

 <p>PHONE: 263 4 585018 263 4 585073- 88 FAX: 263 4 585100 E-mail: ais@caaz.co.zw Website: www.caaz.co.zw</p>	<p>CIVIL AVIATION AUTHORITY OF ZIMBABWE</p> <p>AERONAUTICAL INFORMATION SERVICES P. BAG 7716 CAUSEWAY, HARARE</p>	<p>AIC</p> <p>A004/11</p> <p>07 MAR 2011</p>
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AERONAUTICAL INFORMATION CIRCULAR

OPERATIONS OF AIRCRAFT SUPPLEMENTARY REQUIREMENTS

1.1 AUTHORITY OF AUTHORISED PERSON

In addition to any specific power granted to or duty imposed on an authorised person under any part of the regulations, such authorised person may –

- (a) require the pilot of an aircraft to furnish his or her name and address and any other particulars concerning his or her identity;
- (b) require any person on an aerodrome or in an aircraft, aircraft factory or civil aviation related facility to furnish his or her name and address and any other particulars concerning his or her identity and to furnish such information as is at his or her disposal concerning the identity of the pilot or owner of any aircraft, or the owner of any aerodrome, aircraft factory or civil aviation related facility;
- (c) require the owner or operator of an aircraft to furnish such information as may be necessary concerning the identity of the pilot of the aircraft at any time or during any particular period;
- (d) call upon any person required by the regulations to be the holder of a licence, certificate, permit, approval or authorisation or, in the case of a flight crew member or an aircraft maintenance engineer, his or her log-book, for inspection within a reasonable time to be stipulated by such authorised person.
- (e) Call upon the owner, operator or pilot-in-command of any aircraft to produce or cause to be produced for inspection any licence, certificate, manual, log-book or other document relating to the aircraft; and

- (f) enter any premises for the purposes of inspecting any aircraft, aircraft factory, aerodrome, civil aviation related facility, aircraft component, aircraft equipment, licence, certificate, permit, approval, authorisation, register, book or document which he or she believes to be on such premises.

Provided that before such authorised person exercises the power granted in paragraph (f), he or she shall obtain the prior approval of the Authority. Such authorized persons may be individuals other than staff members of the Authority including but not limited to Designated Dangerous Goods inspector and Medical Assessor. Methods of alleviating conflict of Interest shall be employed where the Authority deems this to be necessary.

1.2 REQUIREMENTS FOR DANGEROUS GOODS PROCEDURES AND TRAINING PROGRAMMES

- (a) air operators shall develop procedures for retaining the Notification to Captain (NOTOC) on the ground and readily accessible at the aerodromes of last departure and next scheduled arrival for each of its flights on which dangerous goods are carried;
- b) air operators authorized to transport dangerous goods shall establish in-flight procedures for emergency response for aircraft incidents involving dangerous goods;
- (c) dangerous goods training programmes of air operators are subject to be reviewed and approved by the CAAZ;
- (d) air operators who choose not to transport dangerous goods by air shall develop and implement training programmes for ground and flight personnel to enable them to recognize and refuse dangerous goods .
- (e) air operators shall develop procedures to convey information to emergency services and to appropriate authorities in the event of an incident or accident of an aircraft carrying dangerous; and
- (f) specific dangerous goods training programmes shall be established and maintained by:
 - 1. Shippers of dangerous goods, including packers and shippers' agents
 - 2. Air operators
 - 3. Agencies which perform, on behalf of the air operator the act of accepting, handling, loading, unloading, transferring or other processing of cargo
 - 4. Agencies located at an aerodrome which perform, on behalf of the air operator, the act of processing passengers
 - 5. Agencies not located at an aerodrome which perform, on behalf of the air operator, the act of checking in passengers

6. Agencies other than air operators involved in processing cargo
7. Agencies engaged in the security screening of passengers and their baggage

1.3 REQUIREMENTS FOR FLIGHT DATA RECORDERS

Operators shall as part of their FDA programs establish and maintain an up to date and sufficient documentation concerning FDR parameter allocation, conversion equations, periodic calibration and other serviceability/maintenance information and ensure their availability to aircraft accident investigators. Sufficient documentation is necessary to avail to investigation authorities necessary information to read out the data in engineering units.

1.4 OPERATIONS MANUAL

Air operators shall address, in their operations manuals, all provisions of Annex 6 to the Chicago Convention, including:

- a) procedures for flight crew to record and report on routine meteorological observation and on volcanic activity,
- b) procedures for the preparation and dissemination of the information contained in the Aeronautical Information Publication (AIP), and in the Aeronautical Information Circular (AIC) to flight crew and operations personnel.
- c) instructions on the clarification and acceptance of air traffic control clearances, particularly where terrain clearance is involved.

1.5 REQUIREMENTS FOR CABIN CREW INSTRUCTORS AND EXAMINERS

- a) Operators are required in their manuals to specify the minimum requirements for
- b) selection and appointment of cabin crew instructors and inspectors.
- c) Operators must ensure cabin crew instructors and inspectors maintain their knowledge, skills and qualifications.

1.6 QUALIFICATION OF FLIGHT DISPATCH/ FLIGHT OPERATIONS OFFICERS GROUND INSTRUCTORS

Air operators shall maintain, on a recurrent basis, the knowledge, skills and qualifications of flight dispatch/flight operations officers ground instructors.

1.7 GROUND HANDLING RESPONSIBILITIES

- a) Operators shall establish an organizational structure which includes the responsibilities and authority for the management of all ground handling functions prior to the issuance of an AOC, and
- b) have developed aircraft ground handling training requirements, subcontracting policies, handling processes, procedures and practices for all ground handling operations.

1.8 AIRCRAFT OPERATING MANUAL

In addition to the AOM requirements contained in 9.3.1.4, operators are required to establish checklists as an integral part of their Standard Operating Procedures and to instruct crews on how to use them.

1.9 AERIAL WORK: AIR AMBULANCE SERVICE OPERATIONS

GENERAL

Applicability

This part shall apply to -

- (a) aircraft engaged in commercial and non-commercial air ambulance service operations within Zimbabwe;
- (b) aircraft registered in Zimbabwe and engaged in commercial and non-commercial international air ambulance service operations;
- (c) persons acting as flight deck crew and medical personnel of the aircraft operated in terms of this part ; and
- (d) persons acting as operations personnel in respect of any air ambulance service operation carried out in terms of this part .

Requirements For Commercial Air Ambulance Service Operations

The operator of an aircraft engaged in a commercial air ambulance service operation, shall not operate the aircraft unless such operator is the holder of a valid -

- (a) air services permit
- (b) air operator certificate

OPERATING RULES

Manual of Procedure

The owner or operator of an aircraft engaged in an air ambulance service operation shall compile a manual of procedure in accordance with the provisions of the regulations, for the use and guidance of flight deck crew, medical personnel and operations personnel.

Competence of Personnel

The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that all flight deck crew, medical personnel and operations personnel are properly instructed, have demonstrated their abilities in their particular duties and are

aware of their responsibilities and the relationship of such duties to the operation as a whole.

Quality Control System

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall establish a quality control and supervision of the air ambulance service provided.
- (b) The quality control system shall be established in consultation with the body or institution designated by the Authority in terms of the Regulation.

FLIGHT DECK CREW

Composition of Flight Deck Crew

- (a) If the owner or operator of an aircraft engaged in an air ambulance service operation only operates by day, such owner or operator shall assign a minimum of two pilots to each aircraft used in a particular air ambulance service operation.
- (b) If the owner or operator operates the air ambulance service operation by day and by night, such owner or operator shall assign a minimum of four pilots to each aircraft used in a particular air ambulance service operation: Provided that the owner or operator may assign less pilots than the number prescribed in this regulation-
 - (i) if the provisions of this subpart are complied with; and
 - (ii) the flight time and duty scheme of the operator is complied with.

Pilot Qualifications

The pilot of an aircraft engaged in an air ambulance service operation shall-

- (a) be the holder of a –
 - (i) commercial pilot licence (aeroplane);
 - (ii) airline transport pilot licence (aeroplane)
 - (iii) commercial pilot licence (helicopter); or
 - (iv) airline transport licence (helicopter),as the case may be; and
- (b) be the holder of a valid night rating ;
- (c) in the case of a helicopter engaged in an air ambulance service operation, have completed not less than 2000 hours flight time as pilot – in-command of a helicopter , of which not less than –
 - (i) 5 hours shall be as pilot-in-command at the controls of the type of helicopter operated; or
 - (ii) 10 hours shall be as pilot-in-command at the controls of the helicopter , if the helicopter is the first multi-engine type helicopter to be flown by such pilot;
- (d) in the case of an aeroplane engaged in an air ambulance service operation, have completed not less than 2 000 hours flight time as pilot-in-command of an aeroplane , of which not less than –
 - (i) 500 hours shall be as pilot-in-command of a multi-engine aeroplane;
 - (ii) 100 hours shall be night flight time ; and
 - (iii) 25 hours shall be as pilot-in-command of an aeroplane of the same type as the type which is used in the air ambulance service operation; and

- (e) have successfully completed the training referred to in the Subpart below.

TRAINING

General

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall establish and maintain an approved training programme for all flight deck crew members in his, her or its employ.
- (b) The owner or operator shall ensure that each flight deck crew member and medical personnel member receives training in accordance with this subpart and the appropriate syllabus.

For the purposes of this subpart, a medical personnel member shall be deemed to be in the employ of the owner or operator if the medical personnel member is assigned to flight duties by such owner or operator; irrespective of whether such medical personnel member is enumerated by such owner or operator.

Initial Training Of Flight Deck Crew

The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that an approved recurrent training programme is included in the manual of procedure.

Recurrent Training Of Flight Deck Crew

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that a recurrent training programme is included in the manual of procedure .
- (b) All recurrent training shall be conducted by a competent person.
- (c) The owner or operator shall ensure that each flight deck crew member undergoes the prescribed recurrent training.
- (d) On the successful completion of the recurrent training, the owner or operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such a certificate is issued.
- (e) The owner or operator shall, if the flight deck crew concerned does not successfully complete the recurrent training, remove such flight deck crew member from flight duties until he or she has successfully completed such recurrent training.

Initial training of medical personnel

The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that a medical personnel member, prior to being assigned to the air ambulance service operation, successfully completes an approved initial training.

Recurrent training of medical personnel

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that an approved recurrent training programme is included in the manual of procedure.
- (b) All recurrent training shall be conducted by a competent person.

- (c) An owner or operator shall ensure that each flight deck crew member undergoes recurrent training.
- (c) On the successful completion of the recurrent training, the owner or operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (d) The owner or operator shall, if the medical personnel member concerned does not successfully complete the recurrent training, remove such medical personnel member from flight duties until he or she has successfully completed such recurrent training.

Training assistance to operations personnel

The owner or operator of an aircraft engaged in an Air Ambulance Service operation shall provide the prescribed training assistance as in respect of all operations personnel including law enforcement personnel, hospital staff, flight dispatchers and radio operators.

DOCUMENTATION AND RECORDS

Manual Of Procedure

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall complete a manual of procedure setting out the manner in which such owner or operator will operate the air ambulance service operation; provided that if the operator is engaged in a commercial air ambulance service operation, the operations manual of the operator shall be deemed to be the manual of procedure for the purposes of this part.
- (b) The owner shall, prior to commencing an air ambulance service operation, submit the manual of procedure in duplicate to the Authority for approval.
- (c) If the Authority is satisfied that the owner will operate the air ambulance service operation in accordance with the provisions in this part, the Authority shall certify in writing, on both copies of the manual of procedure, that such manual of procedure has been approved and shall return one copy of such manual of procedure to the owner.
- (d) The owner shall submit an amendment to the manual of procedure in duplicate to the Authority for approval.
- (e) If the Authority is satisfied that the owner will comply with the provisions of this part, the Authority shall certify in writing on both copies of the amendment to the manual of procedure that such amendment has been approved, and shall return one copy of the approved amendment to the owner.
- (f) The owner shall at times operate the air ambulance service operation in accordance with the manual of procedure or an amendment thereto.
- (g) The owner shall-
 - (i) ensure that all operations personnel are able to understand the technical language used in those sections of the manual of procedure which pertain to their duties;
 - (ii) ensure that every flight is conducted in accordance with the manual of procedure and that those parts of the manual which are required for the conduct of a flight, are easily accessible to the flight deck crew and medical personnel on board the aircraft;

- (iii) make the manual of procedure available for the use and guidance of operations personnel;
 - (iv) provide the flight deck crew and medical personnel with their own personal copy of the sections of the manual of procedure which are relevant to the duties assigned to them;
 - (v) keep the manual of procedure up to date;
 - (vi) keep the manual of procedure in a safe place.
- (h) The structure and contents of the manual of procedure shall be as prescribed.
 - (i) The manual of procedure shall be reviewed every six months and updated in accordance with the quality control system established by the owner or operator in terms of the regulations .

Training records

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall return records of all –
 - (i) training undertaken by the flight deck crew and medical personnel in his, her or its employ , and such records shall incorporate certificates indicating the completion of such training; and
 - (ii) training assistance provided to the operations personnel .
- (b) The owner or operator shall retain the records of each flight deck crew member, medical personnel member and operations personnel member for a period of at least 12 months from the date on which the flight deck crew member , medical personnel member or operations personnel member has left the employ of such owner or operator.
- (c) The certificate referred to in sub regulation (a) shall be made available by the owner or operator to the flight deck crew member or medical personnel member concerned on request.
- (d) All training successfully completed by a flight deck crew member or medical personnel member, shall be recorded by the flight deck crew member or medical personnel member in his or her log book or file, as the case may be.

Presumption

For the purposes of this subpart, a medical personnel member shall be deemed to be in the employ of the owner or operator if the medical personnel member is assigned to flight duties by such owner or operator, irrespective of whether such medical personnel member is remunerated by such owner or operator.

INSTRUMENTS AND EQUIPMENT

General

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that the aircraft which is to be used in the air ambulance service operation, is configured in such a way that-
 - (i) the medical personnel members have access to a patient in order to begin and maintain basic and advanced life-support treatment ; and
 - (ii) there is access and the necessary space to ensure that the patient's airway is maintained, and that adequate ventilatory support from the secured seat-belted position of the medical personnel , is provided.

- (b) All equipment, supplies and other items in the aircraft shall be-
 - (i) properly secure ; and
 - (ii) so positioned that they do not , or are not likely to, cause injury to any person on board the aircraft.
- (c) Medical equipment in the aircraft shall function without interfering with the avionic equipment of the aircraft and such avionic equipment shall not interfere with the functioning of the medical equipment.
- (d) If the owner or operator has to modify the aircraft in order to comply with the provisions of this subpart, such owner or operator shall obtain prior written approval from the Authority for such modification.
- (e) the design and configuration of an aircraft which is to be used in an air ambulance service operation shall not compromise patient stability or the functioning of medical equipment while loading or unloading.

Patient restrains and stretchers

The owner or operator of an aircraft engaged in an air ambulance service operation shall not operate the aircraft unless such aircraft is equipped with –

- (a) an approved restraining strap for each patient;
- (b) an additional restraining device for a child or small adult who will not be adequately restrained with the restraining strap referred to in paragraph (a);
- (c) a stretcher and mounting system which is strong enough to support a person weighing not less than 100 kilograms, and which is sufficiently rigid to withstand the forces incurred during cardiopulmonary resuscitation;
- (d) a device to protect the pilot , aircraft controls and radios from any interference whatsoever by the patient , medical personnel or medical equipment on board the aircraft.

Incubator

If an aircraft engaged in an air ambulance service operation is equipped with an incubator, the incubator shall be properly secured in position.

Oxygen and other gases

- (a) If an aircraft engaged in an air ambulance service operation is equipped with gas cylinders for medical purposes , the cylinders shall –
 - (i) be carried in accordance with the provisions of the regulations; and
 - (ii) if the cylinders are inside the cabin, be positioned in such a way that no part of the fitment constitutes a hazard to any person inside the cabin , the pressure gauges are fitted and visible for use , and shut-off and change-over valves are installed inside the cabin.
 - (iii) if the cylinders are positioned outside the cabin , be positioned in such a way that the in-line pressure gauges are visible for use and shut-off and change over valves are installed inside the cabin.
- (b) All portable gas cylinders shall be properly secured during flight.
- (c) All gas outlets shall be clearly marked for identification.
- (d) The owner or operator shall serialise and keep a register of all oxygen bottles used on board the aircraft.

Intravenous fluids

- (a) Intravenous glass containers shall not be used in an aircraft engaged in an air ambulance service operation unless required by medical specifications.

- (b) An adequate supply of conveniently placed hangers or hooks shall be available and all such supports shall be soft, padded or flush mounted to prevent head trauma to any person on board the aircraft in the event of a hard landing or an emergency situation.

Cardiac monitoring and defibrillating equipment

If an aircraft engaged in an air ambulance service operation is fitted with cardiac monitoring and defibrillating equipment, such cardiac monitoring and defibrillating equipment shall be positioned in such a manner that the screen can be easily read and the machine be readily accessible in the event of a medical emergency.

Lighting and electrical equipment

- (a) Adequate lighting equipment shall be provided in the patient care area.
- (b) Portable lighting equipment for use in the event of a failure of the main electrical system shall be provided.
- (c) The cockpit or flight deck, as the case may be, shall be screened from lights in the patient care area during night operations.
- (d) The electrical outlets 28v DC and 115v AC shall be provided to accommodate specialised medical equipment.
- (e) The electrical outlets referred to in sub regulation (d) shall have sufficient capacity to power all medical equipment without compromising the operation of the normal aircraft equipment.

Interphone system

The owner or operator of an aircraft engaged in an air ambulance service operation shall not operate the aircraft unless such aircraft is equipped with an interphone system which provides a means of two-way communication between the flight deck crew members and medical personnel members and from which the pilot is able to isolate himself or herself.

Supplementary equipment

The owner or operator of an aircraft engaged in an air ambulance service operation shall not operate the aircraft unless such aircraft is equipped with floor sealing measures to protect such aircraft against fluid contamination

Communication equipment

The owner or operator of an aircraft engaged in an air ambulance service operation shall not operate the aircraft unless such aircraft is equipped with a radio capable of communicating with the dispatching base and other emergency medical services.

FLIGHT OPERATIONS

Dispatching Base

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that a competent person with a thorough understanding of aviation, air traffic service, safety and emergency procedures, navigation techniques and the influence of weather, is assigned to the dispatching base.
- (b) The owner or operator shall ensure that the dispatching base has at its disposal for immediate use, a detailed aeronautical map of the area covered by the operation, a copy of the local emergency procedures and a list of telephone numbers of all relevant contact persons.

Infection control

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that each person in his, her or its employ-
 - (i) is familiar with any infection control procedure which may apply in respect of the aircraft; and
 - (ii) takes appropriate precautions before performing duty on or cleaning such aircraft.
- (b) Any flight deck crewmember of an aircraft engaged in an air ambulance service operation shall wear gloves and take appropriate protective measures, including eye and mouth protection, when in contact with a patient on board the aircraft.

Unprepared landing areas;

- (a) The pilot-in-command of a helicopter engaged in an air ambulance service operation, may land by day at any suitable and safe landing area if such landing area –
 - (i) is large enough to permit a safe approach and take-off;
 - (ii) has been secured against the public prior to landing ; and
 - (iii) has been cleared of ground debris.
- (b) The pilot-in-command shall ensure that the power required for an approach to, landing at and take-off from an unprepared landing area with the load, is within the helicopter performance limitations specified in the aircraft flight manual.
- (c) The pilot-in-command shall only land on a public road if –
 - (i) no other viable alternative exists;
 - (ii) all other traffic has been brought to a complete stop; and
- (d) law enforcement personnel is on hand to secure the landing area.

Loading and unloading

The pilot-in-command of a helicopter engaged in an air ambulance service operation shall only perform the loading or unloading of a patient with rotors turning –

- (a) under strictly controlled circumstances;
- (b) in times of a serious emergency ; and
- (c) if the loading or unloading of a patient is undertaken by appropriately trained personnel.

Night flying

The pilot-in-command of a single-engine helicopter used in an air ambulance service operation shall not undertake any air ambulance service flight by night.

High altitude flights

The owner, operator or pilot-in-command of an unpressurised aircraft engaged in an air ambulance service operation shall, in consultation with the medical personnel members, determine whether altitude limitations need to be imposed on the flight deck crew members and medical personnel members on board the aircraft.

MAINTENANCE

General

- (a) The owner or operator of an aircraft engaged in an air ambulance service operation shall not operate the aircraft unless such aircraft is maintained in accordance with the regulations in Part 5 of the regulations.

- (b) The owner or operator of an aircraft engaged in an air ambulance service operation shall ensure that any person involved in the maintenance of the aircraft has, and any such person shall have, a thorough knowledge of the interior modifications to, and medical fitments of, such aircraft.
- (c) The maintenance of the aircraft shall be carried out in accordance with any infection control measure which may apply in respect of such aircraft.

Maintenance of medical equipment

Maintenance of an aircraft engaged in an air ambulance service operation, carried out in accordance with the regulations in Part 5, shall not include the maintenance of any medical equipment fitted to, or installed in, the aircraft.



D.Chawota
General Manager

This AIC is issued for information, guidance and necessary action.