIC				
	iv.	Duties and responsibilities of crew members other than the PIC				
		A statement defining the duties and responsibilities of crew members other than the PIC.				

2.1.3	OPERATION CONTROL AND SUPERVISION				
	A description of the system for supervision of the operation by the operator. This must show how the safety of flight operations and the qualifications of personnel are supervised. In particular, the procedures related to the following items must be described –				
	i.	licence and qualification validity			
	ii.	competence of operations personnel			
	iii.	control, analysis and storage of records, flight documents, additional information and data			
	System of promulgation of additional operational instructions and information				
		A description of any system for promulgating information which may be of an operational nature but is supplementary to that in the operations manual. The applicability of this information and the responsibilities for its promulgation must be included			
	Operational control				
		A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety.			
	QUALITY MANAGEMENT SYSTEM (TO COMPLETE CA AOC-C-004)				
	SAFETY MANAGEMENT SYSTEM (TO COMPLETE CA 140-05)				
2.1.6	Flight crew composition				
	An explanation of the method for determining flight crew compositions taking account of the following				
	i.	the size of the free balloon being used			
	ii.	the minimum one flight crew member			
	iii.	a second pilot designated by the operator as pilot-under-supervision for the purposes of training or check flight			
	iv.	experience (total flight time and on size category), recency and qualification of the flight crew member.			
	a. Designation of the pilot-in-command				
		The rules applicable to the appointment or designation of the pilot-in-command.			
2.1.7	Qualification requirements				
	A description of the required licence, rating(s), qualification/competency required to complete a balloon flight.				
	a. Flight crew				
	i.	Pilot-in-command			
	ii.	Pilot-under-supervision.			
	Training, checking and supervision personnel				
	i.	Flight crew			
	ii.	Ground crew: Safety, communication, ERP training, land owner relations			
2.1.8	Flight Crew Health Precautions				
	The relevant regulations and guidance to flight crew members concerning health including:				
	a.	Alcohol and other intoxicating liquor			
	b.	Narcotics and drugs			
	c.	Immunization			
	d.	Sleep and rest			
	e.	Surgical operations			
2.1.9	Flight Time Limitations				

	1.	Flight and Duty period limitations and rest requirements: A Description of the flight time and duty period limitation and rest requirements prescribed in the Technical Standards as applicable to the operation.				
	2.	Exceedances of flight time and duty period limitation and/or reduction of rest periods: Conditions under which flight time and duty period may be exceed or rest period may be reduced and the procedures used to report these modifications.				
2.1.10	Operating Procedures					
	1.	Flight preparation instructions, as applicable to the operation:				
	a.	Interpretation of meteorological information, including explanatory material on the decoding of MET forecasts and MET reports relevant to the area of operations				
	b.	Methods by which the quantities of fuel to be carried are determined and monitored in flight. Such instructions must take account of all circumstances likely to be encountered on the flight, including the failure of one or more of the burners				
	c.	System for maintaining fuel records				
	d.	the general principles of calculating available lift				
	e.	Responsibilities and the use of the operator's flight folio must be described;				
	f.	List of documents, forms and additional information to be carried on board the balloon and the vehicle.				
	2.	Ground handling instructions, as applicable to the operation:				
	a.	a description of fuelling procedures, including safety precautions during refueling.				
	b.	procedures to ensure that persons, who appear to be intoxicated or who demonstrate by manner or physical indications that they are under the influence of drugs, are refused embarkation.				
	3.	Flight procedures, as applicable to the operation:				
	a.	a description of the policy for ensuring flights are conducted under VFR				
	b.	the area and type of operation being undertaken				
	c.	the phase of the flight				
	d.	circumstances in which a radio listening watch is maintained; when operating in close proximity of controlled airspace				
	e.	instructions on:				
	i.	the use of normal checklists and the timing of such use				
	ii.	altimeter setting procedures				
	f.	policy and procedures for inflight fuel management				

	g.	procedures for reporting and avoiding potentially hazardous atmospheric conditions, including e.g., thunderstorms, turbulence, heavy precipitation, mountain waves and significant temperature inversions				
	h.	the contents and timing of appropriate passenger briefings including:				
	i.	landing positions				
	ii.	the use of mobile phones				
	iii.	Non-interference with pilot equipment and control lines				
	iv.	no smoking				
	v.	stowing of cameras, binoculars, etc., for landing				
	vi.	disembarking procedures				
	i.	lists of the survival and emergency equipment and the procedures to ensure such equipment has been inspected and/or is functioning properly prior to departure.				
2.1.11	Handling of Aviation Accidents and Incidents					
	1.	Procedures for the handling, notifying and reporting of aviation accidents and incidents, this section must:				
	a.	Definitions of aviation accidents and incidents and the relevant responsibilities of all persons involved.				
	b.	The description of which operator departments, authorities or other institutions have to be notified by which means and in which sequence in case of an aviation accident.				
	c.	A description of the requirements to report specific aviation accidents and incidents.				
	d.	The forms used for reporting and the procedure for submitting them to the relevant authority must also be included.				
	e.	If the operator develops additional safety related reporting procedures for its own internal use, description of the applicability and related forms to be used.				
2.2	PART 2: BALLOON OPERATING MATTERS (SIZE RELATED)					
	Taking account of the differences between sizes under the following headings, all relevant sections applicable may be referenced to the balloon flight manual.					
2.2.1	Limitations					
	A description of the certified limitations and the applicable operational imitations including					
	a.	certification status				
	b.	flight crew composition; except in training operations				
	c.	wind limits				
	d.	performance limitations				
2.2.2	Normal Procedures					
	The normal procedures and duties assigned to the flight crew and the appropriate checklists and the system for use of the checklists. The following normal procedures and duties must be included, where deemed necessary for operator specific requirements:					
	a.	pre-flight				
	b.	pre-takeoff				

	c.	altimeter setting and checking				
	d.	take-off				
	e.	flight				
	f.	landing				
	g.	post landing.				
2.2.3	Abnormal, emergency and supplementary procedures					
	The abnormal, emergency and supplementary procedures and duties assigned to flight crew. The following abnormal and emergency procedures and duties shall, if applicable, be included:					
	a.	flight crew incapacitation				
	b.	fire drills				
	c.	distress communications and alerting other aircraft to emergencies				
	d.	emergency landing				
	e.	emergency evacuation				
	f.	There is a procedure that includes the above to form part of the passenger briefing procedure, due to the specific operation of a balloon operator; i.e. single pilot operation				
2.2.4	Flight planning					
	Data and instructions necessary for pre-flight and in-flight planning, including factors such as:					
	a.	Weather				
	b.	Applicable ERP				
	c.	Predicted flight path				
	d.	Mass and loading calculation				
	e.	Fuel loadings				
	f.	Airspace usage				
	g.	Land owners relations (Take-off and landing)				
2.2.5	Emergency equipment					
	1.	A list of the survival equipment to be carried on all balloons				
	2.	procedures for checking the serviceability of this equipment prior to take-off				
	3.	Instructions regarding the location, accessibility and use of emergency equipment and its associated checklist(s)				
2.2.6	Emergency response procedures					
	1.	Instructions for preparation for emergency landing and the ERP				
	2.	A description of the duties of the pilot and members of the supporting ground crew for the rapid evacuation of a balloon in the event of an emergency landing				
2.3	PART 3: TRAINING					
	1.	Training syllabi and checking programs for flight crew members and supporting ground crew members programs shall include:				
	a.	for flight crew members, all relevant items prescribed in Part 69				
	b.	for operations personnel, other than flight crew members, all relevant items pertaining to their duties				
	2.	Procedures:				
	a.	for training and checking				

	b.	to be applied in the event that personnel do not achieve or maintain the required standards				
	c.	to ensure that abnormal or emergency situations, requiring the application of part or all of abnormal or emergency procedures, are not simulated during commercial flights				
	3.	Description of documentation to be stored and storage periods				