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PART 101
RULES OF THE AIR AND GENERAL OPERATING RULES:
OPERATION OF REMOTELY PILOTED AIRCRAFT

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SUBPART I GENERAL

Definitions for this Part

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101.01.1 (1) Definitions pertaining to this Part are contained in Document NAMCATS-RPA.

(2) For the purposes of this Part -

“approval” means an authorisation granted by the Executive Director under this Part, authorising a person to carry out a specified RPA or RPA system operation or to do any other thing in connection with or that is related to a RPA or RPA system operation;

“beyond visual line-of-sight (BVLOS) operation” means an operation of a RPA system in which the remote pilot or RPA observer cannot maintain direct unaided visual contact with the RPA in the manner described in the current updated version of the ICAO Manual on Remotely Piloted Aircraft Systems (Document 10019);

“detect and avoid” means the capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action;

“RPA observer” means a trained and competent person designated by the operator who, by visual observation of a RPA, or a RPA system, assesses the remote pilot in the safe conduct of the flight, and for such purposes, the observer may be an inspector, authorised officer or authorised person designated by the Executive Director; and

“visual line-of-sight (VLOS) operation” means an operation in which the remote pilot or a RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

Applicability

101.01.2 (1) This Part -

(a) applies to the operation of unmanned free balloons, kites, rockets and remotely piloted aircraft; and

(b) contains -

(i) in addition to the provisions of the regulations in Part 91, the operating and flight rules relating to the operations described in paragraph (a); and

(ii) the exceptions or variations to the general operating and flight rules prescribed in Part 91.

(2) This Part does not apply to -

(a) RPA operations that constitute an air service within the meaning of the Air Services Act, 1949 (Act No. 51 of 1949);

(b) operations utilising a RPA or RPA system separately from commercial air transport services;

(c) recreational use RPA provided that -

(i) such use is not within an aerodrome and not less than 1500 metres from the aerodrome boundaries;

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- (ii) it meets the restriction, prohibition, or danger areas requirements wherever or whenever designated; and
- (ii) such use is not in or around any key points as described in Document NAMCATS-RPA; and
- (d) RPA or RPA systems, when used for purposes of -
 - (i) military, police and related security operations; and
 - (ii) environmental protection actions of national game parks or reserves.

SUBPART 2
CLASSIFICATION OF RPA AND RPA SYSTEMS

Classification of RPA and RPA systems

101.02.1 (1) RPA or RPA systems are classified and categorised by weight and use for the purposes of this Part, for use as follows:

- (a) Category I:
 - (i) recreational operation of RPA which refers to a RPA operation for individual, personal, casual and private purposes, within the confines of the private property of the operator, and where -
 - (aa) there is no commercial reward or gain; and
 - (bb) the operation excludes public, sporting or academic research RPA usage; and
 - (ii) a person intending to operate a RPA or RPA system recreational operation outside the boundaries of the private property of the operator, and in excess of the height or VLOS requirements set out in this Part, must apply for an approval under paragraph (b), Category II, and must conduct such operation in accordance with conditions set out in the approval;
- (b) Category II: sports, recreational and research operations, including operations for purposes of tourism, of a RPA or RPA system, which refers to any operation of a RPA or RPA system for the sole purpose of organised leisure, competition, entertainment or games, and where there is no commercial reward or gain, subject to the payment of the fee prescribed under Part 187 for this category; and
- (c) Category III: commercial operation of a RPA or RPA system which refers to any operation under either paragraph (a) or (b), but for purposes of business, and for remuneration, hire, reward or gain, subject to the payment of the fee prescribed fee under Part 187 for this category.

(2) For the purposes of this regulation a RPA or RPA system is considered to be used in a recreational operation if the RPA is -

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- (a) less than 250 grammes in gross weight;
- (b) not powered by any fuel system;
- (c) not capable of carrying any payload;
- (d) not fitted with a camera or other similar recording device; and
- (e) operated at a maximum height of 120 metres above ground level and at a lateral distance of 50 metres from the operator and a maximum speed of 10 knots.

Additional requirements for Category III RPA and RPA systems

101.02.2 (1) An operator or owner of a Category III RPA or RPA system must demonstrate to the Executive Director -

- (a) an adequate organisation for the purposes of the commercial operation;
- (b) a level of accountability for purposes of a commercial operation;
- (c) a method of control and supervision of flight operations, training programmes as well as ground handling and maintenance arrangements under the approval;
- (d) safety management actions consistent with the nature and extent of the operations specified and commensurate with the size, structure and complexity of the organisation as required under Part 140; and
- (e) any other requirement for safe and secure operations under this category.

(2) A person may not own, register or seek approval to operate a RPA or RPA system that has military, police or intelligence specifications, unless that person has been authorised in writing by the Executive Director to conduct the operation.

SUBPART 3**APPROVAL OF RPA AND RPA SYSTEM OPERATIONS****Requirement for approval of RPA and RPA system operation**

101.03.1 A person may not carry out a Category II or III RPA or RPA system operation outside the property of the owner or operator except, under the authority of, and in accordance with the provisions of an approval issued under this Part, and the standards set out in Document NAM-CATS-RPA.

Application for approval or amendment of approval

101.03.2 (1) A person may apply to the Executive Director for the issue or amendment of an approval to operate a RPA or RPA system operation for use in Namibia whether or not the commencing operation is inside or outside of Namibia.

- (2) An application under subregulation (1) must be -

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- (a) made in the appropriate form set out in Document NAM-CATS-RPA; and
 - (b) accompanied by proof of the payment of the appropriate fee prescribed under Part 187.
- (3) An application under subregulation (1) must be made within the following periods prior to the commencement date of the operation:
- (a) Category II: 15 days; and (b)
Category III: 30 days.
- (4) The Executive Director may allow for alternative periods of an application under subregulation (3) on good cause shown by the applicant which is acceptable to the Executive Director.
- (5) An approval issued under this Part must be specific to a particular RPA or RPA system operation and is valid for the period of the specific operation only unless the Executive Director extends its validity up to a maximum of 12 months.
- (6) An application for an approval requiring conversion to another RPA category must be considered as a new application for that RPA category.
- (7) Where an application for conversion is made under subregulation (1) -
- (a) the fee which accompanied the original application is not refundable to the applicant; and
 - (b) the original application must be considered as valid until such time that the conversion to a new RPA category application becomes effective.

Requirements for application

101.03.3 (1) Unless otherwise specified by the Executive Director, an application for an approval to operate or use a RPA or RPA system, must include the following:

- (a) the name and contact information of the operator and, where relevant, the owner;
- (b) the technical characteristics of the RPA, including the type of aircraft, maximum certificated take-off mass, and where relevant, number of engines and other attachments;
- (c) a certified copy of certificate of registration or airworthiness, where relevant;
- (d) aircraft identification to be used in radiotelephony, where relevant;
- (e) a copy of the RPA operator certificate, currently valid, issued by the appropriate authority of another State, where applicable;
- (f) a copy of the remote pilot competency certificate, where relevant;
- (g) a copy of the aircraft radio station licence, if applicable;

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- (h) a description of the intended operation, including type of operation or purpose, and flight rules, visual line-of-sight or beyond visual line of sight (VLOS or BVLOS) operation, if applicable, date of intended flight, point of departure, destination, cruising speed, cruising level, route to be followed and duration or frequency of flight;
- (i) command and control (C2) link failure procedure;
- (j) remote pilot or RPA observer communications failure, if applicable;
- (k) number and location of remote pilot stations as well as handover procedures between remote pilot stations, if applicable;
- (l) document attesting noise and emissions certification, if applicable;
- (m) payload information or description, if applicable;
- (n) proof of adequate insurance liability, including third party insurance coverage; and
- (o) proof of registration as a surveyor, for purposes of commercial aerial and survey mapping, where applicable.

(2) Where the documents listed in subregulation (1) are issued in a language other than English, the applicant for an approval must ensure that a sworn English translation is included.

Issue of RPA approval

101.03.4 (1) The Executive Director may issue a RPA approval, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties; and
- (c) the issuing of the approval is not contrary to the interests of aviation safety.

(2) The RPA approval referred to in subregulation (1) must be issued in the appropriate form, and contain the information, set out in Document NAM-CATS-RPA.

Duplicate approval

101.03.5 (1) If a RPA approval is lost, stolen, damaged or destroyed, the holder may apply to the Executive Director for the issue of a duplicate approval.

- (2) An application referred to in subregulation (1) must be -
 - (a) made in the appropriate form set out in Document NAM-CATS-RPA; and (b) accompanied by the appropriate fee as prescribed in Part 187.
- (3) A duplicate of the approval is issued on the appropriate form set out in Document

NAM-CATS-RPA.

Display of approval

101.03.6 (1) A holder of a RPA approval must display the approval, or a copy of it, in a conspicuous place, generally accessible to the public at such holder's principal place of business.

(2) Where a copy of the approval in Category II or III is displayed under subregulation (1), the holder of the approval must produce the original approval, if so requested by an authorised officer, inspector or authorised person.

Privileges of RPA approval holder

101.03.7 The privileges of a RPA approval holder are limited to the services authorised by the approval and the appropriate specifications set out in Document NAM-CATS-RPA.

SUBPART 4

OTHER REQUIREMENTS RELATING TO RPA AND RPA SYSTEMS

Import, manufacture, assembly and testing

101.04.1 (1) A person may not import or export a RPA or RPA system, or a component thereof, unless that person has complied with the requirements of the Customs and Excise Act of 1998, as specified in Document NAM-CATS-RPA.

(2) Any person intending to manufacture, assemble, modify or test a RPA or RPA system or a component of it, must ensure compliance with requirements of the State of Design, State of Manufacture, State of Import or State of Registration to the extent required by the Executive Director and in compliance with the requirements, where relevant, set out in NAM-CATS-RPA or NAM-CATS-AR.

(3) The Executive Director may require a RPA or RPA system of a certain class and category with a type certificate to obtain a certificate of airworthiness in accordance with Part 21, 34 or 36.

SUBPART 5

OPERATION OF RPA AND RPA SYSTEMS

General: operations

101.05.1 (1) A person may not operate a RPA or RPA system flight commencing at a place within Namibia and terminating at a place outside Namibia, unless that person has authorisation from the State of destination and any other State over whose airspace the RPA must fly.

(2) A person may not launch a RPA flight or RPA system flight commencing at a place outside Namibia and terminating at a place within Namibia or overflying the Namibian airspace, unless that person has obtained approval from the Executive Director.

RPA flight rules

101.05.2 (1) A person who is in charge of the operation of a RPA or RPA system may not operate or permit that aircraft to be operated

- (a) so as to cause a hazard to other aircraft;
- (b) in the vicinity of aircraft manoeuvring in an aerodrome traffic circuit;
- (c) in such a manner or within a distance that may endanger or obstruct traffic that is using a public road as defined in the Road Traffic and Transport Act, 1999 (Act No. 22 of 1999); or
- (d) in a negligent or reckless manner so as to endanger life or cause damage to the property of others.

(2) A RPA must give way to manned aircraft and must have the capability to -

- (a) be halted in mid-air;
- (b) be re-routed to another waypoint; and
- (c) change present flight levels.

(3) The Executive Director may define areas within air traffic services airspace, where RPA activity may, subject to the requirements of Part 173, take place.

(4) A person who is in charge of the operation of a RPA which has a mass of less than 25 kilograms, without fuel but including-

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown in the manner described in subregulation (5).

(5) The RPA referred to in subregulation (4) may not be flown -

- (a) within a prohibited area, restricted area or controlled airspace, without specific approval from the Executive Director;
- (b) in air traffic services airspace, other than controlled airspace, within three kilometres of an aerodrome during periods of aircraft operations, unless the aerodrome operator has given permission for the flight to be undertaken;
- (c) at any distance from a person, vessel, vehicle or structure, unless the RPA is flown under the direct control of the operator or the owner;

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- (d) at any distance from an assembly of persons, unless the RPA is flown under the direct control of the operator or owner and only with an approved fail safe system and with the approval of the Executive Director;
- (e) beyond direct unaided visual line of sight (BVLOS) and not further than 300 metres from the point of operation, unless specifically approved by the Executive Director for BVLOS operations;
- (f) at a height of more than 50 metres above the ground or water, unless the flight is approved by the Executive Director; or
- (g) in such a manner as to allow or permit any article or animal, including a bullet or missile, whether or not attached to a parachute or free balloon to be released from that aircraft.

(6) A person who is in charge of the operation of a RPA or RPA system may not allow such aircraft to be operated from any place, unless the aircraft may take-off and land without undue hazard to persons or property.

(7) A person who is in charge of the operation of a RPA or RPA system, which has a mass of four kilograms or more, without fuel but including -

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown, unless that person has successfully undertaken a course of remote aircraft-related handling, safety, and emergency procedures training acceptable to the Executive Director.

(8) A person who is in charge of the operation of a RPA or a RPA system carrying goods, including -

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown, unless the person has been granted approval by the Executive Director to do so and subject to such conditions as are required by such approval.

Rockets

101.05.3 In the case of a rocket, an operation, other than for military purposes, may not be conducted within Namibia unless the person who is in charge of the operation -

- (a) furnishes such pertinent information as may be required by the Executive Director on the operation;
- (b) obtains approval from the Executive Director prior to the launching of the rocket; and

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- (c) complies with such conditions as are imposed in that approval.

Restrictions on use of RPA and RPA systems

101.05.4 (1) The Executive Director may decline an application for approval to operate a RPA or RPA system and may prohibit such an operation if it appears that it would not be in the interest of aviation safety and security to allow that operation to proceed.

(2) The Executive Director or an authorised officer, inspector or authorised person may at any time during the operations of a RPA or RPA system, subject the RPA or RPA system to inspection without prior notification to the operator or owner.

(3) A person engaged in RPA and RPA system operations is subject to security background checks and, where necessary, vetting, in accordance with the requirements of section 134 of the Act and Part 114.

- (4) A person may not use a RPA or RPA system to -
 - (a) conduct surveillance of another person, unless that other person has given his or her consent to the surveillance;
 - (b) conduct surveillance of movable or immovable property of any person, unless the owner of the property has given his or her consent to the surveillance;
 - (c) photograph or film any person, for the purpose of publishing or otherwise publicly disseminating the photograph, unless that person has given his or her consent to the photographing or filming.

(5) RPA or RPA system usage under this Part allows for newsgathering, or events or places to which the general public is invited and in such manner participate provided that the required approvals from the Executive Director or the Head of Air Navigation Services, as the case maybe, are obtained and all generally accepted aviation safety and security considerations are complied with.

(6) Infrared or other similar thermal imaging technology equipment fitted on a RPA or RPA system, subject to the requirements in this Part, must be set-up as part of the RPA or RPA system, for purposes of -

- (a) scientific research and investigation;
- (b) mapping and evaluating the earth's surface, including terrain and surface water bodies and other features;
- (c) investigation or evaluation of crops, livestock or farming operations;
- (d) investigation of forests and for estate management; or
- (e) fire fighting, police, search and rescue, or crime investigations.

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(7) If it appears to the Executive Director, or an authorised officer, inspector or authorised person that a RPA or RPA system is intended to be or is likely to be flown from any place within Namibia and that there would be a contravention of any provision of the Act, or these regulations, if that RPA were to be so flown, the Executive Director may direct -

- (a) the registered owner or operator of the RPA or RPA system;
- (b) the person who is in charge of that RPA or RPA system;
- (c) the person designated by the registered owner or operator thereof to be in charge of that RPA or RPA system; or
- (d) any other person having charge or purporting to have charge of that RPA, with or without the permission of the registered owner or the legitimate operator of that RPA or RPA system,

that he or she may not to permit or cause the RPA or RPA system to make the flight and the Executive Director may take such steps as are necessary to seize and detain that RPA at a suitable location.

Flight plans: airspace requirements

101.05.5 (1) A RPA or RPA system operator of BVLOS flights and flights in airspace higher than 120 metres must file a flight plan with the nearest ATC as specified in the following conditions:

- (a) flights in controlled airspace must file flight plans as specified for in the Aeronautical Information Publication (AIP); and
- (b) flights in uncontrolled air space higher than 120 metres must file flight plans as follows:
 - (i) operations within five kilometres out of launch area must notify the nearest ATC; and
 - (ii) operations beyond five kilometres out of launch must file flight plans as stipulated in paragraph (a) and in accordance with the requirements set out in Document NAM-CATS-RPA.

Collision avoidance

101.05.6 (1) A RPA or RPA system in controlled airspace must be operated in accordance with the Rules of the Air prescribed in Part 91, and in compliance with following:

- (a) a remote pilot must maintain awareness so as to detect and avoid other aircraft and vehicles and must yield the right-of way to all aircraft;
- (b) yielding the right-of-way means that the RPA or RPA system must give way to the aircraft and may not pass over, under, or ahead of it unless well clear; and
- (c) a RPA or RPA system operating in mixed use airspace must have detect and avoid capability.

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(2) A person may not operate a RPA or RPA system so close to another aircraft so as to create a collision hazard.

Reporting of RPA and RPA system incidents and accidents

101.05.7 (1) A RPA or RPA system owner or operator must ensure that all incidents and accidents involving a RPA or RPA system and which cause damage to property, injuries or death, are reported to the Executive Director, and to the Directorate in accordance with the provisions of Part 11 of the Act.

(2) A RPA and RPA system owner or operator in Categories II and III must develop and implement emergency and contingency procedures acceptable to the Executive Director.

(3) A RPA and RPA system owner or operator in Categories II and III must have response procedures for operations personnel for threats and incidents involving RPA operations in compliance with the requirements set out in Document NAM-CATS-RPA.

(4) A RPA and RPA system owner or operator in Categories II and III must ensure that reports on acts of unlawful interference are promptly submitted to the Executive Director in compliance with the requirements set out in Document NAM-CATS-RPA.

Air traffic control communication

101.05.8 (1) A RPA or RPA system owner or operator must ensure that air traffic control (ATC) is made aware of any operations that takes or will take place in areas which are likely to affect manned and controlled air traffic.

(2) Subject to compliance with the applicable requirements of Part 170, a RPA and RPA system owner or operator must, in compliance with the procedures set out in Document NAM-CATSRPA integrate, the RPA operations into the airspace to ensure aviation safety and such procedures must include communication and surveillance detection.

(3) Procedures referred to in subregulation (2) must specify that the operator or person in charge of the RPA or RPA system must, before and during RPA operations, pass on the required information to the air traffic control services provider.

Operations in vicinity of aerodromes and airports

101.05.9 (1) Except with the permission of the owner or operator of an aerodrome or airport, and subject to the requirements of the appropriate air navigation services provider, a person may not operate a RPA or RPA system -

- (a) from the aerodrome or airport reference point;
- (b) in approach and take-off paths;
- (c) within the vicinity of navigation aids;

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- (d) within the aerodrome traffic zone; and
 - (e) within terminal traffic holding patterns.
- (2) The Executive Director may, in writing, approve RPA or RPA system operations at an aerodrome or airport subject to the following conditions:
- (a) imposition of operating restrictions on the approval in the interest of safety;
 - (b) publication of details of the approval in the appropriate part of the AIP; and
 - (c) revocation or change of the conditions that apply to such approval and publication of details of any revocation or change in conditions in the appropriate part of the AIP.

**SUBPART 6
GENERAL PROVISIONS**

Records and documents

101.06.1 (1) A Category II or Category III RPA or RPA system operator must establish a system of record-keeping that allows adequate storage, accessibility and enabling the surveillance and traceability of all activities developed in terms of this Part.

(2) Records must be stored in a manner that ensures protection from damage, alteration and theft.

(3) The list of others matters required to be recorded and kept in terms of this Part are set out in Document NAM-CATS-RPA.

Insurance

101.06.2 (1) A person may not operate, or cause to be operated or permit any other person to operate a RPA or RPA system unless there is in force adequate liability insurance in respect of third party risks.

(2) A RPA or RPA system owner or operator must make a certified copy of the insurance required in terms of subregulation (1) to be available in case of any inspection carried out by the Executive Director or an authorised officer, inspector or authorised person .

(3) Despite the provision of subregulation (1), the Executive Director may dispense with the requirement depending on the class and category of the RPA or RPA system operation.