
Amendment of Part 101 of the Regulations

14. Part 101 of the regulations is hereby amended by—

(a) the substitution for Part 101 in the arrangements of regulations of the following Subparts:

“SUBPART 1: GENERAL PROVISIONS

- 101.01.1 Applicability
- 101.01.2 Private operations
- 101.01.3 Grouping and classification
- 101.01.4 Directives
- 101.01.5 **[RPA]** UA sales and re-sales labelling

APPROVAL AND REGISTRATION

- 101.02.1 **[RPAS]** UAS letter of approval
- 101.02.2 **[RPAS]** UAS system safety
- 101.02.3 Altimeter
- 101.02.4 Registration and marking

SUBPART 4: [RPAS] UAS OPERATING CERTIFICATE

- 101.04.1 General requirements
- 101.04.2 Application
- 101.04.3 Validity
- 101.04.4 Duties of the holder of **[an ROC]** a UASOC
- 101.04.5 Operations manual
- 101.04.6 Documentation and records
- 101.04.7 Safety management
- 101.04.8 Security
- 101.04.9 Surveillance, safety and security audits and inspections
- 101.04.10 Register of operating certificates
- 101.04.11 Transferability
- 101.04.12 Liability insurance

**SUBPART 5:
[RPAS] UAS OPERATIONS**

- 101.05.1 Weather conditions
- 101.05.2 Landing on roads
- 101.05.3 Controlled airspace
- 101.05.4 Releasing object or substance
- 101.05.5 Dangerous goods
- 101.05.6 Accidents and incidents
- 101.05.7 Consumption of alcohol and drugs
- 101.05.8 C2 operational requirements
- 101.05.9 Precautions and safety considerations
- 101.05.10 General restrictions
- 101.05.11 Beyond visual-line-of-sight
- 101.05.12 Night operations
- 101.05.13 Operations in **[the]** vicinity of people
- 101.05.14 Operations in **[the]** vicinity of property, structures and buildings
- 101.05.15 Operations in **[the]** vicinity of public roads
- 101.05.16 Radio communications requirements
- 101.05.17 Pre-flight preparation

101.05.18 Duties of **[the]** pilot
101.05.19 Flight operations
101.05.20 Right of way
101.05.21 Use of time
101.05.22 Flight folio
101.05.23 Power reserves
101.05.24 First aid kits
101.05.25 Hand-held fire extinguishers

SUBPART 6: MAINTENANCE

101.06.1 Continued system maintenance
101.06.2 **[RPAS]** UAS maintenance
101.06.3 Issuance of a UASMT authorisation
101.06.4 **[RMT]** UASMT logbook.”;

(b) the substitution for regulation 101.01.1 of the following regulation:

“101.01.1 (1) Subject to subregulation (3) this Part applies to aspects relating to operation of Classes 1 and 2 UAS, unless otherwise determined by the Director.

(2) For the purposes of this Part, **[RPAS]** a UAS may be operated for—

- (a) commercial operations;
- (b) corporate operations;
- (c) non-profit operations; and
- (d) private operations.

(3) This Part does not apply to—

- ☐ (a) an autonomous unmanned aircraft and its operation;
- (b) an unmanned free balloon and its operations;
- (c) a type of aircraft which cannot be managed on a real-time basis during flight;
- (d) an aircraft operated in terms of Part 94;
- (e) a model aircraft; and
- (f) toy aircraft.”;

(c) the substitution for regulation 101.01.2 of the following regulation:

“101.01.2 (1) The provisions of Subparts 4 and 6 of this Part do not apply to private operation of UAS.

(2) Private operation of UAS shall be conducted only in R-VLOS with a Class 1A or 1B UAS.

(3) An operator of a UAS involved in private operation shall not convey dangerous goods on board UA.”;

(d) the substitution for regulation 101.01.3 of the following regulation:

“101.01.3 **[RPAS]** UAS shall be **[grouped in accordance with the classifications]** classified as prescribed in Document SA-CATS 101.”;

(e) the substitution for regulation 101.01.4 of the following regulation:

101.01.4 The Director may, from time to time, issue directives which are necessary for safe and secure operation of **[RPAS] UAS**.”;

(f) the substitution for regulation 101.01.5 of the following regulation

“[RPA] UA sales or re-sales labelling

101.01.5 (1) A UA shall not be sold within the Republic unless a seller has, by way of a packaging label, notified a buyer of the requirements as prescribed in Document SA-CATS 101.

(2) Notwithstanding the provisions of subregulation (1), in case of resale, a reseller may use written notification in lieu of a packaging label.”;

(g) the substitution for regulation 101.02.1 of the following regulation:

“[RPAS] UAS letter of approval

101.02.1 (1) [No RPAS] A UAS shall not be operated within the Republic, unless such **[RPAS] UAS** has been issued with a UASLA by the Director.

(2) An application for the issuance or renewal of a UASLA shall be made to the Director on the appropriate form and be accompanied by the appropriate fee as prescribed in Part 187.

(3) The Director shall issue a UASLA **[RLA]** if **[the] an** applicant complies with the requirements prescribed in regulation 101.02.2.

(4) **[An]** A UASLA **[RLA]** shall be valid for a period of 12 months.”;

(h) the substitution for regulation 101.02.2 of the following regulation:

“[RPAS] UAS system safety

101.02.2 (1) An applicant for the issue of a UASLA **[an RLA]**, shall provide the Director with—

(a) documentation regarding the standard to which **[the RPAS]** a UAS was designed; **[or]**

(b) equivalent documentation that demonstrates a level of safety acceptable to the Director; or

(c) documentation demonstrating system safety as prescribed in Document SA-CATS 101.”;

(i) the substitution for regulation 101.02.3 of the following regulation:

“101.02.3 (1) Except as provided for in subregulation (2), **[an RPA]** a UA shall be equipped with an altimetry system or equivalent, that is capable of displaying to **[the]** its operator on **[the RPS]** an RPS, its **[the]** altitude and height **[of the RPA]** above ground level.

(2) **[An RPA]** A UA that is not equipped with an altimetry system or equivalent, required by subregulation (1) shall be operated under R-VLOS only.”;

(j) the substitution for regulation 101.02.4 of the following regulation:

“101.02.4 (1) **[No [RPA]]** A UA shall not be operated within the Republic, unless such **[RPA]** UA has been issued with a certificate of registration by the Director.

(2) **[An RPA]** A UA registered on the South African Civil Aircraft Register shall be deemed to have South African nationality.

(3) An application for a certificate of registration for a UA shall be—

- (a) made on the prescribed form; and
- (b) accompanied by the fee prescribed in Part 187.

(4) The Director shall register **[an RPA]** a UA, issue a certificate of registration and a registration mark if **[the applicant complies with the]** such UA meets the applicable registration requirements of this regulation.

(5) The Director shall maintain a register of all UA registered in terms of this regulation.

(6) The format and specification of a nationality mark designated for use on UA shall be as prescribed in Document SA-CATS 101.

(7) If a holder of a certificate of registration transfers to another person ownership of a concerned UA, such a holder shall, within 30 days, notify the Director of such transfer on the appropriate form.”;

(k) the substitution for regulation 101.04.1 of the following regulation:

“SUBPART 4:

[RPAS] UAS OPERATOR CERTIFICATE General requirements

101.04.1 (1) **[No]** A person shall not operate **[an RPAS]** a UAS in terms of this Part unless such person is **[the]** a holder of—

(a) in the case of commercial, corporate, and non-profit **[operations]**operation, a valid **[ROC]**UASOC including the **[operations specifications]** OpSpec attached thereto; and

(b) in the case of commercial **[operations]**operation, an air services licence issued in terms of the Air Services Licensing Act, 1990 (Act No. 115 of 1990).”;

(l) the substitution for regulation 101.04.2 of the following regulation:

“101.04.2 (1) An application for the a UASOC, renewal or amendment thereof, shall be made to the Director on the appropriate form accompanied by—

- (a) the appropriate fee as prescribed in Part 187;**
- (b) a copy of certificate of registration of each UA to be operated;**
- (c) a copy of a UASLA for each UAS to be operated; and**
- (d) an operations manual required by this Part.**

(2) [No RPA] A UA shall not be registered under more than one [ROC]UASOC.”;

(m) the substitution for regulation 101.04.3 of the following regulation:

“101.04.3 (1) [An ROC] A UASOC shall be valid for a period of 12 months from the date of issue unless—

- (a) it is surrendered by [the] a holder thereof; or**
- (b) it is [suspended by an authorised officer, inspector or authorised person or] cancelled by the Director.**

(2) [The] A holder of [an ROC] a UASOC shall, at least 60 days immediately preceding the date on which such certificate expires, apply for [the] renewal of such certificate.

(3) [The] A holder of [an ROC] a UASOC which is cancelled shall, within seven days from the date on which [the ROC] such UASOC is cancelled, surrender such document to the Director.”;

(n) the substitution for regulation 101.04.4 of the following regulation

“Duties of [the] holder of [an ROC] UASOC

101.04.4 (1) [The] A holder of [an ROC] a UASOC shall—

- (a) [conduct the activities] operate in accordance with the requirements and specifications [granted by] of such certificate [and ensure compliance with the provisions authorised therein];**
- (b) ensure compliance with any other requirements which the Director may impose;**
- (c) report to the Director any changes directly or indirectly related to the [ROC]UASOC that may affect the continued validity of [the] its certificate [or approval] or safety of persons and property; and**
- (d) ensure that a UAS operation is conducted in accordance with this Part and in a safe manner to minimise hazards to persons, property, or other aircraft.**

(2) For operations approved for E-VLOS, [the] an operator shall—

- (a) make use of at least one observer who shall not be younger than 17 years of age; and**
- (b) ensure that [each] an observer referred to in paragraph (a) has completed the training prescribed by [the] an operator [and as approved by the Director in their operations manual] in its approved operations manual.”;**

(o) the substitution for regulation 101.04.5 of the following regulation:

“101.04.5 (1) [An ROC] A UASOC holder shall [develop] develop, for approval by the Director, an operations manual containing all the information required to demonstrate how such an operator will ensure compliance with the regulations and how safety standards will be applied and achieved during **[such operations]operation**.

(2) **[An ROC] A UASOC** holder shall set out the type and scope of operations, including the manner in which each type of **[RPAS]UAS** and operation will be safely conducted.

(3) A UASOC holder’s operations manual or system of manuals, shall specify how all operational activities are to be conducted and how a UASOC holder will comply with the requirements of these regulations, in a manner that is commensurate with the size and scope of its operation.

(4) [The operator] A UASOC holder shall submit amendments made to the operations manual to the Director for approval—

(a) prior to a change in any proposed aspect, **[type] type**, or scope of such operator’s operation;

(b) where such operations manual no longer meets the requirements of these regulations or associated technical standards;

(c) on determining that any part or component thereof is, or becomes, inadequate; or

(d) as required by the Director.

(5) Upon the approval of an amendment to an operations manual by the Director, a UASOC holder shall—

(a) make such changes available to all persons engaged in the operation, deployment, handling, security, transportation, and storage of a UAS operated by such UASOC holder; and

(b) ensure that persons referred to in paragraph (a) are made aware and where necessary, trained in accordance with any relevant aspect relating to such amendment.

(6) The structure and contents of **[the]** an operations manual shall be as prescribed in Document SA-CATS 101.”;

(p) the substitution for regulation 101.04.6 of the following regulation:

“101.04.6 (1) [An RPAS] A UAS operator shall establish a system of record- keeping that allows adequate storage and reliable traceability of all activities **[developed]undertaken**, covering in particular—

(a) lines of responsibility and accountability;

(b) safety policy;

(c) identification of aviation safety hazards encountered by the activities of the operator;

(d) assessment and mitigation of the associated risks, including verification of the effectiveness of the mitigation measures taken;

(e) personnel training and competence; and

(f) quality, safety, and security management records.

(2) A format of records referred to in subregulation (1) shall be specified in **[the ROC]** a UASOC holder's operations manual.

(3) Records referred to in subregulation (1) shall be stored for at least 5 years in a manner that ensures protection from damage, alteration and theft.”;

(q) the substitution for regulation 101.04.7 of the following regulation:

“101.04.7(1) [The] A holder of [an ROC] a UASOC shall establish [a safety management system] an SMS commensurate with [the] its size [of the organisation or entity] and the complexity of its operations.

(2) **[The safety management system] An SMS** established in terms of subregulation (1) shall include—

- (a) a process to identify actual and potential safety hazards and assess the associated risks;
- (b) a process to develop and implement remedial action necessary to maintain an acceptable level of safety;
- (c) **[provision] requirements** for continuous and regular assessment of the appropriateness and effectiveness of safety management activities.”;

(r) the substitution for regulation 101.04.8 of the following regulation:

“101.04.8 (1) [The] A holder of [an ROC] a UASOC issued under this Part shall—

- (a) conduct background checks on all personnel recruited for deployment, handling, and storage of **[any RPAS] UAS**;
- (b) conduct criminal record checks every 24 months on all personnel employed in the deployment, handling, and storage of **[RPAS] UAS**;
- (c) ensure that **[RPAS] a UAS** not in use **[are] is** stored in a secure manner to prevent and detect unauthorised interference or use;
- (d) ensure that **[the RPAS] a UAS** is protected from acts of unlawful interference;
- (e) ensure that **[the RPA] a UA** is stored and prepared for flight in a manner that will prevent and detect tampering and ensure the integrity of vital systems;
- (f) designate a security coordinator responsible for the implementation, **[application] application**, and supervision of **[the] security controls**; and
- (g) ensure that all personnel employed in the deployment, handling, and storage of **[RPAS] a UAS** have received security awareness training as prescribed in Part 109.

(2) **A [The] holder of [an ROC] a UASOC shall include in [the] its operations manual referred to in regulation 101.04.5 [the] security [aspects] requirements appropriate for [of the RPA]UA operations as prescribed in this regulation and Document SA-CATS 101.”;**

(s) the substitution for regulation 101.04.9 of the following regulation:

“101.04.9 (1) An applicant for the issuance of a UASOC shall permit an authorised officer, inspector, or authorised person to carry out such safety and security inspections, audits, and oversight as may be necessary to verify the validity of any application made in terms of regulation 101.04.2.

(2) **[The] A holder of [an ROC] a UASOC issued in terms of regulation 101.04.2, shall permit a person authorised by the Director to carry out such safety and security inspections, audits and oversight, including safety or security inspections and audits of**

its partners or subcontractors, as may be necessary to determine continued compliance with the provisions of these regulations and **[the privileges granted] conditions specified in its [by the]** certificate.”

(t); the substitution for regulation 101.04.10 of the following regulation:

“101.04.10 The Director shall maintain a register of all certificates issued in terms of this Subpart **[subpart]**.”;

(u) the substitution for regulation 101.04.11 of the following regulation:

“101.04.11 [An ROC] A UASOC issued in terms of this Part shall not be transferable.”;

(v) the substitution for regulation 101.04.12 of the following regulation:

“101.04.12 [An ROC] A UAS holder shall at all times be adequately insured for third party liability.”;

(w) the substitution for regulation 101.05.1 of the following regulation:

UA OPERATIONS

“101.05.1 [No] A person shall not operate **[an RPAS] a UAS** in weather conditions that do not allow unobstructed visual contact to be maintained with **[the RPA] a UA** by other airspace users and by **[the] an** operator unless in B- VLOS or night operations approved by the Director in their operations manual.”

(x) the substitution for regulation 101.05.2 of the following regulation:

“101.05.2 [No] A person shall not use a public road as a place of landing or take-off **[of an RPA] for a UA**, except—

(a) **[by the]** if such person is a holder of **[an ROC] a UASOC** and such take-off or landing **[as] has been** approved by the Director in **[the operator’s] such person’s** operations manual; and

(b) when approved by **[the]** relevant local authority.”;

(y) the substitution for regulation 101.05.3 of the following regulation:

“101.05.3 (1) [No RPAS may] A UAS shall not be operated in controlled airspace, except by **[the] a** holder of **[an ROC] a UASOC** and as approved by the Director in **[the operators’] UASOC’s** operations manual.

(2) The Director may approve **[an RPA] a UA** operation in controlled airspace as contemplated in subregulation (1) only in—

(a) VMC in an ATZ and CTR below 400 ft; and

(b) subject to compliance with the conditions prescribed in Document SA- CATS 101.”;

(z) the substitution for regulation 101.05.4 of the following regulation:

“101.05.4 [No] An object or substance shall not be released, dispensed, dropped, **[delivered]**delivered, or deployed from **[an RPA]** a UA except by **[the]** a holder of **[an ROC]** a UASOC and as approved by the Director in **[the operators’]** an operations manual of such UASOC holder.”;

(aa) the substitution for regulation 101.05.5 of the following regulation:

“101.05.5 (1) Subject to subregulation (2), **[no RPA]** a UA shall not carry dangerous goods as cargo, except if operated by **[the]** a holder of **[an ROC]** a UASOC and **[as]** approved for that purpose by the Director in **[the]** such UASOC’s operations manual.

(2) The provisions of Part 92 shall apply to the conveyance of dangerous goods by a UA that—

(a) carries or conveys dangerous goods as payload, including medical supplies, infectious and biological substances, and company material;
(b) carries or conveys general cargo including airmail; and
(c) carries or conveys dangerous goods under the exceptions provided in (2) The provisions of Part 92 shall apply to the conveyance of dangerous goods by a UA that— regulation 92.01.3.”;

(bb) the substitution for regulation 101.05.6 of the following regulation:

“101.05.6 (1) **[All accidents and incidents]** An accident or serious incident involving **[an RPA]** a UA shall be reported as prescribed in Part 12[, **where there is—**

(a) any injury or death to a person;
(b) damage to property; or
(c) destruction of [the RPA] a UA beyond economical repair].

(2) **[All incidents]** An incident involving **[an RPA]** a UA where loss of control occurred shall be reported to **[the]** a holder of **[the ROC]**UASOC.”;

(cc) the substitution for regulation 101.05.7 of the following regulation:

“101.05.7 [No remote] A UAS pilot, **[observer]**observer, or a UASMT**[RMT]** shall not—

(a) consume alcohol less than 8 hours prior to reporting for duty;
(b) commence a duty period while the concentration of alcohol in any specimen of blood taken from any part of his or her body is more than 0,02 grams per 100 millilitres;
(c) consume alcohol or any psychoactive substance during the duty period or whilst on standby for duty; or
(d) commence a duty period while under the influence of alcohol or any psychoactive substance having a narcotic effect.”;

(dd) the substitution for regulation 101.05.8 of the following regulation:

“101.05.8 A person shall not operate a UAS unless such UAS complies with the C2 operational requirements prescribed in Document SA-CATS 101.”;

(ee) the substitution for regulation 101.05.9 of the following regulation:

“101.05.9 (1) [No] A person shall not operate [an RPAS] a UAS unless—

- (a) [the RPA] a UA concerned is in a safe condition for operation [a fit-to- fly condition];**
- (b) [the] a UA pilot concerned is [the] a holder of [a licence] an RPC issued in terms of this Part;**
- (c) [the remotely piloted aircraft station] such RPS is compatible and interoperable with [the] an aircraft [it] to which it is connected [to] in all phases of flight; and**
- (d) [the RPA]A UA is being controlled by only one RPS. [at any given moment in time.]**

(2) [No] A person shall not operate [an RPAS] a UAS in a negligent or reckless manner so as to endanger the safety of any person, [property]property, or other aircraft in the air or on the ground.

(3) [The] A UAS operator shall, in the best interest of safety, ensure that certain [RPAS] UAS operations are supplemented with additional personnel for non-flying duties, such that [the remote pilot] a holder of an RPC can maintain control and situational awareness in respect to positioning and collision avoidance.”;

(ff) the substitution for regulation 101.05.10 of the following regulation:

“101.05.10 (1) [No] A person shall not operate [an RPA] a UA unless [they have] he or she has in [their] his or her possession—

- (a) a valid [RPA Pilot Licence] RPC;**
- (b) a copy of [the ROC]UASOC and associated OpSpec;**
- (c) [the] a certificate of registration for each [RPA]UA in operation;**
- (d) a copy of a UASLA [the RLA]; and**
- (e) a user manual for [the RPA] a UA and [the remote pilot station] RPS.**

(2) A UA shall not tow another aircraft or perform aerial or aerobatic displays.

(3) Unless as otherwise authorised by the Director, A UA shall not be operated—

- (a) above 400 ft above the surface;**
- (b) within a radius of 10 km from an aerodrome reference point;**
- (c) within restricted or prohibited airspace; or**
- (d) adjacent to or above a nuclear power plant, prison, police station, crime scene, court of law, national key point or strategic installation.”;**

(gg) the substitution for regulation 101.05.11 of the following regulation:

“101.05.11 (1) [An RPA] A UA shall not be operated beyond visual-line- of-sight unless [by the holder of an ROC and] as otherwise approved by the Director in [the] a UASOC's operations manual.

(2) The Director may approve B-VLOS operation subject to [the] an operator meeting the requirements prescribed in Document SA-CATS 101.

(3) Approved B-VLOS operations may only be conducted in VMC, below 400 ft above surface level, unless otherwise approved by the Director.”;

(hh) the substitution for regulation 101.05.12 of the following regulation:

“101.05.12 (1) [An RPA] A UA may not be operated at night except—

- (a) in R-VLOS operation; or
- (b) **[by the holder of an ROC, and]** as approved by the Director in terms of subregulation (2).

(2) A UA may only be operated at night by a holder of a UASOC if such a UA has been approved for night operation by the Director and—

- (a) such approval is reflected on such UASOC holder’s OpSpec; and
- (b) such operation shall comply with the requirements prescribed in Documents SA-CATS 101.

(3) **[An RPA]**A UA may not be operated at night in controlled airspace except as approved by the Director and **[prescribed]** as provided for in regulation 101.05.3.”;

(ii) the substitution for regulation 101.05.13 of the following regulation:

“101.05.13 A person shall not operate a UA directly overhead any person or group of people or within a lateral distance of 50 m from any person, unless such person—

- (a) is a holder of a UASOC and such operation has been approved by the Director;
- (b) is an operator of such UAS or is under the direction of an operator of such UAS; or
- (c) a group of people forms part of an operation of such UAS and is under control of an operator of such UAS, and adequate provisions have been made for their safety.”;

(jj) the substitution for regulation 101.05.14 of the following regulation:

“101.05.14 (1) A person shall not operate a UA within a lateral distance of 50 m from any structure or building, unless such person—

- (a) is a holder of a UASOC and such operation has been approved by the Director;
- (b) has obtained permission from an owner of such structure or building, and
- (c) takes such measures as are necessary to ensure the safety of all persons on the ground, accessing such building, or are in the vicinity of such a structure.”;

(kk) the substitution for regulation 101.05.15 of the following regulation:

“101.05.15 [No] A person shall not operate [an RPA]a UA over a public road, along the length of a public [road]road, or at a distance of less than 50 m from a public road unless—

- (a) such person is [the] a holder of [an ROC] a UASOC and [the] such operation has been approved by the Director [in the operator’s operations manual]; [or]
- (b) in the case of operations over a public road, such road has been closed for public use; and
- (c) reasonable care has been taken to ensure the safety of road users and pedestrians in the event of a loss of control of [the RPA] such UAS.”;

(ll) the substitution for regulation 101.05.16 of the following regulation:

“101.05.16 (1) Except for R-VLOS **[operations, no RPAS]** ~~operation~~, a UAS shall ~~not~~ be operated unless **[the]** ~~its~~ pilot ~~is in possession of~~ **[has]** a functioning air-band radio **[in his possession]**, ~~which is~~ tuned to **[the]** ~~a~~ frequency **[or frequencies]** applicable to **[the]** ~~an~~ ATSU providing services or controlling such area or airspace or to aircraft in such area or airspace.

(2) **[The]** ~~An~~ air-band radio ~~referred to in subregulation (1)~~ shall have the required output and be configured in such a way that the range, strength of **[transmission]**~~transmission~~, and quality of communication extends beyond the furthest likely position of **[the RPA]** ~~a UA~~ from **[the]** ~~a~~ pilot.

(3) For VLOS, **[E-VLOS]** ~~E-VLOS~~, and B-VLOS operations, **[the]** ~~a~~ pilot shall, using **[the registration]** ~~a registration mark~~ of **[the RPA]** ~~a UA~~ as a call-sign, make the required radio calls, indicating the altitude, location and intended operation of **[the RPA]** ~~a UA~~ in that area and at such intervals as are required in order to ensure adequate separation from other aircraft is maintained.

(4) For approved **[RPA]**~~UA~~ operations in controlled airspace, **[the]** ~~a~~ pilot shall maintain radio contact, using **[the]** ~~a~~ registration mark of **[the RPA]** ~~a UAS~~ as a call-sign, with the relevant ATSU, and acknowledge and execute such instructions as **[the]** ~~an~~ ATSU may give at any time during **[the]** ~~an~~ operation of **[the RPA]** ~~a UAS~~.”;

(mm) the insertion after regulation 101.05.16 of the following regulation:

“Multi-unmanned aircraft operations

101.05.16A (1) A person shall not operate a UAS in multi-unmanned aircraft operations or a swarm unless—

- (a) such person is a holder of a UASOC and such operation is approved by the Director;
- (b) a UAS is controlled by one RPS as approved by the Director; and
- (c) a UAS is controlled using command inputs only.”;

(nn) the substitution for regulation 101.05.17 of the following regulation:

“101.05.17 A pilot shall complete **[the]** ~~a~~ pre-flight **[preparations]** ~~preparation~~ prior to each flight, as prescribed in Document SA-CATS 101.”;

(oo) the substitution for regulation 101.05.18 of the following regulation: **“Duties of a pilot**

101.05.18 (1) A pilot of a UAS shall—

- (a) be accountable for the safe operation of a UAS;
- (b) operate each aircraft in accordance with such aircraft’s manual;
- (c) be responsible for the separation from and avoidance of other aircraft and any other obstacles and hazard;
- (d) minimize hazards to persons and property on the ground, and other aircraft in the air; and
- (e) ensure that at least one observer is used for E-VLOS operations.”;

(pp) the substitution for regulation 101.05.19 of the following regulation:

“101.05.19 (1) [The RPAS] A UAS shall be operated in such a way that safe separation from other aircraft is maintained and that adequate obstacle clearance is ensured[,] during all phases of the flight.

(2) **[The] A** pilot of **[an RPA] a UA** shall ensure that **[the] a** take-off and landing area is safe and of **[the]** appropriate dimensions, free from obstacles and has adequate surface conditions, with regard to the type of operation, the size of **[the] an** aircraft, **[the] aircraft's [performance]performance,** and external factors.”;

(qq) the substitution for regulation 101.05.20 of the following regulation:

“101.05.20 (1) Notwithstanding the provisions of subregulations (2) to (5), [an RPA]a UA shall give way to a manned aircraft.

(2) **[The RPA] A pilot of a UAS** shall avoid passing a UA over, **[under]under,** or in front of a manned aircraft, unless it passes well clear and takes into account the effect of aircraft wake turbulence.

(3) When two **[aircraft]UA** are approaching head-on or approximately in a **[way that there is] manner that poses** a danger of collision, each **[aircraft]UA** shall alter its heading to **[the] its** right.

(4) When two **[aircraft]UA** are converging at approximately the same level, **[the the aircraft] a UA** which has the other **[aircraft]UA** on its right, shall give way.

(5) **[An aircraft] A UA** which is being overtaken has **[the] a** right of way, and the one overtaking shall alter its heading to keep well clear.”;

(rr) the substitution for regulation 101.05.21 of the following regulation:

“101.05.21 (1) For the purposes of reporting and recording time, Co-ordinated Universal Time [(UTC)] shall be used and shall be expressed in hours and minutes and, when required, seconds of **[the] a** 24-hour day beginning at midnight.

(2) A pilot shall have a timepiece synchronised with Co-ordinated Universal Time [(UTC)] prior to operating a **[RPAS]UAS** in controlled airspace and at such other times during **[the] a** flight as may be necessary.

(3) Wherever time is utilised in the application of data link communications, it shall be accurate to within 1 second of Co-ordinated Universal Time [(UTC)].”;

(ss) the substitution for regulation 101.05.22 of the following regulation:

“101.05.22 (1) [The] An owner or operator of **[an RPA]a UAS** shall ensure that **[the RPA] such UA** has a flight folio or any other similar document which meets the requirements of and contains the information as prescribed in Document SA-CATS 101[, and the flight folio shall be accessible at the remote pilot station all times during flight].

(2) A flight folio referred to in subregulation (1) shall—

- (a) be kept up-to-date and maintained in a legible manner; and
- (b) be accessible at a concerned RPS at all times during a flight.

(3) All entries made in a flight folio shall be made immediately upon completion of the occurrence to which they refer.

(4) In the case of maintenance being undertaken on **[the RPA]** a UA, **[the]** an entry of such maintenance in a flight folio shall be certified by **[the]** a person responsible for the such maintenance.

(5) Without detracting from the generality of subregulation (1), **[the remote pilot]** a holder of an RPC shall—

- (a) maintain fuel or charging records to enable the Director to ascertain that, the requirements of regulation 101.05.23 are complied with in respect of each flight under his or her control;
- (b) ensure that fuel, charging, and oil records of each flight are entered in a flight folio; and
- (c) maintain oil records to enable the Director to ascertain that trends for oil consumption are such that a UA has sufficient oil to complete each flight.”;

(tt) the substitution for regulation 101.05.23 of the following regulation:

“101.05.23 (1) During VLOS operation **[operations]**, **[the remote pilot]** a holder of an RPC shall ensure that **[the aircraft]** a UA has enough fuel or electrical charge to complete the flight, plus a reserve of at least 10%.

(2) During B-VLOS operation, **[operations, the remote pilot]** a holder of an RPC shall ensure that **[the aircraft]** a UA has enough fuel or electrical charge to complete the intended flight plus a reserve of at least 10%.”;

(uu) the substitution for regulation 101.05.24 of the following regulation:

“101.05.24 (1) A person shall not operate a UAS unless a first aid kit consisting of medical supplies as prescribed in Document SA-CATS 91 is available within an RPS and within 300 m of take-off and landing points.

(2) A single first aid kit may be used to comply with the requirements of subregulation (1) when a place of take-off and landing and a location of an RPS is the same.

(3) A first aid kit referred to in subregulation (1) shall be inspected periodically to ensure that, as far as practicable, the contents thereof are in a condition necessary for their intended use.

(4) The contents of a first aid kit shall be replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances require.

(5) A first aid kit shall be readily accessible to all crew members involved in an operation of UAS.”;

(vv) the substitution for regulation 101.05.25 of the following regulation:

“101.05.25 A person shall not operate a UA unless—

(a) a hand-held fire extinguisher suitable for use with electronic equipment and any power generating equipment is available—

(i) at a concerned RPS ; and

(ii) within 300 m of the take-off and landing points

(b) a hand-held fire extinguisher suitable for use on a UA is available within 300 m of the take-off and landing points.”;

(ww) the substitution for regulation 101.06.1 of the following regulation:

“101.06.1 (1) A UAS shall be maintained in compliance with its manufacturer’s instructions for continued equipment maintenance through actions or inspections.

(2) **[The]** An owner or operator of a UAS shall submit to the Director for approval, a maintenance programme for **[the RPAS]** such UAS.”;

(xx) the substitution for regulation 101.06.2 of the following regulation:

“[RPAS] UAS maintenance

101.06.2 (1) A person shall not perform maintenance on a UAS or any component thereof unless such person is—

(a) in respect of a UA classified as a Class 3 and higher, a holder of a valid UASMT authorisation; or

(b) in respect of a UA classified as a Class 2 and lower, a holder of a UASOC: Provided that such holder can demonstrate to the satisfaction of the Director, ability to perform the required maintenance on a UA.”;

(yy) the substitution for regulation 101.06.3 of the following regulation:

“Issuance of UASMT authorisation

101.06.3 (1) An applicant for the **[issuing]** issuance or renewal of **[an RMT]**a UASMT authorisation shall—

(a) be not less than 18 years of age; [and]

(b) be a South African citizen or in possession of a valid permanent residence permit or valid temporary work permit with a letter of employment; and

(c) [shall] have successfully completed appropriate UAS maintenance training, provided by—

(i) an organisation approved by [the] a competent authority [in the] of a country where [the] such training organisation is located;

(ii) [training provided by] an approved original equipment manufacturer; or

(iii) a training facility approved by the Director; or

(d) demonstrate to the Director, the ability to perform maintenance functions where no training for [the] a particular [RPA]UA is offered or available.

(2) An application for the issuance of **[an RMT]** a UASMT authorisation shall be made to the Director in the appropriate form and accompanied by the appropriate fee as prescribed in Part 187.

(3) The Director shall issue **[an RMT]** a UASMT authorisation if **[the]** a concerned applicant complies with the requirements **[prescribed]** stipulated in subregulation (1).

(4) **[The]** A holder of **[an RMT]** a UASMT authorisation shall not exercise privileges other than the specific privileges for which **[the]** such authorisation is issued.

(5) **[An RMT]** A UASMT authorisation shall be valid for a period of 24 months.”;

(zz) the substitution for regulation 101.06.4 of the following regulation:

“[RMT]UASMT logbook

101.06.4 (1) **[Any]**A person responsible for maintenance of **[RPAS]** UAS shall maintain a personal logbook and shall record therein all work carried out on **[an RPAS]**a UAS and its components.

(2) The form of and information to be contained in a logbook referred to in subregulation (1), and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 101.

(3) **[No alterations]** Alterations of a logbook shall not be made once a logbook **[it]** is signed off by a designated person.”.



A v i a t i o n
S o l u t i o n s