

Part 27

Unmanned Aircraft Systems

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SUBPART A: GENERAL

27.001 CITATION & APPLICABILITY

- (a) These Regulations are cited as Civil Aviation (Unmanned Aircraft Systems (UAS)) Regulations.
- (b) This Part prescribes the requirements of Rwanda regarding the operations or piloting of unmanned aircraft systems of any size, whether generically termed as aircraft, balloons, drones, vehicles or models.
- (c) This Part is applicable to all persons operating unmanned and/or remotely piloted unmanned aircraft systems of any size in the airspace of Rwanda over land or water.
- (d) This Part is specifically applicable to the following—
 - (1) Unmanned aircraft systems;
 - (2) Unmanned aerial vehicles;
 - (3) Drones;
 - (4) Unmanned balloons, whether tethered or free-flight;
 - (5) Radio controlled model aircraft;
 - (6) Free flight model aircraft (whether launched by hand, catapult or rocket cartridge);
 - (7) Control line model aircraft;
 - (8) Model rockets;
 - (9) Kites;
 - (10) Small free flight model aircraft;
 - (11) Any other unmanned aircraft system that is not yet identified in this regulation.
- (e) Civil Aviation Technical Standards (Unmanned Aircraft Systems) published by the Authority shall also be applicable to the operations of unmanned aircraft systems in Rwanda.

27.005 DEFINITIONS

- (a) The following definitions are used in this Part—

Note: Additional definitions are provided in Part 1, Appendix 1 to 1.015.

Accident: An occurrence associated with the operation of any aircraft, including UAS, which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which—

- (i) A person is fatally or seriously injured as a result of—
 - (A) Being in the aircraft, or
 - (B) Direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - (C) Direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
- (ii) The aircraft sustains damage or structural failure which—
 - (A) adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - (B) would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to single engine, including its cowlings or accessories, to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin, such as small dents or puncture holes, or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or
- (iii) the aircraft is missing or is completely inaccessible.

Aerodrome: A defined area on land or water, including any buildings, installations and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aircraft: Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Air traffic: All aircraft in flight or operating on the maneuvering area of an aerodrome.

Air traffic control clearance: Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.

Note 1. — For convenience, the term “air traffic control clearance” is frequently abbreviated to “clearance” when used in appropriate contexts.

Note 2. — The abbreviated term “clearance” may be prefixed by the words “taxi”, “take-off”, “departure”, “enroute”, “approach” or “landing” to indicate the particular portion of flight to which the air traffic control clearance relates.

Appropriate authority—

- (i) Regarding flight over the high seas: the relevant authority of the State of Registry.
- (ii) Regarding flight other than over the high seas: the relevant authority of the State having sovereignty over the territory being overflown.

Authority: The Rwanda Civil Aviation Authority;

Authorization: The formal permission granted to an applicant, from the Authority, allowing particular operations with limitations commensurate with the combined operational and system risk.

Automatic Dependent Surveillance – Broadcast (ADS-B): One method by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

Basic operations: Operations that are likely to fall under the lowest risk categories and likely require only registration of the UAS in addition to set restrictions for private use.

Beyond Visual-Line-of-Sight: Unmanned aircraft operations in which the remote pilot does not have to keep the unmanned aircraft within visual-line-of-sight at all times.

Command and Control (C2) link: The data link between the unmanned aircraft and the remote pilot station for the purposes of managing the flight.

Commercial operation of UAS: Any UAS operations for hire, profit, gain, remuneration or earnings.

Conspicuity: Quality of an aircraft (e.g. lighting or paint scheme) allowing it to be easily seen or noticed by others (e.g. by pilots, ATCOs, aerodrome personnel).

Continuing airworthiness: The set of processes by which an aircraft, engine, propeller or part complies with the applicable airworthiness requirements and remains in a condition for safe operation throughout its operating life.

Control area: A controlled airspace extending upwards from a specified limit above the earth.

Controlled airspace: Airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.

Note 3. — Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in Annex 11, 2.6.

Controlled flight: Any flight which is subject to an air traffic control clearance.

Control zone: Controlled airspace extending upwards from the surface of the earth to a specified upper limit. **Data link Communications:** Form of communication intended for the exchange of messages via a data link.

Detect and avoid: The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.

Fatigue: A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental or physical activity) that can impair a crew member’s alertness and ability to safely operate an aircraft or perform safety-related duties.

Flight plan: Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Flight recorder: Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation. In the case of unmanned aircraft system, it also includes any type of recorder installed in a remote pilot station for the purpose of complementing accident/incident investigation.

Flight time: The total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

Note 4. — Flight time as here defined is synonymous with the term “block to block” time or “chock to chock” time in general usage which is measured from the time an aircraft first moves for the purpose of taking off until it finally stops at the end of the flight.

Flight visibility: The visibility forward from the cockpit of an aircraft in flight.

Geographical limitation: A restricted airspace volume defined through electronic map data.

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Geofencing: Automatic function to limit the access of the UA to airspace areas or volumes provided as geographical limitations based on the UA position and navigation data.

Guidance Material (GM): Non-binding material developed by the Authority that helps to illustrate the meaning of a requirement or specification and is used to support the interpretation of the Regulation, Standard Scenarios, and outlines additional Acceptable Means of Compliance.

Highly automated aircraft: An unmanned aircraft that does allow minimal pilot(s)' intervention in the management of the flight.

Highly automated operation: An operation during which an unmanned aircraft system is operating with minimal pilot intervention in the management of the flight.

Human performance: Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Incident: An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note 5. — The types of incidents which are of interest for safety-related studies include the incidents listed in Annex 13, Attachment C.

Instrument Meteorological Conditions (IMC): meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for visual meteorological conditions.

Landing area: That part of a movement area intended for the landing or take-off of aircraft.

Maintenance: The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification and the embodiment of a modification or repair.

Maintenance organization's procedures manual: A document which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures, and quality assurance, or inspection systems. This document is normally endorsed by the head of the maintenance organization.

Maintenance program: A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability program, necessary for the safe operation of those aircraft to which it applies.

Maneuvering area: That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

Movement area: That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron(s).

Operational control: The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operations manual: a manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operation specification: the Authorization, conditions and limitations within the UAS operator's certificate and subject to the conditions in the operation manual.

Operator: a person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Private operation of UAS. UAS operation by individual or organization, for the recreational purposes and not intended for any commercial use.

Note 6. - In the context of unmanned aircraft system, refer to the UAS definition

Remote crew member: A crew member responsible of any duty essential to the operation of an unmanned aircraft system during a flight duty period.

Remote flight crew member: a licensed crew member responsible of any duty essential to the operation of an unmanned aircraft system during a flight duty period.

Remote pilot: a person given responsibility by the operator of any duty essential to the operation of an unmanned aircraft system and who manipulates the flight controls, as appropriate, during flight time.

Remote pilot-in-command: the remote pilot designated by the operator as being in command and is responsible for the safe conduct of a flight.

Remote pilot station. the component of the unmanned aircraft system containing the equipment used to pilot the unmanned aircraft.

Unmanned Aircraft (UA): an aircraft where the pilot is not on board the aircraft.

Unmanned Aircraft System (UAS): a set of configurable elements consisting of a remotely-piloted aircraft, its associated remote pilot station(s), the required command and control links and any other system elements as may be required, at any point during flight operation.

Unmanned Aircraft System operating manual: A manual containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the UAS and each associated UAS model and other material relevant to the operation of the unmanned aircraft system.

Note 7. — The unmanned aircraft system operating manual is part of the operations manual.

Risk mitigation: The process of incorporating defenses or preventive controls to lower the severity and/or likelihood of a hazard's projected consequence in an effort to meet safety performance, "Target Levels of Safety," necessary for flight operations.

Rotorcraft: A power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors.

UAS Operator Certificate (UOC): A certificate authorizing an operator to carry out specified UAS operations.

Safety: The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety Management System (SMS): systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Safety performance indicator: Data-based safety parameter used for monitoring and assessing safety performance.

Safety risk: The predicted probability and severity of the consequences or outcomes of a hazard.

Segregated airspace: Airspace of specified dimensions allocated for exclusive use to a specific user(s).

Standard Scenario: A description of a type of operation included in a certification specification issued by the Authority, for which an operational risk assessment has been conducted and mitigations identified that can be applied to a variety of applicants in satisfying Target Levels of Safety for approval.

State of Design: The State having jurisdiction over the organization responsible for the type design.

State of Manufacture: The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

State of Registry: The State on whose register the aircraft is entered.

State of the Operator: The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

Target Level of Safety (TLS): A generic term representing the level of risk which is considered acceptable in particular circumstances.

Testing Site: A specific geographical location designated by the Authority for UAS testing and flight operations, managed by the Rwandan government or delegated entity such as a UAS Club.

Type certificate: A document issued by a Contracting State to define the design of an aircraft type and to certify that this design meets the appropriate airworthiness requirements of that State.

Note 8. — Many unmanned aircraft systems (UAS) do not have, and according to current standards, are not able to be certificated. It is up to the operator to provide the proper mitigations to risk that enable higher risk operations in lieu of more robust and reliable system certification and to use industry best practice standards when available to achieve Alternate Means of Compliance (AMOC).

Unmanned free balloon: Non-power-driven, unmanned, lighter-than-air aircraft in free flight.

Unmanned Aircraft (UA) observer: A trained and competent person designated by the operator who, by visual observation of the unmanned aircraft system, assists the remote pilot in the safe conduct of the flight.

Unmanned Aircraft System: An aircraft and its associated elements which are operated with no pilot on board.

VFR flight: Flight conducted in accordance with the visual flight rules.

Visibility: For aeronautical purposes is the greater of—

- (i) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background;
- (ii) The greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.

Note 9. — The two distances have different values in air of a given extinction coefficient, and the latter (i) varies with the background illumination. The former (i) is represented by the meteorological optical range (MOR).

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Note 10. - The definition applies to the observations of visibility in local routine and special reports, to the observations of prevailing and minimum visibility reported in the aerodrome routine meteorological report (METAR) and aerodrome special meteorological report (SPECI) and to the observations of ground visibility.

Visual Line-of-Sight (VLOS) operation: An operation in which the remote crew maintains direct unaided visual contact with the unmanned aircraft system to manage its flight

Visual Meteorological Conditions (VMC): Meteorological conditions expressed in terms of visibility, distance from clouds, and ceiling, equal to or better than specified minima.

27.010 ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this Part—

Note: Additional acronyms and abbreviations are provided in Part 1, Appendix 1 to 1.020.

GM = Guidance Material

IMC = Instrument Meteorological Conditions

MOR = Meteorological Optical Range

UOC = UAS Operator Certificate

SMS = Safety Management System

TLS = Target Level of Safety

UA = Unmanned Aircraft

UAS = Unmanned Aircraft System

VFR = Visual Flight Rules

VLOS = Visual Line-of-Sight

VMC = Visual Meteorological Conditions

SSR = Secondary Surveillance Radar

ATC = Air Traffic Control

RPAS = Remotely Piloted Aircraft System

SUBPART B: CLASSIFICATION AND REGISTRATION OF UAS

27.015 CATEGORIZATION AND CLASSIFICATION OF UAS AND OPERATIONS

(a) A classification of UAS (equipment) separate from their intended operations (activity) is impossible without clear certification and airworthiness standards, and therefore until such time that these become available,

- (1) UAS classification must consider both the intended operation and proposed system.
- (2) In addition to the three general classifications mentioned below, the Authority reserves the right to require additional mitigations commensurate with the perceived risk to air traffic and ground infrastructure and populations in the interest of safety and/or security.
- (3) Class 1 – Basic Operations: A category of UAS operation that, considering the risk involved, does not require a prior Authorization by the Authority before the operation takes place however requires notification to the authority prior to operation.
 - (i) Operational requirements fitting the Basic Operation category are identified in Subpart D “Basic Operations” of this regulation.
 - (ii) These are considered the lowest risk operations for UAS and will not be considered for any commercial UAS flights. A basic risk assessment shall be conducted and submitted to the Authority for approval.
 - (iii) Operations conducted in private property only with appropriate property owner’s authorization.
- (4) Class 2 – Specific Operations: A category of UAS operation that, considering the risk involved, requires an Authorization by the Authority before the operation takes place and takes into account the mitigation measures identified by an operational risk assessment, except for certain standard scenarios where a declaration by the operator is sufficient.
 - (i) Operational requirements for this category can be found in Subpart E “Specific Operations” of this regulation.
 - (ii) These operations are considered acceptable only upon approval of a risk assessment and risk mitigation plan as described in the issued Authorization granted by the Authority.

- (iii) Specific categories fit UAS operations that are not for commercial UAS operations and limited in risk exposure on the ground or in the air, or larger more complex aircraft for private testing and flight operations. This category requires the remote pilot to have a remote license issued the Authority.
- (5) Class 3 – Complex Operations: A category of UAS operation that, considering the risks involved requires extensive performance review and reliability testing, a licensed remote pilot, a UAS operator certificate (UOC); and approval by the Authority (Authorization) with specifically required risk mitigations to operate as described.
 - (i) This category of operation may also require additional system certification such as type certifications.
 - (ii) Operational requirements for this category can be found in Subpart F “Complex Operations” of this regulation.
 - (iii) Complex Operations categorization provides the opportunity for highly robust UAS to operate in Authority controlled airspace where other operations would not be allowed for lack of system performance, reliability, and certification.
- (b) As an applicant seeks approval for UAS operations from the Authority, they can look to these three categories for guidance and what will be required of them.

Appendix 1 to 27.015 illustrates of permit and licensing flow chart for UAS

 - (1) It is recommended that an applicant identifies what elements of the operation do not meet with the “Basic Category.”
 - (2) These identified operational differences will be the focus of the risk assessment processes to be considered in the Specific or Complex categories.
 - (3) As an applicant’s intended operation is characterized by higher risk elements, more significant training, licensing, permissions, system reliability, and equipage will be required.
- (c) The Subparts in this regulation relating to the categories (Subparts D, E and F) outline and identify requirements that characterize that classification of operation.
- (d) The Authority reserves the right to amend or require operational changes at any time.

UAS Operation Licensing and Permission Categories		
Basic	Specific	Complex
1. Registration 2. Notification to the Authority	1. Registration 2. Authorization 3. Pilot License	1. Registration 2. Authorization 3. Pilot License 4. UAS Operator Certification

- (e) An applicant seeking operations beyond those limitations identified in Subpart D “Basic Operations” must provide operational risk assessment as described by the Authority in support of an Authorization. As risk increases, the complexity of the assessment will include operational considerations identified in Subpart E “Specific Operations” and Subpart F “Complex Operations”.

27.020 OWNERSHIP OF UAS IN RWANDA

- (a) A person shall be eligible to own a UAS if they are—
 - (1) A Rwandan citizen of minimum age of eighteen (18) years.
 - (2) A resident of Rwanda of minimum age of eighteen (18) years.
 - (3) A company registered in Rwanda.
 - (4) An institution of the government of Rwanda.
- (b) A person who wishes to change ownership of a UAS shall notify the Authority in writing seven days before the change.
- (c) A person shall not own, register or operate UAS with military specifications.
- (d) Non Rwandans with visas shall abide by regulation 27.035(l) for ownership of UAS in Rwanda, then Regulation 27.090 and 27.255 (if applicable) before any operations

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27.025 DECLARATION OF UAS ON ARRIVAL AT THE AIRPORT/BORDER

- (a) A person shall declare his/her unregistered UAS to Airport security or security officer at the border post upon arrival.
- (b) Unless a person has authorization, any UAS brought in the country whether unregistered or foreign registered shall notify Airport security or border security upon arrival, submit/handover the UAS, obtain and complete a seizure form. The UAS owner must complete registration and/or Authorization process before claiming back the UAS.
- (c) A person who has already registered his/her aircraft prior to arrival must present all documentation to Airport security or security officer at the border post to confirm the aircraft is adequately registered and marked.
- (d) A UAS seized for a period of over 6 months without owner's claim, shall be removed from the store and submitted for either destroying or auctioning.

27.030 MANUFACTURE, ASSEMBLY & TESTING OF UAS

- (a) Any person intending to manufacture, assemble or test a UAS, or a component thereof, shall request for Authorization and be subjected to necessary security clearance by relevant competent security agencies.
- (b) Any person intending to test a UAS or component thereof, shall register the aircraft or component with the Authority and issue notification to the Authority prior to any flight.
- (c) Areas of operation may be designated by the Authority as "Testing Sites" where any person manufacturing, assembling, or testing a UAS, or a component thereof, may fly any registered aircraft or component without an Authorization.

27.035 REGISTRATION OF UAS

- (a) A person shall not operate an unmanned aircraft system within Rwanda unless the unmanned aircraft system has been registered by the Authority and a certificate of registration is issued to its owner in accordance with these regulations;
- (b) An unmanned aircraft system acquires Rwandan nationality when registered under these Regulations;
- (c) An unmanned aircraft system is eligible for registration if it is owned by—
 - (1) any Rwanda Government institution except if classified as state aircraft;
 - (2) an individual legally residing in Rwanda or a Rwandan citizen;
 - (3) any company registered in Rwanda;
- (d) The owner of a UAS applies to the Authority by sending the following items—
 - (1) an application form to provide information about the unmanned aircraft system and contact information for the UAS owner;
 - (2) evidence of ownership (such as a bill of sale); and
 - (3) the registration fee as determined by the Authority.
- (e) If the applicant meets the registration requirements, the Authority registers the UAS by assigning a registration number ("9XR-...") and issues a certificate of registration to the owner;
- (f) The Authority establishes and maintains a UAS register containing the information specified in regulation 27.045,
- (g) If a UAS is leased or is the subject of a lease, charter or hire purchase agreement to a person qualified under 27.035 (c), the Authority temporarily registers the UAS in the names of the parties to the charter or hire purchase agreement for the duration of the lease, charter or hire-purchase agreement.
- (h) The certificate of registration shall not be transferable.
- (i) An operator or owner of a UAS shall be subjected to security vetting from competent security vetting agencies.
- (j) Any significant modification, that affects flight characteristics, to the specifications of registered UAS shall be subject to clearance by the authority.
- (k) Not prejudice to regulation 27.035 (a) and 27.035 (i), an applicant with foreign registered UAS intending to fly UAS in Rwanda, will not require Rwandan registration mark.
- (l) A foreign applicant shall fly in Rwandan airspace only if the following are fulfilled—

- (1) presenting all required documents as proof of having gone through registration process applicable in their home country (and recognized by the Authority) or registration in a global and accessible database;
- (2) when Authorization is issued by the Authority as required;

27.040 DISPLAY OF REGISTRATION MARKS

- (a) The owner of the unmanned aircraft system shall display Authority-issued registration marks prominently on the unmanned aircraft system;
- (b) The registration marks shall be displayed in the largest practicable manner.

27.045 UAS REGISTER

- (a) The Authority shall establish and maintain a UAS register containing the following particulars-
 - (1) The number of the certificate;
 - (2) The registration mark assigned to unmanned aircraft system by the Authority;
 - (3) The name of the manufacturer and the manufacturer's designation of the unmanned aircraft system;
 - (4) The serial number of the unmanned aircraft system;
 - (5) The name and address of the owner
 - (6) The use or conditions with regard to which unmanned aircraft system is registered.
 - (7) Entry date,
 - (8) Registration/deregistration date
 - (9) Inspector's signature

27.050 DE-REGISTRATION OF UAS

- (a) The Authority may de-register or cancel the registration of a UAS under the following circumstances—
 - (1) Upon application of the UAS owner for purposes of registering the UAS with another Authority;
 - (2) Upon destruction of the UAS or its permanent withdrawal from use; or
 - (3) In the interest of National Security

27.055 IDENTIFICATION PLATE

- (a) UAS must carry an easily identified inscription with its registration mark and be made of fire resistant material or placed far from any combustible material such as batteries;
- (b) The identification inscription must be commensurate with the size of the UAS and affixed conspicuously to the exterior of the unmanned aircraft system.

27.060 AIRWORTHINESS OF UAS

- (a) Unmanned aircraft systems owner or operator shall ensure that all its components are in working order and in accordance with the manufacturers' user manual.
- (b) For the "Specific" and "Complex" risk categories of UAS operation, the Authority shall require UAS operations to meet a standards level of performance to be determined by the authority and commensurate with the risk of the operation.
- (c) No airworthiness type certification shall be required for unmanned aircraft system operations that are subject to these Regulations;
- (d) Without prejudice to Regulation 27.060 (c), no person shall operate an unmanned aircraft system unless it is in a condition for safe operation. This condition may be determined during the preflight check required under regulation 27.095 of these Regulations;
- (e) The remote pilot must discontinue the flight when he/she knows or has reason to know that continuing the flight would pose a hazard to other aircraft, people, or property.

27.065 MAINTENANCE & INSPECTION

- (a) A remote pilot or the owner of an unmanned aircraft system must—
 - (1) Maintain the unmanned aircraft system in a condition for safe operation; and
 - (2) inspect the unmanned aircraft system prior to flight to determine that the system is in a condition for safe operation;

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- (3) Keep a log of all the checks performed before each flight operation. These logs should then be consulted in case of incident or accident.

27.070 INSPECTION, TESTING & DEMONSTRATION OF COMPLIANCE

- (a) A remote pilot, or owner of an unmanned aircraft system, must upon request, make available to the Authority—
 - (1) the remote pilot license with an unmanned aircraft system rating;
 - (2) the certificate of registration for the unmanned aircraft system being operated; and
 - (3) any other document, record, or report required to be kept by a remote pilot or owner of an unmanned aircraft system under these Regulations
- (b) The remote pilot, or owner of an unmanned aircraft system must, upon request, allow the Authority to make any test or inspection of the unmanned aircraft system, the remote pilot, and to determine compliance with these Regulations.

27.075 REPORTING OF UAS INCIDENTS AND ACCIDENTS

- (a) A remote pilot must, as soon as possible but not later than 24 hours, report to the Authority any operation of the unmanned aircraft system that involves the following accident—
 - (1) Any fatal or serious injury to any person; or
 - (2) Damage to any property including the unmanned aircraft system itself.
- (b) UAS operator shall ensure that all eligible incidents and accidents involving UAS are reported to the Authority in accordance with Rwanda Civil Aviation Safety Management requirements.

27.080 IMPORT AND EXPORT OF UAS

- (a) A person shall not import a UAS or a component thereof without a permit issued by the Authority subject to necessary security clearance by the competent security agencies.
- (b) A person who intends to export a Rwandan registered UAS shall notify the Authority in writing attached to the registration certificate issued and obtain a de-registration certificate prior to transportation.

SUBPART C: OPERATION OF UAS

27.085 GENERAL OBLIGATION OF UAS OWNER AND OPERATOR

- (a) The UAS operator shall be responsible for the safe conduct of its operations.
- (b) The UAS operator shall comply with all requirements established by the Authority regarding its operation.
- (c) The UAS operator shall be responsible for contracted services from providers (e.g. communications service providers), as necessary, to carry out its operations.
- (d) Responsibility for operational control shall rest with the registered owner or operator of the UAS.
- (e) The UAS owner or operator shall ensure that it is registered in accordance with the provisions of these regulations.
- (f) Prior to conducting controlled UAS operations whether BVLOS OR VLOS, the operator shall subscribe to any means of UAS surveillance approved by the authority. Application will be submitted through www.caa.gov.rw/uas
- (g) No person shall be allowed to operate UAS under no surveillance unless otherwise authorized by the Authority.
- (h) Unless otherwise specified by the Authority the request for Authorization for operation shall include the following—
 - (1) Name and contact information of the operator;
 - (2) UAS characteristics including type of aircraft, maximum certificated take-off mass, number of engines and wing span;
 - (3) Copy of certificate of registration;
 - (4) Aircraft identification to be used in radiotelephony, if applicable;
 - (5) Copy of all approvals related to aircraft airworthiness;
 - (6) Copy of the uas operator certificate;

- (7) Copy of the remote pilot license;
- (8) Copy of the aircraft radio station license, if applicable;
- (9) Description of the intended operation such as to include type of operation or purpose, flight rules, mode of separation from air and ground obstacles, date of intended flight, point of departure, destination, cruising speed, cruising level, route to be followed, duration/frequency of flight;
- (10) take-off and landing requirements and procedures;
- (11) UAS performance characteristics, including—
 - (i) Operating speeds;
 - (ii) Typical and maximum climb rates;
 - (iii) Typical and maximum descent rates;
 - (iv) Typical and maximum turn rates;
 - (v) Other relevant performance data including limitations regarding wind, icing, precipitation; and
 - (vi) Maximum unmanned aircraft endurance;
- (12) communications, navigation and surveillance capabilities;
 - (i) Aeronautical safety communications frequencies and equipment, including—
 - (ii) ATC communications, including any alternate means of communication;
 - (iii) Command and control links (C2) including performance parameters and designated operational coverage area;
 - (iv) communications between remote pilot and UA observer, if applicable;
 - (v) navigation equipment; and
 - (vi) surveillance equipment, such as SSR transponder, ADS-B;
- (13) detect and avoid capabilities;
- (14) emergency procedures, including but not limited to—
 - (i) Communications failure with ATC;
 - (ii) C2 link failure; and
 - (iii) UAS pilot/UA observer communications failure, if applicable;
- (15) number and location of remote pilot stations as well as handover procedures between remote pilot stations, if applicable;
- (16) document attesting noise certification, if applicable;
- (17) confirmation of compliance with Part 29 of the Civil Aviation Regulations;
- (18) payload information/description; and
- (19) Proof of adequate insurance coverage commensurate to the risk of the operation.
- (g) Where documents identified in regulation 27.085 (f) above are issued in another language other than English, the UAS operator shall ensure that an English translation is included.
- (h) The UAS shall meet the performance and equipment carriage requirements for the specific airspace in which the flight is to operate.
- (i) Operational risk assessment including specific route(s) and site(s).
- (j) Proof of operation(s) site approval from the appropriate authorities.
- (k) An operator shall not engage in commercial UAS activity unless the operator holds a valid UAS operator certificate (UOC) issued by the Authority

27.090 AUTHORIZATION OF UAS ACTIVITIES

- (a) A person shall not operate a UAS in Rwanda, except in accordance with these regulations and given Authorization by the Authority.
- (b) UAS operations shall be authorized in accordance with the category of use, for purposes of—
 - (1) Private Use: No additional Authorization other than notification to the authority is required if operating within the constraints of Subpart D (Basic Operations);
 - (2) Recreation and Sports: Authorization shall be through registered clubs established in accordance with the provisions of Subpart D of these regulations;
 - (3) Commercial UAS Operations: Authorization shall be issued in accordance with the provisions of Subpart F of these regulations.
- (c) The Authority may grant upon application a temporary Authorization(s) to person(s) intending to operate UAS not registered in Rwanda—
 - (1) For a period of fourteen (14) days' renewable once when the reason for renewal is genuine;

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- (2) Such application shall be submitted to the Authority and processed within four (4) weeks.

27.095 PREFLIGHT FAMILIARIZATION, INSPECTION AND ACTIONS FOR UAS OPERATION

- (a) Prior to flight, the remote pilot must—
 - (1) assess the operating environment, considering risks to persons and property in the immediate vicinity, both on the surface and in the air. This assessment must include—
 - (i) Local weather conditions;
 - (ii) Local airspace and any flight restrictions;
 - (iii) The location of persons and property on the surface; and
 - (iv) Other ground hazards.
 - (2) ensure that all persons involved in the operation of the unmanned aircraft system receive a briefing that includes operating conditions, emergency procedures, contingency procedures, roles and responsibilities, and potential hazards;
 - (3) ensure that all links between ground station and the unmanned aircraft system are working properly; and
 - (4) if the unmanned aircraft system is powered, ensure that there is enough available power for the unmanned aircraft system to operate for the intended operational time and to operate after that for at least five minutes.
- (b) Each person involved in the operation must perform the duties assigned by the remote pilot.

27.100 OPERATION OF UAS IN PROHIBITED OR RESTRICTED AREAS

- (a) A person shall not operate a UAS—
 - (1) In or around a prohibited or a restricted area or “no fly zone” the particulars of which have been duly published in the Rwanda Aeronautical Information Publication or any other relevant document, except in accordance with the conditions of the restrictions or by permission granted by the Authority;
 - (2) In or around Strategic Installations, Radar Sites, high tension cables and Communication Masts, highways, stadiums, Prisons, Police Stations, Military barracks, Courts of Law, Scenes of Crime, except in accordance with the conditions of the restrictions or by permission granted by the Authority through an Authorization.

27.105 CARRIAGE OF DANGEROUS GOODS

- (a) A person shall not take or cause to be taken on board a UAS or deliver or cause to be delivered for loading thereon any goods which that person knows or has reasonable cause to know to be dangerous goods unless authorized by the Authority to do so.
- (b) Dangerous goods are defined as—
 - (1) Chemical and/or Biological substances;
 - (2) Nuclear material;
 - (3) Explosives;
 - (4) Arms, ammunition and munitions of war;
 - (5) Corrosive substances;
 - (6) Radioactive elements;
 - (7) Volatile liquids;
 - (8) Highly flammable liquids;
 - (9) Aerosol sprays;
 - (10) Illicit or unauthorized drugs;
 - (11) Any such materials and/or substances that may from time to time be so classified by the Authority.

27.110 HAZARDOUS/RECKLESS OPERATION

- (a) No person shall—
 - (1) operate an unmanned aircraft system in a careless or reckless manner so as to unduly endanger the life or property of another; or
 - (2) allow an object to be dropped from an unmanned aircraft system if such action would endanger the life or property of another.

27.115 OPERATION IN CONTROLLED AIRSPACE

- (a) An unmanned aircraft system shall not operate in a controlled airspace unless the operator has prior
- (b) Authorization from the appropriate Authority to operate in such airspace;
- (c) An unmanned aircraft system must only operate outside any aerodrome control zone (CTR);
- (d) Any person conducting unmanned aircraft system operations must ensure that the appropriate air traffic service unit(s) is advised immediately anytime the flight of an unmanned aircraft system inadvertently enters into controlled airspace.

27.120 MEDICAL CONDITION, CONSUMPTION OF ALCOHOL & DRUGS

- (a) No person shall act as a remote pilot/observer/controller if he or she knows or has reason to know that he/she has a physical or mental condition that would interfere with the safe operation of an unmanned aircraft system.
- (b) No UAS pilot or observer or controller shall—
 - (1) consume alcohol less than 8 hours prior to reporting for duty;
 - (2) 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 0.04 grams per 100 milliliters;
 - (3) consume alcohol or any psychoactive substance during the duty period or whilst on standby for duty; or
 - (4) commence duty period/operate UAS while under the influence of alcohol or any psychoactive substance having a narcotic effect and put operation to safety risk.

27.125 INTERNATIONAL UAS OPERATION

- (a) A person shall not conduct a UAS flight commencing at a place within Rwanda and terminating at a place outside Rwanda without Authorization from the State of destination or any other State over whose airspace the UAS shall fly.
- (b) A person shall not conduct a UAS flight commencing at a place outside Rwanda and terminating at a place within Rwanda or over-flying the Rwanda airspace without Authorization from the Authority.

27.130 CANCELLATION, SUSPENSION OR VARIATION OF AUTHORIZATION

- (a) Notwithstanding the provisions of regulation 27.090, the Authority may, in the interest of safety and national security, cancel, suspend or vary any Authorization granted under these regulations.

27.135 NOTIFICATION TO THE LOCAL AUTHORITIES

- (a) No unmanned aircraft system shall be launched or recovered from any public or private property without Authorization;
- (b) After reception of Authorization from the Authority, the remote pilot or the owner must notify appropriate authorities (local authorities and police), as well as inform people around the area, before starting the operations.
- (c) If the flight is to be performed near any aerodrome or aircraft operating site, procedures for notification of the intended operation should be provided to air traffic services unit in the area prior to take-off and file flight plan as prescribed in regulation 27.155, 27.165 and 27.210.
- (d) All UAS operations shall always be notified to local/security authorities in the area of the intended operation to avoid interruption or concerns from the public.

27.140 EMERGENCIES AND CONTINGENCIES

- (a) UAS operators shall develop and implement emergency and contingency procedures acceptable to the Authority and submit it as part of their operation manual.

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27.145 COMMAND AND CONTROL LINK

- (a) A UAS pilot/controller shall ensure that he or she has command and/or control link of the UAS at all times during the flight.
- (b) Any UAS pilot/controller who loses command and/or control link of his UAS for a period necessitating termination of the flight must report to the Authority as soon as possible within 24hours.

27.150 ISSUANCE OF AUTHORIZATION/OPERATOR CERTIFICATE

- (a) A person shall not operate an unmanned aircraft system within Rwanda unless authorized by the Authority.
- (b) The Authority may issue an Authorization for a single activity or a block of repeated activities to be carried out by an unmanned aircraft at a specific area of operation, and which are of specific operational profiles and conditions.
- (c) A UAS Operator Certificate (UOC) is issued by the Authority if the applicant is able to ensure safe operation of unmanned aircraft, taking into account the applicant's organizational set-up, competency of the personnel especially those flying the unmanned aircraft, procedures to manage safety including the conduct of safety risk assessments, the airworthiness of the aircraft system, training and security programs in place based on category and complexity of operation.
- (d) Applications for UAS Operator Certificate (UOC) or Authorization will be assessed on a case-by-case basis.
- (e) Authorization applications and documents to be provided in the form and manner prescribed by the Authority.
- (f) Applicable fees for issuance of activity permit and/or UAS Operator Certificate shall be determined by the Authority as published in appropriate document

27.155 OPERATION IN THE VICINITY OF AERODROMES

- (a) Except with written permission of the operator of an aerodrome, the appropriate ANSP and approval from the Authority; a person shall not operate a—
 - (1) UAS within ten (10) Km of an aerodrome from the aerodrome reference point of any aerodrome;
 - (2) UAS on approach and take-off paths;
 - (3) UAS within the vicinity of navigation aids;
 - (4) UAS within the aerodrome traffic zone;
 - (5) UAS within terminal traffic holding patterns.

27.160 UAS COMMUNICATION FREQUENCIES

- (a) Communication between remote pilot and ATC shall be on established Radio frequencies used in aeronautical radio frequency spectrum.
- (b) If applicable, the UAS operator shall seek radio license from the appropriate national agency in charge prior to operating any radio for communication.
- (c) Communication between remote pilot and ATC for operations considered as basic category for UAS, Subpart D of this Regulation, will require notification to the Authority.

27.165 RESPONSIBILITY OF THE REMOTE PILOT

- (a) The remote pilot is directly responsible for, and is the final authority as to the operation of the unmanned aircraft system.
- (b) The remote pilot must ensure that the unmanned aircraft system will pose no undue hazard to other aircraft, people, or property in the event of a loss of control of the unmanned aircraft system for any reason.

27.170 OPERATIONS MANUAL

- (a) A UAS operator shall develop and submit to the Authority for approval an operation manual as set out in the Appendix 1 to 27.170 to these regulations.
- (b) An operations manual shall include each item set forth in this Appendix which is applicable to the specific operation, unless otherwise approved by the Authority.

- (c) The holder of UOC establishes a safety management system commensurate with the size of the organization or entity and the complexity of its operations
- (d) The safety management system shall include—
 - (1) Lines of responsibility and accountability;
 - (2) Safety policy;
 - (3) Identification of aviation safety hazards encountered by the activities of the operator, assessment and mitigation of the associated risks, including taking actions and verifying their effectiveness;
 - (4) A process to identify actual and potential safety hazards and assess the associated risks;
 - (5) A process to develop and implement remedial action necessary to maintain an acceptable level of safety;
 - (6) Provision for continuous and regular assessment of the appropriateness and effectiveness of safety management activities.
- (e) The holder of UOC establishes a system of record-keeping that allows adequate storage and reliable traceability of all activities conducted;
- (f) The format of the records is specified in the UOC holder's operations manual;
- (g) Records are stored for at least 5 years in a manner that ensures protection from damage, alteration and theft.

SUBPART D: BASIC OPERATIONS OF UAS FOR PRIVATE, SPORT AND RECREATION

27.175 PRIVATE UAS OPERATIONS

- (a) A person operates UAS for private purposes only after registering the UAS with the Authority, and is subject to the conditions contained in regulation 27.195.

27.180 TRAINING FOR PRIVATE UAS OPERATIONS

- (a) The UAS pilots will be trained in accordance with training requirements provided and approved by the authority.

27.185 RECREATIONAL AND SPORTS UAS OPERATIONS

- (a) UAS operations for recreation and sports purposes shall be conducted within registered clubs which are approved by the Authority as set out in the Appendix 1 to 27.185 of these regulations. Such recognition shall be valid for twelve (12) months.
- (b) The Authority shall develop a system for approval of clubs including requirements for composition, documentation and club rules and regulations.
- (c) The clubs referred to in regulation 27.185 (a) shall provide the Authority with details of their operation areas and times for approval.
- (d) UAS operators shall comply with requirements to operate within the designated airspaces determined by the appropriate authorities.

27.190 TRAINING REQUIREMENTS FOR RECREATIONAL AND SPORTS UAS OPERATIONS

- (a) Clubs referred to in regulation 27.185 herein shall prescribe minimum training requirements for UAS operation under the club.
- (b) Training requirements referred to in regulation 27.190 (a) above shall be documented and submitted to the Authority for acceptance.

27.195 BASIC UAS OPERATING LIMITATIONS

- (a) A remote pilot must comply with all of the following operating limitations when operating an unmanned aircraft system under the Basic Classification of UAS operations—
 - (1) The airspeed of the unmanned aircraft system shall not exceed 87 knots (100 miles per hour) calibrated airspeed at full power in level flight;
 - (2) The maximum take-off weight of a UAS under the Basic Classification shall be 1 kg.

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- (3) A person shall not operate a UAS at a height above 400 feet (120 meters) Above Ground Level (AGL) and a lateral distance of 100 m away from any person, vessel, vehicle or structure which is not under the control of the person in charge of the UAS except when approved by the Authority.
- (4) The lateral distance between the unmanned aircraft system and the remote pilot shall be in such a way that the remote pilot will maintain continuous visual contact with the unmanned aircraft system;
- (5) The unmanned aircraft system shall not be flown over or within any congested area of a city, town or settlement unless approved by the Authority;
- (6) the minimum flight visibility, as observed from the location of the ground control station must be no less than 3 statute miles (5 kilometers);
- (7) the minimum distance of the unmanned aircraft system from clouds must be no less than—
 - (i) 500 feet (150 meters) below the cloud; and
 - (ii) 2,000 feet (600 meters) horizontally away from the cloud.
- (8) Notwithstanding the provisions of regulation 27.195 (a) (3), operations of UAS may be conducted at such higher heights and lateral distances as the Authority may approve.
- (9) Operating UAS fitted with cameras and/or imaging devices at heights or lateral distances where such cameras and/or imaging devices capture information, pictures or videos extending beyond the prescribed area of approved operation is prohibited.
- (10) Unless approved by the Authority on a case by case basis, a person shall not operate a UAS—
 - (i) In conditions other than Visual Meteorological Conditions (VMC);
 - (ii) At night;
 - (iii) In controlled airspace under this category.

27.200 DAYLIGHT OPERATION

- (a) All operations of an unmanned aircraft system under basic regulations must be between the hours of official sunrise and sunset.
- (b) Night operations are not permitted under these regulations, except by approval under the "Specific" or "Complex" classification of operations.

27.205 VISUAL LINE-OF-SIGHT (VLOS) UAS OPERATION

- (a) The remote pilot of a UAS must maintain continuous unaided visual contact with the unmanned aircraft system sufficient to—
 - (1) Maintain operational control of the unmanned aircraft system,
 - (2) Know the unmanned aircraft system's location;
 - (3) Determine the unmanned aircraft system's attitude, altitude, and direction;
 - (4) Observe the airspace for other air traffic or hazards; and
 - (5) Determine that the unmanned aircraft system does not endanger the life or property of another.

Note 11. - The use of a trained UA Observer may satisfy this condition for VLOS aircraft operation.

SUBPART E: SPECIFIC OPERATIONS

27.210 FLIGHT PLAN

- (a) All UAS flights flown under Subpart E or F shall file flight plans as specified in the conditions here under—
 - (1) Flights in controlled airspace shall file flight plans as prescribed for in the Aeronautical Information Publication (AIP).
 - (2) Flights in uncontrolled air space shall file flight plans as follows —
 - (i) Operations within 5 kilometers out of launch area to notify the nearest ATC and fulfil regulation 27.195 (a) (1), (3), (4), (5), (6), (7), (8), (9), (10);
 - (ii) Operations beyond 5 Km out of launch shall file flight plans as stipulated in regulation 27.210 (a) above and fulfil regulation 27.195 (a) (1), (3), (4), (5), (6), (7), (8), (9), (10);
 - (3) while filing a Flight Plan, UAS operator shall abide by the appropriate regulations.
- (b) The UAS operator shall share any UAS flight data with the authority when required.

- (c) Data related to UAS flight shall be recorded, stored and retrievable as and when required by the Authority for investigation.

27.215 OPERATION NEAR AIRCRAFT; RIGHT-OF WAY RULES

- (a) A remote pilot must maintain awareness so as to see and avoid other aircraft and vehicles and must yield the right-of-way to all aircraft and vehicles;
 - (1) In order to maintain awareness so as to see other aircraft and vehicles, the remote pilot/controller shall maintain visual contact with his/her UAS in case of Visual Line-Of-Site (VLOS) operations or ensure continuous real time tracking of UAS in case of Beyond Visual Line-Of-Site (BVLOS) operations.
 - (2) Yielding the right-of-way means that the unmanned aircraft system must give way to the aircraft or vehicle and may not pass over, under, or ahead of it unless well clear.
- (b) No person may operate an unmanned aircraft system so close to another aircraft as to create a collision hazard.

27.220 OPERATION IN CONGESTED AREAS AND OVER PEOPLE

- (a) A person shall not operate a UAS at lateral distance of less than 328 feet [100 meters] from any person or an open-air assembly/crowd of persons, building structure, vehicle, vessel or animal not associated with the operations of UAS unless otherwise authorized by the Authority.
- (b) Subject to paragraph (a) above vertical limits shall be less than 100 feet [30 meters] AGL except when approved by the Authority.
- (c) Subject to regulation 27.220(a) a person shall not operate UAS in a reckless manner thus abiding by regulation 27.110.

27.225 OPERATION IN CONTROLLED AIRSPACE

- (a) An unmanned aircraft system shall not operate in a controlled airspace unless the operator has prior authorization from the appropriate Authority to operate in such airspace;
- (b) An unmanned aircraft system must only operate outside any aerodrome control zone (CTR) unless otherwise authorized by the Authority;
- (c) Any person conducting unmanned aircraft system operations must ensure that the appropriate air traffic service unit(s) is advised immediately anytime the flight of an unmanned aircraft system inadvertently enters into controlled airspace

27.230 ATC COMMUNICATION

- (a) UAS pilots shall ensure that ATC is made aware of any operations that shall take place in areas which are likely to affect manned and controlled air traffic.

27.235 OPERATIONS AT AN AERODROME

- (a) The Authority may upon approval of UAS operation at an aerodrome—
 - (1) Impose operating restrictions on the approval in the interest of safety;
 - (2) Publish details of the approval in the appropriate element of the Aeronautical Information Publication (AIP);
 - (3) Revoke or change the conditions that apply to such approval and publish details of any revocation or change in conditions in the appropriate element of the AIP.

SUBPART F: COMPLEX COMMERCIAL OPERATIONS

27.240 UOC COMPLIANCE

- (a) An operator shall not engage in commercial UAS operations unless the operator holds a valid UAS Operator's Certificate (UOC) issued by the Authority.
- (b) The UOC referred to in regulation 27.240 (a) shall enable the operator to conduct UAS operations in accordance with the conditions and limitations detailed in the operations specifications attached to the UOC.

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- (c) The issuance of an UOC by the Authority is dependent upon the UAS operator demonstrating an adequate organization, method of control and supervision of flight operations, training program as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified and commensurate with the size, structure and complexity of the organization and abide by appendix 1 to 27.170 regulation.
- (d) A commercial UAS operator shall establish and implements a safety management system (SMS) in accordance with their operational requirements established under the Civil Aviation Law or any other regulations made there under.

27.245 UAS OPERATOR CERTIFICATE (UOC)

- (a) An operator or owner of unmanned aircraft system shall have a UOC issued in accordance with these Regulations.
- (b) The issuance of UOC by the Authority shall be dependent upon the unmanned aircraft system operator demonstrating method of control and supervision of flight operations and training consistent with the nature and extent of the operations specified.
- (c) Application for UOC shall be sent to the Authority—
 - (1) on a form and manner prescribed by the Authority; and
 - (2) containing any other information the Authority requires the applicant to submit.
 - (3) accompanied by proof of payment of relevant fees for UOC as determined by the Authority in appropriate document.
- (d) The Authority shall issue UOC to an applicant if that applicant—
 - (1) Has its principal place of business and it is registered in Rwanda;
 - (2) Meets the requirements of these Regulations;
 - (3) Has qualified remote pilots to safely operate the unmanned aircraft system; and
 - (4) Has met any other requirements as specified by the Authority.
- (e) The UOC shall contain at least the following—
 - (1) The issuing authority;
 - (2) The UOC number and its expiration date;
 - (3) The unmanned aircraft system operator name, trading name (if different) and address of the principal place of business;
 - (4) The date of issue and the name, signature and title of the authority representative;
 - (5) The location where the contact details of operational management can be found;
 - (6) The description of the types of operations authorized;
 - (7) The type(s) or model(s) of the unmanned aircraft system authorized for use; and
 - (8) The authorized areas of operation.
- (f) An UOC shall be valid for a period of 12 months unless otherwise approved by the Authority
- (g) The continued validity of UOC shall depend upon the unmanned aircraft system operator maintaining the requirements of regulation 27.245(b) and (c) under the supervision of the Authority.

27.250 APPLICATION FOR UAS OPERATOR CERTIFICATE

- (a) An operator applying to the Authority for a UAS Operator Certificate (UOC) shall submit an application in a form and manner prescribed by the Authority and containing any other information the Authority may require.
- (b) An applicant shall make the application for an initial issue or reissue of UOC at least four weeks before the date of the intended operation.

27.255 ISSUANCE OF UOC

- (a) The Authority may issue UAS Operator Certificate (UOC) to an applicant if that applicant—
 - (1) Meets the requirements of ownership stipulated in regulation 27.020
 - (2) Meets the applicable regulations and standards for the holder of a UOC;
 - (3) Is properly qualified and adequately staffed and equipped to conduct safe operations in commercial operations of the UAS;

- (4) Has an approved aircraft operator security program in accordance with the Civil Aviation (Security) Regulations, and meets any other requirements as specified by the Authority.

27.260 VALIDITY AND RENEWAL OF UAS OPERATOR CERTIFICATE

- (a) A UAS Operator Certificate (UOC) issued by the Authority shall be valid for 12 months from the date of issue or renewal unless—
 - (1) A shorter period is specified by the Authority;
 - (2) The Authority amends, suspends, revokes or otherwise terminates the certificate;
 - (3) An UOC holder surrenders it to the Authority;
 - (4) The UOC holder notifies the Authority of the suspension of operations.
- (b) An UOC which is suspended or revoked shall be returned to the Authority.
- (c) An applicant for an UOC which has expired shall make an initial application.

27.265 AMENDMENTS OF UAS OPERATOR CERTIFICATE

- (a) The Authority may amend a UAS operator certificate (UOC) if the—
 - (1) Authority determines that the amendment is necessary for the safety of commercial UAS operations.
 - (2) UOC holder applies for an amendment and the authority determines that the amendment is necessary.
 - (3) The amendment is in the interests of national security.
- (b) The UOC holder shall operate in accordance with the amendment unless it is subsequently withdrawn.

27.270 CONDUCTING SURVEILLANCE, TESTS AND INSPECTIONS

- (a) The Authority shall conduct surveillance, inspections and tests on the UAS operator certificate (UOC) holder to ensure continued eligibility to hold an UOC and associated approvals.

27.275 PERSONNEL REQUIRED FOR UAS COMMERCIAL OPERATIONS

- (a) UAS operator shall have an accountable manager acceptable to the authority, with corporate authority for ensuring that all necessary resources are available to support activities as mentioned in the UOC specifications.
- (b) The accountable manager shall have sufficient qualified and competent personnel for the planned tasks and activities to be performed in accordance with the applicable requirements.
- (c) A UAS operator should establish initial and recurrent training to ensure continuing competence of its personnel.

27.280 AUTHORIZATION FOR COMMERCIAL UAS OPERATIONS

- (a) UOC holder shall not undertake commercial operations of UAS except with Authorization issued by the Authority.
- (b) Authorization referred to in regulation 27.280 (a) shall be specific to particular operations.

27.285 CERTIFICATION OF UAS PILOTS / INSTRUCTORS

- (a) A person shall not operate a UAS, for commercial or private purposes, without a valid License issued by the authority in accordance with these regulations.
- (b) An applicant for UAS Pilots License referred in Regulation 27.285 (a) above shall—
 - (1) Be at least 18 years old;
 - (2) Hold a current class 3 medical certificate;
 - (3) Demonstrate english language proficiency at least level 4;
 - (4) Demonstrate basic knowledge of radio telephony phraseologies;
 - (5) Have completed remote pilot training in a training organization approved by the authority;
 - (6) Have passed a knowledge and skills test;
 - (7) Hold valid identification from appropriate government authority;
 - (8) Hold criminal record certificate (Casier judiciaire) ;
 - (9) Have proof of payment of fees as determined by the authority

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- (c) Where applicable, UAS Pilot shall hold an appropriate rating for the type of operations they will perform including—
 - (1) Type rating;
 - (2) Instrument rating;
 - (3) Night rating;
- (d) where applicable UAS Instructor shall hold an appropriate rating for the type of operations they will perform including—
 - (1) Type rating;
 - (2) Instrument rating;
 - (3) Night flying rating;
 - (4) Instructor rating.
- (e) UAS pilots/instructors for commercial operations shall be certified by the Authority in accordance with the Appendix 1 to 27.300 to these regulations.

27.290 ELIGIBILITY REQUIREMENTS FOR A REMOTE PILOT CERTIFICATE/LICENSE

- (a) A person shall not act as a remote pilot unless that person holds—
 - (1) A remote pilot certificate;
 - (2) A rating for the specific UAS type or is operating under the supervision of a rated remote pilot for the purpose of qualifying for the rating;
 - (3) The required knowledge for the type of UAS;
 - (4) A current Class 3 medical certificate.
- (b) A person undergoing training to qualify for a remote pilot certificate or rating shall not—
 - (1) Act as solo remote pilot of an UAS unless under the supervision of, or with the authority of, an authorized UAS instructor;
 - (2) Form a part of the crew of a commercial UAS flight.

27.295 VALIDITY OF UAS PILOTS CERTIFICATE/LICENSE

- (a) The UAS pilots Certificate/license shall be valid subject to validity of the holder's medical certificate.

27.300 TRAINING REQUIREMENTS FOR COMMERCIAL UAS OPERATIONS

- (a) The UAS pilots shall be trained in accordance with training requirements in Appendix 1 to 27.300.

27.305 INSTRUMENTS AND EQUIPMENT REQUIREMENTS

- (a) The Authority shall prescribe instrument requirements for UAS operators for specific operations depending on—
 - (1) The category of the UAS
 - (2) Type of operations
 - (3) Special authorizations sought

27.310 ISSUANCE OF A REMOTE PILOT LICENSE WITH A UAS RATING

- (a) An applicant for a remote pilot license with an unmanned aircraft system rating under these Regulations must make the application in a form and manner acceptable to the Authority.
- (b) The application must include—
 - (1) A knowledge test report showing that the applicant passed an initial aeronautical knowledge test, or recurrent aeronautical knowledge test; and
 - (2) A certification signed by the applicant stating that the applicant does not know or have reason to know that he or she has a physical or mental condition that would interfere with the safe operation of a unmanned aircraft system;
 - (3) Proof of payment of fees for remote pilot license as determined by the Authority in appropriate document.
 - (4) A copy of ID/passport plus one passport photo
- (c) A remote pilot license is valid for a period of twenty-four (24) months.

27.315 RESPONSIBILITY OF THE REMOTE PILOT

- (a) The remote pilot is directly responsible for, and is the final authority as to the operation of the unmanned aircraft system.
- (b) The remote pilot must ensure that the unmanned aircraft system will pose no undue hazard to other aircraft, people, or property in the event of a loss of control of the unmanned aircraft system for any reason.

27.320 AERONAUTICAL KNOWLEDGE RECENCY

- (a) A person shall not operate an unmanned aircraft system unless that person has completed one of the following, within the previous 24 calendar months—
 - (1) Passed an initial aeronautical knowledge test covering the areas of knowledge specified in Regulations 27.325 (a) and 27.330. (a)
 - (2) Passed a recurrent aeronautical knowledge test covering the areas of knowledge specified in Regulations 27.325 (a) and 27.330(b).

27.325 KNOWLEDGE TESTS: GENERAL PROCEDURES AND PASSING GRADES

- (a) Knowledge tests prescribed by or under these regulations is conducted by the Authority or by persons designated by the Authority.
- (b) An applicant for a knowledge test must have proper identification at the time of application that contains the applicant's—
 - (1) Photograph;
 - (2) Signature;
 - (3) Date of birth, which shows the applicant meets or will meet the age requirements of these Regulations for the certificate sought before the expiration date of the applicant knowledge test report; and
- (c) The minimum passing grade for the knowledge test and second chance exam sitting is 70% as specified by the Authority.

27.330 INITIAL & RECURRENT KNOWLEDGE TESTS

- (a) An initial aeronautical knowledge test covers the following areas of knowledge—
 - (1) Applicable regulations relating to unmanned aircraft system rating privileges, limitations, and flight operation;
 - (2) Airspace classification and operating requirements, obstacle clearance requirements, and flight restrictions affecting unmanned aircraft system operation;
 - (3) Official sources of weather and effects of weather on unmanned aircraft system performance;
 - (4) Unmanned aircraft system loading and performance;
 - (5) Emergency procedures;
 - (6) Crew resource management;
 - (7) Radio communication procedures;
 - (8) Determining the performance of unmanned aircraft system;
 - (9) Physiological effects of drugs and alcohol;
 - (10) Aeronautical decision-making and judgment; and
 - (11) Airport operations.
- (b) A recurrent aeronautical knowledge test covers the following areas of knowledge—
 - (1) Applicable regulations relating to unmanned aircraft system rating privileges, limitations, and flight operation;
 - (2) Airspace classification and operating requirements, obstacle clearance requirements, and flight restrictions affecting unmanned aircraft system operation;
 - (3) Official sources of weather;
 - (4) Emergency procedures;
 - (5) Crew resource management;
 - (6) Aeronautical decision-making and judgment; and
 - (7) Airport operations.

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27.335 UAS OPERATION BEYOND VISUAL LINE-OF-SIGHT (BVLOS)

- (a) To conduct BVLOS operations, the operator shall obtain Authorization from the Authority after conducting operation safety risk assessment.
- (b) To conduct flights BVLOS of the remote pilot or UA observer, the remote pilot shall have a means to Detect and Avoid traffic and all other hazards such as hazardous meteorological conditions, terrain and obstacles unless otherwise approved by the appropriate authority.
- (c) Prior to conducting a controlled BVLOS operation, coordination shall be effected with the ATC unit involved regarding—
 - (1) Any operational performance limitations or restrictions unique to the UAS (e.g. unable to perform standard rate turns);
 - (2) Any preprogrammed lost C2 link flight profile or flight termination procedures; and
 - (3) direct telephone communication between the Remote Pilot Station (RPS) and the ATC unit for contingency use, unless otherwise approved by the ATC unit(s) involved.
- (d) Communication between the Remote Pilot Station (RPS) and the ATC unit(s) shall be as required for the class of airspace in which operations occur and should utilize standard ATC communications equipment and procedures, unless otherwise approved by the ATC unit involved.
- (e) C2 link transaction time should be minimized so as not to inhibit the remote pilot's ability to interface with the UAS compared to that of a manned aircraft.
- (f) UAS operating BVLOS shall only operate within Radio line of sight (RLOS). Operation beyond Radio line of sight shall require special Authorization from the Authority after indicating all operational control functions and safety measures associated to the type of operation.
- (g) Remote Pilot Station for UAS operations BVLOS will be designed in such way to match the performance of the type of C2 link (BRLOS/RLOS) with which they will be used.
- (h) BVLOS operations shall be conducted only when the following conditions are met—
 - (1) the State of the Operator and the State in whose airspace operation occurs have approved the operation;
 - (2) The Unmanned Aircraft (UA) remains in VMC throughout the flight; and
 - (3) a Detect And Avoid (DAA) capability or other mitigation is used to assure the UA remains well clear of all other traffic; or
 - (4) the area is void of other traffic; or
 - (5) the operation occurs in specifically delimited or segregated airspace.
- (i) Operations BVLOS over heavily populated areas or over open air assemblies of people shall require special considerations such as the following—
 - (1) Altitudes for safe operation;
 - (2) Consequences of uncontrolled landing;
 - (3) Obstructions;
 - (4) Proximity to airports/emergency landing fields;
 - (5) Local restrictions regarding UAS operations over heavily populated areas; and
 - (6) The emergency termination of a UA flight.
- (j) Take-off/launch of UAS BVLOS shall be operated from established aerodromes/UAS ports or from any other location depending on operational requirements and system configuration, design and performance.
- (k) Take-off/launch from aerodromes for BVLOS operations from established aerodromes may be approved after ensuring that the safety of manned aircraft operations is not jeopardized, the remote pilot/controller shall consider the following—
 - (1) Regulations pertaining to UAS operations on or near an aerodrome;
 - (2) Complexity and density of air traffic;
 - (3) Ground operations (e.g. taxiway width, condition, other ground traffic);
 - (4) C2 link continuity;
 - (5) Payload considerations;
 - (6) Wake turbulence;

- (7) Performance and capability related to take-off distance/run available and minimum obstruction climb requirements, departure procedures and any flight restricting conditions associated with operations to or from the aerodrome; and
- (8) Availability of emergency recovery areas.

27.340 HIGHLY AUTOMATED UAS OPERATIONS

- (a) Increasingly complex automated aircraft require extensive performance review, risk assessment, and testing.
- (b) The entity conducting the automated unmanned aircraft operations is responsible for oversight of the operations, including unmanned aircraft airworthiness and any operational requirements imposed by the government entity;
- (c) Automated unmanned aircraft operations must comply with rules of air, as applicable to all aircraft in Rwanda Airspace;
- (d) Approval of highly automated UAS operations must be done in consultation with the Chairperson of the National Civil Aviation Security Committee (NCASC) who will issue a Certificate of Authorization for a specific period of time that permits an entity to operate an automated aircraft, in a particular area;
- (e) The NCASC shall prescribe security conditions and limitations for highly automated unmanned aircraft operations to ensure they do not jeopardize national security.

SUBPART G: SECURITY REQUIREMENTS FOR UAS OPERATIONS

27.345 SECURITY VETTING FOR UAS PILOT/CONTROLLER OR THE OWNER

- (a) On receipt of an application for a remote pilot license/controller or registration of unmanned aircraft system, the Authority verifies compliance and the accuracy of the application and provides the applicant's information to competent security agencies for security vetting prior to certificate issuance;
- (b) The Authority only issues pilot licenses and/or UAS Operator Certificate (UOC)s to individuals who have successfully completed a security threat assessment conducted by the competent security agencies;
- (c) The security threat assessment consists of a check of intelligence-related databases, including Interpol and international databases, terrorist watch lists, and other sources relevant to determining whether an individual poses or may pose a threat to national security, and that confirms the individual's identity;
- (d) If the competent security agencies determine that the applicant poses a security risk, the Authority denies the application for a certificate;
- (e) A holder of a remote pilot license or the certificate of registration who will be determined to pose a security risk must have his/her certificate amended, modified, suspend, or revoke (as appropriate) based on the competent security agencies' security findings;
- (f) The competent security agencies conduct background and criminal record checks every 24 months on all personnel employed in the deployment, handling, and storage of unmanned aircraft system.

27.350 SECURITY PROGRAMME REQUIREMENTS

- (a) A person or a club shall not operate a UAS without operator security procedures developed in accordance with the provisions of the Civil Aviation (Security) Regulations and accepted by the Authority.
- (b) A UAS operator shall specify the security measures, procedures and practices to be followed by the operator to protect pilots and facilities from acts of unlawful interference.
- (c) A UAS operator shall carry out and maintain security measures including identification and resolution of suspicious activity that may pose a threat to civil aviation—
 - (1) At a remote pilot station;
 - (2) On an UAS; and
 - (3) At any facility under the control of the UAS operations.
- (d) UAS shall be subject to security inspection at any time during its operations without prior notification to the operator,
- (e) The specific security measures referred to in regulation 27.350 (c) shall provide—

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- (1) That the premises used for preparing, storing, parking including UAS ground station shall be secured at all times against unauthorized access;
- (2) For protection of critical information technology and communication systems used for operations purposes from interference that may jeopardize the security of civil aviation;
- (3) For protection of flight documents;
- (4) That Commercial Operators requesting to operate with a camera shall be required to include details of the camera usage in the application for Security review and approval;
- (5) Requirements for checks and searches of specific areas and accessible compartments of the interior and exterior of UAS; and
- (6) That persons engaged in UAS operations are subject to recurrent background checks and selection procedures and are adequately trained.

27.355 SECURITY OBLIGATIONS FOR UAS OPERATORS

- (a) The operator of UAS shall be responsible for the security of UAS operations including associated facilities, personnel and equipment,
- (b) The UAS operator shall ensure that the UA or any component thereof that is no longer in use is completely disabled or destroyed to prevent unauthorized use,
- (c) The UAS operator shall comply with any security directives or circulars issued by the Authority.

27.360 ACTS OF UNLAWFUL INTERFERENCE

- (a) The UAS operator shall ensure that the unmanned aircraft system is protected from acts of unlawful interference;
- (b) The UAS operator shall have response procedures for operations, personnel for threats and incidents involving UAS operations.
- (c) UAS operator or owner shall ensure that reports on acts of unlawful interference are promptly submitted to the Authority as per the Civil Aviation (Security) Regulations.

27.365 UAS OPERATOR OR OWNER'S SECURITY MEASURES

- (a) The holder of an UOC issued under these Regulations shall—
 - (1) Ensure that unmanned aircraft systems not in use are stored in a secure manner to prevent and detect unauthorized interference or use;
 - (2) Ensure that the unmanned aircraft system is protected from acts of unlawful interference;
 - (3) Ensure that the unmanned aircraft system is stored and prepared for flight in a manner that will prevent and detect tampering and ensure the integrity of vital systems;
 - (4) Designate a security coordinator responsible for the implementation,
 - (5) Ensure that all personnel employed in the deployment, handling, and storage of unmanned aircraft system have received security awareness training.

SUBPART H: GENERAL PROVISIONS

27.370 RECORDS

- (a) A UAS operator should establish a system of record-keeping that allows adequate storage and reliable traceability of all activities developed, covering at a minimum—
 - (1) operator's organization;
 - (2) SMSs;
 - (3) Personnel training and competence verification;
 - (4) Documentation of all management system key processes;
 - (5) Maintenance records; and
 - (6) Security management records.
- (b) Records shall be stored in a manner that ensures protection from damage, alteration and theft
- (c) Records identified in this regulation shall be current and in sufficient detail to determine whether the experience and qualification requirements are met for the purpose of commercial operations

27.375 INSURANCE

- (a) A person shall not operate, or cause to be operated or commit any other person to operate UAS unless there is in force a minimum insurance policy, commensurate with the risk of the operation conducted, in respect of third party risks and proof of insurance document submitted to the authority.
- (b) An operator of UAS shall make available third party liability insurance certificate, in the authentic form, at the location of the UAS operator's operational management or other location specified by the Authority
- (c) Notwithstanding the provisions of regulation 27.375 (a), the authority may dispense with requirement depending on the class and category of the UAS.

27.380 PRIVACY OF PERSONS AND PROPERTY

- (a) Any person conducting operations using UAS fitted with cameras shall operate them in a responsible way to respect the privacy of others.
- (b) No person shall use a UAS to do any of the following—
 - (1) conduct surveillance of—
 - (i) A person without the person's consent.
 - (ii) Private real property without the consent of the owner.
 - (2) Photograph or film an individual, without the individual's consent, for the purpose of publishing or otherwise publicly disseminating the photograph or film. This requirement shall not apply to news gathering, or events or places to which the general public is invited.
- (c) Infrared or other similar thermal imaging technology equipment fitted on unmanned aircraft system shall only be for the sole purpose of—
 - (1) Scientific investigation;
 - (2) Scientific research;
 - (3) Mapping and evaluating the earth's surface, including terrain and surface water bodies and other features;
 - (4) Investigation or evaluation of crops, livestock, or farming operations;
 - (5) Investigation of forests and forest management;
 - (6) Other similar investigations of vegetation or wildlife;
 - (7) Border surveillance as approved by the Authority.

27.385 DISCHARGING OR DROPPING GOODS

- (a) A person must not cause a thing to be dropped or discharged from an unmanned aircraft in a way that creates a hazard to another aircraft, a person, or property.

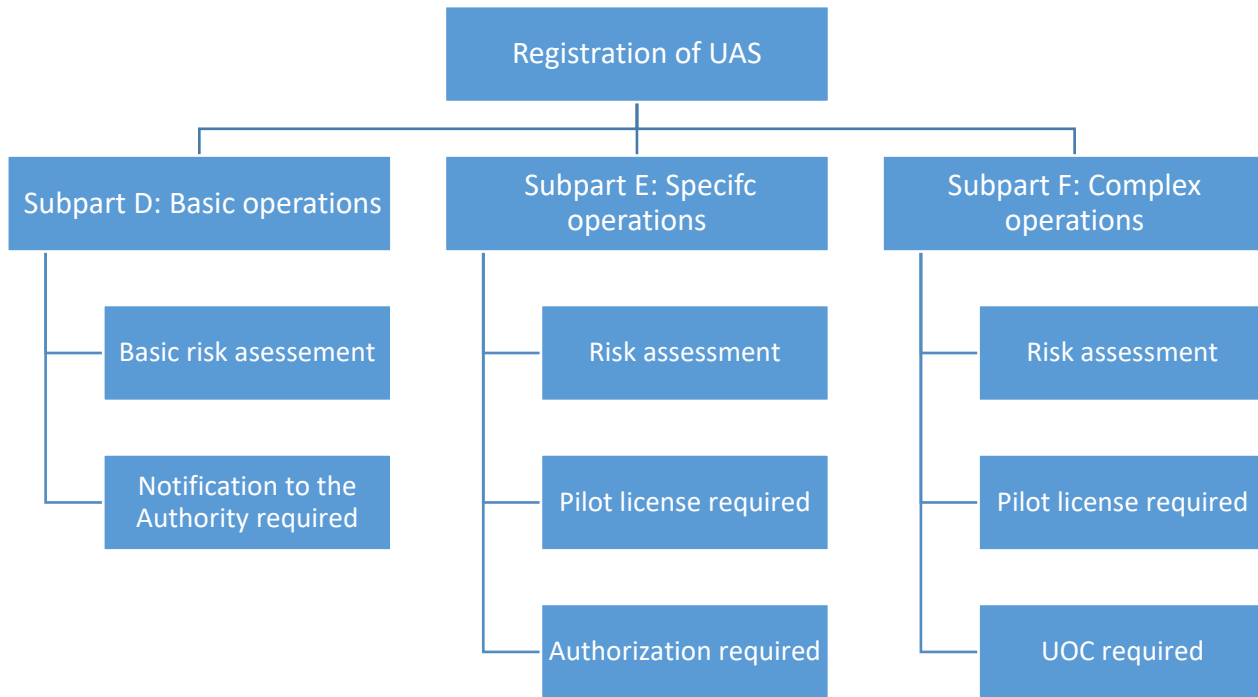
27.390 REPORTS OF VIOLATION

- (a) Any UAS Operator or employee of the operator who knows of a violation under these regulations, shall reports it to the Authority.
- (b) The Authority will determine the nature and type of any additional investigation or enforcement action that requires to be taken.

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APPENDICES

APPENDIX 1 TO 27.015- PERMIT AND LICENSING FLOW CHART FOR UAS



APPENDIX 1 TO 27.170: UAS OPERATIONS MANUAL

An operations manual shall include each item set forth below which is applicable to the specific operation, unless otherwise approved by the Authority.

Part A - General

1. INTRODUCTION

- 1.1 Purpose and scope of manuals
- 1.2 A statement that the manual complies with all applicable Authority regulations and requirements and with the terms and conditions of the applicable UAS operator certificate.
- 1.3 A statement that the manual contains operational instructions that are to be complied with by the relevant personnel in the performance of their duties.
- 1.4 List of manuals comprising operations manual.
- 1.5 A list and brief description of the various operations manual parts, their contents, applicability and use.
- 1.6 Responsibility for manual content.
- 1.7 Responsibility for manual amendment.
- 1.8 List of effective pages.
- 1.9 Distribution of manuals and amendments

2. SAFETY MANAGEMENT SYSTEM

- 2.1 Safety Policy
- 2.2 Description of safety management system
- 2.3 Accident and Investigation policies

3. QUALITY SYSTEM

Description of quality system adopted

4. MANAGEMENT ORGANISATION

4.1 A description of the organizational structure including the general company organization and operations department organization. The relationship between the operations department and the other departments of the company. In particular, the subordination and reporting lines of all divisions, departments etc., which pertain to the safety of the UAS operations, shall be shown

- 4.2 Accountable Manager –duties and responsibilities
- 4.3 Nominated personnel – Functions duties and responsibilities
- 4.4 UAS Pilot- duties and responsibilities
- 4.5 Support personnel in the operation of UAS- duties and responsibilities
- 4.6 A description of the objectives, procedures and responsibilities necessary to exercise operational control with respect to flight safety.

5. DOCUMENTATION

- 5.1 Documents required in UAS operations
- 5.2 Document storage and retention period

Part B – UAS Operating Information

1. CREW INFORMATION

- 1.1 Flight team/crew composition
- 1.2 Qualification requirements of UAS Pilot and support crew
- 1.3 Medical competencies
- 1.4 Operations of different types of UAS

2. OPERATIONS OF UAS

- 2.1 Operating Limitations and conditions
- 2.2 Communications
- 2.3 Weather
- 2.4 On site procedures

3. UAS FLIGHT MANAGEMENT

- 3.1 Assembly and functional checks
- 3.2 Pre –flight checks
- 3.3 Normal flight procedures associated with relevant systems
- 3.4 Inflight checks associated with relevant systems
- 3.5 Abnormal procedures associated with relevant systems
- 3.6 Emergency Procedures associated with relevant systems

4. UAS USER MANUAL

Part C – Areas Routes and Aerodromes

- 1. Areas of Operations
- 2. Operating site planning and assessment
- 3. Authorizations including site permissions

Part D – Training

- 1. Training syllabi and checking programs for UAS crew
- 2. Training syllabi and checking programs for UAS support crew
- 3. Training syllabi and programs for personnel other than crew
- 4. Recurrent training programs
- 5. Additional training requirements that individual clients specify for the proposed operations.

APPENDIX 1 TO 27.185: OPERATIONAL GUIDELINES FOR UAS CLUBS

The following requirements shall apply to UAS clubs intending to operate for sport and recreation as required in these regulations.

1. GENERAL PROVISIONS

- (a) A UAS club shall be registered in accordance with the provisions pertaining to the registration of clubs in Rwanda for it to be recognized and approved by the Authority.
- (b) No UAS club shall operate without the approval by the Authority;
- (c) The club is required to develop an operational manual that provides for—
 - (1) Membership requirements;
 - (2) Administration of members;

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- (3) Training requirements for its members;
- (4) Procedures and guidelines of operations;
- (5) Types of operation;
- (6) Class of equipment operated;
- (7) Security arrangement for operations; and
- (8) Reporting mechanisms of incidents and accidents of the UAS operations.

2. ADMINISTRATION OF THE CLUB

- (a) The club management shall ensure that members—
- (1) Have adequate training to facilitate operations;
 - (2) Are informed on current regulations, policies and procedures;
 - (3) Adhere to safe business practices in their activities;
 - (4) Are knowledgeable of airspace restrictions that apply in the area of operation as approved; (5) Are conversant with and meet the training requirements of the club.

3. RESPONSIBILITY OF THE CLUB MANAGEMENT

- (a) The administrator of the club shall—
- (1) Obtain consent of the property owner or person in charge of the area of operation.
 - (2) Ensure that the club's recognition status is current with the Authority
 - (3) Develop and operationalize a training program and plan for their membership;
 - (4) A current list of members and particulars of their UAS;
 - (5) Maintain a record/database of all accidents and incidents that occur within their area of jurisdiction;
 - (6) Ensure that it has adequate personnel are properly qualified and competent to perform their allocated tasks and responsibilities;
 - (7) Have procedures for responding to an incident, accident, medical emergency, or if any UAS becomes uncontrollable;
 - (8) Immediately stop all operations if unable to meet the exemption requirements or if the safety of a person, property or other aircraft is at risk,
 - (9) Ensure that club activities do not interfere with civil aviation;
 - (10) Adhere to laws from all levels of government;
 - (11) Inspect their UAS on site before conduct of any flight to ensure that they are safe.

APPENDIX 1 TO 27.290: ELIGIBILITY REQUIREMENTS FOR A REMOTE PILOT CERTIFICATE/LICENSE

This appendix sets forth the eligibility and training requirements for the certification of UAS pilots.

1. KNOWLEDGE AND SKILL REQUIREMENTS

- (a) An applicant for a remote pilot certificate shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of the certificate holder, in the following subjects—
- (1) Air law;
 - (2) UAS general knowledge;
 - (3) Flight performance, planning and loading;
 - (4) Human performance;
 - (5) Meteorology;
 - (6) Navigation;
 - (7) Operational procedures;
 - (8) Principles of flight related to UAS; and
 - (9) Radiotelephony
- (b) An applicant for a remote pilot certificate shall pass a skill test to demonstrate the ability to perform, as remote PIC of the appropriate RPA category and associated RPS, the relevant procedures and maneuvers with the competency appropriate to the privileges granted.

2. CREDIT

- (a) A holder of a license issued by the Authority may be credited towards the requirements for theoretical knowledge instruction and examination requirements for the remote pilot certificate.

3. PASSING GRADE

- (a) The Authority shall prescribe the minimum passing grade.

4. RETESTING AFTER FAILURE

- (a) An applicant for a knowledge or practical test who fails that test, may retest after the applicant has received the necessary training from an authorized instructor who has determined that the applicant is proficient to pass the test.

5. SPECIAL CONDITIONS

- (a) In the case of introduction of new UA or UAS in an operator's fleet, when compliance with the requirements established by the Authority is not possible, the Authority may consider issuing specific Authorization giving privileges for UAS instruction. Such an Authorization should be limited to the instruction flights necessary for the introduction of the new type of UAS or UA.
- (b) The validity period for this Authorization shall be for the instruction sought only.

END OF RCAR PART 27