

TABLE OF CONTENTS

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 1. UNMANNED AIRCRAFT AND EQUIPMENT

Section 1. Certificate of Registration for unmanned aircraft.	.....3
Section 2. Remote Identification.	..... 7

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 1. General information.	..... 8
Section 2. Application phase.	..... 10
Section 3. Theoretical knowledge examination	..... 14
Section 4. Practical flight tests.	.....16
Section 5. Remote pilot instructor responsibilities, tasks and qualifications	..... 19
Section 6. Issuance of the KSA Remote Pilot Certificate (RPC).	.... 23
Section 7. Issuance of KSA RPC based on foreign license.	.....31
Section 8. Issuance of KSA RPC based on military competence.	....36

CHAPTER 3. OPERATIONAL APPROVALS

Section 1. Permit to Operate in the Open category.	.....41
Section 2. Model aircraft clubs and associations.	..... 43
Section 3. Operational Authorization for the Specific category.	.... 45
Section 4. UAS Declaration of Compliance (DoC).	..... 53
Section 5. Certificate of waiver.	..... 60

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 1. Phase 1 – Pre-application.	.....62
Section 2. Phase 2 – Formal Application.	..... 71
Section 3. Phase 3 – Document Compliance.	.....75
Section 4. Phase 4 – Demonstration and Inspection.	..... 78
Section 5. Phase 5 – Certification.	.....80

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 1. General Information.	..... 82
Section 2. Duties, responsibilities and qualifications.	..... 84
Section 3. Selection, appointment and renewal.	..... 90

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

Section 4. Surveillance and evaluation.	.....97
Section 5. Suspension and termination.	..... 101
APPENDIX A. LIST OF FORMS	..... 104

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 1. UNMANNED AIRCRAFT AND EQUIPMENT

Section 1. Certificate of Registration for unmanned aircraft

18.1.1.1 GENERAL.

The Chapter provides information and instructions on the requirements for applications related to the initial issuance, renewal, replacement and de-registration of Certificate of Registration for Unmanned Aircraft System (CR-UAS). This addresses the application requirements prescribed in GACAR Part 48.

A. These instructions are applicable to UAS operators and/or owners of UAS, wishing to register their UAS through the GACA UAS Registration Portal, or already holding a Saudi Arabian CR-UAS. These instructions also apply to model aircraft.

B. These instructions are applicable to unmanned aircraft with maximum take-off mass less than 150 kg, and intended to be operated under the Open and Specific categories of UAS operation, as defined in GACAR Part 107.

NOTE 1 – Model aircraft are considered unmanned aircraft. Registration of model aircraft intended to be operated in the Open category is also possible by aviation clubs certificated under GACAR Part 149.

NOTE 2 – There is no distinction between registration of unmanned aircraft intended for recreational and commercial use. In both cases, the UAS must be registered in accordance with GACAR Part 48.

18.1.1.2 FORMS.

Unmanned aircraft registration should be done electronically through <https://uas.gaca.gov.sa/uas>. All applicable forms and the associated e-services are available through GACA's UAS Registration Portal.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.1.1.3 INITIAL ISSUANCE.

This Section summarizes essential information to be obtained from applicants for Certificates of Registration for Unmanned Aircraft System (CR-UAS). The GACA staff of the UAS department must inform applicants that, should GACA reject to issue a requested CR-UAS, the Applicant may be eligible to reapply for CR-UAS after having corrected wrong information.

A. Applicants who intend to bring or import UAS from another country into the KSA, must be informed by the UAS department staff that security clearance from the GACA Aviation Security Sector must be obtained first. Custom clearance from Zakat, Tax and Customs Authority (ZATCA) may only be provided after security clearance and registration of the unmanned aircraft. The UAS Department staff will approach ZATCA after registration to try to obtain the custom clearance.

B. The applicant should first be asked to provide the maximum take-off mass of the unmanned aircraft, and to indicate which types of UAS operations are intended to be conducted (Open and/or Specific). Based on this information, the application will be classified as one of the following:

- 1) Unmanned aircraft less than 15 kg, only intended for operations in the Open category.
- 2) Unmanned aircraft between 15 and 25 kg, only for operations in the Open category.
- 3) Unmanned aircraft less than 150 kg, intended for operations in the Specific category.
- 4) Unmanned aircraft, for which operations under a GACAR Part 107 waiver is envisaged.
- 5) Unmanned aircraft, which cannot be operated within the scope of GACAR Part 107.

C. Table 1 summarizes the essential information related to the application for initial issuance of a CR-UAS, which may only be issued through GACA UAS Registration Portal for applications classified under B. above as 1, 2 or 3. The other types of applications (classified as 4 or 5) typically require the applicant to register under GACAR Part 47 and then apply for an airworthiness certificate. Registrations under GACAR Part 47 are conducted by the GACA Airworthiness Department.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

Table 1 Essential information for initial issuance of CR-UAS

Essential Information	Open Category	Specific Category
Applicant name	Yes	Yes
Applicant authorized representative	Yes	Yes
Applicant national address	Yes	Yes
Mailing address	Yes	Yes
Applicant email address	Yes	Yes
Manufacturer	No	Yes
Model name	No	Yes
Serial number, if available	No	Yes

NOTE 3 – GACA may ask the Applicant to provide more than the essential information (e.g. for the Open Category, GACA may ask the Applicant for the manufacturer, model name and serial number of the unmanned aircraft if this information is available). After initial issuance of the CR-UAS, the registered unmanned aircraft must display a unique identifier. This is either the GACA registration certificate number or the UAS serial number (in accordance with GACAR 48.21).

NOTE 4 – The UAS Department must, together with issuance of the CR-UAS, inform the Applicant that all UAS intended for operations in the Specific category must, after obtaining a valid Operational Authorization (OA) or UAS Operator Certificate (UOC), also display a label or QR-code reflecting eligibility to conduct such UAS operations. This label or QR-code, which is issued by the GACA UAS Department together with the OA or UOC, must be removed when the OA or UOC expires.

NOTE 5 – Unmanned aircraft intended for operations in the Specific category, must only be registered by companies registered in the KSA, unless otherwise authorized by the President of the GACA.

18.1.1.4 RENEWAL.

UAS operators and/or owners of UAS may apply for renewal of the CR-UAS, prior to the expiry date. Such request may be made no earlier than six months prior to expiry date.

18.1.1.5 REPLACEMENT.

In the event of a lost or destroyed CR-UAS, the owner of the unmanned aircraft (or authorized

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

representative) should be instructed to download a new version from the UAS Registration Portal.

18.1.1.6 DE-REGISTRATION.

The owner of the UAS (or the authorized representative) may ask for de-registration of the CR-UAS, for example for a lost or damaged unmanned aircraft that cannot be repaired or for another reason. The reason must be acceptable to the Inspector and must be provided prior to de-registration.

18.1.1.7 CHANGE OF OWNERSHIP.

The owner of the UAS (or the authorized representative) may ask to transfer the CR-UAS to another owner. The new owner of the UAS (or the authorized representative) must apply for a new CR-UAS as per the instructions described above through the GACA UAS Registration Portal.

18.1.1.8 CHANGE OF INTENDED UAS OPERATION(S).

In case the owner of the UAS (or the authorized representative) has approval for operations in the Open Category only and wishes to extend this to intended operations in the Specific Category, he/she must apply for an amended CR-UAS, through the GACA UAS Registration Portal, as per paragraph 18.1.1.3 above. The existing registration number may be reused. In this case, the UAS Department staff must also inform the UAS operator about the applicable marking requirements for the Specific Category.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 1. UNMANNED AIRCRAFT AND EQUIPMENT

Section 2. Remote Identification

Reserved.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 1. General information.

18.2.1.1 REMOTE PILOT CERTIFICATION (RPC). The GACA processes and procedures for remote pilot certification are supported by flight instructors for the operation of unmanned aircraft and by Designated Remote Pilot Examiners (DRPEs). The flight instructors provide practical training for Specific Category operations. DRPEs provide examination services to remote pilots, within the limitations set forth in the DRPE's Certificate of Designation.

18.2.1.2 PREREQUISITES. This task requires knowledge of GACAR Part 107, GACA policies and knowledge of the functional responsibilities of the UAS Inspector responsible for DRPE oversight.

18.2.1.3 COORDINATION. This task may require coordination between the Instructor, DRPE, the UAS Department and the Personnel Licensing Department of the GACA.

18.2.1.4 DIFFERENT TYPES OF CERTIFICATES. There are two types of remote pilot certificates:

- RPC Open Category for Open Category operations (RPC-O)
- RPC Specific Category for Specific Category operations (RPC-S)

Additionally, there are endorsements for Specific Category operations.

Remote pilots for Open Category operations are not required to conduct a practical skills exam and therefore there is no requirement to use Instructors and/or DRPEs for these operations.

18.2.1.5 FORMS. There are three forms, associated with the different steps in the process:

- Remote Pilot Application
- Remote Pilot Examination

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- Remote Pilot Certificate

18.2.1.6 COMPETENCY-BASED FRAMEWORK. Different types of competencies may need to be achieved.

The Instructors and DRPEs should adhere to the competency-based framework associated with the type of operation for which the practical skills of the remote pilots are being assessed. The competency-based framework for Specific Category operations is described in Advisory Circular 107-02. This AC includes competencies and observable behaviors that must be achieved for remote pilot certification.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 2. Application phase

18.2.2.1 OBJECTIVE. The task objective is to determine an applicant's eligibility for a remote pilot certificate under GACAR Part 107. Completion of this task results in the issuance of a Notice of Approval or Notice of Disapproval.

18.2.2.2 GENERAL.

A. Applicant Minimum Age. An applicant for a remote pilot certificate must be at least eighteen years of age when applying for either Open or Specific Category operations

B. Eligibility for Certificates and Endorsements. To be eligible for remote pilot training in the Specific Category, an applicant must be able to demonstrate an ability to read, speak, write, and understand English language.

NOTE 6 – This does not apply to student remote pilot applicants for operations in the Open Category.

18.2.2.3 RENEWAL.

Expiration. A Notice of Approval is valid for 12 calendar months. The applicant may reapply for a new approval. The application process is the same as for the original issuance.

18.2.2.4 PROCEDURES.

A. Applicant Initiates the Application Process for a Notice of Approval.

1) Determine if the applicant is a student remote pilot seeking a remote pilot certificate for the Open Category (RPC-O) or the Specific Category (RPC-S).

2) Inform applicant to complete and submit the application form online.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 3) Inform applicant for RPC-O that a knowledge test must be successfully completed.
- 3) Inform applicant for RPC-S that a virtual application meeting must be scheduled.
- 4) Verify the applicant's identification.
- 5) Open the student remote pilot record.

B. Schedule Appointment. Inform the applicant for RPC-S that the following information must be included in the application package to be provided before the virtual application meeting.

- 1) Complete and signed application form.
- 2) Copy of valid passport, for Saudi Arabian applicants.
- 3) Copy of valid passport and Iqama, for non-Saudi Arabian applicants.
- 4) Receipt of security clearance from aviation security sector.
- 5) Recent photo (3.5 x 4.5 cm, uncovered head, and white background).
- 6) Evidence of Fees payment.

C. Review Application. Verify that the appropriate application has been completed correctly using the prescribed application procedures:

- 1) Ensure the application package contains the required documents.
- 2) Ensure the applicant meets the requirements.

D. Verify Applicant's Identity. Inspect documents to establish the applicant's identity.

- 1) If the applicant's identity can be verified, proceed with the next steps for issuing the Notice.
- 2) If the applicant's identity cannot be verified because of lack of or inadequate identification, explain what types of identification are acceptable. Instruct the applicant to

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

return with appropriate identification to reapply.

3) If the applicant's identity appears to be different from the information supplied during the application process, or it appears that an attempt at falsification has been made, do not issue the Notice of Approval.

E. Establish Eligibility.

1) Determine if the applicant for a remote pilot certificate meets the requirements regarding age, language, academic and other qualifications.

2) If the applicant does not meet the requirements, deny the application.

F. Applicant Meets Requirements. If applicant meets all requirements:

1) Approve the request by completing and signing the application form

2) Prepare the Notice of Approval.

3) Issue the original Notice of Approval to the applicant.

4) Inform the applicant that the Notice of Approval expires 1 year after the date it was issued (i.e., the last day of the month).

5) Archive the application package.

G. Subsequent Issuance. If a Notice of Approval has expired, follow the procedures for original issuance.

H. Complete the (student) remote pilot record and save all the application documents in a secured electronic database in accordance with the GACA IT cyber security rules.

18.2.2.5 TASK OUTCOMES.

Completion of this task will result in the issuance of one of the following:

- Notice of Approval

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- Notice of Disapproval

18.2.2.6 FUTURE ACTIVITIES.

- A. The applicant may reapply for a reissuance.
- B. The applicant may return for a Notice of Approval for other training with unmanned aircraft.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 3. Theoretical knowledge examination

18.2.3.1 OBJECTIVE. The objective is to determine an applicant's aeronautical knowledge for a remote pilot certificate under GACAR Part 107. Completion of this task results in the issuance of a certificate showing that the applicant has passed the knowledge test for a remote pilot certificate, endorsement(s) and/or rating(s) or a notice of failure of the knowledge test.

18.2.3.2 GENERAL.

A. An applicant for a knowledge test for a remote pilot certificate, endorsement(s) or rating(s) must make arrangements with the GACA Personnel Licensing Department to take the appropriate knowledge test. The applicant must fill and submit the GACA Application Form for Remote Pilot Certification through the UAS Registration Portal.

B. The applicant must present evidence of the appropriate qualifications and eligibility for the remote pilot certificate/endorsement(s)/rating(s) sought, to the GACA.

C. Aeronautical Knowledge. A knowledge test report or record of the knowledge test taken, from the GACA or an approved Remote Pilot Training Organization (RPTO) with knowledge test examining authority, are the only acceptable forms of evidence that the applicant has passed the knowledge test for a remote pilot certificate.

18.2.3.3 APPLICATION.

A. The applicant must satisfactorily complete all of the applicable fields of the GACA application and must provide all the supporting documentation.

B. The applicant must provide evidence of payment of the applicable fees.

18.2.3.4 KNOWLEDGE TEST.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- A. Knowledge Tests. Knowledge examinations, if required, must be accomplished at the GACA or a GACA approved remote pilot training organization.
- B. The format of the knowledge test report must include its QR Code issued by PEL Department. If the generation of the QR Code is not available, an embossed seal must be used.
- C. The holder of a remote pilot certificate for Specific Category operations is required to take a knowledge test for the addition of new endorsement(s) and/or rating(s)
- D. A person who already holds a pilot certificate for operations with manned aircraft and who is applying for a remote pilot certificate for Open Category operations does not need to take an additional knowledge test.
- E. The knowledge test results for an Airline Transport Pilot License (ATPL), Commercial Pilot License (CPL), Private Pilot License (PPL) or similar license are sufficient evidence of aeronautical knowledge for Specific Category operations.
- F. Knowledge Test Failures. A person who fails the required knowledge test(s) in three attempts, may re-apply after a period of at least 60 (sixty) days.
- G. Validity Period of Knowledge Test Results. The GACA does not accept expired knowledge test reports. The validity expires 36 months after having taken the test.

18.2.3.5 TASK OUTCOMES.

Completion of this task will result in the issuance of one of the following:

- Knowledge test certificate
- Notice of Failure

18.2.3.6 FUTURE ACTIVITIES.

- A. The applicant may reapply for a new test.
- B. The applicant may return for knowledge tests for other operations with unmanned aircraft.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 4. Practical flight tests

18.2.4.1 OBJECTIVE. The objective is to determine an applicant's practical skills for a remote pilot certificate for Specific Category operations under GACAR Part 107. Completion of this task results in the issuance of a certificate that the applicant has passed the practical skills test for a remote pilot certificate, endorsement(s) and/or rating(s) or Notice of Failure.

18.2.4.2 GENERAL.

- A. An applicant for a practical skills test for a remote pilot certificate or endorsement(s) must arrange the appropriate practical test with a Designated Remote Pilot Examiner (DRPE), who is acceptable to the GACA. The applicant must approach the GACA first to obtain an actual list of DRPE's authorized to conduct practical skills examinations for the Specific Category.
- B. The applicant must present evidence of the appropriate qualifications and eligibility for the remote pilot certificate/endorsement(s)/rating(s) sought, to the GACA.
- C. Practical Skills. A practical skills test report or record of the practical skills test taken, from the Designated Remote Pilot Examiner, is the only acceptable form of evidence that the applicant has passed the practical skills test for a remote pilot certificate.

18.2.4.3 APPLICATION.

- A. The applicant must satisfactorily complete all the applicable fields of the application and must provide all the supporting documentation as stipulated in GACAR Part 107 Subpart C.
- B. The applicant must provide evidence of payment of the applicable fees.
- C. An applicant for a practical skills test for a remote pilot certificate or additional endorsement(s) must arrange the appropriate practical test with a Designated Remote Pilot Examiner (DRPE) and inform GACA about the date and time not later than 1 week before.
- D. The applicant must present to an Inspector or DRPE, evidence of having passed

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

(successfully) the relevant knowledge test(s) associated with the practical test.

E. Aeronautical Experience. The applicant must present a remote pilot logbook, training record or other reliable records as evidence of meeting the required aeronautical experience for the remote pilot certificate, endorsement(s) and/or rating(s) sought.

18.2.4.4 PRACTICAL SKILLS TEST.

A. The applicant or DRPE employer must provide an unmanned aircraft appropriate to the remote pilot certificate, endorsement(s) or rating(s) sought.

B. Practical Skills Tests. Practical tests/examinations, if required, must be accomplished under the authority of a Designated Remote Pilot Examiner (DRPE) employed by a GACA approved Remote Pilot Training Organization or approved UAS operator.

C. The format of the practical skills test report must include its QR Code. If the generation of the QR Code is not available, an embossed seal must be used.

D. The holder of a remote pilot certificate for Specific Category operations is required to take a practical test for the addition of new endorsement(s) and/or rating(s).

E. A person who already holds a pilot certificate for operations with manned aircraft and who is applying for a remote pilot certificate for Specific Category operations must take an additional practical skills test.

F. Practical Skills Test Failures. A person who fails the required practical skills test(s) in three attempts, may re-apply after a period of at least 60 (sixty) days.

G. Validity Period of Practical Skills Test Results. The GACA does not accept expired practical test reports. The validity expires 36 months after having taken the test.

18.2.4.5 TASK OUTCOMES.

Completion of this task will result in the issuance of one of the following:

- Practical skills test certificate
- Notice of Failure

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.2.4.6 FUTURE ACTIVITIES.

- A. Upon expiration of practical test result(s), applicant may reapply for a new test.

- B. The applicant may return for practical skills test(s) to obtain additional endorsement(s) for other types of operations with unmanned aircraft.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 5. Remote pilot instructor responsibilities, tasks and qualifications.

18.2.5.1 REMOTE PILOT INSTRUCTOR DUTIES.

Remote Pilot Instructors (RPIs) may be appointed by GACA approved UAS operators or Remote Pilot Training Organizations to provide theoretical and practical skills training to student remote pilots. RPIs are not appointed by GACA.

An appointed Remote Pilot Instructor (RPI) typically conducts the following activities:

- Provide theoretical knowledge training and deliver courses in unmanned aviation
- Provide practical skills training for designated operations with unmanned aircraft
- Issue course certificates to student remote pilots who completed the training

18.2.5.2 RPI RESPONSIBILITIES

The responsibilities of RPIs typically include the following:

A. GENERAL. A RPI performs functions as stated in the Operations Manual of the UAS operator or Remote Pilot Training Organization (RPTO) that he/she is working for.

B. INDEMNIFICATION. A RPI is not an employee of GACA and is therefore fully liable for his/her work performed and decisions made as RPI, while working for his/her UAS operator, or RPTO. The GACA will not indemnify RPI's or his/her employer against liability incurred by reason of any act or omission within the scope of their deployment or duties.

C. PRACTICAL SKILLS TRAINING. All practical training must be conducted in accordance with GACAR Part 107, and associated UAS e-Book(s) and Advisory Circulars.

D. AUTHORIZED TRAINING. Perform only training within the limits of the OA or UOC of the UAS operator or RPTO. Training may only be delegated or transferred to another RPI appointed

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

by the same UAS operator or RPTO.

E. BEHAVIOUR. RPIs must follow all requirements found in regulations, orders, and other policies related to their duties and responsibilities. RPIs should be unmanned aviation experts and demonstrate willingness to maintain skills and knowledge relevant to endorsements held.

F. COMMUNICATION. RPIs must have the approval of his/her UAS operator or RPTO, before accepting any training activity requested by an applicant/customer. RPIs should be open to accept any special directions or further instructions deemed necessary by GACA.

G. SUMMARY ACTIVITY REPORTS. RPIs must provide information relating to their accomplishments and training activities in accordance with requests from GACA.

H. SAFEGUARDING INFORMATION. RPIs and their UAS operator or RPTO must ensure that all information related to the training activities of their students are properly safeguarded.

I. CONFLICT OF INTEREST. RPIs are not allowed to perform any training for student remote pilots with which they have, or appear to have, vested interests.

J. RECORD KEEPING. RPIs must ensure that training attendance documents are recorded and stored in the training record of the UAS operator or RPTO within 7 days of completion.

K. COOPERATION. RPIs must cooperate with GACA during oversight activities and allow GACA to inspect all related/relevant official training records/documents at any time.

L. TRAINING/SEMINARS. RPIs should attend (recurrent) training/seminars relevant for his/her remote pilot certificates and training activities, especially as requested by GACA.

18.2.5.3 RPI LIMITATIONS. A RPI should not:

A. Deliver and administer more than one training course at a time. Training must be provided to no more than sixteen participants per day. In addition to practical training, not more than one theoretical knowledge course may be administered on the same day.

B. Provide practical skills training to student remote pilot who have not already successfully completed the relevant theoretical knowledge examinations.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.2.5.4 RPI QUALIFICATIONS.

RPI qualifications must be documented in the Operations Manual of the UAS operator or RPTO that he/she is appointed by. The RPI qualifications should include the following:

A. QUALIFICATIONS. RPIs appointed by UAS operators or RPTOs should:

- 1) Possess a remote pilot license, issued by the GACA or by a foreign country acceptable to the GACA, in the areas for which the appointment is sought.
- 2) Demonstrate past professional performance and personal conduct suitable for a position of responsibility and trust.
- 3) Be able to read, write, speak, and understand the English language.
- 4) Be knowledgeable of the principle of operation centric risk-based approach.
- 5) Be thoroughly familiar with instructions as to techniques of training, assessment of practical skills for UAS operations, and pilot certification.
- 6) Be engaged in the unmanned aviation industry.
- 7) Have a reputation for dependability.
- 8) Be able to maintain a high degree of objectivity while performing authorized functions.
- 9) Abide by the policies, rules, and regulations of the GACA.
- 10) Have up-to-date extensive knowledge and experience for the type of training provided.
- 11) Have successfully completed one or more of the following basic training courses in Unmanned Aircraft Systems (UAS):
 - a) ICAO Unmanned Aircraft Systems online courses
 - b) FAA Part 107 Non-recreational operations of unmanned aircraft
 - c) EASA A1/A2/A3 UAS Operations in the European Open category

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

d) Any other courses recommended by the GACA

12) Have successfully completed practical skills training in the KSA or a foreign country acceptable to GACA, for the type of training provided.

B. UAS OPERATOR / REMOTE PILOT TRAINING ORGANIZATION. RPI employer must:

- 1) Have approval from the GACA to provide remote pilot training services
- 2) Document the appointment of RPIs in the Operations Manual.
- 3) Have access to an appropriate operational environment for practical skills training.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 6. Issuance of the KSA Remote Pilot Certificate (RPC).

18.2.6.1 OBJECTIVE. The objective of this task is to determine if an applicant meets the requirements for certification as a remote pilot under GACAR Part 107. Completion of this task results in the issuance of a Remote Pilot Certificate or Notice of Disapproval.

18.2.6.2 GENERAL.

A. Remote Pilot Certificate for Open Category operations. The UAS Inspector should confirm that the applicant has already successfully completed the theoretical examination. The UAS Inspector must review the applicant's unmanned aircraft registration and UAS Declaration of Compliance (if required) in the UAS Registration Portal to determine if the aircraft is safe to fly and suitable for Open Category operations.

B. Remote Pilot Certificate for Specific Category operations. The Designated Remote Pilot Examiner (DRPE) conducting the practical test must review the applicant's unmanned aircraft maintenance records, unmanned aircraft logbooks, UAS Declaration of Compliance or Certificate of Airworthiness, and unmanned aircraft registration to determine if the aircraft is safe to fly and suitable for the practical test. After review, return the documents to the applicant. The DRPE must confirm that the applicant has already successfully completed the theoretical examination. A UAS Inspector observing the practical test may also review these documents for conformity.

18.2.6.3 ESTABLISHING ELIGIBILITY.

A. Graduate of an Approved Remote Pilot Training Organization (RPTO) or UAS operator with a DRPE. An applicant who graduates from a training program under an approved GACAR Part 107 RPTO or UAS operator with a DRPE is considered to have met the applicable UAS aeronautical experience and other relevant practical skills training, if the applicant presents the graduation certificate and passes the required practical test after the date of graduation.

B. Aeronautical Knowledge. A knowledge test report issued by the GACA Personnel

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

Licensing Department or a test report from an approved remote pilot training organization with examining authority are the only acceptable forms of evidence that the applicant has passed the knowledge test for a remote pilot certificate.

- 1) The format of the knowledge test report must include its QR Code. If the generation of the QR Code is not available, an embossed seal must be used.
- 2) The holder of a remote pilot certificate for Specific Category operations is required to take knowledge test(s) for the addition of endorsement(s) for specific type(s) Specific Category operation to his/her remote pilot certificate.

C. Aeronautical Experience.

- 1) Applicants for a remote pilot certificate for Open Category operations are required to provide a self-declaration of having obtained the practical skills.
- 2) The applicant for a remote pilot certificate for Specific Category operations must present a remote pilot logbook training record or other reliable records as evidence of meeting the required aeronautical experience of GACAR Part 107.

D. English Language. Early in the process of issuing a remote pilot certificate, the Inspector must confirm whether the applicant can read, speak, write, and understand the English language (see also paragraph 18.2.2.2).

18.2.6.4 REMOTE PILOT LOGBOOK ENDORSEMENTS.

A. For Specific Category operations, the applicant's logbook or training record must contain an endorsement from an authorized instructor who certifies that the applicant has received and logged 8 hours of flight training within the 60 days preceding the date of the application in preparation for the practical test.

B. For Specific Category operations, the applicant's logbook or training record must contain an endorsement from an authorized instructor who certifies that the applicant has been adequately prepared to pass the practical test. In addition, the applicant must provide evidence of payment of the applicable fees and have submitted an application to the GACA using the prescribed application procedures.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

C. An applicant for a remote pilot certificate must have logged training and received a logbook endorsement from an authorized instructor on training required by GACAR Part 107 that is appropriate for the remote pilot certificate and endorsement(s) sought.

18.2.6.5 LIMITATIONS.

A. Open Category operations limitations. The Standard Operations Limitations that apply to remote pilot(s) authorized for this category only are indicated on the certificate.

B. Specific Category operations limitations. A person who has not demonstrated the skills and competencies required for specific endorsement(s) may be issued a remote pilot certificate indicating that any of the following are “PROHIBITED”:

- 1) Night operations
- 2) Operations above people
- 3) BVLOS operations (> 1 km)
- 4) Operations at aerodromes or heliports
- 5) Operations in non-segregated airspace
- 6) Transport and/or dropping of cargo/goods
- 7) Operations with multiple and/or swarms of unmanned aircraft
- 8) Operations over mountainous terrain, areas with snow or above water
- 9) Transport of dangerous goods for humanitarian aid or emergency support.

Any limitations may be removed by the GACA, if the holder complies with all the required practical competencies and requirements of GACAR Part 107.

18.2.6.6 CATEGORIES, ENDORSEMENTS AND RATINGS. The category of UAS operations used for the practical test is placed on the remote pilot certificate. For Specific Category operations, endorsements will be placed on the certificate.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

A. Open Category of operation. A reference to the applicable Standard Operating Limitations, as described in GACAR Part 107 Subpart B, is added to the certificate.

B. Specific Category of operation. The following endorsements are originally issued or added to the remote pilot certificates:

- 1) Night operations
- 2) Operations above people
- 3) BVLOS operations (> 1 km)
- 4) Operations at aerodromes or heliports
- 5) Operations in non-segregated airspace
- 6) Transport and/or dropping of cargo/goods
- 7) Operations with multiple and/or swarms of unmanned aircraft
- 8) Operations over mountainous terrain, areas with snow or above water
- 9) Transport of dangerous goods for humanitarian aid or emergency support.

18.2.6.7 REMOTE PILOT UPGRADES. A remote pilot who desires certification as a remote pilot for higher categories of UAS or additional endorsement(s) or rating(s), must meet all the prerequisite eligibility requirements appropriate to the category, endorsement(s) or rating(s) sought for. Since a remote pilot has limited privileges, the remote pilot's logbook must be endorsed by an UAS flight instructor for each operation not authorized by the remote pilot certificate.

A. Knowledge Test. The applicant for an upgrade to a remote pilot certificate must also pass the appropriate remote pilot knowledge test.

B. Remote Pilot Certificate upgrade. The upgraded certificate supersedes the previous remote pilot certificate and should cover all the privileges of the previous certificate.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.2.6.8 PROCEDURES.

A. For UAS operations in the Specific Category, the Inspector should schedule an appointment. Advise the applicant regarding all procedures prior to the appointment and check the following:

- 1) Evidence of payment of the applicable fees
- 2) Submission of application to the GACA using the prescribed application procedures.
- 3) A Notice of Approval for training in the envisaged category of operation.
- 4) A knowledge test report (if applicable).
- 5) A GACA-approved RPTO graduation certificate, if applicable.
- 6) Personal logbooks or other records to substantiate UAS flight experience.
- 7) The unmanned aircraft maintenance records, if applicable.
- 8) The unmanned aircraft airworthiness certificate, if applicable
- 9) The unmanned aircraft declaration of compliance, if applicable
- 10) The unmanned aircraft registration certificate, if applicable.
- 11) An acceptable photo identification.

B. Applicant Arrives for Appointment.

- 1) Collect and review the documents indicated above.
- 2) Open a remote pilot record.

C. Review Application.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Check the application for accuracy. If the applicant is seeking endorsements, ensure that the applicant has checked the appropriate endorsements for Specific Category operations.
- 2) Ensure that the DRPE has signed for successful completion of an endorsement test no more than 60 days before the application process is completed.

D. Verify Applicant's Identity. Inspect acceptable forms of identification to establish the applicant's identity. Compare the identification with the personal information provided on the application.

- 1) When the applicant's identity is verified, proceed with the task.
- 2) If the applicant's identity appears to be different from the information supplied on the application or it appears that falsification attempt has been made, do not continue testing.

E. Establish Eligibility. Determine if the applicant meets the specific eligibility, knowledge, and experience requirements for certification as a remote pilot and potential endorsements sought.

- 1) Check the record of flight time submitted to determine if the applicant has the minimum flight experience required for the certificate, endorsement(s) and/or ratings sought. The applicant must meet the aeronautical experience required for the remote pilot certificate and endorsement sought. Graduates of approved RPTOs or UAS operators must provide their aeronautical experience in the application process even though the graduation certificate is evidence of having completed the training. For a remote pilot certificate for Open Category operations, it will be sufficient for the applicant to provide a self-declaration as evidence of having sufficient aeronautical experience.
- 2) Examine the applicant's logbook to verify that all UAS flight experience is recorded.
- 3) Examine the knowledge test report or test report from an approved RPTO with knowledge test authority, as applicable.

F. Unmanned Aircraft Requirements. The DRPE conducting the practical test must review the applicant's UAS maintenance records, logbooks, airworthiness certificate or declaration of compliance (if required), and unmanned aircraft registration to determine if the UAS is properly registered and marked (if required), safe to fly and suitable for this practical test.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

G. Discrepancies. If a discrepancy that cannot be immediately corrected exists in any of the documents, return the application and all submitted documents to the applicant. Inform the applicant of the reasons for ineligibility and explain how discrepancies may be corrected.

H. Conduct Practical Test. After GACA determines that the applicant is eligible and meets all prerequisites for the certificate/endorsement/rating sought, the GACA establishes contact with an appropriate DRPE, and informs the applicant and the DRPE by letter or email that the test may be conducted.

- 1) The DRPE gives an applicant who is retesting credit for the areas of operations successfully completed on the previous practical test. If the previous test was conducted more than 60 days before the retest, the DRPE must test the applicant in all applicable areas of operation.
- 2) If the practical test is not completed for reasons other than unsatisfactory performance, all submitted documents are returned to the applicant.

I. Unsatisfactory Performance. If the applicant did not meet the applicable standards for the certificate sought, inform the applicant of the reasons for the unsatisfactory performance.

- 1) Prepare the Notice of Disapproval.
- 2) List the areas of operation that were unsatisfactory.

J. Satisfactory Performance. Issue a certificate when the applicant has met all requirements for a remote pilot certificate.

K. Complete the remote pilot record.

18.2.6.9 TASK OUTCOMES.

Completion of this task results in the issuance of one of the following:

- Remote Pilot Certificate
- Notice of Disapproval

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.2.6.10 FUTURE ACTIVITIES.

- A. Applicant may return for an added category, endorsement or rating.
- B. Applicant may return for an upgraded certificate.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 7. Issuance of KSA RPC based on foreign license.

18.2.7.1 OBJECTIVES.

A. Eligibility Determination. This task determines if an applicant is eligible for a Kingdom of Saudi Arabia (KSA) remote pilot certificate, endorsement(s) and/or rating(s) based on holding a foreign remote pilot license. Completion of this task results in issuance, non-issuance, or denial of a KSA remote pilot certificate, endorsement and/or rating.

1) The issuance of a KSA remote pilot certificate/endorsement/rating based on a foreign remote pilot license would mean the applicant has met the appropriate eligibility requirements of the relevant GACARs and the provisions set forth in this chapter.

2) Non-issuance or denial would mean the applicant has not met the appropriate eligibility requirements of the relevant GACARs and provisions set forth in this chapter; therefore, the applicant would be disqualified from receiving a KSA remote pilot certificate based on a foreign remote pilot license (and must be issued with a Notice of Disapproval).

B. Application Process. The GACA requires a foreigner with an Iqama, who applies for a KSA remote pilot certificate/endorsement/rating to go through a security check and have their foreign remote pilot licenses verified for validity purposes.

18.2.7.2 GENERAL.

A. General Process. A person may only be issued KSA remote pilot certificate with remote pilot privileges based on a foreign remote pilot license that is at least equivalent to or higher than the KSA remote pilot certification level. The foreign remote pilot license must have been issued by a foreign Civil Aviation Authority (CAA) that is a member State of the International Civil Aviation Organization (ICAO), and the foreign remote pilot license must be valid.

B. Applicability. This section applies to the issuance of KSA remote pilot certificates and ratings to persons who apply based on their foreign remote pilot licenses under the following rules within GACARs:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Open Category operations in accordance with GACAR Part 107 Subpart B.
- 2) Specific Category operations in accordance with GACAR Part 107 Subpart D.

18.2.7.3 OBTAINING A KSA REMOTE PILOT CERTIFICATE. A person may apply for a KSA remote pilot certificate and associated endorsement(s) based on a foreign remote pilot license under the following:

A. Foreign Remote Pilot License. A person may be issued a KSA remote pilot certificate based on a foreign remote pilot license as follows:

- 1) For Open Category operations, if the applicant has passed the knowledge test in the KSA and has provided a self-declaration of practical skills.
- 2) For Specific Category operations with specific endorsement(s), provided the applicant has passed the knowledge test and the applicant's foreign remote pilot license and training record has equivalent endorsement(s) or higher.

B. Language. Applicants who cannot read, speak, write, or understand English may be restricted to the Open Category. If an applicant cannot read, speak, write, or understand English and applies for a remote pilot certificate for the Specific Category, then the GACA must only issue the KSA remote pilot certificate with an operating limitation that requires the person to be accompanied by another pilot who is qualified to serve as a pilot in command (PIC) for the appropriate category of UAS operations and associated endorsement(s), as applicable.

18.2.7.4 REMOTE PILOT CERTIFICATE REQUIREMENTS.

A. Operating Foreign-Registered UAS in the KSA. A person who holds a valid foreign remote pilot license or certificate issued by a foreign country must ask the GACA for permission to operate an unmanned aircraft registered in that foreign country within the KSA.

B. Operating KSA-Registered UAS outside the KSA. A person who holds a KSA remote pilot certificate must inquire with a foreign country's Civil Aviation Authority (CAA) and must become familiar with that country's operational and remote pilot certification requirements before operating a Saudi Arabian-registered civil unmanned aircraft in that country.

C. Knowledge Test Failures. A person who fails a KSA knowledge test for operations with

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

unmanned aircraft, should be advised to conduct additional training before reapplying.

18.2.7.5 KSA REMOTE PILOT CERTIFICATES THAT MAY BE ISSUED TO A PERSON WHO HOLDS A FOREIGN REMOTE PILOT LICENSE. The kinds of KSA pilot certificates, endorsement(s) and rating(s) that may be issued to a person who holds a foreign pilot license are:

A. Remote Pilot Certificate for Open Category operations. A KSA remote pilot certificate based on a valid foreign pilot license that is at least equivalent to or higher than the KSA remote pilot certification level for Open Category operations.

B. Remote Pilot Certificate for Specific Category operations. A KSA remote pilot certificate based on a valid foreign pilot license that is at least equivalent to or higher than the KSA remote pilot certification level for Specific Category operations. Endorsements:

- 1) Night operations
- 2) Operations above people
- 3) BVLOS operations (> 1 km)
- 4) Operations at aerodromes or heliports
- 5) Operations in non-segregated airspace
- 6) Transport and/or dropping of cargo/goods
- 7) Operations with multiple and/or swarms of unmanned aircraft
- 8) Operations over mountainous terrain, areas with snow or above water
- 9) Transport of dangerous goods for humanitarian aid or emergency support.

C. Duration. A KSA remote pilot certificate issued on the basis of a foreign remote pilot license remains in effect as long as the foreign remote pilot license used to obtain the KSA remote pilot certificate is valid.

18.2.7.6 PROCEDURES.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

A. Review the completed application.

B. Verify the applicant has the following documents.

- 1) The applicant's foreign remote pilot license. A legible English transcription of a foreign remote pilot license not in English is acceptable.
- 2) Superseded KSA remote pilot certificate, if applicable.
- 3) Knowledge test results, if applicable.
- 4) Verifiable and positive identification of the person.

C. Determine ICAO Member State Status.

- 1) If in doubt about whether a country is an ICAO member state, check the listing of current ICAO Member States on the ICAO Web site at: http://www.icao.int/icao/en/m_about.html
- 2) If the country is not an ICAO member state, inform the applicant that the KSA pilot certificate cannot be issued and return all submitted documents to the applicant.
- 3) If the country is an ICAO member state, verify the applicant's identity.

D. Verify the Applicant's Identity.

- 1) Establish the person's identity with some form of government-issued photo identification (driver's license, passport, etc.).
- 2) Compare the identification with the information provided in the application.
- 3) If the person's identity cannot be verified because of lack of documentation or inadequate documentation, request that the person return with the appropriate identification.
- 4) If the person's identity appears to be falsified, do not proceed.

E. Establish the Applicant Eligibility. Review the applicant foreign remote pilot license:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Ensure the information on the foreign remote pilot license is the same as the information provided in the application.
- 2) Ensure the applicant holds the endorsement/rating that he/she is applying for by comparing it to those held on the foreign remote pilot license.
- 3) Verify that the applicant has passed the KSA knowledge test.
- 4) If an applicant is not eligible for KSA remote pilot certificate/endorsement/ rating sought, or if a discrepancy exists in any of the items indicated above, return any submitted documents to the person. Inform the person why he/she is not eligible and explain how to obtain the certificate/endorsement/rating.
- 5) Close the remote pilot record.

F. Issue a KSA Remote Pilot Certificate.

G. Discuss Relevant Regulations with Applicant. Advise the applicant about the rules and requirements for operation of unmanned aircraft and the associated GACARs. Inform the applicant for a remote pilot certificate for Specific Category operations that GACA may request the administration of a UAS flight review by an Inspector or DRPE.

H. Complete the Certification File.

I. Close the remote pilot record.

18.2.7.7 TASK OUTCOMES. Completion of this task could result in the issuance of:

- KSA Remote Pilot Certificate
- Notice of Disapproval

18.2.7.8 FUTURE ACTIVITIES.

- A. Issue the applicant other grade of certificate(s), endorsement(s) and/or rating(s).
- B. Process an enforcement investigation if the application was falsified.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 2. CERTIFICATION OF REMOTE PILOTS

Section 8. Issuance of KSA RPC based on military competence.

18.2.8.1 OBJECTIVE. The objective of this task is to determine if an applicant is eligible for a remote pilot certificate, endorsement(s) and/or rating(s) based on military competence. Completion of this task results in the issuance or denial of a remote pilot certificate, endorsement and/or rating.

18.2.8.2 GENERAL.

A. General Process.

- 1) A remote pilot certificate may be issued on the basis of military competence to an applicant who is or has been a rated military remote pilot in the Kingdom of Saudi Arabia (KSA) Armed Forces.
- 2) Unmanned aircraft category of operations, endorsement(s) and/or ratings may be added to new or existing remote pilot certificates issued under the GACARs.
- 3) A military remote pilot or former military remote pilot who has been removed from flying status because of lack of proficiency or disciplinary action involving aircraft operations is not eligible for a certificate, endorsement and/or rating based on military competence. The applicant must declare to GACA that no such removal or disciplinary action was taken. In case of doubt, the GACA may approach the Ministry of Defense to verify the declaration.

B. Eligibility.

- 1) A military applicant for a remote pilot certificate based on military competence must pass the appropriate GACA knowledge and practical tests in that category of operations of unmanned aircraft, as appropriate.
- 2) An applicant who meets all the requirements for certain types of UAS operations, may be issued a certificate based on military competence.
- 3) All certifications, endorsement(s) and/or (type) ratings shown on the superseded

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

certificate are brought forward to the higher certificate level within that category of operations and aircraft class without further testing.

4) Official military documents are required as evidence of the applicant's remote pilot experience. The applicant must present official KSA Armed Forces records that show compliance with one of the following requirements:

a) Before the date of the application, passed an official KSA Armed Forces remote pilot proficiency check in an Armed Forces unmanned aircraft of the type(s) of operations, endorsement(s) or type (if class or type of aircraft is applicable) for the ratings; or

b) Before the date of the application, logged 16 hours of remote pilot time as a pilot in a KSA Armed Forces unmanned aircraft of the type(s) of operations, endorsement(s) or type (if class or type of aircraft is applicable) for the ratings.

C. Acceptable Records.

If a remote pilot is a KSA citizen and wants to show that he is serving or has served as a KSA military remote pilot, the remote pilot must present the following evidence to the GACA:

1) An aeronautical order of flight status as a rated military remote pilot

2) An aeronautical order showing graduation from a KSA Armed Forces undergraduate remote pilot training school and receipt of a qualification as a military remote pilot

3) A form or logbook showing flight status as a rated military remote pilot

4) A record showing that the pilot passed a remote pilot proficiency check in an unmanned aircraft as a military remote pilot in the KSA Armed Forces.

D. Knowledge and Practical Tests. An applicant for issuance of an original remote pilot certificate on the basis of military competence, who qualifies as a current or former KSA Armed Forces remote pilot may apply for remote pilot certificate, endorsement for Specific Category operations if the applicant:

1) Has passed the Armed Forces competency aeronautical knowledge test for the appropriate types of operations with unmanned aircraft.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

2) Presents official Armed Forces records that show compliance with one of the following requirements:

- a) Before the date of the application, passed an official KSA Armed Forces remote pilot proficiency check in an Armed Forces unmanned aircraft of the type(s) of operations, endorsement(s) or type (if class or type of aircraft is applicable) for the ratings; or
- b) Before the date of the application, logged 16 hours of remote pilot time as a pilot in a KSA Armed Forces unmanned aircraft of the type(s) of operations, endorsement(s) or type (if class or type of aircraft is applicable) for the ratings.

18.2.8.3 PROCEDURES.

A. Application. The following records must be provided for review:

- 1) Military flight records (these may be classified and require confidential treatment)
- 2) Military identification
- 3) Military orders or discharge/release papers
- 4) Superseded (remote) pilot certificate (if applicable)
- 5) Knowledge test results (if applicable)

B. Review Remote Pilot Application.

C. Verify Applicant's Identity.

- 1) Inspect the applicant's military identification (if applicable) or other acceptable forms of identification to establish the applicant's identity.
- 2) Compare the identification with the information provided during the application process.
 - a) If the applicant's identity cannot be verified for lack of documentation or inadequate documentation, request that the applicant return with the appropriate identification.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

b) If the applicant's identity appears to be falsified, do not proceed.

D. Determine Applicant's Request. Verify that applicant has completed the application correctly. If not correct, have the applicant review and revise as necessary.

E. Establish Eligibility. Determine if the applicant has met all the GACAR requirements.

F. Discrepancies or Ineligibility. If a discrepancy that cannot be immediately corrected exists in any of the documents, return all submitted documents to the applicant. Inform the applicant of the reasons why the certificate, endorsement(s) and/or rating(s) cannot be issued, and explain how the applicant may correct the discrepancies. If the applicant is not eligible for the certificate, endorsement(s) and/or rating(s) sought, inform the applicant of the reasons for ineligibility and explain how the applicant may obtain certificate, endorsement(s) and/or rating(s).

G. Applicant Meets Eligibility Requirements. If the applicant meets the eligibility requirements for issuance or upgrade of a certificate on the basis of military competence, the applicant must complete the KSA Armed Forces aeronautical knowledge test (if not already done). If the applicant is eligible to add endorsement(s) and/or rating(s) to an existing certificate, issue a certificate with the appropriate endorsement(s) and/or rating(s) without a knowledge test.

H. Issuance of Certificate.

1) Issue the appropriate remote pilot certificate, endorsement(s) and/or rating(s).

2) Return all submitted documents, except the application and any superseded (remote) pilot certificate.

I. Additional Requirements. Advise the applicant of the following requirements.

1) GACAR currency requirements for remote pilots must be met before exercising the privileges of the certificate.

2) An appropriate GACA medical certificate (if applicable) must be obtained before the privileges of the certificate can be exercised.

J. Complete Certification File.

1) Provide the following information, as applicable:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

a) Approved (issued) or disapproved (denied) certificate, endorsement(s) or rating(s) based on military competence

b) Knowledge Test Report

2) Attach the applicable documents to the report.

K. Complete the remote pilot record.

18.2.8.4 TASK OUTCOMES.

Completion of this task results in the issuance or denial of a temporary remote pilot certificate.

18.2.8.5 FUTURE ACTIVITIES.

A. Applicant may return for added class and/or category ratings.

B. Applicant may return for an added type rating.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 3. OPERATIONAL APPROVALS

Section 1. Permit to Operate in the Open category

18.3.1.1 APPLICATION PROCESS. These steps should be followed:

A. The UAS operator will initiate the request to apply for a Permit to Operate in the Open category through the UAS Registration Portal. Administrative staff, appointed by the Director Unmanned Aircraft System department (D-UAS), will inform the UAS operator about the regulatory requirements, which include the following:

- 1) Registration of the UAS Operator
- 2) Successful security background check(s)
- 3) Registration of UAS intended to be used
- 4) Remote pilot(s) certificate(s) for the Open category
- 5) UAS Declarations of Compliance (for UAS in between 15 and 25 kg only)

B. The appointed Administrative Staff inform the UAS operator about the necessity of obtaining approval from other competent authorities for making videos or photographs and/or for the collection of surveying and geospatial data. The UAS Inspector, appointed by the D-UAS, must coordinate the process with the relevant competent authorities as follows:

- 1) Approval of the Ministry of Defense must be obtained for making videos or photographs.
- 2) Approval of the General Authority for Survey and Geospatial Information (GASGI) must be obtained for the collection of surveying and geospatial data.

C. The UAS operator will submit the full application for a Permit to Operate in the Open category through the UAS Registration Portal. The application package must contain:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) UAS Operator registration certificate
- 2) Temporary Permit(s) to Operate in Open category
- 3) Remote pilot(s) certificates for the Open category
- 4) Unmanned Aircraft System registration certificate(s)
- 5) UAS Declarations of Compliance (for UAS in between 15 and 25 kg only)

D. The Inspector checks the application package on completeness and proceeds to the next step, as described in 18.3.1.2, only after successful completion of the security background check(s).

18.3.1.2 AUTHORIZATION TO CONDUCT UAS OPERATIONS IN THE OPEN CATEGORY.

A. The appointed administrative staff will issue the Permit to Operate in the Open category when all requirements, as stipulated in GACAR Part 107 Subpart B, are fulfilled. This must include approval of the Ministry of Defense and/or GASGI if making videos or photographs and/or collecting surveying and geospatial data is intended. The operator will be informed that flights may only be conducted in UAS geographical zone(s) designated by the GACA for UAS flights in the Open category and/or alternative operational area(s) specifically authorized by the GACA upon request.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 3. OPERATIONAL APPROVALS

Section 2. Model aircraft clubs and associations

18.3.2.1 APPLICABLE GACAR(S). The GACA considers model aircraft clubs and associations to be “Aviation Recreation Organizations” and therefore both GACAR Part 107 and Part 149 apply.

18.3.2.2 AUTHORIZATION OF MODEL AIRCRAFT CLUBS AND ASSOCIATIONS.

Model aircraft clubs and associations must, in accordance with GACAR Part 107, apply for a Permit to Operate in the Open Category or an Operational Authorization (OA) / UAS Operator Certificate (UOC) for the Specific Category, if such operations by one or more of their members are anticipated.

In accordance with GACAR Part 107, model aircraft clubs and associations may obtain from the GACA an authorization that is valid for all their members to operate UAS, including model aircraft, according to conditions and limitations tailored for the club or association. Model aircraft clubs and associations must submit to the GACA an Operations Manual with the procedures that all members are required to follow. This Operations Manual must be structured in accordance with Subpart H of GACAR Part 107.

18.3.2.3 CONDITIONS AND LIMITATIONS FOR OPERATIONS.

A. When the GACA is satisfied with the OM of a model club/association, the UAS Inspector may provide the authorization for UAS operations in the Open and/or Specific Category.

B. The authorization must be limited to operations conducted within operational area(s) and time periods as defined by the GACA and as stated in the Permit to Operate, OA or UOC.

18.3.2.4 REGISTRATION OF MEMBERS OF THE CLUB OR ASSOCIATION.

The Inspector must inform the model aircraft club and association that the authorization does not exempt members of the club or association from registering themselves in the UAS Registration Portal of the GACA. However, the model aircraft club or association may register their members on their behalf. The Inspector must check that this process is described in the Operations Manual and

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

that the registration procedures are aligned with the UAS Registration Portal maintained by the GACA.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 3. OPERATIONAL APPROVALS

Section 3. Operational Authorization for the Specific category

18.3.3.1 APPLICATION PROCESS. The following steps should be followed:

A. Initial Contact. The application process usually begins with a visit, phone call, or e-mail from the UAS operator to the principal operations inspector (POI) or, for new entrants, to the GACA Director Unmanned Aircraft Systems (D-UAS). At that time, the following questions should be asked and responses annotated for future reference:

- 1) Do you already have a Permit to Operate in the Open category?
- 2) Are you familiar with the requirements for the Specific category?
- 3) Do you already have Operational Authorizations or UAS Operator Certificate?
- 4) What type of UAS operation do you want to conduct: VLOS, BVLOS or both?
- 5) Do you intend to use cameras for making videos or photographs?
- 6) Do you intend to collect surveying and/or geospatial data?
- 7) Do you intend to transport dangerous goods for medical, agricultural or other services?
- 8) Do you intend to operate UAS for experimental, research, development or prototyping?
- 9) When do you want to start the UAS operation?
- 10) Where do you want to fly?
- 11) What unmanned aircraft are you going to use?
- 12) What are the qualifications of your remote pilots?

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 13) Do you have an Operations Manual?
- 14) Are you familiar with Operational Risk Assessments?
- 15) What is a good day and time for you to meet with us?

NOTE 8 – An initial meeting with the operator should be scheduled.

B. Initial Preparation for the Initial Meeting.

- 1) In preparation, inform GM ANS and, if applicable, discuss the UAS operator's existing programs for any deficiencies that could affect issuing of the OA.
- 2) The D-UAS will assign a UAS Inspector as Team Leader to lead the OA activity.
- 3) The D-UAS will, together with the Team Leader, establish a team with the competencies and resources to address all the technical aspects relevant for the OA application. These resources may include relevant Inspectors or specialists from other GACA departments.
- 4) The Team Leader will coordinate with the other team members before the initial meeting.

C. Conduct the Initial Meeting.

- 1) Initial Meeting. At the initial meeting, the UAS operator should officially request the OA and present the GACA with the official letter of intent (LOI) and the initial application package, which should include at least:
 - a) Operations Manual (OM)
 - b) Remote Pilot Certificates
 - c) Unmanned Aircraft Certificates
 - d) Operational Risk Assessment(s)
- 2) Notes. Review any notes from the initial contact with the UAS operator
- 3) Discussion. During the meeting, discuss the following items with the operator:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- a) POCs. Identify all of the Points of Contact (POCs) for the UAS operator and the GACA. The UAS operator should also appoint a team leader as a POC.
- b) Program Deficiencies. If applicable, identify any existing program deficiencies or findings the UAS operator may have. If the operator has existing OA(s), present any existing deficiencies to the operator. The operator must address and solve these deficiencies prior to applying for any additional OA(s).
- c) Identify Appropriate Regulations and Guidance Materials. Identify all of the regulations and guidance materials including GACARs, ACs, as may be appropriate. Manufacturer's guidance material may also be available.
- d) Operational Requirements. Brief the applicant on the applicable Operational Requirements. Operators applying for OA must present to the GACA team adequate documentation to show that they have policies, procedures, and training programs for remote pilots and other crew members (such as visual observers, if necessary) to conduct the intended UAS operations. The OM must include description(s) of the intended UAS operations, contingency procedures and emergency response procedures. The OM must include maintenance instructions for all the UAS used. The OM must also include the processes that the UAS operator will use to collect, monitor, evaluate, and maintain records for their UAS operations. The OM must include the method for operational risk assessment that the UAS operator proposes to use. The OM must address transport of dangerous goods if such operation is intended.
- e) Technical requirements: Brief the applicant on the technical requirements associated with the UAS. Explain that the UAS DoC serves as declaration, by the applicant, that the UAS is designed, produced, or modified such that it does not contain any safety defects. Explain that low-risk UAS operations require the UAS operator to submit a self-declaration and that medium-risk UAS operations require evaluation/validation, by the GACA, of the UAS DoC submitted by the UAS operator or manufacturer.
- f) Safety Management System Requirement. Inform the applicant that SMS must be implemented if the GACA considers that the risks of the intended UAS operations cannot be adequately mitigated without SMS. This includes at least the following:
- o UAS operations over people and/or in cities

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- o Beyond-Visual Line-of-Sight (BVLOS) operations
 - o Transport of dangerous goods by Unmanned Aircraft
 - o UAS operators approved to conduct practical skills examinations
 - o UAS operation at aerodromes, heliports or in non-segregated airspace
 - o Medium-risk and/or high-risk UAS operations in the Specific Category
 - o Any type of UAS operation for which a Certificate of Waiver is required
 - o Any other type of UAS operation for which SMS is required by the President
- g) Occurrence reporting requirements. Brief the applicant on occurrence reporting and explain that the procedures must be described in the OM, including the channel and how to report to the National Transport Safety Center (NTSC) in case of a serious incident or accident. Inform the applicant that – depending on the type and/or purpose of the intended UAS operation – the GACA may add specific occurrence reporting requirements to the Operational Authorization (OA) certificate. This could e.g. be for UAS operations for experimental, research, development and/or prototyping purposes (since for those operations there is typically a lack of operational and/or safety data).
- h) Insurance requirement: Brief the applicant on the insurance requirements, covering:
- o Liability to third parties and cargo because of the operation with its UA. The coverage of this insurance must be at least 1,000,000 SAR per year.
 - o Damage to third party property, injury to other people, acts of war, terrorism, hijacking, acts of sabotage, unlawful seizure of aircraft, and civil commotion.
 - o Insurance associated with the carriage of dangerous goods for humanitarian aid or emergency operations, if such operations are intended to be conducted.
 - o Each and every flight, regardless of whether the aircraft is operated at the UAS operator disposal through ownership or any form of lease agreement.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

i) Security requirements. Inform the applicant that a security statement must be submitted to GACA, stating that appropriate preventive security measures have been implemented. Inform the applicant that these preventive security measures must be described in the Operations Manual, and must be implemented prior to operations.

j) Requirement to obtain approval from other competent authorities (if applicable). Brief the applicant on the requirement to obtain approval(s) from the Ministry of Defense and/or General Authority for Survey and Geospatial Information if making of videos or photographs and/or collecting surveying and geospatial data is intended.

NOTE 9 – Although the UAS operator may have already conveyed this information, re affirm the formal LOI, which should include the following information at a minimum:

- *Intended areas of operation*
- *Proposed UAS operations start date*
- *Unmanned aircraft intended to be used*
- *Type of operational authorization requested*
- *Existing OA(s) and/or operating certificate information, if applicable*

D. Application Package: The applicant must submit an application, which is the heart of the authorization process. It must contain detailed information on the following:

- 1) The formal LOI
- 2) Operations Manual (OM)
- 3) Remote Pilot Certificates
- 4) Unmanned Aircraft Certificates
- 5) Operational Risk Assessment(s) (ORA)
- 6) A matrix, demonstrating compliance with the regulatory requirements

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

7) Validation process, including formal timeline for how to achieve the milestones.

NOTE 10 – The OM structure must adhere to Subpart H “Operations Manual Structure” of GACAR 107.

NOTE 11 – The ORA should be tailored to the risk of the operation, with appropriate risk mitigations stated. All phases of an operation with unmanned aircraft must be considered. The inclusion – in the OM – of a documented method for identifying hazards and controlling the associated risks provides confidence that the operator understands how to apply safety risk management to ensure safe operation. There are different methods for identifying hazards and controlling the associated risks. Commonly used ORA methods that may be acceptable to the GACA for application to UAS operations are the following:

- *ICAO Safety Management Manual (Doc 9859), Chapter 2, Section 2.5 Safety Risk Management.*
- *Specific Operations Risk Assessment (SORA), developed by JARUS and published by EASA.*
- *GACAR Part 5 Safety Management Systems, Subpart C, Safety Risk Management.*

E. Review Process. The GACA team validates whether the applicant included all the required elements in the application package. Planned dates of meetings; data submittals; requested GACA reviews and/or approvals; and milestones to achieve the OA should all be provided by the Applicant. If the applicant included all the elements in the application package, then the review team continues with the evaluation process and proceeds to evaluate the application package including all the elements. If there are missing or incomplete elements, the Team Leader must send written notification to the operator describing the shortfalls.

NOTE 12 – The review team must include all relevant departments. For example, the GACA Aviation Security department must be involved for the security statement (declaration) to be submitted in the application for operations in the Specific category; and the Dangerous Goods (DG) department must be involved for review and acceptance of the relevant parts of the OM if UAS carriage of DG is intended.

F. Process Validation Plan. The process validation plan must include how the applicant intends to validate the elements required to attain the OA. This plan must spell out how the applicant intends to demonstrate that all regulatory requirements are met.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) After the team leader accepts the completed application package, inform the UAS operator to begin the execution of their process validation plan. The UAS operator will complete the process validation plan under GACA observation.
- 2) The final step in the process validation plan are the validation flights. The applicant cannot institute the validation flight portion of the validation process until the review team clarifies the flight scenario's and coordinates them as may be necessary. Upon concurrence with all involved GACA parties, the team leader must issue a memo that authorizes the UAS operator to conduct validation flights.
- 3) Prior to the initiation of the validation flight(s), the operator (applicant) must have the OM and Operational Risk Assessment(s) accepted with one exception, that is the physical inspection of all the operator's proposed stations/facilities.
- 4) If the validation flight is successful, then the operator may be granted the OA.

18.3.3.2. VALIDATION FLIGHTS.

The review team, after receiving the complete package from the UAS operator, will validate the application. The process will conclude with validation flights. These flights must demonstrate that the operator is able to safely conduct the UAS operations. Prior to the initiation of validation flights, the team leader or POI must issue appropriate Operational Authorization that is restricted to the UAS validation flights only. After the conclusion of each validation flight, the team leader and the operator should conduct a review of the flight. All active participants in the validation flight should participate in the review. If there are any areas of concern regarding conduct or flight(s), the operator must offer remedies prior to initiation of the next validation flight or final approval process.

18.3.3.3. AUTHORIZATION TO CONDUCT SPECIFIC CATEGORY OPERATIONS.

A. Team Leader Recommendation: The team leader determines the final decision regarding whether the operator has demonstrated the appropriate qualifications to receive the OA for the intended Specific Category operation(s) in the Specific category. The team leader must discuss any contentious issues with the rest of the review team prior to making that recommendation and prior to issuing the applicable OA.

B. Heightened Surveillance: After the above affirmative recommendations and any required

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

coordination, the principal inspector(s) (PIs) will issue the appropriate OA. Although the UAS operator now has the authority to begin the UAS operations, heightened surveillance by the GACA may continue to apply for the first 6 months.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 3. OPERATIONAL APPROVALS

Section 4. UAS Declaration of Compliance (DoC)

18.3.4.1 OBJECTIVES. This section provides instructions and guidance to GACA Inspectors on the acceptance and evaluation of UAS intended to be operated in the Open and Specific category as defined in GACAR 107.10.

18.3.4.2 GENERAL.

A. A Declaration of Compliance (DoC) must be submitted by the Applicant to the GACA UAS Department for intended UAS operations with the following unmanned aircraft, as follows:

- Unmanned aircraft with maximum take-off mass between 15 and 25 kg, which are intended to be operated in the Open Category only. The Declaration of Compliance statement of the Applicant is included in the Application for a Permit to Operate (see Chapter 3, Section 1).
- Unmanned aircraft with maximum take-off mass of less than 150 kg, intended to be operated in the Specific Category. There are two possibilities, depending on operational risk assessed by the Applicant in the Operational Risk Assessment submitted to the GACA:
 - a) Low Risk: DoC by Applicant must include a statement that containment requirements addressing the risk posed by an operational loss of control that could infringe on areas adjacent to the operational volume and buffers are met (see GACAR 107.119(b)(3)i).
 - b) Medium Risk: The Applicant must request an evaluation of the submitted UAS Declaration of Compliance by the GACA as stipulated by GACAR 107.215(b). This DoC evaluation addresses the compliance of the UAS design with industry standards.

B. UAS operators and/or owners of UAS for which an EASA Design Verification Report (DVR) or Certificate of Airworthiness (CofA) has been issued may be notified of acceptance of the UAS DoC by the UAS department, without the need for demonstration of compliance with industry standards acceptable to GACA (see 18.3.4.3.A). Note that this is only possible for unmanned

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

aircraft with maximum take off mass of less than 150 kg, since this is the upper weight limit for GACAR 107.

C. Declarations of Compliance may be submitted by UAS operator, UAS manufacturer or owner. The UAS DoC Application Forms must be sent to the UAS Department through uas-ops@gaca.gov.sa.

D. The UAS DoC applicant must use one of the Application Forms provided by the GACA.

E. A list of accepted UAS DoCs is maintained in the GACA UAS Registration Portal.

F. Any UAS DoC submitted to the GACA must state whether the UAS is requested to be operated in the Open category and/or Specific category. In case of a request to conduct operations in the Specific category, the GACA may restrict the use of the UAS to certain types of operation.

G. Acceptance of UAS DoC is a step in the operational approval process, which is described in Chapter 3 of this E-Book. An accepted UAS DoC is not sufficient to start operating the UAS.

18.3.4.3 RESPONSIBILITIES OF THE INSPECTORS.

A. ACCEPTANCE OF VALID UAS DoC ISSUED BY ANOTHER STATE. UAS Declarations of Conformity that are acceptable to EASA and UAS Declarations of Compliance that are acceptable to the FAA, are generally accepted by the GACA UAS department without the need for further review and analysis of Inspector(s). DoC issued by other ICAO contracting States or organizations typically require analysis and evaluation by UAS/Airworthiness Inspectors before being accepted.

B. ACCEPTANCE OF UAS SELF-DECLARATION OF COMPLIANCE. This applies to intended UAS operations in the Open Category and Low Risk UAS operations in the Specific Category. The UAS Inspector must explain to the UAS operator that acceptance of UAS DoC is not sufficient to operate the UAS. For the Open Category, a Permit to Operate is required. For the Specific Category Operational Authorization (OA) or UAS Operator Certificate (UOC) issued by GACA is required.

C. EVALUATION OF SUBMITTED DOC AND MEANS OF COMPLIANCE. This applies to Medium Risk UAS operations in the Specific Category. An assigned Inspector of the GACA

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

Airworthiness Department must review the application, obtain appropriate additional information from the applicant, if necessary, and determine whether the applicant has provided adequate means of compliance for DoC. The UAS Inspector must provide the Applicant with the status of the DoC evaluation, if requested. The Applicant must receive a notification from the UAS Inspector after acceptance of the UAS DoC. The UAS Inspector may then proceed with the application for authorization of the operation. A copy of the DoC application, including the means of compliance, must be retained by the GACA.

18.3.4.4 FORMS.

- UAS Declaration of Compliance (for Low-Risk Operations with UAS in the Specific Category)
- Application for UAS DoC Evaluation (for Medium Risk Operations in the Specific Category)

18.3.4.5 PREREQUISITES. This task requires knowledge of GACAR Part 107.

18.3.4.6 COORDINATION. This task requires internal coordination between the UAS Department and the Airworthiness Department. The overall responsibility for acceptance of DoC submitted by Applicants for the Open and Specific Category is with the UAS Department. The UAS Department processes the DoCs for the Open Category and for Low-Risk operations in the Specific Category directly, as part of the process for operational approval. The Airworthiness Department only contributes to evaluation of the UAS Declarations of Compliance submitted for medium-risk operations in the Specific Category. Once this DoC evaluation is successful, the UAS Department may continue with operational approval.

18.3.4.7 INITIAL ISSUANCE. Essential information to be obtained from applicants for UAS DoC is provided below. The UAS Department staff should inform applicants that should GACA refuse to accept a UAS DoC for certain intended UAS operation(s) in the Specific category, they may be eligible to reapply for intended UAS operations in the Open category and/or with a lower risk in the Specific Category.

A. REASON FOR ISSUANCE. The UAS DoC may be accepted by the GACA UAS department as part of the process for approval of the proposed operation on the following grounds:

- 1) Acceptance of UAS Declaration of Compliance submitted by the applicant. This applies to:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- a) Unmanned aircraft between 15 and 25 kg, operated in the Open Category only.
 - b) Unmanned aircraft intended for Low-Risk operations in the Specific category.
- 2) Acceptance of UAS DoC issued through a State or organization acceptable to the GACA.
- 3) Evaluation of Means of Compliance (MoC) submitted by the applicant. This applies to unmanned aircraft systems intended for Medium Risk operations in the Specific category

B. INTENDED UAS OPERATIONS.

The applicant must be asked to provide the Certificate of Registration of unmanned aircraft, and to indicate which types of UAS operations are intended to be conducted (Open and/or Specific). UAS DoC must be submitted for the following types of intended UAS operations only:

- 1) Operations with unmanned aircraft between 15 and 25 kg in the Open category.
- 2) Operations with unmanned aircraft less than 150 kg in the Specific category.

C. ESSENTIAL INFORMATION REQUIRED FROM THE APPLICANT.

Essential Information	Open Category	Specific Category
Applicant (legal) name	Yes	Yes
Applicant authorized representative	Yes	Yes
Applicant national address	Yes	Yes
Mailing address	Yes	Yes
Applicant email address	Yes	Yes
Manufacturer	Yes	Yes
Model name	Yes	Yes
Serial number, if available	Yes	Yes
UAS Registration number	Yes	Yes
UAS Flight Manual	Yes	Yes
UAS Maintenance Manual	Yes	Yes

D. OPERATIONAL ENVIRONMENT.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

The UAS Inspector must address the operational environment of the UAS operation as declared by the Applicant on the UAS DoC. As a minimum, the UAS Inspector must conclude on the acceptance of the UAS for operations in the Open category and/or Specific category. Only after acceptance of the UAS DoC, may the UAS Inspector proceed with the application process. Operational limitations with respect to visual observation (VLOS, EVLOS and/or BVLOS), operational area (Controlled Ground Area, Desert/Remote Area, Sparsely Populated Area, Suburban Area, Urban Area/Downtown, Vital/Critical Infrastructure, airspace (Controlled Airspace, At/Near Aerodromes (< 8 km), Above 400 feet AGL) and visibility (day or night) must be documented and listed on the certificate authorizing the operation.

18.3.4.8 COMPLIANCE WITH INDUSTRY STANDARD ACCEPTABLE TO THE GACA.

A. A demonstration of compliance with industry standards to the GACA is required for Medium Risk operations in the Specific Category. The Applicant must submit an Application for Declaration of Compliance (DoC) Evaluation and supporting Means of Compliance (MoC) documentation to the GACA, demonstrating compliance with industry standards deemed acceptable to the GACA.

B. Unless otherwise agreed with the GM Air Navigation Safety, the UAS DoC evaluation must be conducted by the Airworthiness Department, with support of the UAS Department:

C. Example industry standards / means of compliance that may be used by the Applicant are:

1) Means of compliance issued by the FAA:

a) Operation of Small Unmanned Aircraft Systems Over People, 14 CFR Parts 11, 21, 43, and 107 Docket FAA–2018–1087, Amendments Nos. 11–64, 21–105, 43–51, 107–8, RIN 2120–AK85

b) Accepted Means of Compliance; Operations Over Human Beings, Category 2 and Category 3 Small Unmanned Aircraft, 14 CFR Part 107, Docket FAA–2021–1158, Notice 107–21–01–NOA.

c) Accepted Means of Compliance; Remote Identification of Unmanned Aircraft, 14 CFR Part 89, Docket FAA–2022–0859.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

2) Means of compliance with EASA Special Condition Light-UAS Medium Risk or Special Condition Light UAS High Risk for operations in Europe’s Specific Category of operations:

- a) Means of Compliance with Light-UAS.2511 – Containment, Issue 1, 05 May 2022
- b) Means of Compliance to Special Condition Light UAS for UAS operated in SAIL III and below, FTB MOC SC Light-UAS, Issue 1, 26 May 2022
- c) Means of Compliance with Light-UAS.2510 – Equipment, Systems and Installation, MOC Light-UAS.2510-01, Issue 1, 30 June 2023
- d) Means of Compliance with Light-UAS.2615 – Flight, navigation, and thrust/lift /power system instruments, MOC Light-UAS.2615-01, Issue 1, 11 August 2023.
- e) Means of Compliance with Light-UAS.2410 – Lift/Thrust/Power System Endurance and Durability, MOC Light-UAS.2410-01, Issue 1, 11 August 2023.
- f) Means of Compliance with Light-UAS.2405 – Lift/Thrust/Power System Integrity, MOC Light-UAS.2405-01, Issue 1, 11 August 2023.

3) ASTM standard F3298-19 “Standard Specification for Design, Construction, and Verification of Lightweight Unmanned Aircraft Systems”.

4) Any other standard for UAS declared by the GACA as being acceptable for UAS DoC.

D. Once the documentation provides sufficient evidence of compliance, the Airworthiness Inspector informs the UAS Department accordingly. The UAS Inspector will notify the Applicant about the positive outcome of the evaluation and proceeds with the process for approval of the operation. The UAS Department staff must update the UAS DoC list in the GACA UAS Registration Portal.

18.3.4.9 CANCELLATION OF UAS DoC

The GACA may decide to cancel an accepted UAS DoC at any time, for example based on occurrence information regarding incidents and/or accidents with a particular type of UAS. Other grounds for cancellation by the GACA include e.g. information indicating that a self-declaration made by the

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

Applicant is not justifiable or modifications of the UAS without informing the GACA.

In case of cancellation, UAS Inspector must update the UAS DoC list in the UAS Registration Portal.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 1. UNMANNED AIRCRAFT AND EQUIPMENT

Section 5. Certificate of waiver.

18.3.5.1 GENERAL. The President may issue a Certificate of Waiver authorizing different types of operations with unmanned aircraft that are not covered under Subpart D “Specific Operations”, if he finds that the proposed operation can be safely conducted under the terms of that Certificate of Waiver.

The following types of UAS operations may receive a waiver under GACAR Part 107:

- Cross-border operations.
- Operations conducted over assemblies of people.
- Autonomous operations with UA.
- Operations involving the carriage of dangerous goods, that may result in high risk for third parties in case of accident.

18.3.5.2 PROCEDURES TO OBTAIN A WAIVER. To apply for a waiver, an operator must submit a request to the GACA. The application must be made by letter, including a reference to Subpart K “Waiver policy and requirements” of GACAR 107. The letter and attachments must contain the reasons and time-period for which the waiver is requested, and must include at least the following information:

- Complete description of the proposed UAS operation.
- Justification based on operational risk assessment approved by GACA, confirming that the proposed operation can safely be conducted under the terms of a certificate of waiver.
- Airworthiness certificate of the UAS.
- Appropriate remote pilot licensing.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- Operations manual of the UAS operator.
- Safety management system of the UAS operator as stipulated in GACAR Part 5.

18.3.5.3 INSPECTOR RESPONSIBILITIES. The application must be processed in a timely manner. The assigned UAS Inspector must review the application, obtain appropriate additional information from the applicant, if necessary, and determine whether the applicant has provided adequate justification for a waiver. The Inspector must review the operational risk assessment to determine whether the applicant will provide an acceptable level of safety during the conduct of any operation under a certificate of waiver. If the application is denied, the reasons for denial must be specified in a letter to the applicant. If the waiver or is to be granted, the Inspector must prepare the Certificate of Waiver. The completed waiver dated and signed by the Executive Vice President (EVP), will be delivered to the applicant. A copy of the waiver application and the waiver certificate must be retained in the GACA office files.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 1. Phase 1 – Pre-application

18.4.1.1 GENERAL.

A. Direction and Guidance. This chapter provides direction and guidance on the certification process for GACAR Part 107 Unmanned Aircraft System operators, conducting Specific Category operations in the Specific category.

B. Certification Process. In addition to this guidance, the prospective operator and the General Authority of Civil Aviation (GACA) must follow the certification process found in E-Book Volume 3, Chapter 1, The Generic Certification Process for Air Operators and Air Agencies.

C. Process for operators that only conduct UAS operations in the Open category. These UAS operators do not need to be certified. Successful completion of the registration process as UAS Operator through the UAS Registration Portal of the GACA is sufficient to start operating in the Open category.

D. Pre-requisites for registration as UAS operator include at least

- 1) registration of unmanned aircraft used (less than 25 kg).
- 2) valid remote pilot certificates for the Open category.
- 3) successful completion of security background check by GACA.

E. Process for operators that conduct UAS operations in the Specific category without a UAS Operator Certificate (UOC). Obtaining a valid Operational Authorization (OA) provides UAS operators with an alternative pathway to conduct UAS operations in the Specific category.

18.4.1.2 FORMS AND LETTERS. The following forms and letters must be used. Versions of these forms and letters must be included in the “Certification File” by the GACA.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- A. UAS Operator Certification Job Aid (Part 107)
- B. CPM Designation Notification to Applicant
- C. Attendance Roster
- D. Pre-Application Checklist
- E. Schedule of Events
- F. Compliance Statement

18.4.1.3 INITIAL INQUIRIES OR REQUESTS

A. Initial Inquiries. Initial inquiries about UAS operator certification or requests for application may come in various formats from individuals or organizations. These inquiries should be in the form of meetings with GACA personnel, which may include: General Manager (GM) Air Navigation Safety (ANS) and Director Unmanned Aircraft Systems department (D-UAS).

B. Preliminary Discussion. At the initial inquiry meeting, the UAS inspector should briefly explain all of the requirements within the GACAR that the applicant must meet in the certification process. The applicant should complete a Pre-Application Statement of Intent (PASI). In addition, the applicant should provide contact information to the GACA and receive from GACA, the contact information of GM and UAS department. The Inspector should ask the applicant to schedule an appointment for a pre-application meeting, allowing enough time for the applicant to thoroughly review and understand GACA requirements.

NOTE 12: Applicant should email the PASI to GM and D-UAS prior to the pre-application meeting. Upon receipt, these documents will be forwarded to the relevant departments for review as applicable.

18.4.1.4 CERTIFICATION TEAM. The D-UAS (in coordination with the GM) must use the guidance found in Volume 3, Chapter 1, Section 1, for the assignment, qualifications, duties and responsibilities of Inspectors on the certification team. The Inspector assigned as the Certification Project Manager (CPM) has the responsibility to complete the UAS Operator Certification Job Aid (Part 107). The CPM must send a notice to the applicant informing them of the certification team assignment.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.4.1.5 INITIAL CERTIFICATION TEAM BRIEFING. CPM will brief the certification team must be held prior to the pre-application meeting with the applicant. At this briefing, the team must review the applicants PASI. In addition, the following administrative activities must be conducted:

- Create a certification file
- Ensure that the GM, D-UAS and all other team members have access to the file
- Maintain hard copies of all official correspondence to/from applicant
- Inform other team members

18.4.1.6 PRE-APPLICATION MEETING.

A. General. In preparation for the meeting, the assigned CPM must remind the applicant that the applicant's key management personnel should attend the pre-application meeting and should be prepared to discuss, in general terms, specific aspects of the applicant's proposed operation. The CPM must discuss the certification process in depth. Emphasis should be placed on the expectations of the GACA, what the applicant should expect from the GACA, and the sequence of events. The CPM must discuss the communication protocol between the UAS operator and the GACA. The applicant should be encouraged to ask questions during the discussion. The CPM should have all attendees sign the Attendance Roster.

B. Verifying Information on the PASI. The first item for discussion must be verification of the information on the PASI, such as the type of UAS operations, types of unmanned aircraft, geographic areas of UAS operations, and location of facilities. When changes to this information occur, the applicant must annotate the changes on the PASI and inform the GACA. If the changes significantly affect the anticipated scope and/or type of operation, a copy of the revised PASI must be forwarded to the GACA.

C. Briefing of the Applicant. At the pre-application meeting, the applicant and any key personnel attending the meeting must be briefed in as much detail as necessary to ensure that they understand the certification process using the UAS Operator Certification Job Aid (Part 107) as a guide to facilitate the discussion and to ensure that all elements of the certification process are covered. The applicant should be encouraged to ask questions about any area of the process not clearly understood. The CPM must provide the Pre-Application Checklist (PAC) to

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

the applicant.

D. Management Resumes. Management resumes must be reviewed by the certification team to determine that there is a resume for each required management position and that these resumes contain the basic information necessary to achieve regulatory compliance. The depth of review should be only to determine that there are no obvious omissions or significant discrepancies. A detailed review of the management qualifications and effectiveness will be accomplished during the document compliance and the demonstration and inspection phases.

E. Informing the Applicant of Pertinent Regulations. It is essential that the applicant understand which regulations are applicable to the proposed UAS operation. The applicant must be advised to acquire and become familiar with the GACARs and other guidance pertinent to the proposed UAS operations. The applicant and the applicant's personnel must be made aware of their responsibilities during the certification process. It is to their benefit to submit required items as soon as they become available.

18.4.1.7 INSTRUCTIONS TO THE APPLICANT ON THE FORMAL APPLICATION.

A. Requesting the Formal Application. The applicant must be informed that the formal application must be submitted to the GACA at least 90 calendar days prior to the proposed formal application meeting to allow the GACA to prepare resources. After initial review, GACA must notify the applicant of its acceptance or rejection by letter within 5 working days. The applicant should be encouraged to submit the formal application as early as possible of the intended starting date. The following documents must be submitted when requesting the formal meeting:

- 1) Formal application letter
- 2) Operations Manual
- 3) Operational Risk Assessment(s)
- 4) List of proposed operations specifications (OpSpecs)
- 5) An up-to-date Pre-Application Statement of Intent (PASI)

NOTE 13: The CPM should inform the applicant that while GACA Inspectors will furnish

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

informal guidance and advice during the preparation of required documents and manuals, the production of acceptable documents and manuals is solely the responsibility of the applicant.

B. Formal Application Letter. The formal application letter serves as the vehicle to transmit the package of documents required to be certificated. The CPM must inform the applicant that the formal application must be a letter containing a statement that the letter serves as a formal application for a UAS Operator Certificate (UOC). The letter must contain the full and official name of the applicant. This letter must be signed by the owner when applying as an individual or sole proprietorship, all partners when applying as a partnership, or an authorized officer(s) when applying as an organization. The letter must contain the physical location address of the applicant's intended primary operating location. The letter must also confirm the identity of key personnel such as the accountable manager, operations manager, training manager, maintenance manager and safety manager.

18.4.1.8 FORMAL APPLICATION ATTACHMENTS. In addition to the documents listed in paragraph 18.4.1.6 above, the formal application letter must be accompanied with the attachments listed in the Pre-Application Checklist. The applicant must understand that this letter and these attachments will be the minimum information acceptable for meeting the requirements of the GACARs. Below is the guidance to be used when evaluating several of the key certification documents.

A. Schedule of Events. The applicant needs to understand that the schedule of events is a key document to be presented with the formal application. The schedule of events will include the applicant's best estimate of the date the item, activity, program, unmanned aircraft, or facility acquisitions will be accomplished or ready for inspection. The schedule of events must also provide sufficient time for the GACA for review and accept or approve intermediate results. The applicant must be advised that if deficiencies are detected during the review of Operations Manuals, Operational Risk Assessment(s) and/or other supporting documents, they will be returned for amendment or correction. Such action may also cause additional delays in the certification process.

B. Company Training Curriculums. The company training curriculum must be included in the Operations Manual (as part of the formal UOC application). If company training is provided by external training provider(s), this must be described in the Operations Manual submitted in the UOC application. The company training curriculum for remote pilots must include:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Safety training
- 2) Basic training for the Open category
- 3) Advanced training for the Specific category
- 4) Emergency response training

C. Management Qualification Resumes. This attachment must include resumes that contain information on the qualifications, certificates, remote pilot certificates, and experience of personnel selected for the following positions, or equivalent:

- 1) Accountable Manager
- 2) Operations Manager
- 3) Safety Manager

For small organizations, depending on the complexity and the risk associated with the type of UAS operations, the GACA may accept one manager to manage two of these positions.

D. Documents of Purchase, Contracts, and Leases. This attachment should provide evidence that the applicant has acquired unmanned aircraft, facilities, and services to conduct the type of UAS operation proposed. This evidence may be in the form of proof of formal purchases, leases, or contractual arrangements. These documents should provide evidence that the applicant is, in good faith, committed to making arrangement for aircraft, supporting facilities, and services as necessary for the proposed operation. Examples of the types of equipment, facilities, and services that should be addressed in these documents, contracts, or leases include the following:

- 1) Unmanned Aircraft
- 2) Weather and Notices to Airmen (NOTAM) gathering facilities and services
- 3) Aeronautical charts and related publications
- 4) UAS geographical zones information
- 5) Uncrewed Traffic Management (UTM) services

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 6) Command and Control (C2) link services
- 7) Remote pilots qualified for the intended UAS operations
- 8) Radio Telephony (RT) qualified crew for ATC communication
- 9) Visual observers for Beyond Visual Line of Sight (BVLOS) operations
- 10) Maintenance facilities and services
- 11) Contract training or use of training facilities
- 12) Any other arrangement relevant for the intended UAS operations.

E. Compliance Statement.

1) Preparation of the compliance statement benefits the applicant by systematically ensuring that all applicable regulatory aspects are appropriately addressed during the certification process. The compliance statement must be in the form of a complete listing of all appropriate GACARs pertinent to the UAS operation(s) the applicant is proposing. This list must reference any applicable subpart and each relevant section of the subpart. Next to each subparagraph, the applicant must provide a specific reference to a manual or other document and may provide a brief narrative description that describes how the applicant will comply with each regulation. This statement also serves as a master index to the applicant's Operations Manual to expedite the GACA's review and approval of the operation. The compliance statement is an important source of document during the certification process. After the certification process is completed, the compliance statement must be kept current as changes are incorporated in the applicant's system.

2) Where the compliance information has been developed (for example, the material submitted with the formal application), a manual reference or description of the method of compliance must be entered next to the applicable regulatory section.

18.4.1.9 INITIAL REVIEW INSTRUCTIONS. The Certification Team should verify that content of the applicant's submission is sufficient to conduct an Initial Review. The purpose is to determine the quality of applicant's application package. The CPM must do the following:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Verify that all PAC documents have been submitted.
- 2) Verify that all manuals required to conduct the certification are available to the CPT.
- 3) Verify that the compliance statement includes all relevant and applicable GACARs.

The CPM should collect the results and store them in the applicant's certification file, while using the following Evaluation Criteria for the Initial Review:

- a) One hundred percent of the documents required by the Pre-Application Checklist (PAC) must have been submitted
- b) The compliance statement must accurately list at least 90 percent of the relevant and applicable rules that apply to the applicant.

18.4.1.10 CONCLUSION OF THE PRE-APPLICATION MEETING. The CPM must ensure that the applicant understands that the formal application, with the above-described attachments, must be complete and acceptable or the entire formal application will be rejected.

A. Applicant is Adequately Prepared. At the close of the pre-application meeting, the Certification Team must determine whether the applicant is prepared to proceed with the certification process. If it appears that the applicant understands the requirements of a formal application and will proceed to that phase, the CPM should encourage the applicant to informally coordinate required documents as they are developed with the certification team before submission of the formal application.

B. Applicant is Not Prepared. If it is evident that the applicant is not adequately prepared to proceed with the certification process, the CPM must advise the applicant of the reasons for concern. When it is apparent that the applicant will not be able to prepare an adequate formal application, the CPM should advise the applicant to request another pre-application meeting after more complete preparation on the applicant's part. It is appropriate for the CPM to recommend to the applicant one or more of the following actions:

- 1) Retain the services of a professional aviation consultant
- 2) A more thorough review of the applicable regulations

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 3) Cease efforts to become GACA certificated
- 4) Changes in proposed key management personnel

18.4.1.11 TERMINATION OF THE PRE-APPLICATION PROCESS. If at any time during the pre-application phase the applicant formally terminates all efforts toward certification, or the GACA determines that the applicant will not proceed with the certification process, the PASI must be returned to the applicant. The GACA must notify the applicant in writing that this action terminates the pre-application process and that the applicant must submit a new PASI in order to initiate the certification process again. Senior GACA management must be notified of any certification project that is terminated.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 2. Phase 2 – Formal Application

18.4.2.1. RECEIPT OF FORMAL APPLICATION. When the formal application is received, the applicant should be informed that the GACA will need 10 working days to review the submission.

18.4.2.2. INITIAL REVIEW OF THE FORMAL APPLICATION. Upon receipt of a formal application, the certification team must initially review it and make a determination of its acceptability. The certification project manager (CPM) must notify the applicant of the results informally, followed promptly by written notification of acceptance or rejection of the formal application. The CPM must document both contacts with the applicant. The initial review serves the following two purposes:

A. It verifies that at least those items required for formal application have been submitted. The required items are as follows:

- 1) The application must contain the formal letter requesting certification, which includes the information described in paragraph 18.4.1.7 of this chapter.
- 2) The application must contain all the required formal attachments. These requirements are listed in the UAS Operator Certification Job Aid (Part 107).

NOTE 14: If any of the items required for the formal application are missing or are incomplete, the entire formal application must be rejected. It should be returned to the applicant with a letter stating the reasons for its rejection following completion of the initial review. The decision must be coordinated with the Director UAS department (D-UAS) and the General Manager Air Navigation Safety (GM ANS). If termination is recommended, Executive Vice President, EVP, must be informed.

B. The initial review also permits a determination of whether the submitted material represents a feasible proposal and is of sufficient quality to allow for a productive formal application meeting and to proceed with the certification process. The following paragraphs are provided as direction and guidance for this initial review.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.4.2.3. SCHEDULE OF EVENTS ATTACHMENT. The schedule of events sets milestones for the certification process and, when accepted, becomes the basis for agreement between the applicant and the certification team to accomplish the certification project. The applicant's ability to plan and carry out a realistic schedule of events will be a major factor in determining the applicant's fitness to hold a certificate. Therefore, when reviewing the schedule of events, the certification team must carefully consider the feasibility of the proposed schedule with respect to the following criteria

- Logic of sequence
- Timeliness of events
- Completeness of events
- UAS Inspector and/or other GACA resource availability

18.4.2.4. KEY DOCUMENTATION ATTACHMENTS. The CPM must give the Operations Manual and Operational Risk Assessment(s) a cursory review. Firstly, to determine that all relevant information has been submitted. Secondly, the CPM must determine that the overall content and scope of these documents indicates that the applicant is proceeding in an appropriate manner and in compliance with the regulations. These completed submissions provide early indications of the quality of the applicant's manual program. An in-depth review and evaluation of the material will be accomplished in the document compliance phase.

18.4.2.5. COMPANY TRAINING CURRICULUM ATTACHMENTS. The CPM must review the training curriculum attachments to determine that each of the curriculum segments have been submitted for each applicable operating position (remote pilot, visual observer, RT, etc). Each curriculum must be reviewed to determine that basic regulatory requirements are being met and that the applicant is proceeding in an appropriate manner with the development of the applicant's training programs. A detailed review and initial approval of the training curriculum will be accomplished in the document compliance phase after the applicant has finalized all training arrangements, including instructor lesson plans. The applicant may not start training in a curriculum until that curriculum has been initially approved.

18.4.2.6. MANAGEMENT ATTACHMENTS (RESUMES). Management resumes must be reviewed by the certification team to determine that there is a resume for each required management position and that these resumes contain the basic information necessary to determine regulatory compliance. A detailed review of management resumes must be accomplished during the document compliance and

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

the demonstration and inspection phases.

18.4.2.7. DOCUMENTS OF SERVICE LEVEL AGREEMENTS. The CPM must review these documents to determine that they include the services to be provided and level of performance to be expected. The documents must be reviewed for obvious omissions or significant discrepancies. Examples of significant discrepancies would be a level of performance lower than necessary to achieve an acceptable level of safety or a contractual arrangement with another organization to provide a service when it is known that the other organization is not qualified to perform that type of service. There should be sufficient evidence to show that the applicant has made the arrangements for sufficient quality of service for certification.

18.4.2.8. COMPLIANCE STATEMENT ATTACHMENT. The CPM must review the compliance statement within 10 working days to determine that it complies with all the relevant regulatory requirements of GACAR Part 107 and that the applicant has proceeded in an appropriate manner.

18.4.2.9. INITIAL DETERMINATION OF FORMAL APPLICATION ACCEPTABILITY.

A. The decision whether to accept the formal application before the formal application meeting and to proceed with the certification process by scheduling a meeting with the applicant must be tempered with good judgment and a reasonably flexible attitude. However, the decision must be based primarily on the results of the initial review of the formal application and attachments. The decision to proceed is predicated on receipt of all required documents in the formal application and an initial approval of the contents.

B. Normally, if an applicant has been thoroughly briefed and has acquired a good understanding of the requirements during the pre-application phase, the formal application should be of sufficient quality that any discrepancies, omissions, and/or "open" questions can be resolved during the formal application meeting. Often minor and occasionally some significant discrepancies or omissions in Operations Manual, Operational Risk Assessment(s), training curriculum, and/or the compliance statement can be resolved during the formal application meeting.

C. If the CPM and the certification team decide to proceed with the certification process, the CPM must contact the applicant and schedule the formal application meeting. The applicant must be informed that attendance of key personnel (accountable manager, operations manager, safety manager, etc) is required.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.4.2.10. THE FORMAL APPLICATION MEETING. The purpose of this meeting is to resolve any questions on the part of either party and to establish a common understanding for future proceedings. The CPM is responsible for conducting the formal application meeting. Except for unanticipated circumstances, all members of the certification team and any other applicable GACA personnel must be present. Normally, the CPM should open the meeting with the applicant, all of the applicant's key management personnel, and the certification team present. To ensure meeting agenda items are accomplished, the CPM should establish a Formal Application Meeting Plan to determine that the applicant's key personnel is knowledgeable and appropriately qualified for conducting the intended UAS operations.

NOTE 15: The CPM must notify the GM ANS and the D-UAS of the formal application meeting date.

A. The CPM should encourage the applicant and the applicant's key management personnel to present any questions they may have on the forthcoming certification process. The CPM and certification team members should provide candid answers and discuss freely all aspects of the certification process.

B. The detailed schedule of events should be discussed, and any needed revisions should be negotiated prior to proceeding.

C. Before concluding the formal application meeting, the CPM must make certain that the applicant clearly understands the following:

1) Notification of acceptance of the formal application package does not in any way constitute acceptance or approval of the separate attachments. The attachments will be reviewed further, and additional corrective actions will be required, following which, the applicant will be expected to take such corrective action. Acceptance or approval of each attachment will be indicated separately at a later date during the certification process.

2) If the applicant is unable to meet the schedule of events, the GACA will still need equivalent amounts of time, as agreed upon during the meeting, to make the necessary reviews and inspections. Consequently, the proposed start-up date could be delayed.

18.4.2.11 FINAL DETERMINATION OF FORMAL APPLICATION ACCEPTABILITY. If the formal application meeting is successful, a letter acknowledging receipt and acceptance of the formal application must be prepared and forwarded to the applicant as soon as possible, but not later than

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

five (5) working days after the meeting (“Acceptance of Formal Application”).

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 3. Phase 3 – Document Compliance

18.4.3.1 GENERAL. The document compliance phase is that part of the certification process when the applicant’s Operations Manual, Operational Risk Assessment(s) and other supporting documents are reviewed in depth to ensure compliance with applicable regulations and conformity to safe operating practices.

NOTE 16: These documents may include flight manuals or maintenance manuals provided by the manufacturer of the unmanned aircraft intended to be used and/or other documents that are used.

A. An important responsibility of the certification project manager (CPM) is to organize the certification team's efforts to promptly review the applicant's Operations Manual, Operational Risk Assessment(s) and other documents. Two key elements useful in planning activities in the document compliance phase are the schedule of events and the compliance statement. The schedule of events determines what will be examined and when. The agreed upon schedule of events will determine the priority of items to be reviewed and any additional aviation safety inspector (Inspector) support or other GACA resources that will be needed beyond the composition of the basic certification team.

B. The plan for review should ensure that each of the required manuals or documents submitted by the applicant will be reviewed. The compliance statement directs the Inspector to the location in the applicant's manuals where a compliance procedure is described. The UAS Operator Certification Job Aid (Part 107) is a good reference to use when conducting a review of an applicant’s manuals and other documents.

18.4.3.2 REVIEW OF APPLICANT’S SUBMISSION.

A. During this phase, members of the certification team evaluate the Operations Manual, Operational Risk Assessment(s) and any other required documents. Although the Operations Manual is accepted (not approved) by the GACA, certain portions of the Operations Manual do require approval. The portions that contain self-declarations of the applicant, typically do not

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

require explicit approval by the GACA. The Operational Risk Assessment(s) must always be approved by the GACA.

B. Review of the applicant's submissions should be accomplished by simultaneous reference to the General Authority of Civil Aviation Regulations (GACARs), the compliance statement, and the appropriate manual or document. The following are examples of typical submissions from applicants during the document compliance phase. This list is not all-inclusive, and certain items may not be applicable to a particular type of operation.

- 1) Operations Manual (including training and maintenance program)
- 2) Operational Risk Assessment(s)
- 3) Resumes of management and operating personnel
- 4) Remote pilot certificates
- 5) Unmanned aircraft registration certificates and Declarations of Compliance (DoCs)
- 6) Safety Management System (if applicable)
- 7) Dangerous goods program (if applicable)
- 8) Unmanned aircraft flight manual
- 9) Unmanned aircraft maintenance manual
- 10) Operational flight plans
- 11) Operations specifications (OpSpecs)
- 12) Compliance statement

18.4.3.3 THE COMPLIANCE STATEMENT.

A. The compliance statement serves the following two purposes:

- 1) It ensures that the applicant has adequately addressed all regulatory requirements

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

applicable to the proposed operation.

2) It aids the certification team in determining where the regulatory requirements have been addressed in the applicant's Operations Manual and other supporting documents. In evaluating the applicant's compliance statement, the certification team may find it helpful to compare (in a side-by-side manner) the GACAR, the applicant's Operations Manual, and the compliance statement. The compliance statement documents show/describe how the applicant intends to comply with each applicable regulation.

B. If the applicant's compliance statement does not serve the preceding purposes, the deficient areas will be communicated to the applicant, and a resolution must be negotiated. The next steps will not be conducted until the certification team is satisfied, through its review of the compliance statement and formal application package, that all regulatory requirements have been adequately addressed. The applicant's methods of compliance will be evaluated throughout the demonstration and inspection phase.

18.4.3.4 DOCUMENT DEFICIENCIES. If the Inspector's review reveals deficiencies in the applicant's submissions, the CPM should negotiate resolution of the deficiencies. The team should be ready to offer suggestions on how to improve the product but avoid "writing" the applicant's documents. The certification team should remember that it is the applicant's responsibility to develop the Operations Manual, Operational Risk Assessment(s) and mitigation measures that ensure safe operating practices and compliance with the rules.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 4. Phase 4 – Demonstration and Inspection

18.4.4.1 GENERAL. In this phase, the certification team determines that the applicant's proposed procedures and programs for training and directing personnel in the performance of their duties are effective. The emphasis is on compliance with regulations and safe operating practices. Certain segments of the document compliance phase often occur simultaneously with certain events in the demonstration and inspection phase. For example, UAS inspectors may be observing maintenance activities and/or pilot training at the applicant's facilities (demonstration and inspection phase) while other certification team members are evaluating the Operations Manual in the GACA office (document compliance phase).

18.4.4.2 OBSERVATIONS AND MONITORING OF EVENTS. Through observation and other forms of on-site evaluation during the demonstration and inspection phase, members of the certifying team observe and monitor many types of applicant activities. The way the applicant is to be evaluated while conducting different segments of this phase is outlined in various sections of this E-Book. The following list of activities or events is representative of events that occur in the demonstration and inspection phase. This list is not all-inclusive, and certain items may not be applicable to a particular type of operator:

- UAS operations (including operational flight planning, Last Minute Risk Assessment)
- Maintenance activities
- Conduct of training
- Implementation of security, privacy and environmental measures
- Recordkeeping
- Operational risk assessment
- Safety management (if applicable)

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- Handling of dangerous goods (if applicable)
- Any other event appropriate for the type of UAS operations to be conducted

18.4.4.3 DEMONSTRATION AND INSPECTION DEFICIENCIES. If, at any time during the demonstration and inspection phase, the applicant does not meet the schedule of events, or the applicant's conduct of various activities or certain items proves to be deficient, appropriate corrective action must be taken. The certification project manager (CPM) must schedule meetings with the applicant, as necessary, to review all deficiencies in detail. If appropriate, the CPM must negotiate a new, modified schedule of events and re-enter the demonstration and inspection phase or the document compliance phase, as appropriate.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 4. CERTIFICATION OF UAS OPERATORS

Section 5. Phase 5 – Certification

18.4.5.1 GENERAL.

A. The applicant must not be certificated under any circumstance until the certification project manager (CPM) has determined that the applicant is compliant with all applicable regulatory requirements and fully capable of fulfilling its ongoing responsibilities of complying with the GACARs in an appropriate manner. The certificate and operations specifications (OpSpecs) are issued to the applicant after all unsatisfactory items have been corrected. This action completes the certification process.

B. Obtaining Certificate Type/Designator Number. The CPM is responsible for ensuring that the Certificate Type and Designator Numbers are issued. The Certificate Type Code for the UAS Operator Certificate is “UOC” (GACAR Part 107). The Designator Number provides up to 9999 unique numbers for issuing UOCs (0001 to 9999).

18.4.5.2 PREPARATION OF THE UAS OPERATOR CERTIFICATE.

A. A UAS Operator Certificate (UOC) will be issued when all phases of the certification have been completed satisfactorily.

B. The Effective Dates. The UOC will be issued with two (2) dates. The first being the date of issuance, and the second being the expiration date. The expiration date must be three (3) years from the date the certificate was issued unless an earlier date is specified by the President. If a certificate is to be changed due to an address change, the date of original issuance must be retained on the changed certificate. A change of name for the UAS operator or a change in the certification statement of authority has the effect of a new certification; therefore, a new certificate and certificate number must be issued. For this situation, the issuance date of the new certificate will be entered in the space provided.

18.4.5.3 ISSUANCE OF OPERATIONS SPECIFICATIONS AND UAS OPERATOR CERTIFICATE.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

A. When it is determined that the applicant has met all regulatory requirements, the UOC and operations specifications (OpSpecs) must be presented to the applicant. The Operations Specifications (OpSpecs) must be prepared in accordance with the template.

B. Before issuance, the operations specifications must be signed by the applicant and the GACA representative (new UOCs may be signed by the President or his representative). The original certificate and operations specifications will be given to the new certificate holder.

18.4.5.4 CERTIFICATION REPORT. When the new operator is certificated, the CPM is responsible for assembling a certification report. This report must be signed by the CPM and will include the name and title of each team member who assisted in the certification project. The report will be maintained in the Certification File relating to the new operator until at least two years after the business life of the UAS operator. The report must consist of:

A. PASI.

B. Formal letter of application.

C. Copy of the UOC.

D. Final compliance statement.

E. A copy of the OpSpecs issued.

F. A summary of major difficulties experienced during the certification process and/or any recommendations that may enhance the certification process must be noted.

18.4.5.5 CERTIFICATION CLOSE OUT. To finalize the certification process, the D-UAS must:

- Assign a Principal Operations Inspector (POI) to the new certificate holder
- Send a copy of the certification report to the General Manager, ANS
- The POI should develop a surveillance plan and forward it to the D-UAS

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 1. General Information

18.5.1.1 EXAMINATION. DRPEs provide examination services to remote pilots. Designation is a privilege, not a right, and designees are appointed by the President to meet GACA needs. DRPEs are expected to exercise the privileges of their designation within the limitations set forth in the DRPE's Certificate of Designation.

18.5.1.2 PREREQUISITES. This task requires knowledge of GACAR Part 107, GACA policies and knowledge of the functional responsibilities of the UAS Inspector responsible for DRPE oversight.

18.5.1.3 COORDINATION. This task requires coordination between the DRPE, the Unmanned Aircraft Systems Department and the Personnel Licensing Department of the GACA.

18.5.1.4 TYPE OF DRPE. There is one type of DRPE for examination of remote pilots for operations in the Specific Category. Remote pilots in the Open Category are not required to conduct a practical skills exam and therefore there is no need to appoint DRPE for the Open category.

18.5.1.5 FORMS. There are four forms, associated with the different steps in the process:

- DRPE Designation Application
- DRPE Competency Check
- DRPE Certificate of Designation (CoD)
- Remote Pilot Examination

18.5.1.6 COMPETENCY FRAMEWORK. The DRPE must adhere to the competency framework associated with the type of operation for which the practical skills of the remote pilots are being assessed. The competency framework for Specific Category operations is described in Advisory Circular 107-02 Remote Pilot Certification. The following types of Specific Category operations are distinguished:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Night operations.
- 2) Operations above people.
- 3) BVLOS operations (> 1 km).
- 4) Operations at aerodromes or heliports.
- 5) Operations in non-segregated airspace.
- 6) Transport and/or dropping of cargo/goods.
- 7) Operations with multiple and/or swarms of unmanned aircraft.
- 8) Operations over mountainous terrain, areas with snow or above water.
- 9) Transport of dangerous goods for humanitarian aid or emergency support.

Advisory Circular 107-02 provides – for each of these different types of Specific Category operations – the competencies and observable behaviors that must be examined during the practical skills test. The DRPE must ensure that practical skills tests are designed and conducted such that all required competencies and observable behaviors will be examined in a relevant operational environment.

The DRPE must use the applicable Remote Pilot Competency Checklist(s) to assess Remote Pilots.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 2. Duties, responsibilities and qualifications.

18.5.2.1 DRPE DUTIES

GACAR Part 183 empowers the President to delegate any function relating to “the examination, testing, and inspection necessary to issue a certificate” to private individuals (designees). These designees are subject to any regulation, supervision, and review that the President may prescribe.

A designated Remote Pilot Examiner (DRPE) is authorized to:

- 1) Conduct the practical skills test for designated operations with unmanned aircraft
- 2) Request GACA to issue temporary remote pilot certificate to applicants who successfully completed test(s) and found qualified by the DRPE for the remote pilot certificate

18.5.2.2 DRPE RESPONSIBILITIES

The Inspector must inform DRPE’s about their responsibilities. These include the following:

A. GENERAL. The DRPE may only perform those functions that are stated on his/her Certificate of Designation and only while the certificate remains valid. The holder must comply with the limitations of their appointment as specified in their Certificate of Designation and this E-Book. DRPEs must comply with GACAR Part 107 and other relevant applicable GACARs.

B. INDEMNIFICATION. A DRPE, while acting pursuant to an appointment by the President, as a representative of the President for specific functions. A DRPE is not an employee of GACA and is therefore fully liable for his/her work performed and decisions made as DRPE. GACA will not indemnify DRPE’s against personal liability incurred by reason of any act or omission within the scope of their deployment or duties.

C. PRACTICAL SKILLS TESTING. All practical tests must be conducted in accordance with the relevant GACARs and the associated Advisory Circulars. The DRPE must notify the GACA office of all scheduled tests in advance. Any potential necessary retest should be conducted by a

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

different DRPE whenever possible. Where DRPE resources are limited or if requested by the remote pilot applicant, the UAS Inspector may approve a retest of an applicant by the DRPE that administered the previous practical test.

D. COMPLIANCE WITH POLICY. Use and implement GACA policy and guidance material (for example Advisory Circulars, orders, and policy memos) in addition to the regulations and any other special instructions provided by the GACA to the DRPE.

E. AUTHORIZED FUNCTIONS. Perform only authorized functions within the limits of designated authority. No authorized function may be delegated or transferred to another individual, including when the other individual is also DRPE.

F. BEHAVIOUR. The DRPE must represent the GACA in a manner that reflects positively on the GACA. The DRPE must follow all requirements found in regulations, orders, and other policies related to their duties and responsibilities. The DRPE must serve as unmanned aviation expert within the unmanned aviation sector and demonstrate willingness to maintain skills and knowledge relevant to all the designations held.

G. COMMUNICATION. The applicant for a remote pilot certificate must send the application to the GACA. After the GACA endorses the application and successfully completes the training, the student remote pilot may take the examination with any DRPE appointed by GACA. Before conducting any examination activity, the DRPE must contact the GACA to check if all pre-requisites are fulfilled and to obtain any directions or instructions that are deemed necessary by the GACA, before accepting examinations requested by student remote pilots.

H. SUMMARY ACTIVITY REPORTS. The DRPE must provide information relating to their accomplishments in accordance with requests from GACA. The Summary Activity Reports must be submitted no less than once per three months to the UAS Director.

I. SAFEGUARDING FORMS. The DRPE must ensure that all forms and official documents are properly safeguarded. Under no circumstance may any GACA document be in the possession of an applicant. All official documents related to the examination must include the DRPE's printed or typed name, signature, and designation number. The DRPE must keep copies of the Remote Pilot Certificates issued by the GACA to the remote pilots that passed his/her exam.

J. CONFLICT OF INTEREST. The DRPE is not allowed to perform any authorized functions on behalf of an applicant for which they have, or appear to have, vested interests.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

K. DOCUMENT SUBMITTAL. The DRPE must submit applicable documents within 7 days of completion to the assigned GACA Inspector(s) for review/approval.

L. APPLICATIONS. The GACA must review the application for a practical skills test for operations in the Specific Category on completeness and accuracy. The applicant must discuss the application with a DRPE only after the application has been endorsed by the GACA.

M. COOPERATION. The DRPE must cooperate with GACA during oversight activities and allow GACA to inspect all related/relevant official records/documents at any time.

N. TRAINING/SEMINARS. The designee must attend (recurrent) training/seminars relevant for the authorizations of the designee, especially as requested by GACA.

O. ADMINISTRATION. Familiarize with all necessary administrative procedures, practices, oversight, and official records, and use all pertinent forms and instructions.

18.5.2.3 DRPE LIMITATIONS. A DRPE must not:

A. Administer more than one test at a time and no more than four full practical skills tests per day. In addition to the four full practical tests, at most two retests may be administered on the same day depending on the operations that must be covered.

B. Test Applicants who have not successfully completed the relevant theoretical knowledge examinations for the certificate(s) and/or endorsement(s) sought.

C. Conduct competency checks for UAS operations that are not within the scope of their designations, as listed on the Certificate of Designation (CoD).

18.5.2.4 DRPE QUALIFICATIONS

The Inspector must inform applicant DRPE's about the minimum qualifications, credentials and the requirement to be employed by an approved UAS operator or Remote Pilot Training Organization:

A. MINIMUM QUALIFICATIONS. Applicants for designation as a DRPE must:

- 1) Possess a remote pilot license, issued by the GACA or by a foreign country acceptable to the GACA, in the areas for which the designation is sought.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 2) Demonstrate past professional performance and personal conduct suitable for a position of responsibility and trust, through a reference letter from a previous employer.
- 3) Be able to read, write, speak, and understand the English language.
- 4) Be knowledgeable of the principle of operation centric risk based approach.
- 5) Be thoroughly familiar with instructions as to techniques of examination, assessment of practical skills for UAS operations, and pilot certification.
- 6) Be engaged in the unmanned aviation industry.
- 7) Have a reputation for dependability; and be able to maintain the highest degree of objectivity while performing authorized functions.
- 8) Abide by the policies, rules, and regulations of the GACA.
- 9) The applicant must have up-to-date extensive knowledge and experience that is pertinent to the designation as a DRPE.
- 10) The applicant must have successfully completed one or more of the following basic training courses in Unmanned Aircraft Systems (UAS):
 - ICAO Unmanned Aircraft Systems online courses
 - FAA Part 107 Non-recreational operations of unmanned aircraft
 - EASA A1/A2/A3 UAS Operations in the European Open category
 - Any other courses that the GACA deems necessary or beneficial.
- 11) The applicant must have successfully completed practical skills training in the KSA or a foreign country acceptable to the GACA, for the designation sought.

B. CREDENTIALS. In the application for designation, the DRPE must submit to GACA, copies of the following documents (translated into English if in another language):

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Educational diplomas or degrees obtained (such as BSc, MSc, PhD)
- 2) Certificates of unmanned aviation theoretical knowledge training
- 3) Certificates of unmanned aviation practical skills training
- 4) Official letter or notification demonstrating Radio Telephony (RT) skills
- 5) A valid remote pilot license for all designations sought
- 6) Copy of a valid I.D.
- 7) A current curriculum vitae
- 8) Any other relevant certificates, authorizations or designations

C. UAS OPERATOR/REMOTE PILOT TRAINING ORGANIZATION. DRPE employer must:

- 1) Have approval from the GACA to provide remote pilot examination services
- 2) Approve the request from the applicant to become DRPE.
- 3) Have access to an appropriate operational environment for conducting the practical skills tests for all the designations sought by the applicant DRPE
- 4) Have a valid authorization for all designations sought by the applicant DRPE

18.5.2.5. EXAMINATION RECORD KEEPING REQUIREMENTS.

The GACA must record, validate, and transmit remote pilot certification data in the examination record keeping system, following successful completion of the examination taken by the DRPE. This record keeping system is maintained by the Personnel Licensing (PEL) Department of the GACA.

A. Corrective action may be considered for DRPEs unable to consistently transmit examination information to the GACA within 14 calendar-days following the date of the examination.

B. The GACA will consider the termination of designation of a DRPE who transmits the examination result to the GACA more than 60 calendar-days after the examination date.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.5.2.6. ONGOING REQUIREMENTS OF A DESIGNEE.

In addition to maintaining minimum qualifications as outlined in Article 18.5.2.4 of this chapter, a designee must meet the following obligations:

A. Proficiency Standards. All designees must meet proficiency standards of performing at least 12 examinations for UAS operations per year.

B. Need. If there is a need for a given DRPE, despite an expectation of low performance examinations, the GACA Director UAS must specifically document GACA's need.

C. Examination Requirements.

- 1) DRPEs must personally perform the examinations at the area(s)/location(s) approved by the Director of the Unmanned Aircraft Systems Department.
- 2) When completing the GACA Examination Form, the DRPE must review and provide definitive comments. The DRPE must sign GACA forms electronically.
- 3) The DRPE assumes responsibility for the accuracy and completeness of the total examination report, even if data entry was performed by someone else.
- 4) All examinations must be electronically sent to GACA within 2 weeks. Mailing examinations may be permitted for a very limited time to cover some extenuating circumstances that do not permit electronic transmission.
- 5) DRPEs may not perform self-examinations for issuance of a certificate to themselves or to a family member.
- 6) DRPEs must refrain from performing tests that are not required by the GACA.
- 7) DRPEs must show the valid DRPE Certificate of Designation, if requested.

D. Designees must meet any other requirements deemed necessary by the President.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 3. Selection, appointment and renewal.

18.5.3.1 OBJECTIVE. This section provides specific guidance on the designation and renewal of GACA Designated Remote Pilot Examiners (DRPEs) who are designated under GACAR Part 183 and are providing services in support of unmanned aviation and advanced air mobility activities.

18.5.3.2 GENERAL.

A. Purpose. This section provides procedures for the designation and renewal of GACA designated remote pilot examiners. Designees support the GACA and provide certification services to the public. Designation is a privilege, not a right, and designees are appointed by the President to meet GACA needs.

B. Types of Designated Pilot Remote Pilot Examiner (DRPEs):

- DRPE UAS for examination of remote pilots conducting Specific Category operations

C. Eligibility Requirements. Each applicant must complete an application in a form and manner prescribed by the President.

D. Designee Standards. A DRPE must conduct all practical skills tests according to the applicable guidance in this E-Book.

18.5.3.3 SELECTION AND APPOINTMENT. Candidates selected for designation must be highly experienced, appropriately qualified and must meet all applicable eligibility requirements.

A. GACA Selection Committee (GSC). Depending on the workload involved with the selection process, GACA may elect to create a GSC to improve designee selection and standardization, develop initiatives for the designee program, and represent GACA on designee issues. The GSC may elect to meet on a quarterly basis and schedule additional meetings as required.

If established, the GSC oversees and administers the following functions:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

1) The Designee Candidate Pool. The GSC is responsible for maintaining a designee candidate pool which contains the application files of all designee applicants who meet applicable requirements for the designation sought. The GSC categorizes applicants who are approved for assignment to the designee candidate pool according to the geographical area(s) which the applicant can serve and by the type(s) of designation sought.

2) Designee Applications. The GSC accepts and evaluates applications from designee applicants. The GSC will use the general qualification requirements, technical requirements, and experience criteria being developed by GACA.

B. DRPE Applications. Candidates for initial designation should send a completed application to the UAS Department.

C. Initial Screening. The UAS Department will, potentially after coordination with the GSC, notify the applicant of the results of the initial screening in writing.

D. Practical Test. Each DRPE candidate selected for designation must pass a practical test by a UAS Inspector before GACA issues an initial designation. The practical test assists GACA in determining if the candidate is competent to apply current practical test requirements, procedures, and performance standards for the operation(s) which authorization is sought.

E. Selection. Selection is the process of determining eligibility. This involves the evaluation of an applicant's technical skills and competence in applying those skills in their area of expertise as well as their understanding of GACA policy and guidance.

18.5.3.4 RENEWAL CRITERIA. The designee must satisfy the requirements and follow the procedures set forth in this e-Book and the applicable GACARs.

A. Certification Activity. During the renewal process, the GACA reviews the amount of certification activity to determine the continuing need for that designation. In the case of a DRPE applying for renewal, the following is acceptable:

1) The examiner has, during the previous 12 calendar-months, been practicing the privileges of his skills as DRPE for the Specific Category.

2) For renewal of endorsements associated with Specific Category operations, the examiner

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

has been practicing these endorsements as remote pilot during the previous year.

3) In extenuating circumstances, the GACA may authorize an exception to the above requirements, by including a written memorandum in the examiner's file to substantiate the circumstances.

B. Reissuance of Certificate of Designation (COD). The COD is valid until the expiration date shown on the COD. The GACA will reissue the COD with each designation renewal.

C. Renewal Test. DRPEs must demonstrate knowledge and skill by the satisfactory completion of an annual renewal test appropriate to the designation and authorizations, if a renewal test is required. A renewal test by the GACA may occur at any time during the year considered appropriate by the GACA, provided a renewal record properly documents the renewal test.

18.5.3.5 REINSTATEMENT. A former designee whose privileges were terminated may apply for reinstatement, provided poor performance, judgment, or integrity were not the basis for the termination. The President may reinstate the designation only if that designee meets the requirements and procedures for an original issuance of the designation.

A. Standardization Training. If the designation has been terminated for more than 36 calendar months, the designee must satisfactorily complete an initial training before reinstatement. If the designation has been terminated for less than 36 calendar months, the applicant may be appointed as a DRPE if he/she meets that recurrent training requirement for the designee type.

B. Demonstration of Competency. If the designation has been expired for less than 12 calendar months, the GACA may require a demonstration of competency for reinstatement.

C. Reissuance of a COD. To qualify for the reissuance of a COD, a reinstated designee must demonstrate competency appropriate for the authorization sought.

D. Designation Number. Use the original designation number for the reinstatement.

18.5.3.6 DESIGNATION NUMBERING. All DRPEs are assigned a unique identifier number.

18.5.3.7 PROCEDURES FOR INITIAL DESIGNATION.

A. Eligibility and appointment. Successfully meeting eligibility requirements does not

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

guarantee appointment as a designee. GACA senior management determines the need for a designee.

B. Selection. The GACA reviews the application package.

For each prospective DRPE candidate, an Inspector must check enforcement records within GACA to ensure that the applicant has an acceptable enforcement history.

a) Prior to designation and/or renewal of a designee, the Inspector must conduct a review of the designee's enforcement history (including all remote pilot certificates held) to determine if there is a regulatory violation history. Applicants for designation and/or renewal should have no more than two separate incidents involving GACAR violations in the last 5 years. A candidate with a revoked remote pilot certificate is ineligible for appointment, regardless of the number of violations.

b) In the case of a violation history that is not disqualifying, an Inspector must conduct an evaluation to ascertain the type of violation(s) and any special or mitigating circumstances, and the applicant's attitude toward compliance with the GACAR.

1) The Inspector assesses each designee candidate's knowledge and experience through review of the application and consultation with others who are familiar with the designee.

2) The Inspector submits the findings and recommendations to the D-UAS. The Inspector provides the following information to the D-UAS on each prospective designee candidate:

- Enforcement and accident history report
- The designee candidate's application
- Any other pertinent information, references, or recommendations

C. Remote Pilot Examiner Practical Test. The practical test for initial remote pilot examiner designations, issuance of additional remote pilot examiner designations, and renewal of remote pilot examiner designations must contain both the appropriate oral questioning and unmanned aircraft performance in accordance with the competency-based framework. A complete pretest,

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

preflight, and postflight briefing must be completed for any practical test.

1) Methods of Testing. In order of preference, an Inspector will choose one of the following methods to test a remote pilot examiner applicant:

a) The Inspector will observe the remote pilot examiner applicant testing an actual remote pilot applicant for a certificate. The Inspector will evaluate the remote pilot examiner applicant's performance while the remote pilot examiner applicant evaluates the remote pilot applicant. Hold in private any discussion between the remote pilot examiner applicant and the UAS Inspector concerning the remote pilot examiner applicant's performance with the remote pilot applicant.

b) The UAS Inspector will play the role of a remote pilot applicant for a certification practical skills test appropriate to the type of designation the remote pilot examiner applicant is seeking. The UAS Inspector may intentionally answer a question incorrectly to test whether the DRPE applicant recognizes an incorrect answer.

c) The UAS Inspector will test the remote pilot examiner applicant on selected maneuvers to assess the remote pilot examiner applicant's flight proficiency and ability to evaluate a remote pilot applicant with the competency-based framework.

2) Practical Test Roles. Where the UAS Inspector plays the role of a remote pilot applicant during a simulated practical test, the simulated practical test will be appropriate to the type of designation that the pilot examiner is seeking.

3) Scheduling. Since a remote pilot examiner applicant's availability may be incompatible with the UAS Inspector's normal duty hours, the UAS Inspector will make every effort to be flexible when scheduling tests with remote pilot examiner applicants.

4) Authority to Issue Documentation After the Practical Test. The UAS Inspector completes the documentation, potentially with the support of the DRPE applicant. Only the UAS Inspector has the authority to sign and issue the documentation for further processing.

D. Appointment.

1) Schedule Meeting with Applicant. After the Director Unmanned Aircraft Systems Department, after consultation of the GSC, if established, decides upon a qualified designee

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

candidate, the Inspector schedules an appointment for the designee candidate to meet with the Inspector and/or take a practical test, if applicable.

2) Designee Candidate Appointment with Inspector. When the designee candidate arrives for the scheduled appointment, the Inspector:

- Inspects acceptable forms of identification to establish designee candidate's identity.
- Reviews applicable records including the designee candidate's certificates and logbooks (if applicable) to ensure the remote pilot is appropriately certificated and verify the aeronautical experience indicated.
- Proceeds with the practical test, if applicable.

E. UAS Inspector's Actions. When issuing an initial designation:

- 1) The UAS Inspector prepares the designee file.
- 2) The UAS Inspector prepares the appropriate COD, including signature.
- 3) The UAS Inspector forwards the authorization documentation to the designee.

18.5.3.8 SPECIAL AUTHORIZATION. DRPEs who are authorized to conduct practical tests for Specific Category operations requiring specific endorsement training, will receive a special authorization on their COD. The COD is valid until the expiration date shown.

18.5.3.9 ADDITIONAL DESIGNATIONS. A remote pilot examiner may receive additional designations by completing the same procedures used for original designation. The DRPE candidate must hold the certificate, endorsement(s) and rating(s), without limitation, appropriate to the designation sought.

A. Requirements. Each additional designation requires a demonstration of competency. The UAS Inspector updates the existing COD to a new COD showing all designations, including the newly obtained. When a designation is added, the existing designation(s) may be renewed.

B. Qualifying for Additional Designations. If the DRPE candidate has already satisfactorily completed all the maneuvers and procedures for certain designation(s), then only those additional maneuvers and procedures that may be added would require additional testing.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

18.5.3.10 RENEWAL—TECHNICAL ADMINISTRATION.

A. Application for Renewal. Designees should apply for renewal at least 45 calendar days before their certificate expires.

B. Recurrent Training Requirements. The designee's renewal application package should include a certified copy of any training received, including recurrent training courses. Designees must always maintain training currency for the designation to be effective.

C. Renewal for DRPE Authorization. A UAS Inspector may administer a renewal test for renewing DRPE's authorization by one of the testing methods as stipulated in 18.5.3.7.C(1).

D. Inspector's Action. When reviewing the designee's renewal application package:

1) The Inspector must determine, in consultation of the D-UAS and the GSC, if established, whether the designee should be renewed or terminated.

2) If it is decided to renew the designee, the Inspector must prepare and issue a new COD listing the designations and authorizations renewed.

3) If it is decided to terminate the designation, the Inspector must follow the process prescribed in Section 3 of this chapter.

18.5.3.11 TASK OUTCOMES.

A. Results. Completion of this task results in issuance or renewal of a Certificate of Designation

B. Complete and close the designation or renewal record.

18.5.3.12 FUTURE ACTIVITIES.

A. Recordkeeping. The UAS Department is responsible for keeping a record of the DRPE.

B. Designee Oversight. Conduct designee oversight and surveillance.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 4. Surveillance and evaluation.

18.5.4.1. OBJECTIVE. This section provides guidance to UAS Inspectors conducting surveillance of DRPEs who are designated under GACAR Part 183 and are providing services in support of unmanned aviation.

18.5.4.2. GENERAL. UAS Inspectors will accomplish the surveillance of designees in accordance with the provisions of this E-Book and GACAR Part 183

A. Definitions (as used in this chapter).

- 1) Applicant. A person being tested for a remote pilot certificate or specific endorsement.
- 2) High Activity DRPE. An examiner who conducts 50 or more practical tests during a given quarter.
- 3) Surveillance. A function used to evaluate a remote pilot examiner's ability to conduct remote pilot certification activities as authorized.

B. Competency-Based Framework. DRPEs will conduct and score all oral and practical tests in accordance with the Competency-Based Framework for the remote pilot certificate sought.

18.5.4.3. INSPECTION.

A. Annual Inspections. All DRPEs must undergo inspection at least once a year. GACA senior management may decide to require more frequent inspections.

B. High Activity DRPE. In addition to the annual inspection described above, high activity examiners will undergo evaluation at least one additional time during the year. This additional inspection requires that an UAS Inspector observe the examiner administer at least one complete practical test.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

C. Other Inspections. UAS Inspectors responsible for oversight may want to consider additional inspections and surveillance of examiners under the circumstances listed below.

- 1) An examiner whose practical test passing rate exceeds 90 percent
- 2) An examiner who conducts three or more complete practical tests on a given day
- 3) An examiner who tests a student trained by that examiner without approval from GACA
- 4) An examiner who is the subject of a valid public complaint
- 5) An examiner who has been involved in an accident, incident, or a GACAR violation

18.5.4.4. OVERSIGHT.

A. Surveillance. Surveillance should include at least one visit every year to a remote pilot examiner's base of operations. The UAS Inspector may ask a remote pilot examiner at any time to demonstrate his/her practical skills for the certifications and endorsements held.

B. Inspections. In order of preference, the UAS Inspector may choose one of the following methods to evaluate an examiner:

- 1) Observe a complete practical skills test.
- 2) Act in the role of an applicant for a practical test.
- 3) Test the examiner on selected maneuvers to assess the examiner's flight proficiency and ability to evaluate in accordance with the Competency-Based Framework.

C. Recordkeeping. Retain reports of all surveillance in the remote pilot examiner's designee file.

18.5.4.5. PROCEDURES.

A. Pre-Inspection Activity.

- 1) The Inspector reviews the examiner's designee file

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

2) Conduct interviews of recently certificated remote pilots, if needed.

B. Method of Inspection. In order of preference, the UAS Inspector may choose one of the testing methods as stipulated in 18.5.3.7.C(1).

C. The Inspector opens a surveillance and evaluation record.

D. During the Inspection. The Inspector verifies the examiner's identity, and examines the examiner's remote pilot certificates, medical certificate, and COD.

18.5.4.6. TESTING PROCEDURES. The Inspector conducts the inspection of the examiner according to one of the methods as stipulated in 18.5.3.7.C(1).

18.5.4.7. INSPECTION RESULTS. Based upon the results of the method of inspection, the UAS Inspector determines whether the examiner's performance is satisfactory or unsatisfactory.

A. Satisfactory Performance. The Inspector records the examiner's satisfactory performance on a form/checklist that will be signed by the Inspector and the examiner at the end.

B. Unsatisfactory Performance. The Inspector records the examiner's unsatisfactory performance on a form/checklist and determines which of the following actions is appropriate:

- 1) If the examiner's performance is unsatisfactory, but the Inspector determines that additional training may correct the deficiency, training will be accomplished. The examiner must receive a satisfactory evaluation before exercising testing privileges.
- 2) If the examiner's performance is unsatisfactory to the extent that additional training is inappropriate, the Inspector must take action to terminate the examiner's authority.
- 3) If the Inspector has reason to believe the examiner may not be qualified and/or competent to exercise the privileges of the remote pilot certificate and/or any endorsement held by that examiner, a practical skills test of the examiner may be scheduled by the GACA.

18.5.4.8. TASK OUTCOMES. Completion of this task will result in the completion of the surveillance and evaluation record and one of the following:

A. Satisfactory Performance Indication. If the DRPE's performance is satisfactory, the Inspector

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

must place the signed form/checklist to that effect in the designee's file.

B. Unsatisfactory Performance Indication. If the DRPE's performance is unsatisfactory, the Inspector must place the signed form/checklist to that effect in the examiner's designee file, and one of the following actions may be warranted:

- 1) Suspension of the DRPE's designation
- 2) Termination of the DRPE's designation
- 3) Counseling or other corrective action to obtain satisfactory performance

18.5.4.9. FUTURE ACTIVITIES.

- Recordkeeping of completed certificates and/or endorsements as submitted by the designated remote pilot examiner
- Maintenance of records according to GACA procedures
- Addition of examiner designations in the COD
- Renewal of the designation, before the annual expiration date
- Reinstatement of the designation, after expiration of designation
- Additional surveillance of the remote pilot examiner

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

CHAPTER 5. DESIGNATED REMOTE PILOT EXAMINER

Section 5. Suspension and termination.

18.5.5.1 OBJECTIVE. This section provides UAS Inspector guidance on the suspension and termination of a Designee Remote Pilot Examiner (DRPE). The designee's appeal rights are addressed under General Authority of Civil Aviation Regulation (GACAR) Part 13.

18.5.5.2 GENERAL. Under the provisions of this section and GACAR Part 13, the President may rescind the delegation at any time and for any reason he deems appropriate. The President may determine whether to renew, suspend or terminate delegation for any reason he deems appropriate.

UAS Inspectors should keep in mind that a suspension or termination of designation may be appealed by the designee. Therefore, UAS Inspectors should include documentation relating to designee deficiencies or termination in the designee's file.

18.5.5.3 SUSPENSION. Suspension is the action by the GACA to temporarily revoke or to rescind a designee's authority at any time and for any reason the President considers appropriate.

18.5.5.4 TERMINATION. Termination is the action by the GACA to not renew or to rescind a designee's authority at any time and for any reason the President considers appropriate.

18.5.5.5 REASONS FOR SUSPENSION OR TERMINATION.

A. There are two types of Suspension or Termination:

- 1) "For cause" is a negative finding based on a designee's performance.
- 2) "Not-for-cause" can be for any reason not specific to a designee's performance (e.g., lack of need for the designee or voluntary surrender).

B. Examples of Deficiencies. The following are examples of deficiencies in a designee's performance:

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

- 1) Unsatisfactory performance in any phase of designee duties or responsibilities, including the inability to accept or carry out the GACA instructions.
- 2) Any actions by the designee that may reflect poorly on the GACA such as misuse of the designation or failure to maintain a reputation for integrity and dependability in the industry and the community.
- 3) The inability of the designee to work constructively with the GACA personnel or the public.
- 4) Evidence that the designee did not meet general and/or professional qualifications and requirements at the time of the original designation or at any time thereafter.
- 5) A designee's inability to demonstrate satisfactory performance during a knowledge and skill evaluation.
- 6) A designee's failure to maintain, or inability to demonstrate, qualifications for any certificate, rating, or examiner designation held.

C. Documentation. The UAS Inspector must document deficiencies in the performance of the DRPE in the designee file. The UAS Inspector must include any correspondence relating to the designee's deficiencies, including but not limited to corrective action taken or a record of additional training.

18.5.5.6 PROCEDURES.

- A. The Inspector opens a suspension and termination record.
- B. Decision to Suspend. GACA suspends designations under GACA enforcement procedures.
- C. Decision to Terminate. GACA terminates designations under GACA enforcement procedures.
- D. Notification. The UAS Inspector must provide to the designee, in writing, the decision regarding the suspension or termination of a designation, with the reasons cited as specifically as possible. Upon notification of suspension or termination, the designee must immediately cease the exercise of his designee privileges.

EBOOK VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

E. Documentation. If the President suspends or terminates a designation, the following actions must also take place:

- 1) The UAS Inspector must ensure that all Inspectors with oversight of other designations that the individual holds are notified of the actions taken.
- 2) Update the designee file to reflect the appropriate designation status (e.g., suspension, termination, appeal pending, or reinstatement).

F. Appeal of Suspension or Termination. Designees cannot appeal termination based on the following conditions:

- 1) Lack of need
- 2) Loss of a prerequisite certification
- 3) Failure to meet training requirements

If the designee wishes to appeal his suspension or termination, the designee must make the request in writing in accordance with the appeal procedures prescribed in GACAR Part 13.

G. The Inspector closes the suspension and termination record.

18.5.5.7 TASK OUTCOMES. After completion of task, the Inspector must update designee file to include:

- A copy of the designee's documentation evidencing the voluntary surrender of the designation
- Documentation of suspension of designee's authority, including supporting documentation
- Documentation of termination of designee's authority, including supporting documentation
- Documentation of the outcome of the designee's appeal, including reinstatement, if applicable

18.5.5.8 FUTURE ACTIVITIES. Additional surveillance of the designee, if designee is reinstated.

VOLUME 18. UNMANNED AIRCRAFT SYSTEMS

APPENDIX A. LIST OF FORMS

1. Application for Registration of Unmanned Aircraft System
2. Certificate of Registration of Unmanned Aircraft System (CR-UAS)
3. UAS Declaration of Compliance (DoC)
4. Application for UAS DoC Evaluation

5. Application for a Remote Pilot Certificate
6. Remote Pilot Self-Declaration for the Open Category
7. Certificate of Completion of Theoretical Knowledge Test
8. Remote Pilot Certificate for the Open category (RPC-O)
9. Application for Practical Skills Test for the Specific Category
10. Remote Pilot Assessment Checklist
11. Certificate of Completion of Practical Skills Test
12. Remote Pilot Certificate for the Specific category (RPC-S)

13. Application for a Permit to Operate in the Open category
14. Application for an Operational Authorization in the Specific category
15. Permit to Operate in the Open Category
16. Operational Authorization for the Specific Category (OA)

17. Application for a UAS Operator Certificate in the Specific category
18. UAS Operator Certification Job Aid (Part 107)
19. CPM Designation Notification to Applicant
20. UOC Meeting Attendance Roster
21. UOC Pre-Application Checklist
22. UOC Schedule of Events
23. UOC Compliance Statement
24. UAS Operator Certificate (UOC)
25. UAS Operations Specifications

26. Application for DRPE Designation
27. Certificate of DRPE Designation (CoD)
28. DRPE Evaluation Checklist.