Operation without position lights

137.02.4 Notwithstanding the provisions of Part 91, the pilot of an aircraft performing an agricultural operation may operate at night without aircraft position lights if-

- (a) it is in the interest of aviation safety to turn the lights off due to operating conditions;
- (b) prominent unlighted objects are visible for not less than 1 850 metres;
- (c) take-offs and landings at aerodromes with an aerodrome control service are performed in accordance with an air traffic control clearance; and
- (d) take-offs and landings at other aerodromes are not made while other aircraft operations requiring position lights are in progress at that aerodrome.

Operation over populous areas

137.02.5 The pilot of an aircraft in an agricultural operation over a populous area may, for the proper completion of the operation, fly below the minimum height prescribed in Part 91 if –

- the operation is conducted on behalf of a Government department;
- (b) prior approval is obtained from the Director and the operation is conducted in accordance with conditions and limitation determined by the Director;
- (c) the operation is conducted under the authority of an operating certificate issued as contemplated in regulation 137.01.3(b); and
- (d) the holder of the operating certificate has complied with regulation 137.04.3.

Operation over non-populous area

137.02.6 Notwithstanding the provisions of Part 91, the pilot of an aircraft engaged in an agricultural operation may, during or for the purposes of the operation, fly at any altitude and at any distance from an obstruction if –

- (a) the operation is not conducted over a populous area;
- (b) the operation is conducted without creating a hazard to persons or property on the ground; and
- (c) the altitude and distance for all approaches, turns and departures are necessary for the operation.

Fuel reserves

137.02.7 Notwithstanding the provisions of Part 91, the pilot of an aircraft engaged in an agricultural operation shall ensure that the aircraft has the following minimum fuel reserves:

(a) for aeroplanes, 30 minutes flight time;

(b) for helicopters, 3 times the anticipated flight time or 30 minutes flight time, whichever is the lesser.

SUBPART 3: SPECIAL FLIGHT RULES

General

137.03.1 This subpart prescribed exceptions to the general operating and flight rules in Part 91, for the pilot of an aeroplane issued with a restricted category certificate of airworthiness in terms of Part 21, engaged in an agricultural operation.

Maximum certificated mass

- 137.03.2 (1) Notwithstanding the provisions of Part 91 and subject to sub-regulation (2), the pilot of an aeroplane engaged in an agricultural operation, may take-off at a mass greater than the MCM specified in the aeroplane flight manual if the pilot complies with the requirements as prescribed in Document SA-CATS 137.
- (2) Where there is a third party risk as specified in Document SA-CATS 137, the pilot shall determine the maximum take-off mass from the requirements prescribed in regulations 137.03.3 and 137.03.4.

Take-off distance and flight path

- 137.03.3 (1) Where there is a third party as specified in Document SA-CATS 137, the pilot of an aeroplane engaged in an agricultural operation shall, notwithstanding the provisions of Part 91 and subject to sub-regulation (2), ensure that the take-off distance available is greater than the take-off distance specified in the aeroplane flight manual, multiplied by a factor of 1.2.
- (2) When calculating the take-off distance, the pilot shall take the following factors into account:
 - (a) The mass of the aeroplane at the commencement of the take-off run;
 - (b) the pressure altitude of the aerodrome;
 - (c) the ambient temperature at the aerodrome;
 - (d) the runway surface type and condition;
 - (e) the runway slope in the direction of take-off; and
 - (f) not more than 50% of the headwind component or not less than 150% of the tailwind component.
- (3) Where there is no third part at risk as specified in Document SA-CATS 137, the pilot is not required, notwithstanding the provisions of Part 91, to comply with
 - (a) the take-off distance specified in the aeroplane flight manual; and

(b) where applicable, the take-off flight path gradient specified in the aeropiane flight manual.

Take-off flight path

- **137.03.4** (1) Where there is a third party risk as defined in Document SA-CATS 137, the pilot of an aeroplane engaged in an agricultural operation shall ensure that, notwithstanding the provisions of Part 91, the take-off flight path clears all obstacles by
 - (a) a vertical distance of at least 50 feet plus 0.025D; or
 - (b) a lateral distance of at least 30 metres plus 0.1D, where D is the horizontal distance travelled by the aeroplane from the end of the take-off distance available.
- (2) When calculating compliance with sub-regulation (1), the pilot shall take the following factors into account:
 - (a) The take-off flight path shall begin at a height of 50 feet above the take-off surface at the end of the take-off distance required by regulation 137.03.3(1) and (2) and end at a height of 500 feet above the take-off surface;
 - (b) the aeroplane shall not be banked at an angle exceeding 20 degrees; and
 - (c) obstacles which have a lateral distance greater than 150 metres from the planned flight path may be disregarded.

SUBPART 4: COMMERCIAL OPERATIONS

Records

- **137.04.1** (1) A holder of an operating certificate shall maintain the following records at the principal place of operation:
 - (a) The name and address of each client;
 - (b) the date of each agricultural operation;
 - the name and quantity of the material dispensed during each agricultural operation;
 - (d) the name, address, licence number, and rating details of the pilot concerned;
 - (e) the date on which an agricultural pilot rating was issued to the pilot concerned.
- (2) The records shall be retained for a period of not less than 12 months from the date on which the operation is completed.

Remote base operations

137.04.2 The holder of an operating certificate who operates an aircraft engaged in an agricultural operation, from a base other than the principal place of operation, for a period of 14 or more consecutive nights, shall appoint a base pilot who —

- (a) holds a valid agricultural pilot rating;
- (b) is responsible for the operations from that remote base; and
- (c) may be responsible for arranging work rosters and maintaining records.

Operations over populous areas

137.04.3 The holder of an operating certificate who wishes to operate an aircraft engaged in an agricultural operation over a populous area shall –

- (a) prepare a plan of the operation, in conjunction with, and for the briefing of, all personnel and organisations involved in the operation, containing
 - (i) consideration of obstructions to flight;
 - (ii) the emergency landing capabilities of the aircraft used; and
 - (iii) and co-ordination necessary with the ATSU concerned;
- (b) give prior written notification to the local government in whose jurisdiction the operation is to be performed;
- (c) give notice of the operation to the public by an effective means;
- (d) ensure maximum safety to persons and property on the ground, consistent with the operation; and
- (e) ensure that the aircraft has, within the preceding 100 hours of time in service
 - (i) had a mandatory periodic inspection; or
 - (ii) been inspected under a progressive inspection programme, in accordance with the regulations in Part 43.

PART 138: AIR AMBULANCE OPERATIONS

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SUBPART 1: GENERAL

Applicability

138.01.1 (1) This Part applies to -

- (a) aircraft registered in the Republic and engaged in commercial air ambulance operations;
 - (b) foreign-registered aircraft operated by an air service operator licensed in terms of the Air Services Licensing Act, 1990 or the International Air Services Act, 1993 and engaged in commercial air ambulance operations;

- (c) foreign-registered aircraft utilised in commercial air ambulance operations to transport one or more patients within or out of the Republic; and
- (d) persons acting as flight crew members, operations personnel and medical personnel in respect of any air ambulance operation carried out in terms of this Part
- (2) The provisions of Part 91, Part 121, Part 127 and Part 135 shall apply with the necessary changes to any aircraft operated in terms of this Part.

Requirements for commercial air ambulance operations

- **138.01.2** (1) The operator of an aircraft engaged in a commercial air ambulance operation, shall not operate the aircraft unless such operator is the holder of a valid
 - (a) Class ill, type G7 licence issued in terms of the Air Services Licensing Act,
 1990, or the International Air Services Act, 1993,; and
 - (b) operating certificate issued in terms of Part 121, Part 127 or Part 135, as the case may be, and endorsed for operations in terms of Part 138; or
 - (c) in the case of a foreign-registered aircraft, a foreign operator's permit issued in terms of the International Air Services Act, 1993).
- (2) Only aircraft that has been certified on its certificate of airworthiness for use as air ambulance may be used in commercial air ambulance operations.
- (3) An operator, engaged in commercial air ambulance operations who wishes to utilise an aircraft that has not been certified for air ambulance operations as a substitute for one of its certified aircraft, shall utilize such aircraft for a maximum of seven (7) consecutive days only or during a period of maximum fourteen (14) days, provided that such aircraft is essentially configured according to the provisions of this Part.
- (4) In the event that it is not be possible to adhere of the conditions, prescribed in sub-regulation (3) above, the operator shall obtain approval from the Director for the utilisation of the aircraft which is not certified for air ambulance operation.

SUBPART 2: FLIGHT CREW

Pilot qualifications

- 138.02.1 (1) The pilot of an aircraft engaged in air ambulance operations shall
 - (a) as a minimum be the holder of a valid CPL with night rating appropriate to the category and type of air ambulance aircraft and the mission to be flown;
 - (b) have received training and terrain and demonstrated minimum competency for the relevant mission to be flown, as prescribed in the manual of procedure; and
 - (c) have successfully completed the training referred to in Subpart 3.

(2) The manual of procedure of the operator shall set minimum criteria for qualifications of pilots to be used for the missions intended.

Medical qualifications

138.02.2 Medical personnel and medical service providers involved in air ambulance operations shall comply with the relevant legislation and regulations administered by the Department of Health, the Health Professions Council of South Africa and the South African Nursing Council, as the case may be.

SUBPART 3: TRAINING

Training of flight crew, medical personnel and operations personnel

- **138.03.1** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that each flight crew member, medical personnel member or operations personnel member, assigned to an air ambulance operation, has successfully completed the initial or recurrent training, as the case may be, as prescribed in Document SA-CATS 138.
- (2) Notwithstanding the provisions of sub-regulation (1), a medical specialist who is not trained in accordance with these regulations may be taken on a specific air ambulance operation, in addition to the regular medical personnel, for the benefit of the patient.
- (3) The operator shall ensure that all flight crew members, medical personnel or operations personnel, as the case may be, who have not completed the training as referred to in sub-regulation (1), shall have a standard safety briefing pertaining to the aircraft to be used for the operation.
- (4) The owner or operator of an air ambulance operation shall ensure that no flight crew member, medical personnel or operations personnel whose training has expired, is assigned flight duties on an aircraft engaged in an air ambulance operation until such time that such member undergoes recurrent training.
- (5) Notwithstanding sub-regulation (4) above, a flight crew member, medical personnel or operations personnel, as the case may be, may be assigned flight duties without having undergone recurrent training as stipulated in sub-regulation (4) above: Provided that such flight crew member, medical personnel or operations personnel, as the case may be
 - (a) undergoes such recurrent training within a period not exceeding six (6) months.
 from the date of expiry of the preceding training;
 - is, during the period of assignment, assigned to duties with at least one flight crew member, medical personnel or operations personnel, as the case may be, whose training has not expired; and

- (c) has, during the period of assignment, not been off active duty for a period exceeding three (3) months.
- (6) Any training required by this Part shall be conducted in accordance with the relevant requirements of this Part or by an ATO approved in terms of Part 141.

SUBPART 4: MANAGEMENT

Quality assurance system

- **138.04.1** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall have a quality assurance system for the control and supervision of the air ambulance operation in place.
- (2) In respect of the owner or operator of a commercial air ambulance operation, the quality assurance system of the operator referred to in Part 121, Part 127 or Part 135, as the case may be, shall include the quality assurance system as prescribed by this Part.

Manual of procedure

- **138.04.2** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall compile a manual of procedure in accordance with the provisions of this Subpart, for the use and guidance of flight crew, medical personnel and operations personnel, setting out the manner in which such owner or operator will operate the air ambulance operation.
- (2) In respect of an owner or operator of a commercial air ambulance operation, the operations manual of the operator referred to in Part 121, Part 127 or Part 135, as the case may be, shall include the procedures as prescribed by this Part.
- (3) The owner or operator of an aircraft shall, prior to commencing an air ambulance operation therewith, submit in duplicate the manual of procedure to the Director for approval.
- (4) If the Director is satisfied that the aircraft owner or operator will comply with the provisions of this Part, the Director shall certify in writing on both copies of the manual of procedure that such manual has been approved, and shall return one copy of the approved manual to the owner or operator.
- (5) The owner or operator of an aircraft engaged in an air ambulance operation shall submit in duplicate any amendment to the manual of procedure to the Director for approval.
- (6) If the Director is satisfied that the aircraft owner or operator will comply with the provisions of this Part, the Director 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 or operator.

- (7) The owner or operator of an aircraft in an air ambulance operation shall at all times operate the aircraft in accordance with the approved manual of procedure and any approved amendment thereto.
- (8) The owner or operator of an aircraft engaged in an air ambulance operation shall:
 - (a) ensure that those parts of the manual, which are required for the conduct of a flight, are easily accessible to the flight crew and medical personnel on board the aircraft:
 - (b) make the manual of procedure available for the use and guidance of operations personnel;
 - (c) keep the manual of procedure up to date; and
 - (d) keep the manual of procedure in a safe place.
- (9) The structure and contents of the manual of procedure shall be as prescribed in Document SA-CATS 138.
- (10) The manual of procedure shall be reviewed annually and updated in accordance with the quality assurance system established by the owner or operator in terms of regulation 138.04.1.

Training records

- **138.04.3** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall retain records of all training undertaken in terms of this Part by the flight crew, medical and operations personnel in his, her or its employ.
- (2) The records referred to in sub-regulation (1) above, shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such training is given.
- (3) The owner or operator of an aircraft engaged in an air ambulance operation shall retain the records of each flight crew member, medical personnel and operations personnel for a period of at least 12 months from the date on which the flight crew member, medical personnel or operations personnel has left the employ of such owner or operator.

Presumption

138.04.4 For the purposes of this subpart, a medical personnel member shall be deemed to be in the employ of the owner or operator of the air ambulance aircraft 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 or not.

SUBPART 5: INSTRUMENTS AND EQUIPMENT

Aircraft configuration

138.05.1 (1) The owner or operator of an aircraft engaged in air ambulance operations shall ensure that the cabin of the aircraft –

- (a) has an entry which allows loading of the patient without excessive manoeuvring and which is not greater than 45 degrees tilt along the lateral axis and not greater than 30 degrees tilt along the longitudinal axis;
- (b) has an entry that allows loading or unloading without compromising the functioning of the monitoring systems, IV lines and manual or mechanical ventilation; and
- (c) must be able to accommodate volumetrically, as a minimum:
 - one stretcher unit large enough to carry a 95 percentile patient full length in supine position (6ft / 1.8m stretcher);
 - (ii) two medical personnel, with sufficient access to the patient from a secured seat-belted position; and
 - (iii) all the medical equipment required by the medical service provider for the operation.
- (2) 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 Director for such modification.

Lighting and electrical equipment

138.05.2 The owner or operator of an aircraft engaged in an air ambulance service shall ensure that –

- adequate lighting equipment is provided in the patient care area;
- (b) portable lighting equipment is provided for use in the event of a failure of, or inability to use, the main electrical system;
- (c) the cockpit or the flight deck, as the case may be, is screened from lights in the patient care area during night operations; or alternatively, where such protection is not possible, shall ensure that sufficient light of low intensity is used in the patient care area provided that such lighting does not interfere with the operations of the flight crew;
- (d) without compromising the normal operation of any aircraft equipment, and if required by the medical service provider, there shall be a power source available from the aircraft.

Communication systems

138.05.3 The owner or operator of an aircraft engaged in an air ambulance operation shall not operate the aircraft –

- (a) unless such aircraft is equipped with means to establish two-way communication with the dispatching base; and
- (b) in cases where unaided verbal communication cannot be sustained, unless such aircraft is equipped with an interphone system which provides a means of two-way communication between the flight crew members and medical personnel members and the pilot can isolate himself or herself from such system.

Patient restraints, stretchers and incubators

138.05.4 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall not operate the aircraft unless such aircraft is equipped with —

- (a) an approved restraining strap for each patient; and
- (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), if applicable;
- (c) an incubator, which is properly secured in position, should an incubator be needed for the flight; and
- (d) a stretcher and mounting system which allows for rapid detachment from the base unit.
- (2) The stretcher or incubator shall be positioned such as
 - to allow medical personnel a clear view of, and access to the patient to perform monitoring and therapeutic intervention as needed;
 - (b) not to block access to normal and emergency exits;
 - (c) not to interfere with any operation of any aircraft controls; and
 - (d) not to restrict access to any emergency equipment.
- (3) The attachment of the stretcher or incubator to the aircraft structure shall allow its rapid detachment for evacuation. The stretcher shall be certified for use in an aircraft by the manufacturer or any other recognised certification body which is acceptable to the Director: Provided that all recommendations by such manufacturer or certification body shall be implemented and adhered to for the stretcher to be acceptable to the Director.
- (4) All restraint systems to be used in the aircraft shall be approved by the Director In cases where the certification referred to in sub-regulation (3) cannot be obtained, the operator shall obtain approval from the Director for the use of such stretcher.

- (5) All other restraint systems to be used in the aircraft shall be approved by the Director.
- (6) The operator shall ensure that suitable measures are taken to protect the pilot, aircraft controls, communication and navigation equipment from any interference by the patient, medical personnel or medical equipment on board the aircraft during flight or during loading and unloading.

Medical equipment

138.05.5 The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that –

- (a) any medical equipment, supplies or other items on board of the aircraft are
 - properly secured in accordance with good aviation practices;
 - (ii) so positioned that they do not or are not likely to
 - (aa) cause injury to any person on board of the aircraft;
 - (bb) obstruct access to any regular or emergency exit; or
 - (cc) obstruct access to any emergency equipment.
 - (iii) appropriately certified by the manufacturer thereof for use in an aircraft; and
- (b) prior to flight, any medical equipment, which transmits any signals, has been certified by the manufacturer for use in an aircraft or has been certified by an aviation authority acceptable to the Director for use in an aircraft
 - (i) certified by the manufacturer for use in an aircraft or has been certified by an aviation authority acceptable to the Director for use in an aircraft; and
 - (ii) tested to ensure that it does not interfere with any aircraft system, in particular with the axionic equipment of the aircraft, and that such axionic equipment does not interfere with the proper functioning of the medical equipment.

Oxygen and other gas cylinders

138.05.6 (1) If an aircraft engaged in an air ambulance operation is equipped with gas cylinders for medical purposes, the cylinders shall –

- (a) be carried in accordance with the provisions of Part 92; and
- (b) 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 readily accessible; or
- (c) 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.

- (2) All portable gas cylinders shall be properly secured with approved devices during flight.
- (3) All gas outlets shall be clearly marked for identification as to their function and gas supplied in accordance with the applicable SABS (South African Bureau of Standards) Code of Practice.
- (4) All oxygen and medical gas cylinders used in an air ambulance operation
 - shall have an annual visual and a five-yearly hydrostatic inspection by a testing facility approved for the purpose by the Department of Labour;
 - (b) shall be marked with a sticker denoting approval for "return to service" and "next service due" date, which sticker shall be clearly visible to flight crew and medical personnel;
 - (c) shall, where applicable, bear a stamp of approval from an appropriately approved provider which stamp shall be clearly visible on each cylinder and certifying such cylinder as being approved.
- (5) All oxygen and medical gas cylinders fixed in an air ambulance aircraft shall be maintained as per the manufacturer's specifications.

Intravenous fluids

138.05.7 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; and
- (b) of a design which prevents the accidental release of intravenous containers in the event of turbulence, a hard landing or an emergency situation.

SUBPART 6: FLIGHT OPERATIONS

Control of Operations

138.06.1 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that he or she is aligned with a medical service provider who is compliant with all the relevant legislation administered by the Department of Health to consult with on matters pertaining to —

- (a) the advisability of the transportation by air of the patient;
- (b) the type of air ambulance aircraft required for the transport;
- (c) the level of patient-care required;
- (d) medical equipment needed on board the aircraft; and

- (e) precautions to be taken during the flight and during ground transportation.
- (2) Where the operator of an aircraft is also the medical service provider, such operator shall ensure that the medical aspects of the operation complies with all the relevant requirements as contained in the relevant legislation administered by the Department of Health.
- (3) The medical personnel on board the aircraft shall be responsible for patient care from the time of hand-over by the dispatching medical unit until the time of hand-over to the receiving medical unit.
- (4) The PIC of the aircraft shall at all times be responsible for the safety of the aircraft operation.

Dispatching base

- **138.06.2** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that a person with a reasonable knowledge of aviation, air traffic service, safety and emergency procedures, navigation techniques and the influence of weather is assigned to the dispatching base.
- (2) The owner or operator shall establish an appropriately equipped operations centre from which air ambulance operations are controlled.
- (3) The minimum requirements to be met in respect of paragraph (2) are laid down in Document SA-CATS 138.

Landings

- **138.06.3** (1) The PiC of an aircraft engaged in an air ambulance operation is exempted from the prohibition to land on a public road in terms of regulation 91.06.1(b).
- (2) The PIC of a helicopter engaged in an air ambulance operation is exempted from the restrictions imposed by regulation 91.07.4(2) in terms of sub-regulation (b) of said regulation.
- (3) Notwithstanding the provisions of sub-regulations (1) and (2), the PIC shall make use of these privileges only if no viable alternative landing place exists and while taking extreme care for the safety of the aircraft and property and persons on the ground.
- (4) The manual of procedure of the operator shall clearly state conditions under which landings at non-registered landing areas may be carried out.

Loading and unloading

- **138.06.4** (1) The PIC of a helicopter engaged in an air ambulance operation shall allow the loading or unloading of a patient with the rotors turning only
 - (a) under strictly controlled circumstances overseen by appropriately trained personnel;
 - (b) in times of a serious emergency; and
 - (c) if the loading or unloading of a patient is undertaken by appropriately trained personnel.
- (2) In cases of fixed-wing multi-engine aircraft, the loading or unloading shall be undertaken only if the engine on the side of the exit is switched off.
- (3) Loading or unloading shall not be undertaken in cases of single-engine aircraft.
- (4) The owner or operator shall make provisions in the manual of procedure referred to in regulation 138.04.2 concerning circumstances and procedures for rapid patient loading and unloading.
- (5) Medical personnel shall inform the PIC regarding add-on equipment for calculation of the aircraft's mass and balance.

Night flying

- **138.06.5** The PIC of a heficopter used in an air ambulance operation shall not undertake any air ambulance flight operation by night unless such helicopter is certified for instrument flight and is operated in accordance with its flight manual for instrument flight: Provided that in any other case an air ambulance flight which is operated under VMC
 - (a) may continue to an illuminated hospital stop or an aerodrome approved for night operations for not more than 45 minutes after sun set; and
 - (b) may commence such flight within the 45 minutes before sun rise.

SUBPART 7: OTHER OPERATIONS

Infection control and fluid contamination

- **138.07.1** The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that
 - every employee, before performing duty on, or cleaning an aircraft,
 - is familiar with any infection control procedure which may apply in respect of the aircraft; and

- (ii) has taken appropriate precautions before performing duty on or cleaning such aircraft, as prescribed by the Occupational Safety and Health Act of 1993 (Act No 85 of 1993) and other relevant legislation, and set out in the manual of procedure referred to in regulation 138.04.2;
- (b) such aircraft shall not be operated unless it is equipped with measures to protect the aircraft against bodily fluid contamination;
- (c) the protection measures referred to in paragraph (b) above are set out in the manual of procedures and are compliant with the minimum standards as prescribed in the regulations issued by the Department of Health; and
- (d) the cleaning agents used for cleaning are non-corrosive or non-abrasive to the aircraft.

SUBPART 8: MAINTENANCE

Aircraft maintenance

138.08.1 The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that any person involved in the maintenance of the aircraft has a thorough knowledge of the interior modifications to, and the medical fitments of such aircraft.

PART 139: AERODROMES AND HELIPORTS

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SUBPART 3: LICENSING AND OPERATION OF HELIPORTS

139.03,1	Requirements for a licence
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SUBPART 4: NON-LICENSED HELICOPTER SITES

139.04.1 Approval and operation of non-licensed helicopter sites

SUBPART 1: GENERAL

Applicability

- 139.01.1 (1) This part applies to -
 - (a) the ficensing of areas demarcated for the development of aerodromes;
 - (b) the licensing and operation of aerodromes; and
 - (c) the licensing and operation of heliports.
- (2) No place in the Republic shall be used as a place of landing or departure by an aeroplane with a MCM exceeding 5 700 kilograms, used in commercial air transport operations, unless it has been licensed in terms of the regulations in this part.
- (3) No area on any land, water or building shall be used for the landing or take-off of aircraft if the air traffic in such area will in any way interfere with existing established procedures regarding controlled airspace.

Use of military aerodromes and hellports

- 139.01.2 (1) Subject to the approval of the Minister of Defence, the Director may, upon application in writing by any operator of an aircraft who desires to use a military aerodrome or heliport for civil aviation purposes, authorise the use of the military aerodrome or heliport for such purposes.
- (2) An authorisation referred to in sub-regulation (1) may be granted under such conditions and for such period which the Director may determine, if the Director is satisfied that the use of such military aerodrome or heliport by such operator will not jeopardise aviation safety.

Restrictions

- **139.01.3** The Director may impose restrictions as to the use of an aerodrome or a heliport and may limit or totally prohibit the operation of any aircraft
 - (a) not equipped with radio equipment;
 - (b) the radio equipment of which is not complementary to the radio equipment installed for the control of air traffic at such aerodrome or heliport, if the Director is satisfied that such restriction, limitation or prohibition is necessary in the interests of aviation safety.

Publication of restrictions and deviations

139.01.4 The Director shall, upon the -

- (a) imposition of any restriction, limitation or prohibition referred to in regulation 139.01.3;
- (b) issuing of an aerodrome licence in terms of regulation 139.02.16;
- (c) renewal of an aerodrome licence in terms of regulation 139.02.17;
- (d) issuing of a heliport licence in terms of regulation 139.03.13; or
- (e) renewal of a heliport licence in terms of regulation 139,03.17,

publish in an AIP, according to the provisions of Part 175 –

- (i) particulars of the restriction, limitation or prohibition referred to in paragraph (a);
- (ii) the category for which the aerodrome is licensed;
- (iii) the restrictions, if any, relating to non-compliance with, or deviations from
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172;
- (iv) the restrictions, if any, relating to non-compliance with, or deviations from --
 - (aa) the appropriate heliport design, operation and equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172;
- (v) limitations on size of aircraft commensurate with the level of AR & FFS provided.

Flights by night

139,01.5 The Director may prohibit flights by night from or at any aerodrome or any heliport at which adequate facilities for night flights are lacking or where the terrain or other objects in the vicinity of the aerodrome or the heliport are such as to endanger operators of aircraft used in night flights.

Register of licences

- **139,01.6** (1) The Director shall maintain a register of all licences of intent, aerodrome licences and heliport licences issued in terms of the regulations in this part.
- (2) The register shall contain the following particulars:
 - (a) The full name and, if any, the trade name of the holder of the licence;
 - (b) the postal address of the holder of the licence;
 - (c) the name and the location of the aerodrome for which the licence was issued;
 - (d) the name and the location of the heliport for which the licence was issued;
 - (e) the proposed name and location of the area demarcated for the development of an aerodrome, for which the licence of intent was issued;
 - (f) the number of the licence issued to the holder;
 - (g) the date on which the licence was issued;
 - (h) file reference numbers of initial and subsequent safety inspection records and audit reports in respect of all aerodromes and heliports licensed; and
 - (i) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence is issued by the Director.

- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Safety and security inspections and audits

- 139.01.7 (1) An applicant for the issuing of an aerodrome or heliport licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits which may be necessary to verify the validity of the application concerned.
- (2) The holder of an aerodrome licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits of such holder's aerodrome, documents and records which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.
- (3) The holder of a heliport licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits of such holder's heliport, documents and records which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Storage of flammable goods

- 139.01.8 (1) Fuel, pyrotechnic stores and all highly flammable matter shall be stored on a licensed aerodrome or heliport only in buildings or receptacles which comply with the appropriate standards prescribed in the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), or any other law.
- (2) Fuel storage facility in and around aircraft hangers or any building must +
 - (a) have at least a 5 meter clean area on all sides;
 - (b) be protected with a bund wall that can contain 110% of the stored content; and
 - (c) comply with SANS 108 and the applicable municipal by-laws.

Safety measures against fire

- 139.01.9 No person shall on a licensed aerodrome or heliport -
 - (a) smoke in, or bring an open flame into -
 - (i) any place where such an act is prohibited by a notice displayed; or

- (ii) any place within 15 metres of an aircraft or of any vehicle used for the supply of fuel to an aircraft or a store or dump or liquid fuel or explosives;
- (b) wilfully give a false fire alarm;
- (c) tamper or interfere with any fire hose reel, hydrant or any other item of equipment provided for fire-fighting purposes;
- (d) keep, store, discard or discharge any flammable liquid, gas, signat flares or other like material in an aircraft except in the receptacle appropriate for the purpose or in a place on the aerodrome or heliport specifically approved by the aerodrome or heliport operator for the purpose; or
- (e) store or stack any material or equipment in a manner which constitutes, or is likely to constitute, a fire hazard.

Lights which endanger the safety of alroraft

139.01.10 (1) Whenever in the Republic any light or pattern of lights is exhibited –

- (a) in the vicinity of an aeronautical light or system of aeronautical lights which by reason of the possibility of it being mistaken for such aeronautical light or lights, is likely to endanger the safety of aircraft; or
- (b) which, being in the vicinity of a licensed aerodrome or heliport, is liable by its glare to endanger the safety of aircraft arriving at or departing from such aerodrome or heliport,

the Director may cause a notice to be served upon the owner of the place where the light is exhibited or upon the person having charge of the light or upon the person owning or having charge of the pattern of lights or any portion of such pattern, directing such owner or person within the period specified in such notice to extinguish or screen effectively the light or lights under his, her or its control and to prevent in the future the exhibition of any light or particular type of light either at all or when ineffectively screened.

- (2) No rockets, missiles or flares other than those used for aeronautical distress shall be fired within controlled or advisory airspace.
- (3) Except with the permission of the Director and subject to such conditions as he or she may impose, the firing of rockets, missiles and flares shall not take place in any other airspace than that referred to in sub-regulation (2)
 - (a) if it exceeds a height of more than 2000 ft above the surface; and
 - (b) if it is closer than 8 kilometres from the reference point of an aerodrome licensed in terms of Part 139.

Use of runways or taxiways and landing at or taking off from aerodrome

139.01.11 Save in an emergency -

(a) or on the direction of the aerodrome operator given in terms of regulation 139.01.14, no person shall move an aircraft in the restricted area except on a runway or taxiway;

- (b) no person shall move an aircraft or vehicle onto a runway or a taxiway or go onto a runway or a taxiway ~
 - (i) without the permission of the ATSU operating at the licensed aerodrome, if the ATSU is manned at the time;
 - (ii) except according to the instructions issued by the ATSU operating at such aerodrome, if the ATSU is not manned at the time;
 - (iii) except in a manner that shall not endanger aircraft traffic, if the ATSU is not manned at the time and no instructions have been issued by such ATSU:
- (c) or with the approval of such holder, no person shall use a portion of a licensed aerodrome other than a runway for landing an aircraft or for taking off; and
- (d) no person shall land on a runway an aircraft fitted with a tailskid nor take off from a runway using such aircraft.

Points of entry to or exit from restricted area

- **139.01.12** (1) No person, vehicle, or aircraft travelling on the surface of a licensed aerodrome or heliport, may enter or leave the restricted area except at points established by the aerodrome or heliport operator for such purpose.
- (2) Save in an emergency, no person
 - (a) other than a person carried in an aircraft or in or on a vehicle shall enter or leave the restricted area; or
 - (b) shall move an aircraft travelling on the surface of a licensed aerodrome or heliport, or a vehicle into or from the restricted area,

except at an appropriate point of entry or exit stipulated in terms of sub-regulation (1).

Movement of aircraft or vehicles in restricted area on direction of aerodrome operator

- 139.01.13 (1) The operator of an aircraft which is travelling on the surface of a licensed aerodrome and which is in the restricted area but not on a runway or a taxiway or the person in lawful charge of a vehicle which is in the restricted area shall, on being directed to do so by the aerodrome operator, move that aircraft along the surface of the aerodrome or that vehicle
 - (a) to another place in the restricted area indicated by the aerodrome operator; or
 - (b) from the restricted area,

and if such operator or person refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have that aircraft or vehicle moved to comply with such direction and may recover from such operator or person the costs incurred in having that aircraft or vehicle so moved an any such action by the aerodrome operator shall not exempt such operator or person from a prosecution in respect of such refusal or failure.

- (2) Any direction given by the aerodrome operator in terms of sub-regulation (1) shall not authorise any person to move the aircraft or a vehicle onto a runway or a taxiway
 - (a) without the permission of the ATSU operating at the licensed aerodrome, if the ATSU is manned at the time;
 - (b) except according to the instructions issued by the ATSU operating at such aerodrome, if the ATSU is not manned at the time;
 - (c) except in a manner that shall not endanger aircraft traffic, if the ATSU is not manned at the time and no instructions have been issued by such ATSU.

Access to apron

- 139.01.14 (1) Except with the approval of the aerodrome operator no person other than -
 - (a) a person carried in an aircraft travelling on the surface of a licensed aerodrome or in or on a vehicle;
 - (b) a person about to embark in an aircraft parked on the apron, who is proceeding under the supervision of the operator of that aircraft or his or her employee from the terminal building to that aircraft;
 - (c) a person who has disembarked from an aircraft parked on the apron, who is proceeding under the supervision of the operator of that aircraft or his or her employee from that aircraft to the terminal building;
 - (d) the operator of an aircraft parked on or moving on the surface of the apron or his or her employee only when the performance of his or her duties or the course of his or her employment requires his or her presence on the apron; or
 - (e) the holder of a licence referred to in section 2(3) of the Businesses Act, 1991 (Act No. 71 of 1991), or his or her employee only when the performance of his or her duties or the course of his or her employment requires his or her presence on the apron, shall have access to the apron.
- (2) Except with the approval of the aerodrome operator no person shall move an aircraft travelling on the surface of a licensed aerodrome or a vehicle onto the apron.
- (3) The aerodrome operator shall determine procedures according to which permission to have access to the apron shall be granted.

Points of access to or egress from apron

- **139.01.15** (1) No person, vehicle or aircraft travelling on the surface of a licensed aerodrome may enter or leave the apron except at points established by the aerodrome operator for such purpose.
- (2) Save in an emergency no person
 - (a) other than a person carried in an aircraft or in or on a vehicle shall enter or leave the apron; or
 - (b) shall move an aircraft travelling on the surface of a licensed aerodrome or a vehicle onto or from the apron.

except at an appropriate point of access or egress stipulated in terms of sub-regulation (1).

Movement of aircraft or vehicles on apron

139.01.16 (1) No person shall move an aircraft or any vehicle on the apron of a licensed aerodrome –

- (a) if there is any reasonably foreseeable danger of a collision with a person or object on the aerodrome; and
- (b) unless a speed is maintained which is safe and reasonable under the circumstances, but which does not in any case exceed 30 km per hour:

Provided that any signals given by hand or otherwise by an official on duty at the aerodrome by instruction of the aerodrome operator to a pilot in control of an aircraft which is being moved on the aerodrome or to a driver or other person in control of any vehicle which is being moved on the apron, or any mark or light on the aerodrome having the purpose of serving as an aid to a PIC of an aircraft or driver or person in control of a vehicle to indicate a specific route or parking bay on the aerodrome, by no means exempts such pilot, driver or other person from the obligation to stop such aircraft or vehicle or to take any other steps which might under the specific circumstances be imperative in order to avoid such collision or damage to property or loss of life.

(2) No person shall move an aircraft travelling under its own power on the surface of a licensed aerodrome on the apron unless he or she is the holder of an appropriate licence issued in terms of Part 61 which entitles him or her to pilot that aircraft: Provided that a student pilot who is not the holder of a SPL, may move an aircraft on the apron while undergoing training with and accompanied in the aircraft by the holder of a flight instructor rating.

Parking of aircraft on apron

139.01.17 (1) The aerodrome operator shall ensure that -

- (a) parking stands are provided and marked for suitable size and type of aircraft.
- (b) where the docking system is not in place or is unserviceable procedures to safely guide aircraft in to the parking bay are provided.
- (2) The operator of an aircraft shall ensure
 - that the aircraft is parked in the place on the apron allocated to it by the aerodrome operator; and
 - (b) that the aircraft is parked in the place so allocated in the position required by the aerodrome operator,

and if such operator refuses or fails or is not present to comply forthwith with the terms of such allocation or requirement, the aerodrome operator may have that aircraft parked or positioned so as to comply with the terms of such allocation or requirement and may recover the costs incurred in so parking or positioning that aircraft from the operator of that aircraft and any such

action by the aerodrome operator shall not exempt such operation for a prosecution in respect of such refusal or failure.

- (2) Save in an emergency no person shall move an aircraft -
 - (a) from the parking place allocated to it in terms of sub-regulation (2)(a); or
- (b) from the position in which it was placed in terms of sub-regulation (2)(b), except with the approval of the aerodrome operator.

Movement of aircraft on apron on direction of aerodrome operator

139.01.18 (1) The operator of an aircraft which is on the apron shall, on being directed to do so by the aerodrome operator, move such aircraft –

- (a) from the position in which it was placed in terms of regulation 139.01.18(2)(a) to another
 position in the same parking place;
- (b) from the parking place in which it was parked in terms of regulation 139.01.18(2)(b) to any other parking place on the apron; or
- (c) from the apron,

and if the operator of such aircraft refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have such aircraft moved to comply with such direction and may recover the costs incurred in having such aircraft so moved from the operator of such aircraft and any such action by the aerodrome operator shall not exempt such operator from a prosecution in respect of such refusal or failure.

(2) An aircraft moved to another position under the provisions of sub-regulation (1)(a) shall be deemed to have been placed in its new position in terms of regulation 139.01.18(2)(b) and an aircraft moved to another parking place under the provisions of sub-regulation (1)(b) shall be deemed to have been parked in its new parking place in terms of regulation 139.01.18(2)(a).

Movement of vehicles on apron on direction of aerodrome operator

139.01.19 The person in lawful charge of a vehicle on the apron shall, on being directed to do so by the aerodrome operator, move such vehicle –

- (a) to another place on the apron indicated by the aerodrome operator; or
- (b) from the apron,

and if such person refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have such vehicle moved to comply with such direction and may recover from such person the costs incurred in having such vehicle so moved and any such action by the aerodrome operator shall not exempt such person from prosecution in respect of such refusal or failure.

Securing of parked aircraft

139.01.20 (1) An aircraft parked on the apron and unattended shall be properly moored or otherwise secured by the operator of such aircraft.

- (2) An aerodrome operator shall
 - (a) make available facilities to enable aircraft operators to safely moor their aircraft.
 - (b) ensure that the operator of an aircraft complies with the requirements of subregulation (1) and (3).
- (3) An aircraft operator shall ensure that appropriate checks are used to secure the aircraft.

Embarkation or disembarkation of persons in or from aircraft

139.01.21 (1) The operator of an aircraft in which persons are to be embarked or from which persons are to be disembarked on the apron shall –

- (a) supervise the embarking or disembarking of persons from such aircraft;
- (b) if the construction of such aircraft requires the use of passenger steps for embarking or disembarking persons in or from such aircraft, ensure that passenger steps have been correctly and securely placed at each aircraft door which is to be used for embarking or disembarking persons in or from such aircraft before persons embark in or disembark from such aircraft.
- (2) Save in an emergency or with the approval of the aerodrome operator, no person shall on a licensed aerodrome embark in or disembark from an aircraft except on the apron.
- (3) If aircraft refuelling is performed with passengers on board, or passengers boarding—the aircraft provide a cabin crew member equipped with a fire extinguisher at each door.
- (4) The PIC of an aircraft that is being refuelled with passengers on board shall ensure that the no smoking sign is lit and the passengers advised of extra safety procedures.
- (5) If required by the aerodrome operator, the fire fighting services shall be placed on standby when refuelling with passengers on board is being performed.

Loading or unloading cargo in or from aircraft

- **139.01.22** (1) The operator of an aircraft which is to be loaded or unloaded on the apron shall
 - (a) ensure that all working holds and doors of such aircraft are open to permit the efficient loading or unloading of such aircraft;

- (b) ensure that proper labels are affixed to all items of cargo which are to be carried in such aircraft:
- (c) supervise the loading or unloading of such aircraft and ensure, when such aircraft is being loaded, that each item of cargo is placed in its appropriate place in such aircraft without any damage to the aircraft; and
- (d) if the aircraft is damaged during the loading or off loading of cargo, establish procedure where this can be reported prior to the departure of such aircraft.
- (2) Save in an emergency or with the approval of the aerodrome operator, no person shall, on a licensed aerodrome, load cargo in or unload cargo from an aircraft except on the apron.

Supply of fuel to aircraft

- **139.01.23** (1) No person shall on a licensed aerodrome or heliport supply any fuel to any aircraft except at a place and in a manner approved by the aerodrome or heliport operator.
- (2) The aerodrome operator shall have a signed copy of the refuelling procedure available for audit purposes as prescribed in Document SA-CATS 139.
- (3) The aerodrome operator shall institute measures to periodically monitor the refuelling processes to ensure compliance with the agreed upon procedure is maintained.
- (4) The aerodrome or heliport operator may subject any approval granted in terms of subregulation (1), to compliance with such conditions as the aerodrome or heliport operator may consider necessary to impose in order to safeguard persons or property on the aerodrome.
- (5) The aerodrome operator shall institute measures to address any identified non-conformance and to keep record thereof.
- (6) The aerodrome operator shall ensure that fixed installation refuelling facilities are provided with emergency cut-off switches that is clearly marked and situated in an area where it can be reached without danger to persons in the event of an emergency.

Boarding or tampering with aircraft

- **139.01.24** Except with the permission of the person in lawful charge of an aircraft no person shall, on a licensed aerodrome or heliport
 - (a) board such aircraft other than doing so under the direction of the aircraft operator; or
 - (b) tamper or interfere in any way whatsoever with such aircraft or anything used in connection with such aircraft.

Test-running of aircraft engines

139.01.25 No person shall test-run an aircraft engine on a licensed aerodrome or heliport except at a place designated for the purpose by the aerodrome or heliport operator.

Regulation of vehicular or other traffic on a licensed aerodrome or heliport

139.01.26 The National Road Traffic Act, 1996 (Act No. 93 of 1996), and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the regulations contained in this subpart and in subpart 2 shall apply to all roads on a licensed aerodrome or heliport as prescribed in Doc SA-CATS 139.

Entering or leaving aerodrome or heliport

- **139.01.27** (1) No person, other than a person entering or leaving a licensed aerodrome or heliport by means of an aircraft landing at or taking off from the aerodrome or heliport, shall enter or leave the aerodrome or heliport otherwise than through a gate or entrance provided by the aerodrome or heliport operator.
- (2) Any person who is directed by an authorised officer, inspector or authorised person to leave the aerodrome or heliport, or any part thereof, shall forthwith do so.

Animals in restricted area of aerodrome or heliport

- **139.01.28** (1) No person shall cause or permit any animal to graze or feed in the restricted area of a licensed aerodrome or heliport unless such animal is to be transported on a flight.
- (2) Any person bringing an animal into the restricted area of the aerodrome or heliport, or receiving an animal in the restricted area of the aerodrome or heliport, shall ensure that such animal is at all times under proper control while it remains in the restricted area of the aerodrome or heliport.

Acts prohibited on aerodrome, hellport or in terminal building

139.01.29 (1) No person shall on a licensed aerodrome or or a licensed or approved heliport –

- (a) obstruct or interfere with the proper use of the aerodrome or heliport;
- (b) obstruct any person in the full-time employment of the aerodrome or heliport operator acting in the execution of his or her duty in relation to the aerodrome or heliport;
- (c) remove any notice board erected by the aerodrome or heliport operator, or with the permission of the aerodrome or heliport operator, or any writing or document displayed on such notice board, or deface any such writing or document or any marking on such notice board or document;
- (d) throw, feave or drop anything capable of causing injury to any person or animal or damage to any property;

- (e) dump any waste matter whatsoever elsewhere than at a place approved for the purpose by the aerodrome or heliport operator;
- (f) commit any act which amounts to nuisance, or commit a disorderly or indecent act or be in a state of intoxication or behave in a violent or offensive manner to the offence or annoyance of other persons on the aerodrome or heliport or make use of offensive language;
- (g) write, draw or affix any profane, obscene, indecent or abusive word, matter, presentation or character on the aerodrome or heliport, or on property on the aerodrome or heliport;
- (h) dump or spill any substance capable of causing water pollution, whether such substance is a solid, liquid, vapour or gas or combination thereof, elsewhere than at a place approved for that purpose by the aerodrome or heliport operator;
- (i) provide false information including a bomb threat that result in the deployment of the aerodrome emergency services.
- (j) misuse the fire crash alarm for any other purposes than for deployment of the emergency services for an actual emergency, unless a request from a civil aviation authorities authorised person, or the aerodrome fire chief or his delegate is received for the purposes of determining compliance with licensing audit requirements.
- (2) Except with the written permission of the aerodrome or heliport operator, no person shall -
 - (a) bring a vehicle into or drive a vehicle in or into a terminal building on a licensed aerodrome or licensed or approved heliport;
 - (b) obstruct an entrance to or a passage in such terminal building in such a manner as to inconvenience other users of the entrance or passage concerned; or
 - (c) walk or drive across any live taxiway or runway.
- (3) Except with the written permission of the aerodrome or heliport operator, no person shall on a licensed aerodrome or licensed or approved heliport or on any public road or parking area adjacent to such aerodrome or heliport
 - (a) damage, interfere or tamper with any part of the aerodrome or heliport or any equipment associated with the operation of the aerodrome or heliport;
 - (b) climb any wall, fence, barrier, railing, gate or post;
 - (c) wash or otherwise clean or polish a vehicle elsewhere than at a place approved for that purpose by the aerodrome or heliport operator;
 - (d) cut, dig, damage or remove any soil, grass, tree, shrub or flower;
 - (e) go on to or damage any flower-bed or anything growing therein;
 - (f) remove, pick or otherwise damage any tree, shrub, plant or flower;
 - (g) go on to a lawn or on to ground which has been seeded or planted for the purpose of growing grass to form a lawn;
 - (h) advertise:
 - (i) display any poster, banner or anything similar, except name plates for the purpose of meeting and collection;
 - (j) handle any baggage or confront passengers to carry their baggage;

- (k) tout for any services, including public transport, taxi, car valet, accommodation, parking and car-wash services; or
- solicit for funds.
- (4) The right of admission to terminal buildings on a licensed aerodrome or licensed or approved heliport is strictly reserved, and signs to this effect shall be erected in a conspicuous place near all entrances to terminal buildings.
- (5) The aerodrome or heliport operator, the aerodrome or heliport manager or a security officer acting on his or her behalf, and members of the South African Police Service may request any person on the licensed aerodrome or licensed or approved heliport or on premises of such aerodrome or heliport to explain reasons for being there, and if an acceptable reason cannot be furnished, order that person to leave the aerodrome or heliport and its premises.
- (6) A person who is ordered by the aerodrome or heliport operator of a licensed aerodrome or a licensed or approved heliport, the aerodrome or heliport manager or a security officer acting on his or her behalf, or a member of the South African Police Service to leave the aerodrome or heliport and its premises, and fails to do so forthwith, shall be guilty of an offence.
- (7) The aerodrome or heliport operator of a licensed aerodrome or a licensed or approved heliport, the aerodrome or heliport manager or a security officer acting on his or her behalf, or a member of the South African Police Service may carry out a search of any article, parcel or baggage in possession of, or under the control of, an undesirable person, vagrant, loiterer or other suspected person.
- (8) No person shall on a licensed aerodrome or licensed or approved heliport carryon any trade or business unless he or she is the holder of a valid permit, licence or concession, issued by or on behalf of the aerodrome or heliport operator, which entitles the holder thereof to carry on the trade or business specified on that particular aerodrome or heliport.
- (9) No person shall provide false information that will necessitate the deployment of the emergency services, or might have as result that the fire alarm is sounded.

Obstacle limitations and markings outside aerodrome or heliport

- **139.01.30** (1) All objects, whether temporary or permanent, which project above the horizontal surface within a specified radius of 8 kilometres as measured from the aerodrome reference point should be marked as specified in Document SA-CATS 139.
- (2) Any other object which projects the horizontal surface beyond these radii or above the conical surface and which constitutes a potential hazard to aircraft must be marked as specified in Document SA-CATS 139.
- (3) Buildings or other objects which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome, or navigation aid, or

which will adversely affect the performance of the radio navigation or instrument lading systems, must not be erected or allowed to come into existence without the prior approval of the Director.

- (4) No buildings or objects higher than 45 metres above the mean level of the landing area, or, in the case of a water aerodrome or heliport, the normal level of the water, must without the approval of the Director be erected within a distance of 8 kilometre measured from the nearest point on the boundary of an aerodrome or heliport.
- (5) No building, structure or object which projects above a slope of 1 in 20 and which is within 3000 metres measured from the nearest point on the boundary of an aerodrome or heliport must, without the prior approval of the Director be erected or be allowed to come into existence.
- (6) No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome or heliport must, without the prior approval of the Director, be erected or allowed to come into existence.
- (7) The obstacle limitation surface as prescribed in Document SA-CATS 139 must be clear of any penetration of obstacles temporary or otherwise.
- (8) In the event of a conflict of interest between land use authorities and air space users, air safety must be regarded as predominant and not to be compromised by land development projects or other obstacles.

Lead in lights

- **139.01.31** (1) In the event that the Director so requires, the licence holder of an aerodrome or heliport shall ensure that such an aerodrome or heliport has runway lead in light system which -
- (a) provides visual guidance along a specific approach path;
- (b) assists in the avoidance of hazardous terrain; or
- (c) assists in noise abatement as prescribed in Document SA-CATS 139.

Surface movement guidance and control system

- **139.01.32** (1) All aerodromes shall have surface movement guidance and control system as prescribed in Document SA-CATS 139, implemented.
- (2) Where an advanced surface movement guidance and control system has been implemented, the provisions of sub-regulation (3) and (4) shall be applicable.
- (3) Where stop bars are specified as components of an advanced surface movement guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the

intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications prescribed in Document SA-CATS 139.

(4) Where taxiway centre line lights are specified as components of a advanced surface movement guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights shall be in accordance with the specifications prescribed in Document SA-CATS 139.

SUBPART 2: LICENSING AND OPERATION OF AERODROMES

Requirements for licence

- **139.02.1** (1) All aerodrome licence holders shall be in possession of a valid aerodrome licence.
- (2) The issue and renewal of an aerodrome licence shall be subject to the aerodrome complying with the Regulations, as complemented by the standards contained in the relevant ICAO Annexes and Documents, listed in Document SA-CATS 139, and any recommended practice contained in these documents which the Director may have incorporated as a standard.
- (3) Compliance with said regulations and standards, for the purposes of issuing or renewal of a licence shall be determined by means of audit procedures and inspections, by the Authority, at various times, as determined by the Director, during the preceding licence period or before the issuing of a new licence.
- (4) The Authority shall fevy fees from aerodrome licence holders, upon renewal or issuing of an aerodrome licence, in accordance with the tariffs as prescribed in Part 187.

Aerodrome design requirements

- **139.02.2** (1) An applicant for the issuing of an aerodrome licence shall ensure that the aerodrome is provided with
 - (a) physical characteristics;
 - (b) obstacle limitation surfaces;
 - (c) visual aids for -
 - (i) navigation;
 - (ii) denoting obstacles; and
 - (iii) denoting the restricted area;
 - (d) equipment and installations;
 - (e) an airspace classification referred to in Part 172; and
 - (f) an appropriate level of fire fighting services compliant with the licence application,

appropriate to the characteristics of the aircraft it intends to serve, the lowest meteorological minima for each runway, and the ambient light conditions during the operation of aircraft.

- (2) The physical characteristics, obstacle limitation surfaces, visual aids, and equipment and installations provided at the aerodrome shall comply with the appropriate aerodrome design standards as prescribed in Document SA-CATS 139.
- (3) The licence holder of an aerodrome used for international operations shall provide a runway lead-in lighting system as prescribed in Document SA-CATS 139, to provide positive visual guidance along a specific approach path, generally a curved one, where problems exist with
 - (a) hazardous terrain;
 - (b) obstructions; and
 - (c) noise abatement procedures.
- (4) All licensed aerodromes used for international operations must have surface movement guidance and control systems commensurate with the level of operation as determined by the Director and as as prescribed in Document SA-CATS 139.
- (5) In instances where stop bars are specified as components of an advanced surface movement—guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.
- (6) In instances where taxiway centre line lights are specified as components of an advanced surface movement guidance and control system, and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.

Operations manual

- **139.02.3** An applicant for the issuing of an aerodrome licence higher than Category 2 or for an aerodrome where scheduled commercial operations are to be conducted shall provide the Director with an operations manual which shall contain
 - (a) a statement by the accountable manager and compliance officer confirming that the operations manual and any included manuals define the organisation of the applicant and demonstrate the procedures and methods for ensuring that the provisions of the regulations in this part will be complied with at all times;
 - (b) particulars of the personnel referred to in regulation 139.02.5(1);
 - (c) an organisational chart showing lines of responsibility of the personnel referred to in regulation 139.02.5(1);
 - (d) the limitations of the use of the aerodrome referred to in regulation 139.01.3 or any other limitation considered necessary by the Director;

- (e) a description of the characteristics of and the infrastructure available at the aerodrome, which, taking into consideration the limitations referred to in paragraph (d), comply with the aerodrome design requirements referred to in regulation 139.02.2;
- (f) the aerodrome emergency management system referred to in regulation 139.02.6;
- (g) a description of the aerodrome's rescue and fire fighting capability which, taking into consideration the limitations referred to in paragraph (d), complies with the requirements prescribed in regulation 139.02.7;
- (h) the aerodrome environment management programme referred to in regulation 139.02.8:
- (i) the procedures for the notification of aerodrome data and information referred to in regulation 139.02.9;
- the quality assurance system referred to in regulation 139.02.4;
- (k) a description of the security measures taken at the aerodrome to comply with the provisions of the Act, and the regulations made thereunder;
- (I) the procedures to control, amend and distribute the operations manual;
- (m) where applicable, the intended air traffic services and the approach and airspace categories; and
- (n) safety procedures pertaining to all apron operations that are carried out on the aerodrome.

Quality assurance system

- **139.02.4** (1) The applicant for the issuing of an aerodrome licence higher than Category shall establish a quality assurance system containing an aviation safety programme, for the control and supervision of the operation and maintenance of the aerodrome and its services and facilities in accordance with the regulations in this subpart.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 139.

Personnel requirements

- 139.02.5 (1) The applicant for an aerodrome licence shall engage, employ or contract -
 - (a) a senior person identified as the accountable manager and compliance officer of in writing by the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out

in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:

- Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
- (ii) full rights of consultation with any such person in respect or such compliance by him or her;
- (iii) powers to order cessation of any activity where such compliance is not effected:
- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person in writing who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting the aviation safety programme; and
- (c) adequate personnel, including an aerodrome manager and ATS personnel, and sufficient and adequate rescue and fire fighting personnel, to operate and maintain the aerodrome and its services and facilities according to the requirements prescribed in this subpart.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in operating and maintaining the aerodrome and its services and facilities in accordance with an Authority or SAQA approved training organization standards.

Establishment of aerodrome emergency management system

- **139.02.6** (1) The applicant who is required to submit an operations manual under regulation 139.02.3 shall establish an aerodrome emergency management system as prescribed in Document SA-CATS 139, designed to minimise the possibility and extent of personal injury and property damage on, or in the vicinity of, the aerodrome.
- (2) The aerodrome emergency management system referred to in sub-regulation (1) shall -
 - (a) provide for all types of emergencies likely to take place on, or in the vicinity of, the aerodrome; and

(b) include -

- an index depicting all aspects contained in the system;
- (ii) the types of emergencies planned for;
- (iii) call out procedures for prompt response to emergencies planned for;
- (iv) the persons involved in executing the allocated tasks;
- sufficient detail to provide adequate guidance to each person responsible for executing such system;
- (vi) provision for a fully equipped emergency operations centre and command post for each type of emergency which may be encountered;
- (vii) a description of all available rescue and medical equipment and the location of such equipment;
- (viii) information on the particulars of personnel and persons to be contacted in the case of a particular emergency;
- (ix) a grid map of the aerodrome indicating available water resources and other landmarks of significance; and
- (x) a grid map indicating of the aerodrome and its surrounding up to a radius of ten kilometers indicating the location of hospitals, clinics and road layout.

(3) The applicant shall -

- (a) co-ordinate the proposed emergency management system with all personnel and persons who have allocated responsibilities in terms of the system;
- (b) to the extent practicable, provide for participation of all personnel and persons referred to in paragraph (a), in the establishment of the system; and
- (c) indicate what capability is available for aircraft recovery after an aircraft accident.

Aerodrome rescue and fire fighting

- **139.02.7** (1) The applicant shall ensure that the aerodrome is provided with a rescue and fire fighting service, capable to provide the required level of protection necessary for maintaining the minimum level of protection required for the appropriate category of aerodrome.
- (2) The classification matrix of aerodrome licence categories, aircraft categories for fire fighting, aircraft overall length categories and aircraft maximum fuselage width categories shall be as prescribed in Document SA-CATS 139.
- (3) An applicant for the issuing of an aerodrome licence, in the Categories 1 to 4, shall determine the appropriate aircraft category for fire fighting in accordance with the following principles as well as the principles prescribed in Document SA-CATS 139:
 - (a) Aerodromes up to aircraft category 4 for firefighting may be licensed one category lower, where aircraft with less than 30 passenger seats operate into such aerodrome and where the number of aircraft movements is less than 30 per week.

- (b) Other than when the principle in paragraph (a) above applies, the aircraft category for firefighting must be equivalent to the category of the aerodrome licence.
- (c) Where aircraft with 30 or more passenger seats operate into an aerodrome, the aircraft category for firefighting must be provided at a minimum of category 4 level: Provided that aircraft classified one category higher in terms of the classification matrix may operate into such aerodrome using the principles identified in paragraph 1 of technical standard 139.02.7.
- (d) The Director may, upon application in writing by an operator of an aerodrome, exempt such operator from the requirement of paragraph (b), in the case of aircraft which may be classified in two or more categories above the aerodrome licence category 2 or 4, respectively,
- (e) In accordance with the risk assessment described in paragraph (2)(a) of technical standard 139.02.7, the operator of an aerodrome shall establish an aerodrome emergency management system (AEMS) for mitigating risk and included the particulars of such emergency management system in the operations manual referred to in regulation 139.02.3.
- (4) A discreet communication system shall be provided, linking a fire station with the control tower, or, where applicable, with any other fire station on the aerodrome, and the rescue and fire fighting vehicles.
- (5) An alerting system for rescue and fire fighting personnel shall be provided at the fire station, or at any remote fire station on the aerodrome and at the aerodrome control tower.
- (6) Emergency access roads shall be provided on an aerodrome where the minimum response times as prescribed in Document SA-CATS 139 cannot be achieved and where the terrain conditions permit their construction.
- (7) Where the airport is fenced, access to the outside areas shall be facilitated by the provision of emergency gates, which shall be marked to indicate their purpose and the prohibition of vehicle parking and obstructions in their immediate vicinity control of these gates shall be under the direct control of the fire fighting services.
- (8) Emergency access roads shall be capable of supporting the heaviest emergency vehicles and shall be accessible in all weather conditions.
- (9) The roads within 90 m of a runway shall be surfaced to prevent surface erosion and transfer of debris to the runway.
- (10) Sufficient vertical clearance shall be provided from overhead obstructions for the largest vehicles.
- (11) When the surface of the road is indistinguishable from the surrounding area, or in areas where snow may obscure the location of the road edge, markers shall be placed at intervals of about 10 m.

Aerodrome rescue and fire fighting training facility

- **139.02.8** (1) The holder of an aerodrome licence operating on a category 6 level or higher shall establish a training facility simulating an aircraft structure that makes provision for effective training standards as prescribed in Document SA-CATS 139.
- (2) The holder of an aerodrome licence operating a category 3 where fiying schools have been established and category 4 or 5 shall establish a fire fighting training facility as prescribed in Document SA-CATS 139.
- (3) The holder of an aerodrome licence operating below a category 4 level, including category 3 aerodromes where flying schools have been established, shall establish a fire fighting training facility as prescribed in Document SA-CATS 139.
- (4) The training facilities shall give effect to the personnel training standards provided for in regulation 139.02.34 and the associated technical standards.

Aerodrome rescue and fire fighting personnel training standards

- **139.02.9** (1) The holder of an aerodrome licence shall establish an aerodrome rescue and fire fighting services personnel training standards as prescribed in Document SA-CATS 139.
- (2) The basis for the training standards of aerodromes below a category 3 level is prescribed in Document SA-CATS 139.

Aerodrome rescue and fire fighting deviations

- **139.02.10** (1) The holder of an aerodrome licence shall provide on the aerodrome the rescue and fire fighting capability which complies with the minimum requirements prescribed in regulation 139.02.7.
- (2) The rescue and fire fighting service shall be provided in accordance with the standards prescribed in Document SA-CATS 139.
- (3) The holder of the licence may deviate from any requirement prescribed in this subpart to the extent required to attend to an emergency arising from any aviation accident or incident which occurs on, or within a radius of 10 kilometres from the aerodrome.
- (4) A deviation in terms of sub-regulation (3) shall only be permitted
 - (a) for the period during which the emergency exists; and
 - (b) for the sole purpose of protecting life or property.
- (5) The holder of the licence shall ensure that the remainder of the rescue and fire fighting personnel and equipment will be able to attend to any possible aviation accident or incident which may occur as a result of the emergency referred to in sub-regulation (3) until assistance is obtained from other participants in the aerodrome emergency management system.

- (6) (a) If an aerodrome operator has to deviate from the required standard, the Air Traffic Control shall be informed of the deviation and indicate to what category the remainder of the service can be provided; and
- (b) Until the required service commensurate with the aerodrome licence is re-instated, the Air traffic Controller must convey this information to all arriving and departing aircraft, the PIC must clearly indicate that they accept the lower category of fire fighting service prior to commencement of a flight, or before landing.
- (7) The holder of the licence who deviates in terms of sub-regulation (3) from any requirement prescribed in this subpart, shall
 - (a) notify the Director immediately of the nature of the emergency and the extent of the deviation; and
 - (b) submit a comprehensive report to the Director within 14 days from the date on which the emergency arose.

Establishment of aerodrome environment management programme

- **139.02.11** (1) The applicant shall, in the area within its authority and where any foreign object debris (FOD), oil and fuel spillages, bird and wildlife presents or are likely to present a hazard to aircraft operating to or from the aerodrome, establish an aerodrome environment management programme to minimise the effects of such hazard or potential hazard, taking due cognisance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989), and the regulations made thereunder.
- (2) The aerodrome operator shall ensure that environmental management meeting is conducted with interval not exceeding three months and that
 - (a) the minutes of the meetings must be kept and must clearly indicate all identified environmental issues that may affect the operations;
 - (b) the meetings must address all environmental issues within the boundaries of the aerodrome and in the immediate vicinity up to a radius of 10 kilometre that might affect the aerodrome operations negatively.
 - (c) mitigating measures to rectify all identified environmental issues must be recorded for audit purposes. This includes communication with external parties.

Notification of aerodrome data and information

- **139.02.12** (1) An applicant for the issuing of an aerodrome licence must establish a procedure to notify the ATSU concerned and the Director
 - (a) of the aerodrome data and information;
 - (b) of any limitation on the use of the aerodrome contemplated in regulation 139.01.3;
 - (c) compliance with regulation 139.02.7 or deviation therefrom;

- (d) as soon as possible, of any change which may affect the use of the aerodrome, including the presence of water on the runway as prescribed in Document SA-CATS 139;
- (e) any other information required in terms of regulations in Part 175.
- (2) A notification contemplated in sub-regulation (1) must be made on the appropriate prescribed form.

Application for licence or amendment thereof

139.02.13 An application for the issuing of an aerodrome licence, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the operations manual referred to in regulation 139.02.3;
 - (ii) the plans of the aerodrome;
 - (iii) written approval from the local government concerned;
 - (iv) an environmental impact report, if required in terms of the Environment Conservation Act, 1989;
 - (v) written approval from all interested Government institutions;
 - (vi) proof that the applicant is financially capable of operating the aerodrome including the provision of fire fighting service as contemplated in regulation 139.02.7:
 - (vii) particulars of non-compliance with, or deviations from
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (viii) the appropriate fee as prescribed in Part 187.

Processing of application for licence or amendment thereof

139.02.14 (1) The Director shall, as soon as practicable after the receipt of an application for an aerodrome licence, or an amendment thereof, publish by notice in the *Gazette* the following particulars in respect of the application concerned:

- (a) The full name of the applicant;
- (b) full particulars of the location of the aerodrome; and
- (c) a reference to the date by which the representations referred to in sub-regulation (2) must be submitted to the Director.

(2) Any person may, after the publication of the notice referred to in sub-regulation (1) address in writing representations to the Director against or in favour of the application concerned.

Adjudication of application for licence or amendment thereof

- **139.02.15** (1) The Director shall as soon as practicable consider an application referred to in regulation 139.02.11 together with all representations, information and other documents relating to such application which are received within the period specified in the notice published in terms of regulation 139.02.12(1).
- (2) The Director may grant the application if the Director is satisfied that
 - (a) the applicant complies with the requirements prescribed in regulations 139.02.2 to 139.02.10 inclusive; and
 - (b) granting the application will not jeopardise aviation safety.

Issuing of licence

- 139.02.16 (1) An aerodrome licence shall be issued on the appropriate prescribed form.
- (2) The licence shall specify -
 - (a) the category for which the aerodrome is licensed; and
 - (b) the restrictions, if any, relating to non-compliance with, or deviations from -
 - the appropriate aerodrome design, operation or equipment standards prescribed in this Part; and
 - (ii) the appropriate airspace classification requirements prescribed in Part 172.

Period of validity

- **139.02.17** (1) An aerodrome licence shall be valid for the period determined by the Director, which period shall be valid for 12 months, calculated from the date on which the licence is issued or renewed.
- (2) The licence shall remain in force until it expires or is suspended or downgraded_by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of a licence which expires, shall forthwith surrender the licence to the Director.
- (4) The holder of a licence which is suspended, shall forthwith produce the licence upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of a licence which is cancelled, shall, within 30 days from the date on which the licence is cancelled, surrender such licence to the Director.

Transferability

- **139.02.18** (1) Subject to the provisions of sub-regulation (2), an aerodrome licence shall not be transferable.
- (2) A change in ownership of the holder of a licence shall be deemed to be a change of significance referred to in regulation 139.02.17.

Changes in quality assurance system

- 139.02.19 (1) If the holder of an aerodrome licence desires to make any change in the quality assurance system referred to in regulation 139.02.4(1), which is significant to the showing of compliance with the appropriate requirements prescribed in this part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 139.02.11 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to his, her or its operations manual, that the applicant will continue to comply with the provisions of regulations 139.02.2 to 139.02.10 inclusive, after the implementation of such approved change.

Renewal of licence

- 139.02.20 (1) An application for the renewal of an aerodrome licence shall be --
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - the updated operations manual referred to in regulation 139.02.3, if required by the Director;
 - (ii) proof of adequate funding;
 - (iii) proof of what level of fire services will be provided;
 - (iv) particulars of non-compliance with, or deviations from
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (v) the appropriate fee as prescribed in Part 187.
- (2) The holder of the licence shall at least 60 days immediately preceding the date on which such licence expires, apply for the renewal of such licence.

Licence of intent

139.02.21 (1) Where a particular area has been officially demarcated at the appropriate institutional level as contemplated in sub-regulation (2)(b)(iii) for the development of an aerodrome, the proposed holder of an aerodrome licence in respect of the aerodrome, may apply to the Director for the issuing of a licence of intent for such area.

- (2) An application for the issuing of a licence of intent must be -
 - (a) made to the Director on the appropriate prescribed form; and
 - (b) accompanied by
 - (i) full particulars of the particular area demarcated for the development of the aerodrome, and the location thereof;
 - (ii) the appropriate fee as prescribed in Part 187;
 - (iii) written approval from the following institutions for the intended aerodrome development:
 - (aa) for private aerodromes: approval from the relevant local authority;
 - (bb) for commercial aerodromes intended for domestic operations: approval from the relevant provincial authority; and
 - (cc) for international aerodromes: approval from the Department of Transport; and
 - (iv) written comments from the national ATS provider regarding the impact on the existing airspace structure and the feasibility of accommodating the intended aerodrome development in the airspace structure.
- (3) The provisions of regulations 139.02.11 and 139.02.12(1) applies, with the necessary changes, to the processing of an application for the issuing of a licence of intent.
- (4) The Director may grant the application if the Director is satisfied that the application complies with the requirements prescribed in sub-regulations (1) and (2) and that the development of the aerodrome will not jeopardize aviation safety.
- (5) A licence of intent must be issued on the appropriate prescribed form.
- (6) The licence of intent must specify the conditions and the restrictions which the Director considers necessary in the interests of aviation safety.
- (7) A licence of intent is
 - (a) not transferable; and
 - (b) valid for the period determined by the Director, which period must not exceed five years, calculated from the date on which the licence is issued.

General duties of holder of licence

139.02.22 (1) The holder of an aerodrome licence must –

- (a) hold at least one complete and current copy of the approved manuals referred to in this subpart, at the aerodrome;
- (b) comply with all procedures detailed in such approved manuals;
- (c) make each applicable part of such approved manuals available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of the licence must ensure that -
 - (a) the aerodrome is maintained in a serviceable condition;
 - (b) the aerodrome is kept free of unauthorised persons, vehicles or animals not under proper control, in compliance with the Act;
 - (c) all obstructions are marked as prescribed in Document SA-CATS 139;
 - (d) the Director is informed of any alterations to or obstructions or workings on the aerodrome;
 - (e) an apparatus showing the surface direction of the wind, is installed and functions satisfactorily;
 - (f) VHF Direction Finding (VDF) equipment is installed where an ATSU is present on the aerodrome and that it functions satisfactorily to the requirements and specifications as prescribed in Document SA-CATS 139. This requirement may be omitted if the ATSU is serviced by surveillance;
 - (g) the markings as prescribed in Document SA-CATS 139, are maintained in a conspicuous condition, readily visible to aircraft in the air or manoeuvring on the ground;
 - the accommodation and facilities offered to the public are available and in a serviceable condition;
 - (i) all apparatus installed by such holder to promote safety in flight, is functioning efficiently;
 - (j) unserviceable areas on the landing terrain are appropriately marked as prescribed in document SA-CATS 139;
 - (k) the Director is informed whenever an aerodrome becomes unserviceable through any cause or whenever any portion of the surface of the landing area deteriorates to such extent that the safety of an aircraft may thereby be endangered, and

aircraft operations are limited to those portions of the aerodrome not rendered unsafe by those conditions;

- such reports on the condition of the aerodrome as may be required from time to time by the Director, are submitted to the Director;
- (m) the particulars of a foreign operator's permit are obtained and verified, in the case where a foreign aircraft which is used by virtue of such foreign operator's permit issued in terms of section 26(1) of the International Air Services Act, 1993 (Act No. 60 of 1993), lands at the aerodrome;
- a survey is carried out on the aerodrome for the purposes of the approval of letdown procedures by the Director whenever any significant changes have occurred;
- (o) (i) Where an ATSU is present on the aerodrome or where scheduled commercial operations are conducted, or where unscheduled commercial operations exceeding 6 movements a week are conducted and the MCM of the aeroplanes involved exceeds 5700 kilograms, sensing equipment will be installed to technical specifications as per Document SA-CATS 139 to provide data to the air traffic service, the specifications of which are mentioned in Document SA-CATS 139;
 - (ii) Such data must be displayed in the aerodrome control tower or ATSU and the aeronautical meteorological station where applicable;
 - (iii) Where an ATSU is not in operation and where scheduled commercial operations occur, such data must be transmitted automatically to a minimum range of 5nm from the aerodrome reference point;
 - (iv) All ticensed aerodromes supporting pilot training operations must make wind direction, speed, surface air temperature and barometric pressure data available at a location accessible to pilots prior to take off;
 - (v) If the aerodrome is used for flights coming from outside the borders of the Republic or for flights departing to a destination outside the Republic, it has to ensure that satisfactory office facilities are available for an aeronautical meteorological station.
- the surface of a runway is maintained in a condition such as to prevent formation of harmful irregularities, as prescribed in Document SA-CATS 139;
- (q) measurements of the friction characteristics of a runway surface are made with a continuous friction measuring device using self-wetting features, in accordance with the minimum friction survey frequency as prescribed in Document SA-CATS 139;
- (r) corrective maintenance action is taken when the friction characteristics for either the entire runway or a portion thereof are below the minimum friction level as prescribed in Document SA-CATS 139;

- (s) when there is a reason to believe that the drainage characteristics, for either the whole runway or a portion thereof, are poor due to slopes or depressions, that the runway friction characteristics are assessed under natural or simulated conditions which are representative of local precipitation conditions, and that, corrective maintenance action is taken as necessary;
- (t) the surface of a paved runway is maintained in such condition so as to provide good friction characteristics and low rolling resistance;
- (u) snow, slush, ice, standing water, mud, dust, sand, oil, rubber deposits and other contaminants are removed as rapidly and completely as possible to minimise accumulation:
- (v) for aerodromes category 3 and above, a full set of the Civil Aviation Regulations that contain the latest amendments are available at the aerodrome:
- (w) for aerodromes category 3 and above, the respective departments/ sections have available a set of the ICAO annexes and documents relevant to their area of responsibility.

(3) The holder of the licence must –

- furnish the Director with the aerodrome financial data and the aerodrome traffic statistics as prescribed in Document SA-CATS 139;
- (b) in the case of aerodrome which serves aircraft used in international public air transport operations, establish a facilitation committee and compile a facilitation plan in accordance with the requirements and standards as prescribed in Document SA-CATS 139;
- (c) be responsible for the monitoring of aircraft noise on and in the vicinity of an aerodrome, and the reporting of violations to the Director, in accordance with the requirements and standards as prescribed in Document SA-CATS 139;
- (d) when the ATSU at the aerodrome is not in operation, be responsible for the maintenance of flying discipline on, and in the vicinity of, such aerodrome;
- (e) furnish in writing to the Director as soon as practically possible, but within thirty days from the day of engagement, employment or contracting, the accountable manager and compliance officer referred to in regulation 139.02.5(1)(a), with that person's full particulars.
- (f) furnish the Director with the bearing strength of a pavement on completion of the construction, or whenever major repair work has been conducted which affects the pavement bearing strength;

- (g) report the following information on the bearing strength of a pavement using the aircraft classification number – pavement classification number method as prescribed in Document SA-CATS 139:
 - (i) the pavement classification number;
 - (ii) pavement type for aircraft classification number-pavement classification number determination;
 - (ii) sub-grade strength category;
 - (iv) maximum allowable tire pressure category or value; and
 - (v) evaluation method;
- (h) furnish the Director on monthly basis with the statistical data of incidents and accidents occurring on the airside of the aerodrome as prescribed in Document SA-CATS 139
- (4) (a) The holder of the licence must ensure that -
 - all originating hold baggage to be carried on a commercial air transport aeroplane engaged in international civil aviation operations are screened prior to being loaded onto the aircraft;
 - (ii) the operator of a commercial air transport aeroplane engaged in a scheduled commercial air service does not carry any originating hold baggage unless such baggage has been screened prior to being loaded into the aircraft.
- (b) The minimum requirements for the procedures referred to in paragraph (a) above are prescribed in Document SA-CATS 121.
- (5) The holder of the aerodrome licence is accountable for the implementation of aeronautical studies, inclusive of technical analysis, risk assessment and proposed risk mitigation for any contemplated deviation from Subparts 1 and 2 of Part 139 and the resultant outcome of such studies must be presented to the Director.
- (6) The holder of the aerodrome license must determine procedures to ensure that the personnel operating on airside wear high visibility clothing at all times whilst on airside.

Works on aerodrome

- 139.02.23 (1) The holder of an aerodrome licence shall establish procedures and take precautions to ensure that any works carried out on the aerodrome, do not endanger any aircraft operations.
- (2) The procedures to be established and precautions to be taken in terms of sub-regulation (1), shall be established and taken in accordance with the requirements and standards as prescribed in Document SA-CATS 139.
- (3) No hot work, or work with an open flame shall be performed on the airside of the aerodrome without notifying the fire-fighting services and all other affected parties of –

- (a) the type of work to be performed
- (b) the location where this work will be performed; and
- (c) the expected duration of the work to be performed.
- (4) If considered necessary by the licence holder, or if this type of work can have an impact on aviation safety, the fire services shall perform standby duties during such hot work or work with an open flame until the work is completed; and comply with regulation 139.02.9.

Maintenance of aerodrome emergency management system

139.02.24 The holder of an aerodrome licence shall -

- (a) establish procedures to ensure that all participants to the effectiveness of the aerodrome emergency management system (AEMS) with allocated duties or responsibilities, are familiar with, and are properly trained for, their assignments and shall –
 - submit such AEMS to the Authority for approval;
 - (ii) provide a copy of the approved AEMS to the South African Search and Rescue (SASAR) coordination centre in accordance with the South African Maritime Search and Rescue Act, 2002 (Act No. 44 of 2002);
 - (iii) provide a copy of the approved AEMS to the Provincial Disaster Management Centre in accordance with the Disaster Management Act, 2002 (Act No. 57 of 2002);
- (b) test the effectiveness of such aerodrome emergency management system by -
 - undertaking a full-scale aerodrome emergency exercise at intervals not exceeding two years;
 - (ii) arranging special emergency exercises in the intervening year to correct any deficiencies identified during the full-scale aerodrome emergency exercise;
 - (iii) performing a desk top exercise with intervals not exceeding three months to verify roleplayers, contact detail and other vital information required to ensure that the current AEMS is up to date; and
 - (iv) Establish procedure to address all communicable diseases as depicted in Document SA-CATS 139;
- submit a comprehensive written report to the Director within 14 days from the date on which –
 - a full-scale aerodrome emergency exercise referred to in paragraph (b)(i);
 or
 - (ii) special emergency exercise referred to in paragraph (b)(ii), has been undertaken or arranged; and

- (iii) notify the Authority and all other roleplayers of all changes referred to in paragraph (b) (iii) to the AEMS with intervals not exceeding three months;
- (d) review such aerodrome emergency management system for effectiveness after each of the exercises referred to in paragraph (b), as well as after an actual emergency, to address any deficiencies identified and to adapt such system for the enhancement of its efficiency;

Maintenance of aerodrome environment management programme

139.02.25 The holder of an aerodrome licence shall -

- (a) maintain and comply with the aerodrome environment management programme referred to in regulation 139.02.8; and
- (b) operate the aerodrome in accordance with the provisions of the Environment Conservation Act, 1989, and the regulations made thereunder, together with the recommendations and requirements prescribed in any relevant Specifications or Codes of Practice published under the Standards Act, 1993 (Act No. 29 of 1993).

Aerodrome inspection programme

139.02.26 (1) The holder of an aerodrome licence shall establish and maintain an aerodrome inspection programme, including –

- (a) procedures to ensure that job specific competent aerodrome personnel execute the relevant programme effectively; and
- (b) a reporting system to ensure prompt correction of unsafe aerodrome conditions noted during any inspection,

to ensure compliance with the regulations in this subpart.

(2) The programme referred to in this regulation is prescribed in Document SA-CATS 139.

Demarcation of restricted area

139.02.27 (1) The holder of an aerodrome ticence shall, on the aerodrome, demarcate a restricted area and indicate its boundaries by means of –

- (a) markings on the surface of such aerodrome;
- (b) obstructions or notices erected along the boundaries of such restricted area or a fence commensurate with the level of threat;; or
- (c) a combination of such markings, fences, obstructions or notices to achieve the desired level of control.

- (2) Subject to the provisions of sub-regulation (1) relating to the manner in which such boundary shall be indicated, the holder of the licence may alter any boundary or any portion of a boundary of the restricted area.
- (3) Fences or obstructions or notices erected along the boundaries of such restricted area shall have emergency access gates inline or as close as possible to the threshold of all available runways to ensure an acceptable response times can be met.
- (4) These emergency gates shall not be used for gaining access to the aerodrome but—should be solely for emergencies inside or outside the aerodrome perimeter. The control—of—these emergency gates shall be the responsibility of the fire fighting service.

Control of entry into restricted area

- **139.02.28** (1) The holder of an aerodrome licence must exercise control over entry into a restricted area.
- (2) The control referred to in sub-regulation (1) must be exercised according to the procedures and criteria approved by such holder.
- (3) An authorised officer, inspector or authorised person may
 - (a) prohibit any person from entering a restricted area;
 - (b) order any person to leave a restricted area immediately, whether such person has been granted permission to be within a restricted area or not.
- (4) A fence or other suitable barrier must be provided on an aerodrome to
 - (a) prevent the entrance to the movement area of animals large enough to be a hazard to aircraft; and
 - (b) deter the inadvertent or premeditated access of an unauthorised person onto a non-public area of the serodrome.
- (5) Suitable means of protection must be provided to deter the inadvertent or premeditated access of an unauthorised person into ground installations and the facilities located off the aerodrome, which is essential for the safety of civil aviation.
- (6) The fence or barrier must be located so as to separate the movement area and other facilities or zones on the aerodrome vital to the safe operation of aircraft from areas open to public access.
- (7) When greater security is deemed necessary
 - (a) a cleared area should be provided on both sides of the fence or barrier to facilitate the work of patrols, and to make trespassing more difficult; and

- (b) consideration should be given to the provision of a perimeter road inside the fencing for use of both the maintenance personnel and security patrols.
- (8) A licensed aerodrome must
 - (a) have a fence or other barrier for the protection of civil aviation; and
 - (b) where it is deemed desirable for security reasons, have lights at a minimum essential level located in such a way that the ground area on both sides of the fence or barrier, particularly at the access points, is illuminated.
- (9) During low visibility operation procedures, the holder of an aerodrome licence must restrict construction or maintenance activities in the proximity of aerodrome electrical systems as prescribed in Document SA-CATS 139.

Demarcation of routes on apron

- **139.02.29** (1) The holder of an aerodrome licence shall be means of markings on the surface of an aerodrome or by notices, or by means of both such markings and notices demarcate routes on the apron for use by
 - (a) persons other than a person carried in an aircraft or in or on a vehicle;
 - (b) aircraft travelling on the surface of an aerodrome; or
 - (c) vehicles and equipment,

and such holder may similarly restrict any such route to use by such person or aircraft or vehicle for the purpose of movement in one direction only.

- (2) Save in an emergency no person -
 - (a) other than a person carried in an aircraft or in or on a vehicle must proceed on foot on the apron; or
 - (b) must move an aircraft travelling on the surface of an aerodrome or a vehicle on the apron.

except along an appropriate route demarcated in terms of sub-regulation (1).

- (3) Save in an emergency, or in the event of accident on or in the vicinity of the apron, the emergency services are exempted from making use of these roads, markings or notices to attend to such emergency in the shortest period of time.
- (4) The holder of an aerodrome licence must provide the minimum clearance between an aircraft using the aircraft stand and any adjacent building, any other aircraft parked on another aircraft stand, or any other objects as prescribed in Document SA-CATS 139.

Safety measures against fire

- **139.02.30** (1) The holder of an aerodrome licence shall establish preventative measures against possible fires on the aerodrome and identify a person or group or persons in writing to maintain a fire prevention programme for the aerodrome and aerodrome buildings.
- (2) If the aerodrome has no fire brigade service designated in terms of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), the holder of the licence shall arrange with the local government concerned to maintain a fire prevention programme for the aerodrome buildings on landside and to advise such holder of any dangerous conditions for rectification.
- (3) Unless the local authority's persons received airside induction training the aerodrome rescue and fire fighting services shall be responsible to ensure that fire prevention on airside is maintained, and shall keep proper record of inspections performed and rectification measures instituted.
- (4) The holder of the licence shall ensure that no unsafe practice is performed on the aerodrome or within its parameters.
- (5) If unsafe practices have to be performed during any day-to-day maintenance of, or on, the aerodrome, the holder of the licence shall alert the rescue and fire fighting service concerned to be on standby for the duration of such practices.

Access of ground vehicles to aerodrome movement area

139.02.31 The holder of an aerodrome licence shalf -

- (a) limit access to the aerodrome manoeuvring area of those ground vehicles which are necessary for aerodrome and aircraft operations;
- (b) if an ATSU is in operation at the aerodrome, provide adequate procedures for the safe and orderly access to, and operation in the aerodrome manoeuvring area of ground vehicles, in order to ensure that each ground vehicle operating in the aerodrome manoeuvring area is controlled by –
 - (i) two-way radio communication between the vehicle and the ATSU;
 - (ii) if the vehicle has no radio, an accompanying escort vehicle with two-way radio communication with the ATSU is required; or
 - (iii) if it is not practical to have two-way radio communication or escort vehicle, adequate measures including signs, signals or guards for controlling the vehicle;
- (c) if an ATSU is not in operation at the aerodrome, provide adequate measures to ensure that ground vehicles operating in the aerodrome movement area are controlled by the signs, pre-arranged signals or standards as prescribed in Document SA-CATS 139; and
- (d) ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of the aerodrome which has access to the aerodrome movement area is familiar with, and complies with, the rules and procedures for the operation of ground vehicles as prescribed in Document SA-CATS 139.

Protection of navigation aids

139.02.32 The holder of an aerodrome licence shall -

- (a) prevent any construction of facilities on the aerodrome which may adversely affect the operation of any electronic or visual navigation aid or ATS facility on such aerodrome;
- (b) prevent, as far as it is within the authority of the such holder, any interruption of visual or electronic signals of navigation aids;
- (c) liaise with the local government concerned and the Director with regard to any structure higher than the obstacle limitation surfaces on or in the vicinity of the aerodrome; and
- (d) ensure that these facilities are provided with adequate and appropriate fire fighting protection equipment.

Aerodrome abandoned or not maintained

- **139.02.33** (1) In order that adequate warning may be given to the users of an aerodrome, the holder of an aerodrome licence shall give the Director at least 60 days written notice of its intention to discontinue the maintenance of the aerodrome or to abandon the aerodrome.
- (2) If, after the expiry of the period of notice referred to in sub-regulation (1), an aerodrome is abandoned or is not being maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify all aerodrome markings as the Director may direct.
- (3) On completion of the task, referred to in sub-regulation (2), the holder shall surrender the licence to the Director.

SUBPART 3: LICENSING AND OPERATION OF HELIPORTS

Requirements for licence

- 139.03.1 (1) All heliport licence holders shall be in possession of a valid heliport licence.
- (2) The issue and renewal of a heliport licence shall be subject to the heliport complying with the regulations, as complemented by the standards contained in the relevant ICAO Annexes and Documents listed in Document SA-CATS 139 and any recommended practice contained in these documents which the Director may have incorporated as a standard.
- (3) Compliance with the said regulations and standards, for the purposes of issuing or renewal of a licence shall be determined by means of audit procedures and inspections, by the Authority, at various times, as determined by the Director, during the preceding licence period or before the issuing of a new licence.
- (4) The Authority shall levy fees from heliport licence holders, upon renewal or issuing of a heliport licence, in accordance with the tariffs as published in Part 187.

(5) All heliports irrespective of their location shall be licensed in accordance with this subpart.

Heliport design requirements

139.03.2 (1) An applicant for the issuing of a heliport licence shall ensure that the heliport is provided with –

- (a) physical characteristics;
- (b) obstacle limitation surface;
- (c) visual aids for -
 - (i) navigation:
 - (ii) denoting obstacles; and
 - (iii) denoting the restricted area;
- (d) equipment and installations; and
- (e) an airspace classification referred to in Part 172,

appropriate to the characteristics of the helicopters is intends to serve, the lowest meteorological minima for each touchdown area, and the ambient light conditions during the operation of helicopters.

(2) The physical characteristics, obstacle limitation surfaces, visual aids, and equipment and installations provided at the heliport shall comply with the appropriate heliport design standards as prescribed in Document SA-CATS 139.

Operations manual

139.03.3 An applicant for the issuing of a heliport licence shall provide the Director with an operations manual which shall contain—

- (a) a statement by the accountable manager and compliance officer confirming that the operations manual and any included manuals define the organisation of the applicant and demonstrate the procedures and methods for ensuring that the provisions of the regulations in this part will be complied with at all times;
- (b) particulars of the personnel referred to in regulation 139.03.5(1);
- (c) organisational chart showing lines of responsibility of the personnel referred to in regulation 139.03.5(1);
- (d) the limitations on the use of the heliport referred to in regulation 139.01.3 or any other limitations the Director may deem necessary;
- (e) a description of the characteristics of and the infrastructure available at the heliport, which, taking into consideration the limitations referred to in paragraph (d), comply with the heliport design requirements referred to in regulation 139.03.2;

- (f) the heliport emergency management system referred to in regulation 139.03.6;
- (g) a description of the heliport's rescue and fire fighting capability which, taking into consideration the limitations referred to in paragraph (d), complies with the requirements prescribed in regulation 139.03.7;
- (h) the heliport environment management programme referred to in regulation 139.03.8;
- the procedures for the notification of heliport data and information referred to in regulation 139.03.9;
- (j) the quality assurance system referred to in regulation 139.03.4;
- (k) a description of the security measures taken at the heliport to comply with the provisions of the Act;
- (f) the procedures to control, amend and distribute the operations manual; and
- (m) where applicable, the intended air traffic services and the approach and airspace categories.

Quality assurance system

- **139.03.4** (1) The applicant shall establish a quality assurance system containing an aviation safety programme, for the control and supervision of the operation and maintenance of the heliport and its services and facilities in accordance with the regulations in this subpart.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 139.

Personnel requirements

- 139.03.5 (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect or such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected;

- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting the aviation safety programme; and
- (c) adequate personnel, including a heliport manager, ATS personnel, to operate and sufficient rescue and fire fighting personnel maintain the heliport and its services and facilities according to the requirements prescribed in this subpart.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in operating and maintaining the heliport and its services and facilities.

Establishment of heliport emergency management system

- **139.03.6** (1) The applicant shall establish a heliport emergency management system designed to minimise the possibility and extent of personal injury and property damage on, or in the vicinity of, the heliport.
- (2) The heliport emergency management system referred to in sub-regulation (1) shall
 - (a) provide for all types of emergencies likely to take place on, or in the vicinity of, the heliport; and
 - (b) include
 - (i) an index depicting all aspects contained in the system;
 - (ii) the types of emergencies planned for;
 - (iii) call out procedures for prompt response to emergencies planned for;
 - (iv) the persons involved in executing the allocated tasks;
 - sufficient detail to provide adequate guidance to each person responsible for executing such system;
 - (vi) provision for a fully equipped emergency operations centre and command post for each type of emergency which may be encountered;
 - (vii) a description of all available rescue and medical equipment and the location of such equipment;
 - (viii) information on the particulars of personnel and persons to be contacted in the case of a particular emergency; and
 - (ix) a grid map of the heliport indicating available water resources and other landmarks of significance;

- (x) a gridmap indicating the heliport and its surrounding up to a radius of 10 kilometer indicating the location of hospitals, clinics and road layout.
- (3) The applicant shall -
 - (a) coordinate the proposed emergency management system with all personnel and persons who have allocated responsibilities in terms of the system; and
 - (b) to the extent practicable, provide for participation of all personnel and persons referred to in paragraph (a), in the establishment of the system.

Heliport rescue and fire fighting

- **139.03.7** (1) The applicant shall ensure that the heliport is provided with a rescue and fire fighting service, capable to provide the required level of protection necessary for maintaining the minimum level of protection required for the appropriate category of heliport as prescribed in Document SA-CATS 139.
- (2) The rescue and fire fighting category of the heliport shall be determined as prescribed in Document SA-CATS 139.
- (3) Personnel training standards shall be the same as indicated in regulation 139.02.9 with the emphasis on rotor-wing aircraft.
- (4) The holder of the licence may deviate from any requirement prescribed in this subpart to the extent required to attend to an emergency arising from any aviation accident or incident which occurs on, or within a radius of 10 kilometres from, the heliport.
- (5) A deviation in terms of sub-regulation (4) shall only be permitted
 - (a) for the period during which the emergency exists; and
 - (b) for the sole purpose of protecting life or property.
- (6) The holder of the licence shall ensure that the remainder of the rescue and fire fighting personnel and equipment will be able to attend to any possible aviation accident or incident which may occur as a result of the emergency referred to in sub-regulation (4) until assistance is obtained from other participants in the heliport emergency management system.
- (7) The holder of the licence who deviates in terms of sub-regulation (4) from any requirement prescribed in this subpart, shall
 - (a) notify the Director immediately of the nature of the emergency and the extent of the deviation; and
 - (b) submit a comprehensive report to the Director within 14 days from the date on which the emergency arose.

Establishment of heliport environment management programme

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AIDS HELPLINE: 0800-0123-22 Prevention is the cure

- 139.03.8 (1) The applicant shall, in the area within its authority and where any bird and wildlife presents or is likely to present a hazard to helicopters operating to or from the heliport, establish a heliport environment management programme to minimise the effects of such hazard or potential hazard, taking due cognisance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989), and the regulations made thereunder.
- (2) The heliport operator shall ensure that an environmental management meeting is conducted with intervals not exceeding three months, and
 - (a) during such meetings, minutes must be kept and should clearly indicate all identified environmental issues that may affect the operations;
 - (b) the meeting must address all environmental issues within the boundaries of the heliport and in the immediate vicinity up to a radius of 10 kilometer that might affect the heliport operation negatively; and
 - (c) the mitigating measures to rectify all identified environmental issues must be recorded for audit purposes. This includes communication with external parties.

Notification of heliport data and information

139.03.9 (1) An applicant for the issuing of a heliport licence shall establish a procedure to notify the ATSU concerned and the Director –

- (a) of the heliport data and information;
- (b) of any limitation on the use of the heliport contemplated in regulation 139.01.3;
- (c) of compliance with regulation 139.03.7;
- (d) as soon as possible, of any change which may affect the use of the heliport; and
- (e) any other information required in terms of regulations in Part 175.
- (2) A notification contemplated in sub-regulation (1) shall be made in the appropriate prescribed form.

Application for licence or amendment thereof

139.03.10 An application for the issuing of a heliport licence, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by ~
 - the operations manual referred to in regulation 139.03.3;
 - (ii) the plans of the heliport;
 - (iii) written approval from the local government concerned;
 - (iv) an environmental impact report, if required in terms of the Environment Conservation Act, 1989 and including the provision of rescue and fire fighting service as contemplated in regulation 139.03.7;
 - (v) written approval from all interested Government institutions;
 - (vi) proof that the applicant is financially capable of operating the heliport;
 - (vii) particulars of non-compliance with, or deviations from -

- (aa) the appropriate heliport design, operation or equipment standards prescribed in this Part; or
- (bb) the appropriate airspace classification requirements prescribed in Part 172; and
- (viii) the appropriate fee as prescribed in Part 187.

Processing of application for licence or amendment thereof

- **139.03.11** (1) The Oirector shall, as soon as practicable after the receipt of an application for a heliport licence, or an amendment thereof, publish by notice in the *Gazette* the following particulars in respect of the application concerned:
 - (a) The full name of the applicant;
 - (b) full particulars of the location of the heliport; and
 - (c) a reference to the date by which the representations referred to in sub-regulation(2) must be submitted to the Director.
- (2) Any person may, after the publication of the notice referred to in sub-regulation (1) address in writing representations to the Director against or in favour of the application concerned.

Adjudication of application for licence or amendment thereof

- **139.03.12** (1) The Director shall as soon as practicable consider an application referred to in regulation 139.03.11 together with all representations, information and other documents relating to such application which are received within the period specified in the notice published in terms of regulation 139.03.11.
- (2) The Director may grant the application if the Director is satisfied that
 - (a) the applicant complies with the requirements prescribed in regulations 139.03.2 to 139.03.10 inclusive; and
 - (b) granting the application will not jeopardise aviation safety.

Issuing of Ilcence

- 139.03.13 (1) A heliport licence shall be issued on the appropriate prescribed form.
- (2) The licence shall specify
 - (a) the category for which the heliport is licensed; and
 - (b) the restrictions, if any, relating to non-compliance with, or deviations from -
 - the appropriate heliport design, operation or equipment standards prescribed in this Part; and
 - (ii) the appropriate airspace classification requirements prescribed in Part 172.

Period of validity

- **139.03.14** (1) A heliport licence shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date on which the licence is issued or renewed.
- (2) The licence shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of a licence which expires, shall forthwith surrender the licence to the Director.
- (4) The holder of a licence which is suspended, shall forthwith produce the licence upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of a licence which is cancelled, shall, within 30 days from the date on which the licence is cancelled, surrender such licence to the Director.

Transferability

- **139.03.15** (1) Subject to the provisions of sub-regulation (2), a heliport licence shall not be transferable.
- (2) A change in ownership of the holder of a licence shall be deemed to be a change of significance referred to in regulation 139.03.16.

Changes in quality assurance system

- **139.03.16** (1) If the holder of a heliport licence desires to make any change in the quality assurance system referred to in regulation 139.03.4, which is significant to the showing of compliance with the appropriate requirements prescribed in this part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 139.03.10 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to his, her or its operations manual, that the applicant will continue to comply with the provisions of regulations 139.03.2 to 139.03.10 inclusive, after the implementation of such approved change.

Renewal of licence

- 139.03.17 (1) An application for the renewal of a heliport licence shall be -
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -

- (i) the updated operations manual referred to in regulation 139.03.3, if required by the Director;
- (ii) proof of adequate funding;
- (iii) particulars of non-compliance with, or deviations from
 - (aa) the appropriate heliport design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
- (iv) the appropriate fee as prescribed in Part 187.
- (2) The holder of the licence shall at least 60 days immediately preceding the date on which such licence expires, apply for the renewal of such licence.

Licence of intent

- **139.03.18** (1) Where a particular area has been demarcated for the development of a heliport, the proposed holder of a heliport licence in respect of the heliport, may apply to the Director for the issuing of a licence of intent for such area.
- (2) An application for the issuing of a licence of intent shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by
 - full particulars of the particular area demarcated for the development of the heliport, and the focation thereof; and
 - (ii) the appropriate fee as prescribed in Part 187.
- (3) The provisions of regulations 139.03.11 and 139.03.12(1) shall apply with the necessary changes to the processing of an application for the issuing of a licence of intent.
- (4) The Director may grant the application if the Director is satisfied that the development of the heliport will not jeopardise aviation safety.
- (5) A licence of intent shall be issued on the appropriate prescribed form.
- (6) The licence of intent shall specify the conditions and the restrictions which the Director deems necessary in the interests of aviation safety.
- (7) A licence of intent shall
 - (a) not be transferable; and
 - (b) be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date on which the licence of intent is issued.

General duties of holder of licence

139.03.19 (1) The holder of a heliport licence must -

- (a) hold at least one complete and current copy of the approved manuals referred to in regulation 139.03.3, at the heliport;
- (b) comply with all procedures detailed in such manuals;
- (c) make each applicable part of such operations manual available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this part.
- (2) The holder of the licence must ensure that -
 - (a) the heliport is maintained in a serviceable condition;
 - the heliport is kept free of unauthorised persons, vehicles or animals not under proper control, in compliance with the Act;
 - (c) all obstructions are marked as prescribed in Document SA-CATS 139;
 - (d) the Director is informed of any alterations to or obstructions or workings on the heliport;
 - (e) an apparatus to show the surface direction of the wind, is installed and functions satisfactorily;
 - (f) the markings as prescribed in Document SA-CATS 139, are maintained in a conspicuous condition, readily visible to helicopters in the air or on the ground;
 - (g) the accommodation and facilities offered to the public are available and in a serviceable condition;
 - (h) all apparatus installed by such holder to promote safety in flight, is functioning efficiently;
 - unserviceable areas on the landing terrain are appropriately marked as prescribed in Document SA-CATS 139;
 - (j) the Director is informed whenever a heliport becomes unserviceable through any cause or whenever any portion of the surface of the touch-down area deteriorates to such extent that the safety of a helicopter may thereby be endangered, and helicopter operations are limited to those portions of the heliport not rendered unsafe by those conditions;

- such reports on the condition of the heliport as may be required from time to time by the Director, are submitted to the Director;
- (I) the particulars of a foreign operator's permit are obtained and verified, in the case where a foreign helicopter which is used by virtue of such foreign operator's permit issued in terms of section 26(1) of the International Air Services Act, 1993 (Act No. 60 of 1993), lands at the heliport;
- (m) an annual survey is carried out on the heliport for the purposes of the approval of let-down procedures by the Director;
- (n) for heliports category H 1 2 and 3, a full set of the Civil Aviation Regulations that contain the latest amendments is available at the heliport; and
- (o) for heliports category H 1, 2 and 3, that the respective departments/ sections have available a set of the ICAO annexes and documents relevant to their area of responsibility.
- (3) The holder of the licence must
 - (a) furnish the Director with the heliport financial data and the heliport traffic statistics as prescribed in Document SA-CATS 139;
 - (b) in the case of a heliport which serves helicopters used in international public air transport operations, establish a facilitation committee and compile a facilitation plan in accordance with the requirements and standards as prescribed in Document SA-CATS 139;
 - (c) be responsible for the monitoring of helicopter noise on and in the vicinity of a heliport, and the reporting of violations to the Director, in accordance with the requirements and standards as prescribed in Document SA-CATS 139; and
 - (d) when the ATSU at the aerodrome is not in operation, be responsible for the maintenance of flying discipline on, and in the vicinity of, such heliport.
- (4) The holder of the heliport licence is accountable for the implementation of aeronautical studies, inclusive of technical analysis, risk assessment and proposed risk mitigation for any contemplated deviation of Subpart 1 and Subpart 3 of Part 139 of the Regulations and the resultant outcome of such studies must be presented to the Director.

Works on heliport

- **139.03.20** (1) The holder of a heliport licence shall establish procedures and take precautions to ensure that any works carried out on the heliport, do not endanger any helicopter operations.
- (2) The procedures to be established and precautions to be taken in terms of sub-regulation (1), shall be established and taken in accordance with the requirements and standards as prescribed in Document SA-CATS 139.

Maintenance of heliport emergency management system

139.03.21 The holder of a heliport licence shall –

- (a) establish procedures to ensure that all participants to the effectiveness of the heliport emergency management system (HEMS) with allocated duties or responsibilities, are familiar with, and are properly trained for, their assignments and shall –
 - (i) submit such HEMS to the Authority for approval;
 - (ii) provide a copy of the approved HEMS to the South African Search and Rescue (SASAR) coordination center in accordance with the South African Maritime Search and Rescue Act, 2002 (Act No. 44 of 2002);
 - (iii) provide a copy of the approved AEMS to the Provincial Disaster Management center in accordance with the Disaster Management Act, 2002 (Act No. 57 of 2002);
- (b) test the effectiveness of such heliport emergency management system by --
 - undertaking a full-scale heliport emergency exercise at intervals not exceeding two years;
 - (ii) arranging special emergency exercises in the intervening year to correct any deficiencies identified during the full-scale heliport emergency exercise;
 - (iii) conducting a table top exercise in intervals not exceeding three months to verify the roteplayers, contact detail and other vital information required to ensure that the HEMS is up to date.
- (c) submit a comprehensive written report to the Director within 14 days from the date on which –
 - a full-scale heliport emergency exercise referred to in paragraph (b)(i); or
 - (ii) special emergency exercise referred to in paragraph (b)(ii), has been undertaken or arranged; and
- (d) review such heliport emergency management system for effectiveness after each of the exercises referred to in paragraph (b), as well as after an actual emergency, to address any deficiencies identified and to adapt such system for the enhancement of its efficiency.

Maintenance of heliport environment management programme

139.03.22 The holder of a heliport licence shall -

- (a) maintain the heliport environment management programme referred to in regulation 139.03.8;
- (b) operate the heliport in accordance with the provisions of the Environment Conservation Act, 1989, and the regulations made thereunder, together with the

recommendations and requirements prescribed in any relevant Specifications or Codes of Practice published under the Standards Act, 1993 (Act No. 29 of 1993); and

(c) comply with the provisions of regulation 139.03.8.

Heliport inspection programme

139.03.23 The holder of a heliport licence shall establish and maintain a heliport inspection programme, including –

- (a) procedures to ensure that competent heliport personnel execute the programme effectively; and
- (b) a reporting system to ensure prompt correction of unsafe heliport conditions noted during any inspection,

to ensure compliance with the regulations in this subpart.

Demarcation of restricted area

139.03.24 (1) The holder of a heliport licence shall, on the heliport, demarcate a restricted area and indicate its boundaries by means of –

- (a) markings on the surface of such heliport;
- (b) fences or obstructions or notices erected along the boundaries of such restricted area; or
- a combination of such markings, fences, obstructions or notices.
- (2) Subject to the provisions of sub-regulation (1) relating to the manner in which such boundary shall be indicated, the holder of the licence may alter any boundary or any portion of a boundary of the restricted area.

Control of entry into restricted area

139.03.25 (1) The holder of a heliport licence shall exercise control over entry into a restricted area.

- (2) The control referred to in sub-regulation (1) shall be exercised according to the procedures and criteria approved by such holder.
- (3) An authorised officer, inspector or authorised person may -
 - (a) prohibit any person from entering a restricted area;
 - (b) order any person to leave a restricted area immediately, whether such person has been granted permission to be within a restricted area or not.

Safety measures against fire

- **139.03.26** (1) The holder of a heliport licence shall establish preventative measures against possible fires on the heliport and identify a person or group or persons to maintain a fire prevention programme for the heliport and heliport buildings.
- (2) If the heliport has no fire brigade service designated in terms of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), the holder of the licence shall arrange with the local government concerned to maintain a fire prevention programme for the heliport and to advise such holder of any dangerous conditions for rectification.
- (3) The holder of the ticence shall ensure that no unsafe practice is performed on the heliport or within its parameters.
- (4) If unsafe practices have to be performed during any day-to-day maintenance of, or on, the heliport, the holder of the licence shall alert the rescue and fire fighting service concerned to be on standby for the duration of such practices.

Access of ground vehicles to heliport movement area

139.03.27 The holder of a heliport licence shall -

- (a) limit access to the heliport manoeuvring area of those ground vehicles which are necessary for heliport and helicopter operations;
- (b) if an ATSU is in operation at the heliport, provide adequate procedures for the safe and orderly access to, and operation in the heliport manoeuvring area of ground vehicles, in order to ensure that each ground vehicle operating in the heliport manoeuvring area is controlled by –
 - (i) two-way radio communication between the vehicle and the ATSU;
 - if the vehicle has no radio, an accompanying vehicle with two-way radio communication with the ATSU; or
 - (iii) if it is not practical to have two-way radio communication or and escort vehicle, adequate measures including signs, signals or guards for controlling the vehicle;
- (c) if an ATSU is not in operation at the heliport, provide adequate measures to ensure that ground vehicles operating in the heliport movement area are controlled by the signs, pre-arranged signals or standards as prescribed in Document SA-CATS 139; and
- (d) ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of the heliport which has access to the heliport movement area is familiar with, and complies with, the rules and procedures for the operation of ground vehicles as prescribed in Document SA-CATS 139.

Protection of navigation aids

139.03.28 The holder of a heliport licence shall --

- (a) prevent any construction of facilities on the heliport which may adversely affect the operation of any electronic or visual navigation aid or ATS facility on such heliport;
- (b) prevent, as far as it is within the authority of the such holder, any interruption of visual or electronic signals of navigation aids; and
- (c) liaise with the local government concerned and the Director with regard to any structure higher than the obstacle limitation surfaces on or in the vicinity of the heliport.

Heliport abandoned or not maintained

- 139.03.29 (1) In order that adequate warning may be given to the users of a heliport, the holder of a heliport licence shall give the Director at least 60 days written notice of its intention to discontinue the maintenance of the heliport or to abandon the heliport.
- (2) If, after the expiry of the period of notice referred to in sub-regulation (1), a heliport is abandoned or is not being maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify all heliport markings as the Director may direct.
- (3) On completion of the task referred to in sub-regulation (2), the holder shall surrender the licence to the Director.

SUBPART 4: NON-LICENSED HELICOPTER SITES

Approval and operation of non-licensed helicopter sites

- 139.04.1 (1) No PIC of a helicopter shall land or take off from any place unless the place is so situated to permit the helicopter, in the event of an emergency arising during such landing or take-off, to land without undue hazard to persons or property on the surface.
- (2) No PIC of a helicopter shall land on, or take-off from, any building, structure or place situated within 100 meters of any other building or structure, in the area of jurisdiction of a local government, unless such building, structure or place has been approved for the purpose by the Director: Provided that this restriction shall not apply
 - (a) to a helicopter landing on, or taking off from a building, structure or place within an industrial area, a commercial warehouse area or open farm land which is suitable for such purposes and in respect of which helicopter the PIC is the holder of a valid CPL or ATPL (helicopter) or, in the case of the holder of a PPL (helicopter), with the written permission of the Director, unless specifically prohibited by the local authority;

- (b) to a helicopter engaged in an air ambulance operation referred to in Part 138 (Air Ambulance Operations) a fire service referred to in this Part, or undertaking of a flight for the exercising of any power in terms of any law.
- (3) A local authority may after consultation with the Director, extend the scope of the provisions of sub-regulation (2)(a) to include other places in its area of jurisdiction.
- (4) The Director may, in the interest of aviation safety, impose conditions or institute restrictions as to the use of any building, structure or place for the landing or take-off of helicopters, or require special flight procedures to be adopted at, or special routes to be followed to or from, such building, structure or place by helicopters, and the Director may impose different conditions, institute different restrictions require different special flight procedures to be adopted in respect of different buildings, structures or places.
- (5) Nothing in this regulation shall be construed as conferring any right to land at any building, structure or place against the wishes of the owner of, or any other person who has an interest in, the building, structure or place or as prejudicing the rights or remedies of any person in respect of an injury to persons or property caused by the helicopter or its occupants.

PART 140: SAFETY MANAGEMENT SYSTEM

List of regulations

140.01.1	Applicability
140.01,2	Establishment of safety management system
140.01.3	Requirements for safety management system

Applicability

140.01.1 This Part applies to the holder of -

- (a) a category 4 or higher aerodrome licence issued in terms of Part 139, where commercial activities take place;
- (b) an ATO approval issued in terms of Part 141;
- (c) an AMO approval issued in terms of Part 145;
- (d) a manufacturing organisation approval issued in terms of Part 148;
- (e) an ATSU approval issued in terms of Part 172;
- a design organisation approval issued in terms of Part 147;
- (g) an operating certificate issued in terms of Parts 127;
- (h) procedure design organisation approval issued in terms of Part 173; and
- (i) an electronic services organisation approval issued in terms of Part 171.

Establishment of safety management system

140.01.2 (1) The holder of a category 4 or higher aerodrome licence where commercial activities take place, shall establish, implement, maintain and adhere to a SMS that is appropriate to the size, nature and complexity of the operations or activities authorized to be conducted in terms of the licence issued under regulation 139.02.1 and the hazards and risks related to the operations or activities.

- (2) The holder of -
 - (a) a category 4 or higher aerodrome licence;
 - (b) an ATO approval;
 - (c) an aircraft maintenance organisation approval;
 - (d) a manufacturing organisation approval;
 - (e) an ATSU approval;
 - (f) a design organisation approval;
 - (g) an AOC issued in terms of Part 127;
 - (h) a procedure design organisation approval; and
 - (i) an electronic services organisation approval,

shall establish a SMS for the control and supervision of the services rendered or to be rendered by that organisation.

(3) The Director shall determine the acceptable level of safety for all the holders of approvals or operating certificates reflected in sub-regulation (1).

Requirements of safety management system

140.01.3 (1) The SMS shall include -

- (a) the identification of safety hazards;
- (b) remedial action necessary to maintain an acceptable level of safety
- (c) continuous monitoring and regular assessment of the safety level achieved;
- (d) continuous improvement to the overail level of safety;
- (e) a clear definition of the level of safety that the organisation intends to achieve;
- (f) proof by the organisation that adequate safety measures to maintain the required level of safety will be or have been instituted;
- (g) the components and elements referred to in Document SA-CATS 140.
- (2) The SMS shall clearly define lines of safety accountability throughout all the organisations and by operators referred to in regulation 140.01.1, including direct accountability for safety by senior management.
- (3) The minimum standards for a SMS that have to be complied with are prescribed in Document SA-CATS 140.

(4) A SMS established in terms of regulation 140.01.2 shall be documented and after it has been approved by the Director, shall form part of an operations manual of the organisations and of operators referred to in regulation 140.01.1.

PART 141: AVIATION TRAINING ORGANISATIONS

List of regulations

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SUBPART 1: GENERAL

Applicability

141.01.1 (1) This Part applies to the approval and operation of organizations conducting -

- (a) aviation training;
- (b) temporary aviation training; and
- (c) aviation training conducted on behalf of a third party.
- (2) This Part does not apply in respect of
 - (a) training conducted for familiarisation purposes; and
 - (b) training or instruction conducted in the interests of aviation safety: Provided that such training or instruction is not conducted for the issuing, renewal, reissuing, validation or revalidation of any licence, certificate or rating in terms of the Regulations.

Designation of body or institution

141.01.2 (1) The Director may designate a body or institution to -

- (a) exercise control over the aviation training specified in the Regulations, and over the persons conducting such aviation training;
- (b) determine standards for such aviation training and for the training of such persons;
- (c) issue, confirm, suspend or withdraw certificates for the successful completion of such aviation training, and keep all books or documents regarding such aviation training; and
- (d) advise the Director on any matter connected with such aviation training or persons.
- (2) The designation referred to in sub-regulation (1) shall be made in writing and shall be published by the Director in the Gazette within 30 days from the date of such designation.
- (3) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 141.

Display of aviation training organisation approval

141.01.3 The holder of an ATO approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of

the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

- 141.01.4 Any advertisement by an organisation indicating that it is an ATO, shall -
 - (a) reflect the number of the ATO approval issued by the Director; and
 - (b) contain a reference to the aviation training for which such approval was issued.

Safety inspections and audits

- **141.01.5** (1) An applicant for the issuing of an ATO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of regulation 141.02.7 or regulation 141.03.2, as the case may be.
- (2) The holder of an ATO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- **141.01.6** (1) The Director shall maintain a register of all ATO approvals issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the scope of the approval issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF AVIATION TRAINING ORGANISATION (STANDARD AVIATION ORGANISATION)

Requirements for approval

- **141.02.1** (1) No organisation shall conduct aviation training except under the authority of, and in accordance with the provisions of this Part.
- (2) The issuing of an approval for an ATO and the continued validity of the approval shall depend upon the ATO being in compliance with the requirements of this Subpart.

Training and procedures manual

- **141.02.2** (1) The ATO shall provide a training and procedures manual for the use and guidance of personnel concerned and such manual may be issued in separate parts and shall contain at least the following information:
 - (a) A general description of the scope of training authorised under the ATO's terms of approval.
 - (b) The contents of the training programmes offered, including the courses and equipment to be used.
 - (c) A description of the organisation's quality assurance system in accordance with regulation 141,02.3.
 - (d) A description of the organisation's facilities.
 - (e) The name, duties and qualifications of the person designated as responsible for compliance with the requirements of the approval in regulation 141.02.4 (1)(a).
 - (f) A description of the duties and qualifications of the personnel designated as responsible for planning, performing and supervising the training in regulation 141.02.04(1)(c).
 - (g) A description of the procedures used to establish and maintain the competence of personnel as required by regulation 141.02.04 (2) and (3).
 - (h) A description of the method used for the completion and retention of the training records required by regulation 141.02.14.
 - (i) A description, when applicable, of additional training needed to comply with an operator's procedures and requirements.
 - (j) A description of the selection, role and duties of the authorised personnel, as well as the applicable requirements established by the Director, if the Director has authorised an ATO to conduct the testing required for the issuing of a licence, rating, or qualification.

- (2) The ATO shalf ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date.
- (3) Copies of all amendments to the training and procedures manual shall be furnished promptly to all organisations or persons to whom the manual has been issued.
- (4) The ATO must comply with the guidelines for the content of the training and procedures manual are prescribed in Document SA-CATS 141.
- (5) The contents of the training and procedures manual shall, with the necessary changes, include the elements prescribed in Document SA-CATS 141 as far as they are appropriate to the type of aviation training to be provided.
- (6) The Director may approve the addition or removal of elements of the training and procedures manual to meet the unique requirements of an ATO.

Quality assurance system

- **141.02.3** (1) The ATO shall establish a quality assurance system, acceptable to the Director which complies with all requirements as prescribed in Document SA-CATS 141.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 141.

Personnel requirements

- 141.02.4 (1) The ATO shall nominate engage, employ or contract --
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her:
 - (iii) powers to order cessation of any activity where such compliance is not effected;
 - (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
 - (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);

- (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting airworthiness and aviation safety; and
- (c) adequate personnel to plan, conduct and supervise the standard aviation training covered by the application.
- (2) The ATO shall establish a procedure acceptable to the Director for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, conducting or supervising the aviation training covered by the application.
- (3) The ATO shall ensure that those personnel responsible for training or assessing students, have a combination of competence and experience adequate for the level of competence required by the Director for such training or assessment.
- (4) (a) The ATO shall ensure that all instructional personnel receive initial and recurrent training appropriate to their assigned tasks and responsibilities.
- (b) The training programme established by the ATO shall include training in knowledge and skills related to human performance.

Accommodation, facilities and equipment

- **141.02.5** (1) The ATO shall ensure that the facilities and working environment are appropriate for the axiation training to be performed and are acceptable to the Director.
- (2) The synthetic training devices shall be qualified according to requirements established by the Director and prescribed in Document SA-CATS 141.
- (3) The use of the synthetic training device shall be approved by the Director to ensure that it is appropriate and limited to the approved training.

Accreditation

141.02.6 An ATO shall obtain accreditation from a body or institution that may be designated by the Director in terms of regulation 141.01.2, for conducting the aviation training covered by the application.

Application for approval or amendment thereof

- **141.02.7** An organisation applying for an ATO approval to conduct aviation training, or an amendment thereof, shall
 - (a) follow the approval or amendment process prescribed in Document SA-CATS 141 for ATOs; and
 - (b) ensure that the application is accompanied by the appropriate fee as prescribed in Part 187.

Issuing of approval

- **141.02.8** The Director shall issue an ATO approval to conduct standard aviation training, if the applicant complies with the requirements prescribed in regulations 141.02.2 and 141.02.6 inclusive.
- (2) The Director shall issue the approval on the appropriate prescribed form.
- (3) The approval shall contain at least the following:
 - (a) the organisation's name and location;
 - (b) the date of issue and period of validity, where applicable;
 - (c) the terms of approval; and
 - (d) the organisation's certificate number.

Scope of approval

141.02.9 An ATO approval shall specify the aviation training which the holder of the approval is entitled to conduct.

Period of validity

- **141.02.10** (1) An ATO approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) If the holder of an approval applies for the renewal of the approval at least 30 days prior to the expiry of the approval, then approval shall, notwithstanding sub-regulation (2), remain in force until the Director issues the renewal thereof.
- (4) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (5) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (6) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **141.02.11** (1) Subject to the provisions of sub-regulation (2), an ATO approval shall not be transferable.
- (2) A change in ownership of the holder of an approval to conduct aviation training shall be deemed to be a change of significance referred to in regulation 141.02.12.

Renewal of approval

- 141.02.12 (1) An application for the renewal of an ATO approval shall be -
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) be accompanied by --
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the training and procedures manual referred to in regulation 141.02.2; and
 - (iii) proof of the accreditation referred to in regulation 141.02.6.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Duties of holder of approval

- 141.02.13 The holder of an ATO approval shall -
 - (a) keep at least one complete and current copy of its training and procedures manual referred to in regulation 141.02.2, at each training facility specified in the training and procedures manual;
 - (b) comply with all procedures detailed in the training and procedures manual;
 - (c) make each applicable part of the training and procedures manual available to the personnel who require those parts to carry out their duties; and
 - (d) continue to comply with the appropriate requirements prescribed in this Part.

Documents and records

- 141.02.14 (1) The holder of an ATO approval shall -
 - retain detailed student records to show that all requirements of all the training presented under the organisation's approval have been met as approved by the Director;
 - (b) establish procedures to control the documents referred to in paragraph (a).
- (2) The procedures referred to in sub-regulation 1(b) shall be made to ensure that
 - (a) all documents are reviewed and authorised by the appropriate personnel before the issuing thereof;
 - (b) current issues of all relevant documents are available to those personnel involved in planning, conducting or supervising the specified aviation training undertaken by the holder of the approval;

- (c) all obsolete documents are promptly removed from all points of issue or use; and
- (d) changes to documents are reviewed and authorised by the appropriate personnel.
- (3) The holder of the approval shall establish procedures to identify, collect, index, store and maintain all records which may be necessary
 - (a) for the specified aviation training conducted by such holder;
 - (b) to determine compliance with the appropriate requirements prescribed in this Subpart.
- (4) The procedures referred to in sub-regulation (3) shall be made to ensure that
 - (a) a record is kept of each quality assurance review of the holder of the approval;
 - (b) a record is kept of each person who conducts the specified aviation training, including particulars of the competence assessments and experience of each such person;
 - (c) a record is kept of each student being trained or assessed by the holder of the approval, including particulars of enrolment, attendance, modules, instructor comments and any flight or similar practical sessions and assessments of each such student;
 - (d) all records are legible; and
 - (e) all records are kept for a period of at least five years calculated from the date of the last entry made in such records.
- (5) An ATO conducting training on behalf of a holder of an operating certificate shall ensure that all training documents utilized, reflect and are specific to the current operating procedures, quality assurance and safety programme of such holder.

Pilot training programmes

- **141,02.15** (1) The Director may approve a pilot training programme for a PPL, CPL or instrument rating that allows an alternative means of compliance with the experience requirements established by Part 61, provided that the aviation training organization demonstrates to the satisfaction of the Director that the training provides a level of competency at least equivalent to that provided by the minimum experience requirements for personnel not receiving such approved training.
- (2) If the Director has approved a pilot training programme for a multi-crew pilot licence, the aviation training organization shall demonstrate to the satisfaction of the Director that the training provides a level of competency in multi-crew operations at least equal to that met by holders of a CPL, instrument rating and type rating for a turbine_aeroplane certificated for operation with a minimum crew of at least two pilots.
- (3) If the Director approved the presentation of a pilot training programme for which a syllabus has not been prescribed by the Director, only the programme with the associated

curriculum, modules, attendance requirements and reference material will be deemed to have been approved; and any notes or course material that may be compiled and distributed by the ATO to students or any other person or organisation, are at the discretion of and the liability of the distributing ATO.

(4) If the Director establishes a criteria or a syllabus with associated requirements for any programme referred to in sub-regulation (3) above, the approval may mutatis mutandis be withdrawn or suspended by the Director until the requirements that may be prescribed are met.

Oversight

141.02.16 The Director shall maintain an effective oversight programme of the ATO to ensure continuing compliance with the approval requirements.

Evaluation and checking

141.02.17 If the Director authorises an aviation training organization to conduct the testing required for the issuing of a licence or rating, the testing shall be conducted by personnel authorised by the Director or designated by the ATO in accordance with the criteria approved by the Director.

SUBPART 3: APPROVAL OF ORGANISATION (TEMPORARY AVIATION TRAINING)

Requirements for approval

141.03.1 (1) No organisation shall conduct temporary aviation training except under the authority of, and in accordance with the provisions of, an ATO approval issued under this Subpart.

- (2) An ATO applying for an ATO approval to conduct temporary aviation training, shall -
 - engage, employ or contract adequate personnel to plan, conduct and supervise the temporary aviation training covered by the application;
 - (b) ensure that those personnel responsible for conducting the temporary aviation training, have a combination of competence and experience adequate for the level of competence required for such training;
 - ensure that the facilities and resources are adequate to enable the personnel to conduct such temporary aviation training; and
 - (d) have documented procedures for conducting such temporary aviation training.

Application for approval

- **141.03.2** An application for the issuing of an ATO approval to conduct temporary aviation training, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the requirements prescribed in regulation 141.03.1.

issuing of approval

- **141.03.3** (1) The Director shall issue an ATO approval to conduct temporary aviation training, if the applicant complies with the requirements prescribed in regulation 141.03.1.
- (2) The Director shall issue the approval on the appropriate prescribed form.

Scope of approval

141.03.4 An ATO approval issued in terms of this subpart shall specify the temporary aviation training which the holder of the approval is entitled to conduct.

Period of validity

- **141.03.5** (1) An ATO approval issued in terms of this subpart, shall be valid for the period required to conduct the specified temporary aviation training.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

141,03.6 An ATO approval issued in terms of this subpart, is not transferable.

Duties of holder of approval

141.03.7 (1) The holder of an ATO approval issued in terms of this subpart, shall –

- (a) continue to comply with the appropriate requirements prescribed in this Part;
- (b) ensure that documents and records are kept as prescribed in regulation 141.02.1 and Document SA-CATS 141.

PART 145: AIRCRAFT MAINTENANCE ORGANISATIONS

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SUBPART 1: GENERAL

Applicability

- **145.01.1** (1) This Part applies to the approval and operation of organisations for the maintenance of aircraft and aircraft components.
- (2) An AMO located outside the Republic may be approved by the Director if -
 - (a) the Director is satisfied that a need exists for such approval; and
 - (b) the AMO complies with the provisions of this part.

Requirement for approval

- 145.01.2 (1) No organisation shall perform maintenance on or release to service
 - (a) an aircraft used or intended to be used for flight operations; or
- (b) an aircraft component fitted or intended to be fitted to the aircraft, except under the authority of, and in accordance with the provisions of, an AMO approval with the appropriate rating issued under this Part.
- (2) No organisation other than the holder of an AMO approval with the appropriate rating issued under this Part, shall carry out
 - (a) the overhaul of an aircraft component;
 - (b) maintenance on an aircraft or aircraft component where the relevant airworthiness data require the use of jig which is –
 - (i) approved or certified by the manufacturer; or
 - (ii) approved by the Director;
 - (c) maintenance on an aircraft component where the maintenance involves the disturbance of any part of the component which is supplied as a bench tested unit, except where
 - the disturbance is for the replacement or adjustment of a part or parts normally replaceable or adjustable in service; and
 - subsequent functioning of the part or parts disturbed can be proved without the use of test apparatus which is additional to the test apparatus used for normal functioning checks;
 - (d) maintenance on an aircraft engine where the maintenance involves -
 - dismantling and assembly of a piston engine except where this is to obtain access to the piston or cylinder assembly;
 - (ii) dismantling and assembly of any main casing or main rotating assembly of a turbine engine, except where this is for replacement of a main casing or rotating assembly, whether comprising the whole or part of a rotating system, and the maintenance manual for the engine provides instruction for the replacement, and the removal from the engine is achieved solely by disconnecting the flanges of main casings; or
 - (iii) disturbance of reduction gear;

- (e) aircraft propeller balancing other than in situ dynamic propeller balancing in accordance with the aircraft manufacturer's instructions; and
- (f) maintenance on a rotorcraft where the maintenance involves the dismantling of any transmission gearbox, except where this is for the separation of casing to obtain access for the purpose of internal inspection in accordance with the rotorcraft manufacturer's instructions.
- (3) No organisation shall release to service an aircraft or aircraft component which has undergone the maintenance referred to in sub-regulation (2), except under the authority of, and in accordance with the provisions of, an AMO approval with the appropriate rating issued under this Part.
- (4) The provisions of sub-regulations (2) and (3) shall not apply in respect of any amateur-built aircraft, microlight aeroplane, gyroplane, airship, glider or free balloon, unless it is used in commercial operations.

Display of AMO approval

145.01.3 The holder of an AMO approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

- 145.01.4 Any advertisement by an organisation indicating that it is an AMO, shall -
 - (a) reflect the number of the AMO approval issued by the Director; and
 - (b) contain a reference to the category under which and the aircraft or aircraft component for which the organisation is rated.

Safety inspections and audits

- **145.01.5** (1) An applicant for the issuing of an AMO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of an AMO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Categories of ratings

145.01.6 The categories of ratings for an AMO approval are -

- (a) Category A ratings and Category B ratings for all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145;
- (b) Category B ratings for rotorcraft only, excluding the engine or engines, either singly or in the classes as prescribed in Document SA-CATS 145;
- (c) Category C ratings for all types of engines, excluding engines to be installed in rotorcraft, and Category D ratings for all types of engines, either singly or in the classed as prescribed in Document SA-CATS 145;
- (d) Category E ratings for all types of rotorcraft, either singly or in the classes as prescribed in Document SA-CATS 145;
- (e) Category W ratings for all types of --
 - electrical installations in all types of aircraft, excluding radio apparatus installations, either singly or in the classes as prescribed in Document SA-CATS 145;
 - (ii) instruments installations in all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145; and
 - (iii) radio apparatus installations in all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145; and
- (f) Category X ratings for aircraft equipment, instruments, components, accessories, auxiliaries or parts, either singly or in the classes as prescribed in Document SA-CATS 145.

Privileges of approved AMO

- **145.01.7** (1) The holder of an AMO approval with the appropriate rating shall ensure that the privileges of such rating are not exercised unless the AMO has the necessary facilities, current technical data, tools, equipment, materials and competent personnel to perform the work in accordance with all current requirements regarding the maintenance and airworthiness of the particular type of aircraft, airframe, engine, aircraft component or other equipment.
- (2) Notwithstanding anything to the contrary contained in the Regulations, the holder of an approval with the appropriate rating may, in circumstances where
 - (a) no appropriately licensed and rated AME; of
- (b) no other approved and appropriately rated AMO,
 is available, rectify any defect in a similar type of aircraft for which the approval is rated.
- (3) Where a defect referred to in sub-regulation (2) is rectified, the holder of the approval shall notify the Director in writing, within 48 hours from the moment the defect is rectified, of the reasons for, and nature of, such rectification.
- (4) Where a defect in an aircraft which is not similar to the type of aircraft for which the approval is rated, is rectified, the holder of such approval shall obtain the prior written permission from the Director to effect such rectification.

Limitations on approved AMO

- 145.91.8 (1) The holder of an AMO approval may only maintain an aircraft or aircraft component for which it is approved.
- (2) The holder of an approval shall not maintain an aircraft or aircraft component for which it is approved unless such holder has available all the facilities, equipment, tooling, airworthiness data and certifying personnel necessary to maintain the aircraft or aircraft component in accordance with its manual of procedure and the requirements prescribed in this part.

Register of approvals

- **145.01.9** (1) The Director shall maintain a register of all AMO approvals issued in terms of the regulations in this part.
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the rating issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Designation of airworthiness representatives

- **145.01.10** (1) The Director may, designate an airworthiness representative to perform the functions as prescribed in Document SA-CATS 145.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 145.
- (3) The Director shall sign and issue to each designated airworthiness representative a document which shall state the full name of such airworthiness representative and contain a statement that
 - (a) such airworthiness representative has been designated in terms of sub-regulation (1);
 and
 - (b) such airworthiness representative is empowered to perform the functions referred to in sub-regulation (1).

Training and checking

- **145.01.11** (1) The holder of an aircraft maintenance approval shall establish and maintain a training programme for aircraft maintenance personnel in his or her employ.
- (2) The approval holder shall ensure that aircraft maintenance personnel
 - (a) receive or has received type- or model-specific training in respect of the aircraft or aircraft components for which the organisation has received maintenance approval; and
 - (b) receive periodically recurrent training with specific attention to new technologies and maintenance techniques,

as prescribed in Document SA-CATS 145.

- (3) The training programme, contemplated in sub-regulation (1), shall be part of the organisation's manual of procedure.
- (4) Initial and recurrent training may be provided only by the holder of an ATO approval issued in terms of Part 141, or by or on behalf of the original equipment manufacturer.

SUBPART 2: APPROVAL OF AIRCRAFT MAINTENANCE ORGANISATION

Manual of procedure

- **145.02.1** (1) An applicant for an AMO approval shall provide the Director with its manual of procedure which
 - (a) complies with the requirements prescribed in this Subpart; and
 - (b) contains the information as prescribed in Document SA-CATS 145.
- (2) Subject to sub-regulations (5) and (6), the holder of an AMO approval must ensure that the details in its manual of procedure provide a current description of the organisation.
- (3) The holder of an approval must
 - (a) ensure that each amendment to its manual of procedure meets the applicable requirements of this Part and any other relevant Part; and
 - (b) comply with the amendment procedures contained in its manual of procedures.
- (4) The holder of an approval must provide the Director with a copy of each amendment to its manual of procedure as soon as practicable after the amendment has been incorporated into the manual of procedure.
- (5) The holder of an approval who intends to change any of the following must apply to and obtain the prior approval of the Director:
 - (a) The accountable manager;
 - (b) the listed senior persons;
 - (c) the maintenance ratings;
 - (d) the procedures for changing the scope within a rating;

- (e) the locations at which maintenance is carried out; or
- (f) the procedure for authorising persons to certify maintenance.
- (6) The Director may specify conditions under which an approval holder must operate during or following any of the changes listed in sub-regulation (5), to ensure continued compliance with the requirements of this Part.
- (7) The holder of an approval must comply with all conditions specified as contemplated in sub-regulation (6).
- (8) If any change referred to in this regulation requires an amendment to the approval, the holder must forward the approval to the Director immediately after the amended approval has been issued.
- (9) The holder of an approval must make such amendments to its manual of procedure as the Director may consider necessary in the interests of aviation safety.

Quality assurance system

- **145.02.2** (1) The applicant shall establish a quality assurance system for the control and supervision of the maintenance of aircraft and aircraft components, covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 145.

Accommodation and facilities

145.02.3 The applicant shall satisfy the Director that —

- (a) it has adequate accommodation and facilities for all maintenance to be performed by the AMO, ensuring in particular, protection from the weather;
- (b) specialised work areas are segregated as appropriate to ensure that environmental and work area contamination does not occur;
- appropriate office accommodation is provided for the administration of the maintenance performed and, in particular, for the administration of the organisation's quality, planning and technical records;
- (d) the working environment is appropriate for each task carried out and, in particular, complies with any special requirements specified in the applicable airworthiness data;
- (e) storage facilities are provided for parts, equipment, tools and materials required by the organisation;
- (f) the storage facilities referred to in paragraph (e) provide security for serviceable parts and segregation of serviceable from unserviceable parts, and control deterioration of, and damage to, stored items; and
- (g) it has established procedures to ensure compliance with the requirements prescribed in paragraphs (d), (e) and (f).

Personnel requirements

- **145.02.4** (1) An applicant for an aircraft maintenance approval shall, subject to sub-regulation (3), engage, employ or contract
 - (a) a senior person identified as the chief executive officer or the accountable manager who
 has the authority to ensure that all activities undertaken by the applicant shall be financed
 and carried out in accordance with the requirements prescribed by this Part;
 - (b) a senior person or group of senior persons who are responsible for ensuring that the applicant complies with the requirements of this Part; such nominated person or persons shall be accountable to the chief executive or accountable manager for the following functions –
 - (i) maintenance control;
 - (ii) personnel authorisations;
 - (iii) internal quality assurance; and
 - (c) sufficient personnel to plan, perform, supervise, inspect and certify the maintenance activities listed in the applicant's manual of procedure.
- (2) The applicant's senior personnel contemplated in paragraphs (a) and (b) of sub-regulation (1) shall meet the minimum requirements as prescribed in Document SA-CATS 145.
- (3) An applicant shall not engage, employ or contract a senior person as accountable manager without prior approval of the Director.
- (4) The applicant shall -
 - (a) establish a procedure to initially assess, and a procedure for maintaining, the competence
 of the personnel involved in planning, performing, supervising, inspecting or certifying the
 maintenance activities performed by the applicant; and
 - (b) provide such personnel with written evidence of the scope of their authorisation.
- (5) The holder of an approval shall ensure that the personnel involved in planning, performing, supervising, inspecting, or certifying maintenance activities of the approval holder are engaged, employed, contracted by only one organisation.
- (6) The holder of an approval shall state in its Manual of Procedure a list of its personnel who are responsible for certifying maintenance and such list shall contain, at least, the following information:
 - (a) The full names of the certifying personnel;
 - (b) The company authorisation number or identification stamp; and
 - (c) The licence number issued by the Director.

Equipment, tools and material

- 145.02.5 The applicant shall satisfy the Director that it has
 - (a) the equipment, tools and material necessary to perform adequately the approved scope
 of work as required by the applicable airworthiness data, its manual of procedure and the
 regulations in this Part; and

(b) established a procedure to control and, where necessary, calibrate tools and other equipment at a frequency and to a standard to ensure serviceability, accuracy and traceability.

Application for approval or amendment thereof

145.02.6 An application for the issuing of an AMO approval, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate from as prescribed by the Director; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 145.02.1.

Issuing of approval

145.02.7 (1) An applicant is entitled to an AMO approval if the Director is satisfied that -

- (a) the applicant meets the requirements prescribed in Part 145 as applicable and the applicant has compiled a statement of compliance which is accepted by the Director;
- (b) the applicant's senior person or persons required by this Part
 - (i) are fit and competent persons; and
 - (ii) have never held a senior position in the previous five years in any AMO where the approval thereof was cancelled by the Director or the Minister as a result of negligence of such person; and
- (c) the granting of the approval is not contrary to the interests of aviation safety.

Privileges

145.02.8 (1)(a) The privileges of an AMO with a Category A rating approval shall be limited to aircraft for which the approval is rated and shall be –

- (i) to release to service an aircraft, excluding its engine or engines;
- (ii) to certify in the manner prescribed in the Regulations
 - (aa) work which the maintenance schedule relating to an aircraft authorises the holder of the approval to certify;
 - (bb) the assembly of an aircraft and any adjustment or minor mod⊞cation of an aircraft; and
 - (cc) the installation or replacement of completed subassemblies, equipment, instruments and minor components of an aircraft, excluding its engine or engines; and
- (ii) to release to service an aircraft, excluding its engine or engines, for a test flight.
- (b) For the purpose of sub-regulation (1)(b)(iii), a completed subassembly comprises a unit built up of individual components to form a complete unit which may include a wing, alleron, landing gear shock strut, wheel, complete landing gear, tail plane, fin, rudder and elevator.

- (2) The privileges of an AMO approval with a Category B rating shall be limited to aircraft for which the approval is rated and shall be
 - (a) to certify in the manner prescribed in the Regulations -
 - any overhaut, repair or modification of an aircraft, excluding its engine or engines, except –
 - (aa) the overhaul, repair or modification of such item, equipment or apparatus which is to be certified by the holder of an approval with a Category X rating; and
 - (bb) the installation and testing of such instrument, electrical equipment or radio apparatus which is to be certified by the holder of an approval with a Category W rating; and
 - the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 21, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify;
 - (b) in respect of rotorcraft for which the approval is rated under Category A, to release to service a rotorcraft, excluding its engine or engines; and
 - (c) in respect of rotorcraft for which the approval is rated under Category E, to release to service a rotorcraft, excluding its engine or engines.
- (3) The privileges of an AMO approval with a Category C rating shall be limited to engines for which the approval is rated and shall be
 - (a) to release to service an engine installed in an aeroplane;
 - (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to an aeroplane authorises the holder of the approval to certify;
 - (ii) the installation of an engine in an aeroplane;
 - (iii) any adjustment or minor modification of an aeroplane engine and the replacement of external components and of piston and cylinder assemblies;
 - (iv) the overhaul and testing of spark plugs; and
 - (v) any installation and maintenance, other than the overhaul, major modification or major repair, of propellers and the reassembly of variable-pitch propellers which may have been dismantled for transport purposes; and
 - (c) to release to service an aeroplane engine for a test flight.
- (4) The privileges of an AMO approval with a Category D rating shall be limited to engines for which the approval is rated and shall be
 - (a) to release to service an engine; and
 - (b) to certify in the manner prescribed in the Regulations
 - (i) any overhaul, repair or modification of an engine or its accessories, except the overhaul, repair or modification of the ignition equipment, other than the spark plugs, and of the propeller, starter and generator which is to be certified by the holder of an approval with a Category X rating; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 21, if the manufacturing of the

components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify.

- (5) The privileges of an AMO approval with a Category E rating shall be limited to aircraft for which the approval is rated and shall be
 - (a) to release to service a rotorcraft:
 - (b) to certify in the manner prescribed in the Regulations -
 - work which the maintenance schedule relating to a rotorcraft authorises the holder of the approval to certify;
 - (ii) the assembly of a rotorcraft and any adjustment or minor modification of a rotorcraft:
 - (iii) the installation or replacement of completed subassemblies, equipment, instruments and minor components of a rotorcraft;
 - (iv) any adjustment or minor modification of a rotorcraft engine and the replacement of external components and of piston and cylinder assemblies;
 - (v) the overhaul and testing of spark plugs; and
 - (vi) any installation and maintenance, other than the overhaul, major modification or major repair, of rotors and the reassembly of rotors which may have been dismantled for transport purposes; and
 - (c) to release to service a rotorcraft for a test flight.
- (6) The privileges of an AMO approval with a Category W rating shall be limited to equipment for which the approval is rated and shall be
 - (a) to release to service the equipment; and
 - (b) to certify in the manner prescribed in the Regulations -
 - (i) work which the maintenance schedule relating to the aircraft authorises the holder of the approval to certify;
 - (ii) any adjustment, maintenance or modification of such equipment; and
 - (iii) any installation of such equipment in aircraft and the replacement of components and parts of such equipment: Provided that no equipment shall be dismantied for the purpose of making internal replacements.
- (7) The privileges of an AMO approval with a Category X rating shall be limited to aircraft equipment, instruments, components, auxiliaries or parts for which the approval is rated and shall be
 - (a) to release to service the aircraft equipment, instruments, components, auxiliaries or parts;
 - (b) to certify in the manner prescribed in the Regulations
 - (i) their overhaul, repair, testing and modification; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed Part 21, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, overhaul, test or modification which it will certify.

Period of validity

- **145.02.9** (1) An AMO approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **145.02.10** (1) Subject to the provisions of sub-regulation (2), an AMO approval, is not transferable.
- (2) A change in ownership of the holder of an approval, shall be deemed to be a change of significance referred to in regulation 145.02.12.

Renewal of approval

- 145.02.11 (1) An application for the renewal of an AMO approval, shall be -
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by the appropriate fee as prescribed in Part 187.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Changes in quality system

- **145.02.12** (1) If the holder of an AMO approval desires to make any change in the quality system referred to in regulation 145.02.2, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 145.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality system.
- (3) An application for the approval of a change in the quality system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 145.02.1 to 145.02.5 inclusive, after the implementation of such approved change.

Duties of holder of approval

145.02.13 (1) The holder of an AMO approval shall -

- (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 145.02.1, at each workplace specified in the manual of procedure;
- (b) comply with all procedures detailed in the manual of procedure;
- (c) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of an approval shall ensure that --
 - (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the AMO; and
 - (b) all personnel who are authorised to issue on behalf of the AMO certificates of release to service and certificates relating to the maintenance of an aircraft,

are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organisation's manual of procedure in accordance with regulation 43.03.1(1)(b).

Record of certifying personnel

- **145.02.14** (1)The holder of an AMO shall maintain a record of all certifying personnel, which record shall include particulars of the scope of their authorisation.
- (2) The holder of an approval shall provide its certifying personnel with evidence of the scope of their authorisation.
- (3) The record referred to in sub-regulation (1) shall be retained by the holder of the approval for a period of five years from the date on which the certifying personnel member ceases to be authorised by such holder.

Maintenance records

- **145.02.15** (1) The holder of an AMO approval with a Category A rating shall keep adequate records of all maintenance performed by the AMO.
- (2) The records referred to in sub-regulation (1) shall -
 - (a) indicate the name of each person who performed the work;
 - (b) indicate the name of each person who inspected the work; and
 - (c) be retained for at least five years from the date on which the aircraft or aircraft component to which the work relates, was released to service.

- (3) The holder of an approval shall provide a copy of each certificate of release to service to the operator of the aircraft, together with a copy of any specific airworthiness data used for repairs or modifications carried out.
- (4) The holder of an approval shall establish a procedure for recording maintenance details and for the retention of such maintenance records.

Reports on defects or non-airworthy conditions

- **145.02.16** (1) The holder of an AMO approval shall report to the Director any defect or condition of an aircraft or aircraft component which may hazard the aircraft, within 48 hours from the moment the defect or condition to which the report relates, has been identified.
- (2) The holder of an aircraft maintenance approval shall establish procedures for -
 - (a) collecting, investigating, and analyzing information relating to defects in the aircraft or component maintained by the applicant and distributing that information to
 - (i) the applicable design organisation; and
 - (ii) the owner or operator of that aircraft or component; and
 - (b) providing defect incident information to the Director in accordance with Part 12.

Airworthiness data

- 145.02.17 (1) The holder of an AMO approval shall --
 - (a) keep all airworthiness data necessary to support the maintenance work performed by the AMO; and
 - (b) make the airworthiness data available to all personnel who need access to such data to discharge their allocated responsibilities.
- (2) The airworthiness data referred to in sub-regulation (1) shall include all relevant data issued by -
 - (a) the Director, and
 - (b) the holder of a type certificate issued --
 - (i) in terms of Part 21; or
 - (ii) by an appropriate authority.
- (3) The Director may classify in Document SA-CATS 145, data issued by an appropriate authority or the holder of a type certificate as mandatory, in which case the holder of an approval shall keep such data.
- (4) The holder of an approval shall establish a procedure to control and amend the data referred to in sub-regulations (1), (2) and (3).

(5) If the holder of an approval intends to produce its own airworthiness data, additional to the data referred to in sub-regulation (1), such holder shall establish a procedure for producing and controlling such additional data.

PART 147: DESIGN ORGANISATIONS FOR PRODUCTS, PARTS AND APPLIANCES

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SUBPART 1: GENERAL

Applicability

147.01.1 This Part applies to the approval and operation of design organisations which design –

- (a) products or changes thereto; and
- (b) parts and appliances or changes thereto.

Display of design organisation approval

147.01.2 The holder of a design organisation approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested.

Advertisements

147.01.3 Any advertisement by an organisation indicating that it is a design organisation, shall reflect the number of the design organisation approval issued by the Director.

Safety inspections and audits

- **147.01.4** (1) An applicant for the issuing of a design organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of regulation 147.02.6.
- (2) The holder of a design organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- 147.01.5 (1) The Director shall maintain a register of all design organisation approvals issued in terms of these regulations .
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the terms of the approval issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF DESIGN ORGANISATION

Requirement for approval

147.02.1 No organisation shall design any product, part and appliance or a change thereto, except under the authority of, and in accordance with the provisions of, a design organisation approval issued under this Subpart.

Manual of procedure

- **147.02.2** An applicant for the issuing of a design organisation approval shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this Subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 147.

Design control system

- 147.02.3 (1) The applicant shall establish a design control system for the control and supervision of the design of products, parts and appliances or changes thereto, covered by the application.
- (2) The minimum standards for a design control system shall be as prescribed in Document SA-CATS 147.

Personnel requirements

- 147.02.4 (1) The applicant shall engage, employ or contract -
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her:
 - (iii) powers to order cessation of any activity where such compliance is not effected;
 - (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
 - (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
 - (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting airworthiness and aviation safety; and
 - (c) adequate personnel to plan, perform, supervise and inspect the design of products, parts and appliances or changes thereto, undertaken by the design organisation.

- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, performing, supervising or inspecting the design of products, parts and appliances or changes thereto, undertaken by the design organisation.
- (3) The applicant shall ensure that
 - (a) the personnel in all technical departments are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities; and
 - (b) there is full and efficient coordination between departments and within departments in respect of airworthiness matters.

Accommodation, facilities and equipment

147.02.5 The applicant shall ensure that the accommodation, facilities and equipment are adequate to enable the personnel to achieve the airworthiness objectives for the product, parts and appliances.

Application for approval or amendment thereof

- **147.02.6** An application for the issuing of a design organisation approval or an amendment thereof, shall be
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the manual of procedure referred to in regulation 147.02.2; and
 - (iii) the terms of approval requested to be issued under regulation 147.02.8, for which application is being made.

Issuing of approval

- 147.02.7 (1) Subject to the provisions of sub-regulation (2), the Director shall issue a design organisation approval to design products, parts and appliances or changes thereto, if the applicant complies with the requirements prescribed in regulations 147.02.2 to 147.02.5 inclusive.
- (2) The Director shall refuse to issue the approval if the application concerned is not appropriate for the purpose of assisting applicants for, or holders of, type certificates, supplemental type certificates, part design approvals, repair design approvals or ZA-TSO authorisations in demonstrating technical capability.
- (3) A design organisation approval shall be issued the appropriate prescribed form.

Terms of approval

- 147.02.8 The terms of approval shall -
 - (a) be issued as part of a design organisation approval;