



TP 15395 E (09/2018)

# Flight Reviewer's Guide for Pilots of Remotely Piloted Aircraft Systems 250 g up to and including 25 kg, Operating within Visual Line-of-Sight (VLOS)

**First Edition** 

09/2018



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# Flight Reviewers and the flight review for small Remotely Piloted Aircraft Systems (RPAS)

# Introduction

# Objective

The objective of the flight review is to verify a pilot's ability to fly their RPAS in the advanced environment.

The *Canada Gazette* I proposal, introduced the concept of a Pilot Permit for operators flying remotely piloted aircraft (RPA) in an advanced environment, and the regulations published in *Canada Gazette* II (CGII) are retaining this obligation through the requirement to obtain a Pilot Certificate endorsed for Advanced Operations. In order to apply for the Pilot Certificate endorsed for Advanced Operations, the operator must successfully pass the Remotely Piloted Aircraft System– Advanced Operations exam, and then subsequently complete a flight review. For the purpose of the flight review, Transport Canada (TC) is using third parties to evaluate and determine whether a pilot can fly their RPAS safely in order to receive their pilot certification.

# Steps to becoming a Flight Reviewer before the new regulations come into force

Before the new regulations come into force into force, RPA pilots of existing TP 15263E Self-Declared RPAS training providers will be asked if they would like to become a RPAS Flight Reviewer. If they would like to participate, they must meet the minimum criteria:

**Note:** some requirements may be waived to provide a seed list of reviewers before the new regulations come into force. These requirements will also be the same for future Reviewers after the new regulations come into force.

- 1. Be a minimum of 18 years of age
- 2. Must have a minimum of 6 months flying experience as per CAR 901.83 (c)
- 3. Must have obtained their Pilot certificate small remotely piloted aircraft (VLOS) endorsed for advanced operations
- 4. Must have successfully completed the Flight Reviewer Exam
- 5. Must be trained to TP 15263E
- 6. Must read and comply with TP 15395 E Flight Reviewer's Guide
- 7. Must be directly affiliated with a TP 15263E Self-Declared RPAS Training provider
- 8. Every 2 years, to maintain Flight Reviewer role, must complete recency requirements as per CAR 901.65
- 9. The candidate must have no enforcement action against them, past or pending
- 10. A good record with respect to aviation

Once RPAS pilots of existing TP 15263E self-declared RPAS training providers have identified that they meet the minimum criteria, they will be required to create an account in the Drone Management Portal, and successfully complete the Remotely Piloted Aircraft System– Advanced Operations exam. TC will waive the flight review portion of the Pilot certificate – small remotely piloted aircraft (VLOS) endorsed

for advanced operations (for pre CGII coming into force candidates only) and they will be permitted to apply for and complete the Remotely Piloted Aircraft System-Flight Reviewer (RPASFR) exam. If they successfully pass they will be issued their Pilot Certificate – Small Remotely Piloted Aircraft (VLOS) endorsed for Advanced Rating and endorsed for Flight Reviewer.

They may begin accepting flight reviews for sRPA pilots-to-be upon the issuance of their Pilot Certificate - Small Remotely Piloted Aircraft (VLOS) endorsed for Flight Reviewer and a valid association with a listed TP 15263E self-declared RPAS training provider within the Drone Management Portal.

Reviewers will be assigned unique Reviewer numbers that will be generated in the Drone Management Portal in order to verify their identity and prevent others from falsely attempting to become Reviewers without TC approval.

# Steps to becoming a Flight Reviewer after the new regulations come into force

After CGII publication, and once pilots have gained a minimum of 6 months experience in the advanced operations environment, plus they have met all the other requirements above, they can apply within the Drone Management Portal to become Flight Reviewers.

# Role of the Flight Reviewer during a flight review

- Third party Reviewers will act on behalf of the Minister to perform their duty.
- The Flight Reviewer may charge a fee to perform the flight review.
- TC will reserve the right to revoke a Flight Reviewer's authority under various criteria listed in this TP 15395 E document, such as:
  - Performing a number of flight reviews that would not be feasible in a normal work day as per this TP 15395 E document.
  - Or if they have falsely claimed they have met the minimum requirements to become a Flight Reviewer.
- TC will be able to pull data from the Drone Management Portal such as how many flight reviews a Flight Reviewer has completed, which would allow TC to perform surveillance on the Flight Reviewer. If there are any issues with a Flight Reviewer or associated TP 15263E self-declared RPAS training provider, they will have their ability to enter data into the Drone Management Portal removed and will be contacted by TC to complete any required remedial action.
- As part of the review process and quality assurance (QA), the Drone Management Portal (DMP) is setup in such a way, that the only way for a candidate to apply for a Pilot certificate small remotely piloted aircraft (VLOS) endorsed for advanced operations, is to pass the Remotely Piloted Aircraft System Advanced Operations exam and pass the flight review. The only way for the attestation of the flight review to be entered into the system is via a registered Flight Reviewer log in.
- After a candidate has passed their Remotely Piloted Aircraft System
  – Advanced Operations
  exam they may contact a TP 15263E self-declared RPAS training provider listed in the Drone
  Management Portal and make arrangements for a flight review with the listed training provider
  (note: only Flight Reviewers from training providers on the Transport Canada list will be
  permitted to enter results into the Drone Management Portal).
- The first level of candidate authentication is via the Drone Management Portal and registering for a GCkey account. The second and most important one is when the candidates are ready to do a flight review with a Flight Reviewer. They will be issued a unique reference number directly

linked to their Drone Management Portal account and additionally a second reference number for successfully passing their Small Remotely Piloted Aircraft (VLOS) – Advanced Operations exam. These two numbers are to be provided to the Flight Reviewer. The Flight Reviewer (who will already have an account in the Drone Management Portal) then can log onto the Drone Management Portal via the internet (tablet, laptop, etc.). He or She can then input these two numbers into the Drone Management Portal and will be brought to a screen that will show the candidate's personal information. Without these 2 separate numbers (that will only be provided by the candidate), the Flight Reviewer will never have access to any candidate's information. At this point the Flight Reviewer will verify the candidate's identity using government issued documents provided by the candidate (such as a driver's license, health insurance, etc.) and if there are no issues, the Flight Reviewer can perform the flight review with the candidate.

**Note:** Flight Reviewers or TP 15263E training provides are not to copy candidate's identity documents, they merely use them to verify the candidate's identity.

- The guidance material for the Flight Reviewers and how to conduct the flight review is the basis of this TP 15395 Document and is based on the regulations.
- The guidance material for what exercises are expected to be covered on a flight review is available in appendix A of this TP 15395 Document.
- At the completion of the flight review, the Flight Reviewer will confirm verbally with the candidate whether the candidate has passed or failed the flight review and enter the results in the Drone Management Portal.

# **Completion of a flight review**

- If the pilot passes their flight review, they will have the ability to apply for a Pilot certificate small remotely piloted aircraft (VLOS) endorsed for advanced operations. The Drone Management Portal will record the results of the flight review automatically registering the event in both the Flight Reviewer's account and the Applicant's account. If the flight review was successful the applicant will be provided the opportunity to apply for the Pilot Certificate endorsed for Advanced Operations through their personal Drone Management Portal account.
- If a pilot fails their flight review, they can re-test (providing the Flight Reviewer has availability) after 24 hours.

# Flight Reviewer policy, directions, and guidance

# **Definitions and abbreviations**

The following definitions and abbreviations are used in this document:

**Conduct**: to take an active role in all phases of a flight review, including pre-flight preparation, the briefing, the control and pace of the various sequences, the assessment of the flight review candidate's performance, the debriefing, and the completion of the required documents including certification of the candidate's licence.

**Flight Reviewer**: A pilot who holds a certificate for small RPA (VLOS) - advanced operations with a flight reviewer rating that permits them to conduct flight reviews when affiliated with a self-declared TP15263 RPAS training provider.

**sRPA**: a small remotely piloted aircraft between 250g to 25Kg operated with in visual line of sight (VLOS).

**Flight review**: an event having a series of tasks, exercises and manoeuvres performed by a candidate for the purpose of determining if that person meets the minimum skill requirements for the issuance of the certificate sought.

# **Criteria for receiving Drone Management Portal privileges**

# Need

A Flight Reviewer – sRPA will be granted Drone Management Portal privileges by Transport Canada via the Drone Management Portal based on the need for this service. The need will be based on the following criteria, but not limited to:

- 1. a requirement for the Flight Reviewer sRPA to conduct at least 10 flight reviews annually
- 2. the number of Flight Reviewer sRPA available to provide the service in a geographical area
- **3.** the logistical advantage to Transport Canada for the provision of the required level of flight reviewer services

# **Qualifications and experience**

A Flight Reviewer – sRPA candidate requires:

- 1. A valid Pilot certificate small remotely piloted aircraft (VLOS) endorsed for advanced operations
- 2. Be a minimum of 18 years of age
- 3. Must have a minimum of 6 months experience as per CAR 901.83 (c)
- 4. Must have successfully completed the Remotely Piloted Aircraft System-Flight Reviewer (RPASFR) exam
- 5. Must be trained to TP 15263E
- 6. Must read, understand and comply with TP 15395E
- 7. Must be directly affiliated with a TP 15263E Self-Declared RPAS Training provider
- 8. The candidate must have no enforcement action against them, past or pending
- 9. Every 2 years, to maintain Reviewer role, must complete recency requirements as per CAR 901.65
- 10. A good record with respect to aviation

# Associating process

Once the sRPA pilot has received their Pilot Certificate - Small Remotely Piloted Aircraft (VLOS) endorsed for Flight Reviewer, they may the contact any school/trainer listed on the TP 15263E RPAS training provider list and request association with that provider. Once the provider notifies Transport Canada

that the Flight Reviewer is associated with them, the Flight Reviewer will be granted privileges within the Drone Management Portal to conduct and enter flight review results. If a Flight Reviewer wishes to change their associated provider they may do so, but they may not conduct or enter data in the Drone Management Portal until there is a new association within the Drone Management Portal.

NO flight reviews may be conducted or entered into the Drone Management Portal if there is no valid association with a listed TP 15263E provider. The Flight Reviewer will have no Drone Management Portal privileges during this time.

# Training

It is recommended that Flight Reviewers receive additional direct training from their associated TP 15263E training provider to ensure that the level of service and quality is at a satisfactory level of the training provider. The following items are what would be expected to be the minimum level completed.

# **Training assignment**

Candidates are expected to complete a training assignment with their RPAS self-declared training provider that will be corrected to 100%, that covers the following items, but not limited to:

- 1. Flight Reviewer's Guide for Pilots of Remotely Piloted Aircraft Systems (TP 15395E)
- 2. Canadian Aviation Regulations Part IX
- 3. Flight Instructor Guide Aeroplane (TP 975)

# Briefing

An existing Flight Reviewer should brief a new Reviewer candidate on how flight reviews are to be conducted and will cover at least:

- 1. Flight Reviewer RPAS's roles and responsibilities
- 2. principles of evaluation
- 3. pre-flight review administration
- 4. flight review ground portion activities
- 5. flight review flight portion activities
- 6. post-flight activities
- 7. flight review report completion and distribution
- 8. other applicable concerns

# Practical training

The trainee should observe a minimum of two flight reviews for the advanced environment.

# Standardization workshop

Candidates may be asked to attend a Flight Reviewer – RPAS standardization workshop when directed by Transport Canada.

# **Drone Management Portal privileges**

# **General Conditions**

These general conditions associated with Flight Reviewer's Drone Management Portal privileges:

- that the person understands that the conducting of flight reviews as a Flight Reviewer RPAS is a privilege and not a right and may be cancelled or suspended for breach of a condition of issuance, administrative reason or for any other reason set out in sections 6.9 to 7.1 of the Aeronautics Act
- 2. that the person knows, accepts and will carry out the following responsibilities, duties and functions of a Flight Reviewer:
  - a) ensure that a flight review candidate meets the prerequisites pursuant to *Canadian Aviation Regulations* (CAR) 921.06 Conduct of Flight reviews
  - b) ensure that aircraft used for flight reviews, for applicable certificates, are flown in accordance with the requirements of Part IX of the *Canadian Aviation Regulations* (CARs)
  - c) ensure a safe flight by notifying immediately the PIC of a sRPA when any action or lack of action by the candidate jeopardizes safety
  - d) assess a flight review candidate's performance in accordance with the competency standards expressed in this guide
  - e) conduct a flight review in accordance with the applicable techniques and procedures outlined in the Flight Reviewer's Guide for Pilots of Remotely Piloted Aircraft Systems (TP 15395E)
  - f) complete all administrative requirements as outlined in the Flight Reviewer's Guide for Pilots of Remotely Piloted Aircraft Systems (TP 15395E)

# Maintaining Drone Management Portal privileges

Flight Reviewer – RPAS privileges are subject to the Flight Reviewer – RPAS continuing to meet the following requirements:

- 1. continuing need at a particular location
- 2. continuing to meet the requirements for the initial appointment
- 3. continuing to honour the conditions of issue of the Pilot Certificate Small Remotely Piloted Aircraft (VLOS)-Flight Reviewer
- conducting flight reviews in accordance with the terms and conditions stipulated in the TP 15395 E
- 5. completing more flight reviews per day than would be reasonably expected
- 6. successfully completing a standardization workshop for conducting flight reviews when requested by Transport Canada

# **Cancellation or suspension of Drone Management Portal privileges**

Minister will cancel a Flight Reviewer – RPAS's Drone Management Portal privileges based on any of the following:

- 1. a record of conviction of an offence punishable on summary conviction under 7.3 of the *Aeronautics Act* or the *Canadian Aviation Regulations*
- 2. evidence of malpractice or the fraudulent use of the designation

Minister may suspend a Flight Reviewer – RPAS's Drone Management Portal privileges based on any of the following:

- 1. an administrative monetary penalty assessed in accordance with sections 7.6 to 8.2 of the *Aeronautics Act*, where there has been a violation of a designated provision
- 2. the suspension of a Canadian Aviation Document in accordance with section 6.9 of the *Aeronautics Act*, in respect of any contravention of a provision of Part I of the *Aeronautics Act*
- 3. a change in the Transport Canada Flight Reviewer RPAS program
- 4. insufficient need for the service
- 5. failure to comply with the requirement to maintain an association with a TP 15263E selfdeclared RPAS training provider
- 6. failure to attend Flight Reviewer RPAS workshops if requested by Transport Canada
- 7. failure to maintain a valid Pilot certificate small remotely piloted aircraft (VLOS) endorsed for advanced operations
- 8. requiring repeated direction from Transport Canada in the proper conduct and administration of flight reviews
- 9. completing more flight reviews per day than would be reasonably expected
- 10. failure to conduct flight reviews in accordance with this guide
- 11. failure to comply with the terms and conditions set forth and agreed upon in this guide
- 12. the need to assess the circumstances following an incident or accident

**NOTE:** If there are issues with any Reviewer they will be removed from the list of available Reviewers (not able to enter results in the Drone Management Portal) and will be contacted by TC to complete any required remedial action.

# **Reinstatement of Drone Management Portal privileges**

Minister may consider the reinstatement of Drone Management Portal privileges at any time deemed appropriate where it is in the interest of need and service to the public. The criteria for initial appointment must be met.

# Responsibilities

# **Recurrent monitoring**

The Flight Reviewer – RPAS program is monitored by:

- 1. reviewing flight review records and flight review reports submitted in the Drone Management Portal
- 2. flight reviewing a candidate that was recommended for a Pilot Certificate Advanced Rating by the Flight Reviewer RPAS
- the observation of any portion or all of a flight review being conducted by the Flight Reviewer RPAS

- 4. remedial training provided to an Flight Reviewer RPAS to correct deficiencies detected during other monitor activities or as requested by Transport Canada
- 5. conducting a flight review of the Flight Reviewer RPAS

Reviewers are encouraged to contact Transport Canada at least once a year to review their Flight Review Records.

# Standardization

When requested by a Transport Canada Inspector, a Flight Reviewer – RPAS is required to:

- 1. allow an Inspector to accompany them during any part or all of a flight review
- 2. allow an Inspector to conduct any part or all of a flight review
- 3. attend any workshops or meetings sponsored by Transport Canada
- 4. complete a standardization flight review with a Transport Canada Inspector

# **Prompt service**

Flight Reviewer – RPAS s have an obligation to provide prompt flight review services to any candidate who meets the experience and knowledge requirements for that review.

# **Flight review service**

All Flight Reviewer – RPAS are expected to provide good service. They are expected to be on time, to ensure that the flight review is conducted in a setting that provides privacy, to have any calls held, and to eliminate interruptions. They are expected to be polite and respectful toward review candidates, and to be well organized and businesslike in their conduct of flight reviews.

# Prompt forwarding of flight review reports

Flight review reports (*passed*) are to be completed within the Drone Management Portal within 24 hours after the flight review. This file is subject to review by Transport Canada at any time.

In the event of a failed flight review, the Flight Reviewer – RPAS shall complete the appropriate portions of the flight review report, recording the failure and entering the report into the Drone Management Portal without delay. It is not acceptable to hold a failed report until a subsequent flight review has been successfully completed as there is a mandatory 24 hour delay in conducting another flight review after a failed one.

#### **Maintaining currency**

Flight Reviewer – RPAS s are expected to maintain a high degree of proficiency in flying skills and evaluation techniques. Flight Reviewer – RPAS s are encouraged to make application to attend Flight Instructor Refresher Courses or other related courses to keep abreast of new developments in pilot training and RPAS operations.

# Request for review of a Flight Reviewer - RPAS's decisions

If a case arises where a candidate is not satisfied with how a flight review was conducted, a written request, with details, to redo a Flight Review may be forwarded to your regional Transport Canada office. In such cases, a Transport Canada – Flight Inspector may conduct the flight review or assign another Flight Reviewer – RPAS to conduct the flight review. On such reviews, the applicant shall be given a complete review, including any items already assessed as passed on the previous review.

# **Reviewing Flight Reviewer - RPAS's own family members**

Flight Reviewer – RPAS shall not conduct flight reviews for immediate family members, including parents, spouses, children, grandchildren or stepchildren, unless a Transport Canada Inspector monitors the flight review or written authorization has been granted by Transport Canada.

# **Flight review results**

The *Privacy Act* protects the privacy of individuals with respect to personal information about themselves held by a government institution.

Personal information may be disclosed in accordance with Section 8(2)(a) of the Act, which allows disclosure, "for the purpose for which the information was obtained or compiled by the institution or for a use consistent with that purpose". The purpose for which flight review information is obtained is to ensure the safety of aviation in Canada. The specific purposes are to measure whether the candidate meets the minimum skill standards for a licence or rating or certificate, whether the Flight Reviewer – RPAS is conducting the flight review in accordance with the standards and this guide.

Specific information about the results of a flight review will not be given by Transport Canada to anyone but the individuals named on the flight review report except in accordance with the *Privacy Act*.

# Security of flight review results

Pursuant to the *Privacy Act*, flight review results are records of personal information and as such must be treated as confidential information by all parties privy to the results. Appropriate security measures must be taken to ensure that accessibility to the documents is restricted to those rightfully in possession of them.

# **Appendix A:**

# Guide to the flight review - RPAS

This reference document sets out the skill requirements for the flight review – RPAS required for candidates wishing to apply for a pilot certificate – small remotely piloted aircraft (VLOS) endorsed for advanced operations.

The goal of the flight review – RPAS is to ensure that the candidate has all the required skills to plan and execute an RPAS flight safely and efficiently.

The flight review – RPAS is conducted by Flight Reviewers as third party providers in accordance with the requirements set out in CARs Standard 921.02 and this TP document.

# General

# Scope of the flight review

The flight review – RPAS consists of the planning, preparation, and completion of a RPAS flight. Although aircraft performances and weight and balance are not tested as separate exercises, it is expected that the candidate will use all the applicable performance data as well as all the approved operating procedures required for a flight. The flight review is not a training flight but an evaluation of the candidate's knowledge and flight skills at the end of their training.

# Prerequisite to the flight review

In order to be admitted to the flight review, the candidate shall have successfully completed and passed the Small Remotely Piloted Aircraft (VLOS) – Advanced Operations exam. Candidates will be issued a unique reference number directly linked to their Drone Management Portal account and additionally a second reference number for successfully passing their Small Remotely Piloted Aircraft (VLOS) – Advanced Operations exam. These two numbers are to be provided to the Flight Reviewer. The Flight Reviewer will then enter these two numbers into the Drone Management Portal and verify the candidates identity based on the credentials provided.

**Note:** Flight Reviewers or TP 15263E training providers are not to copy candidate's identity documents, they merely use them to verify the candidate's identity.

The candidate must provide a valid (not expired) piece of government-issued (federal, provincial/territorial/state government authority or the equivalent body abroad) identification that provides your name and date of birth, including the following:

- o a citizenship certificate
- a Certificate of Registration of Birth Abroad issued by the Department of Citizenship and Immigration

- a birth certificate or baptismal certificate, certified by the issuing authority, or a duly notarized copy. If the date of birth is not shown on a baptismal certificate it shall be supported by a statutory declaration in which the applicant declares the date of birth
- o a passport
- an aviation personnel permit or license, showing the date of birth, issued by the state of which the applicant is a citizen
- a permanent resident card
- o a military ID
- o a driver's license that is issued by a province or territory or the equivalent abroad
- Certificate of Indian Status
- o a ID card issued by the federal, provincial or territorial government

All flight reviews will be conducted when weather conditions do not present a hazard to the operation of the RPAS, the RPAS is airworthy and the candidate has all the RPAS documents required by the Canadian Aviation Regulations and they are valid.

It is the sole responsibility of the candidate to make the final decision as to whether or not the flight review will be conducted.

# Airmanship

The candidate's airmanship will be assessed along with other factors in determining the pass/fail mark awarded for each item. Actions such as looking out for other aircraft, use of checklists, consideration for other aircraft on the ground and in the air, completing a site survey, and choice of takeoff area will be assessed. The candidate will be expected to demonstrate good airmanship and complete accurate checks on a continuing basis.

# Failure of a flight review - RPAS

The failure of any one flight review item constitutes failure of the flight review - RPAS. The failure of one item will require a complete redo of the flight review.

# Complete redo of the flight review

A complete redo of the flight review will be required in the following situations:

- 1. failure of one item during a complete flight review
- 2. failure to do an appropriate site survey
- 3. a demonstrated pattern of failing to use effective visual scanning techniques is displayed during the flight review
- 4. displaying unsafe flying
- 5. displaying dangerous behavior that is not linked to a skill
- 6. displaying a lack of training or competency

# Errors

Error: an action or inaction by the flight crew that leads to a variance from operational or flight crew intentions or expectations.

# **Minor error**

An action or inaction that is inconsequential to the completion of a task, procedure or manoeuvre, even if certain elements of the performance vary from the recommended best practices.

**Example:** You are conducting a flight review with a candidate and as the RPA approaches the landing area the candidate fails to slow the RPA down and overshoots the landing area by a few feet but the candidate does recover and lands safely.

# **Major error**

An action or inaction that can lead to an undesired aircraft state or a reduced safety margin, if improperly managed; or an error that does not lead to a safety risk, but detracts measurably from the successful achievement of the defined aim of a sequence/item.

**Example:** You are conducting a flight review with a candidate and as the RPA approaches the landing area the candidate fails to slow the RPA down and overshoots the landing area by 20 feet, then the candidate lands the RPA where it is.

# **Critical error (failure)**

An action or inaction that is mismanaged and consequently leads to an undesired aircraft state or compromises safety, such as:

- Non-compliance with CARS or non-adherence to mandated standard operating procedures
- Repeated improper error management or uncorrected and unrecognized threats that risk putting the aircraft in an undesired state
- Repeated major errors or the non-performance of elements prescribed in the Performance Criteria\* that are essential to achieving the Aim\* of a flight review sequence/item

**Example:** You are conducting a flight review with a candidate and as the RPA approaches the landing area the candidate fails to slow the RPA down and overshoots the landing area by 30 feet, then the candidate lands the RPA where it is and almost hits a person in the process.

# **Record keeping**

A record that the student has met the skill requirements of the flight review will be kept on the record for the student within the Drone Management Portal. The record shall be retained for one regulatory audit cycle (24 months). It is recommended that the flight reviewer maintain their own copy of the results.

# **Crew resource management**

Crew resource management (CRM) refers to the effective use of all available resources, including working with such groups as dispatchers, other crew members, maintenance personnel, and air traffic controllers. CRM is a set of skill competencies that must be evident in all tasks in the flight review -

RPAS. Indicators of these competencies can be found in four main areas: problem solving and decisionmaking, situational awareness, communication, and workload management.

# Problem solving and decision making

- anticipates problems far enough in advance to avoid crisis reaction
- uses effective decision-making process
- makes appropriate inquiries
- prioritizes tasks to gain maximum information input for decisions
- makes effective use of all available resources to make decisions
- considers "downstream" consequences of decision being considered

# Situational awareness

- actively monitors weather, aircraft systems, instrument indications and ATC communications
- avoids "tunnel vision" is aware that factors such as stress can reduce vigilance
- stays ahead of the aircraft in preparing for expected or contingency situations
- remains alert to detect subtle changes in the environment

# Communication

- provides thorough briefings
- asks for information and advice
- communicates decisions clearly
- enunciates one's location clearly if required

# Workload management

- organizes available resources well
- recognizes overload in self
- eliminates distractions during high workload situations
- maintains ability to adapt during high workload situations

# Flight review guide - RPAS exercises

# **Flight review Drone Management Portal checklist**

For each of the following skills, the Flight Reviewer will indicate whether the pilot candidate has **met** the requirement or **not met** the requirements.

Skills checklist

- Describe the site survey process
- Describe emergency procedures that apply to flying a RPAS, including lost-link procedures and procedures to follow in the event of a fly-away, including who to contact
- Describe the method by which to inform Transport Canada of an incident or accident
- Successfully perform pre-flight checks of their RPAS
- Perform a take-off
- Demonstrate the ability to navigate around obstacles
- Demonstrate the ability to recognize distances
- Perform a landing

If they have any other comments about this flight review that they wish to add, they may provide them in a comment box provided on the Drone Management Portal Flight Review page.

# Performance criteria

# A. Pre-flight planning procedures

#### Aim

To determine that the candidate can effectively and efficiently plan and prepare for a RPAS flight.

#### Description

The candidate will be requested to plan a flight of at least 15 minutes duration simulating a normal operational RPAS flight which shall, at a minimum, include one (1) take-off and one (1) full stop landing.

**Note:** The location of the flight should be assigned in advance so that the candidate can plan accordingly. The candidate is expected to complete all the preparation for the flight in order to be ready for the agreed upon departure time for the flight review.

#### Performance criteria

- 1. provide a satisfactory site survey
- 2. clearly brief the Flight Reviewer or any other required flight crew or visual observers of any duties they are to perform or any other information relevant to the flight
- 3. use appropriate and current aeronautical charts and other current flight publications, extract and record pertinent information either paper or digital
- 4. properly identify airspace, obstructions, and terrain features
- 5. select a safe and efficient take-off location and flight route

- 6. obtain all pertinent information about local air routes and aerodromes
- 7. retrieve and interpret weather information and NOTAM relevant to the intended flight
- 8. determine the acceptability of existing or forecast weather conditions
- 9. select the most favourable and appropriate altitudes, considering weather conditions and equipment limitations
- 10. determine the appropriate departure procedure
- 11. make a competent "GO/NO-GO" decision based on available information for the flight
- 12. demonstrate that the weights and center of gravity are within acceptable manufactures limits
- 13. determine the impact on their RPAS operations, of unserviceability of equipment or equipment configuration changes for the proposed flight
- 14. organize and arrange material and equipment in a manner that makes the items readily available

# **B. Emergency procedures**

#### Aim

To determine that the candidate is familiar with the emergency procedures of the RPAS used for the flight review.

#### Description

The candidate is required to demonstrate verbally to the Flight Reviewer the procedures to be used when an emergency occurs. If during the flight review an actual emergency occurs the candidate shall be assessed on the actual emergency.

#### Performance criteria

Assessment will be based on the candidate's ability to:

- 1. describe the emergency procedures that apply to their drone
- 2. describe what is defined by an incident or accident
- 3. describe the method by which to inform Transport Canada or any other government agency of an incident or accident

# C. Take-off procedure

#### Aim

To determine that the candidate can perform an organized and efficient safe departure.

#### Description

The candidate will safely depart on the planned flight.

#### Performance criteria

- 1. complete all pre-flight inspection/checks on their RPAS
- 2. note take-off time
- 3. use an organized and efficient procedure to take off
- 4. comply with all departure clearances and instructions if the flight review is conducted in controlled airspace

5. complete appropriate checklists

# D. Manual flight procedure

#### Aim

To determine that the candidate can effectively apply systematic control techniques in order to control the RPAS.

#### Description

After taking-off, show the Flight Reviewer the ability to manually control the RPAS through various stages of flight as requested by the Flight Reviewer. These can include but are not limited to, heading, speed and altitude changes, and movements around obstacles.

#### Performance criteria

Assessment will be based on the candidate's ability to:

- 1. maintain a stable airspeed, cruising altitude, and heading
- 2. navigate by applying systematic navigation techniques
- 3. orient the RPAS to the direction of flight
- 4. navigate around an obstacle or fixed point
- 5. determine the position of the aircraft with respect to distance and altitude from the candidate
- 6. apply an organized method that would:
  - a) verify the position of the aircraft
    - b) revise headings to correct any existing track error to maintain the aircraft's position due to wind
    - c) confirm or revise the battery power available at the destination landing point with a degree of accuracy that would make arrival assured
  - d) confirm current fuel/power levels vs requirements for the flight

# **E. Lost link procedures**

#### Aim

To determine that the candidate can apply effective procedures when a lost link occurs.

#### Description

The candidate is required to demonstrate verbally the procedures to be used when a lost link occurs. If during the flight review an actual lost link occurs the candidate shall be assessed on the actual lost link.

# Performance criteria

- 1. correctly program the RPAS for a "return to home" if it is equipped with that function
- 2. select a power setting and altitude appropriate for the lost link situation
- 3. promptly recognize when a lost link has occurred
- 4. show an ability to regain control of the RPAS if it reconnects the lost link
- 5. take an appropriate course of action, once link has been re-established and confirmed
- 6. contact the appropriate facility to provide information on the lost link if needed

# F. "Fly Away" procedures

# Aim

To determine that the candidate can perform the required procedures in the event of a "fly away".

# Description

When requested by the flight Reviewer, the candidate shall verbally demonstrate the ability to perform all the needed actions relating to a "fly away" situation. If during the flight review an actual "fly away" occurs the candidate shall be assessed on the actual "fly away".

# Performance criteria

Assessment will be based on the candidate's ability to:

- 1. perform the following tasks without undue delay:
  - a) identify and record their present position
  - b) identify and record the direction and altitude the RPAS was last seen travelling
  - c) estimate the approximate available flight time that will remain with the fuel/power on board upon arrival at the destination (Example:15 minutes)
- 2. without delay contact the appropriate facility to provide information on the "fly away" if needed

# G. Landing procedure

# Aim

To determine that the candidate can perform an organized and efficient safe arrival.

# Description

The candidate will safely arrive from the planned flight.

# Performance criteria

- 1. use an organized and efficient procedure to land
- 2. comply with all arrival clearances and instructions if the flight review is conducted in controlled airspace
- 3. complete appropriate checklists
- 4. note landing time
- 5. secure the RPAS

# **Appendix B:**

# **Evaluation guidance to the Flight Reviewer - RPAS**

# Factors affecting evaluation

# Comparing candidates with each other

When working with a group of candidates, there may be a tendency to compare one candidate to the other. When conducting a flight review however, compare the candidate's performance to the standard expressed in the performance criteria not to a person who is more or less skilled. The reason for this is, of course, to give the candidate a fair and valid flight review.

# **Characteristics of evaluation**

An evaluation may become useless if certain principles are not respected. The following five characteristics, when used carefully in the conduct of a flight review, will result in an accurate and effective evaluation.

# Reliability

It ensures consistent results. As applied to the flight review, this would mean that two identical performances should result in the same flight review assessment.

Human factors can have significant effect on flight review reliability. Some of these factors are:

- 1. fatigue insufficient sleep or rest prior to the test
- 2. emotions work or home personal problems
- 3. health cold, flu, etc
- 4. time of day very early in the morning, or end of the duty day
- 5. distractions noise, interruptions, etc

Flight Reviewers should be conscious of these factors and attempt to limit their effects as much as possible for they may result in a lack of accuracy in the candidate's performance. Flight Reviewers should also be aware that their ability to accurately assess the candidate's performance could be adversely affected by these same factors. Testing for the purpose of licensing must remain clearly removed from training in order to maintain the reliability of an evaluation. For example, a second or third attempt, in air flight review items, may give the candidate the immediate practice needed to demonstrate a manoeuvre adequately. For this reason, an item will not be repeated unless one of the following conditions applies:

1. Discontinuance. Discontinuance of a manoeuvre for valid safety reasons; i.e., an aborted landing or other procedure necessary to modify the originally planned manoeuvre

- 2. Collision Avoidance. Flight Reviewer intervention on the flight to avoid another aircraft that the candidate could not have seen due to position or other factors
- 3. Misunderstood Request. A legitimate instance when a candidate does not understand a Flight Reviewer's request to perform a specific manoeuvre. A candidate's failure to know the requirements of a specified manoeuvre is not grounds for repeating a task or manoeuvre
- 4. Other Factors. Any condition where the Flight Reviewer was distracted to the point that the candidate's performance of the manoeuvre (radio calls, traffic, etc.) could not be adequately observed

# Validity

Flight reviews are valid if they measure what they are supposed to measure and nothing else. Assessment of ground and air items must remain within the bounds of the appropriate flight review standards. The scope of the flight review must be such that when candidates pass, they have met the skill requirements for the issuance of the certificate.

# Comprehensive

A review is comprehensive if it contains a sample of all course material and measures each area of skill and knowledge required to ensure the standard is met. Flight reviews will be comprehensive if the Flight Reviewer conforms to the items listed in the applicable flight review guide with no additions or deletions.

# Objectivity

Objectivity ensures the Flight Reviewer's personal opinions will not affect the outcome or assessment of the flight review. Pass/Fail marks awarded must be made in accordance with the applicable performance criteria. Flight review Pass/Fail marks are influenced to some degree by subjective opinions. Assessments will be more valid, less subjective, if the Flight Reviewer is an experienced pilot, has sound and adequate background knowledge of the evaluation process and the expertise to accurately assess flight review applicants without prejudice.

# **Evaluation errors**

In order to review effectively, the Flight Reviewer requires not only a sound knowledge of the characteristics of evaluation, but also a firm understanding of the possible errors that can occur throughout the evaluation process. Errors in evaluation fall into several categories.

#### **Personal bias error**

Personal bias is indicated by the tendency of a Flight Reviewer to rate candidates or a particular group of candidates the same. Flight Reviewers must conduct all flight reviews in accordance with the standards expressed in the applicable flight review guide. A Flight Reviewer must not allow personal prejudices based on race, national or ethnic origin, colour, religion, age, sex, sexual orientation, gender identity or expression, marital status, family status, genetic characteristics, disability and conviction for an offence to interfere with the objective evaluation of a candidate's performance.

# **Central tendency errors**

Central tendency errors are indicated by a tendency to rate all or most candidates as average. The Flight Reviewer really "feels" that the performance of most candidates is not as good as it should be and therefore underscores a candidate's good performance.

On the other hand, the Flight Reviewer is reluctant to cope with the possible emotional response of a candidate. This results in padded or inflated assessments of poor performance. This error may also occur because a Flight Reviewer does not want to put effort into making a decision. An average mark is easier to defend.

# **Generosity errors**

Generosity errors are indicated by a tendency to rate all individuals at the high end of the scale and are probably the most common type of personal bias. This could be caused by a Flight Reviewer's desire to be known as a nice person.

# **Severity errors**

In this case, all or most candidates are graded at the low end of the marking scale. Flight Reviewers may feel that the published standards are too low and score the test against their own set of standards. This type of Flight Reviewer feels that few people can fly as well as they can.

# **Halo effect errors**

This occurs when a Flight Reviewer's impression of a candidate is allowed to influence the assessment of performance. Halo error can result in rating an applicant too high or too low. One form of halo error is the error of leniency. Leniency has its source in a Flight Reviewers likes, dislikes, opinions, prejudices, moods and political or community influence of people. For example, when testing a friend, acquaintance, or high profile individual, a Flight Reviewer may give undeservedly high marks or, conversely the error of stereotype.

#### **Stereotype errors**

As with the error of leniency, the error of stereotype has its source in likes, dislikes, opinions, prejudices, etc. In this case, however, a Flight Reviewer may allow personal opinion or prejudice to influence the assessment of the candidate and award undeservedly low marks or high marks.

# Logical error

Logical error occurs when a Flight Reviewer assumes that a high degree of ability in one area means a similar degree of competence in another. This is especially true if the two items being assessed are similar or related. A good mark on one or two items does not mean the candidate is also qualified on all items. The full flight review must be completed and marked.

# Error of narrow criteria

This may occur when a Flight Reviewer has a group of candidates to flight review. The Flight Reviewer may, under this condition, rate each applicant against the others within the group instead of against the published criteria. If the group to be tested is above average, a candidate who is of average ability may be awarded an undeservedly low mark. If the group of candidates to be flight reviewed is below average, then a candidate who performs the best within this group may be awarded a higher assessment than actually deserved.

# Error of delayed grading

This type of error occurs when there is a delay in the assessment of an item, resulting in a tendency to award average marks due to the lack of information and/or poor recall. The use of the top or bottom end of a marking scale would be avoided. By not making an assessment immediately after the event, Flight Reviewers may award assessments based upon an overall impression of the flight review. This results in an erroneous assessment and a flight review report that is of little value to the training system.

# **Standards error**

All the errors we have discussed result in a standards error. However, if a Flight Reviewer is not thoroughly familiar with established standards, as outlined in the applicable flight review guides, it is virtually impossible to conduct an evaluation to that standard. While these errors may appear obvious on paper, they may not be under flight review conditions, especially as the judgment of the Flight Reviewer may be obscured by a combination of two or more. Flight Reviewers must, therefore, be aware of these errors to consciously prevent them from influencing the validity of the flight reviews they conduct

# **Oral questions**

The Flight Reviewer uses oral questions to measure and evaluate the extent of aeronautical knowledge and to determine that the candidate meets the standard of knowledge required for the certificate, licence, or rating being sought. This is an important part of the flight review and it is the portion of flight reviewing that results in the greatest variance in standardization. For this reason it is essential that questions be prepared beforehand to ensure that they are worded correctly and that they are relevant and valid. It is recommended that the Flight Reviewer have a bank of questions prepared for all the required items or areas of the oral portion of the flight review. It is not intended that all of the questions prepared be asked but the additional questions will be available, if required. Moreover, a bank of questions will allow the Flight Reviewer to vary the oral portion of the flight review somewhat, from candidate to candidate. The prepared questions should be of a practical operational nature, based upon the aircraft and the trip assigned for the flight review. Theoretical type questions are not recommended on the flight review as this area is covered by the Small Remotely Piloted Aircraft (VLOS) – Advanced Operations exam. In preparing questions, it is recommended that you first write down the correct answer and then write a question that will elicit only that answer. Questions should be carefully worded and not ambiguous. Good questions are easily understood and composed of common words. They should measure knowledge, not the use of language. Big words and high sounding phraseology may allow the Flight Reviewer to display command of language and vocabulary but only detract attention from the flight review. If candidates cannot understand the meaning of the words, they will not be able to answer the question. Therefore, Flight Reviewers must keep the vocabulary within the grasp of candidates. To make sure that the candidate understands the guestion, familiar terms and words should be used. The situation and conditions must be clear, to give the candidate the chance to answer correctly. A question should center on one idea only. The Flight Reviewer can guide the candidate through a complex procedure by asking "what", "why", "where", "when" and "how" questions after the basic question has been asked. Example of a basic question: What is meant by the term VFR in aviation? Answer: Visual Flight Rules. Next question might be: Is the weather VFR for today's flight?

Note: This requires a YES/NO answer, but you could follow up with – How do you know? Etc.

Keep questions as practical as possible. A flight review is an operational exercise where the candidate demonstrates knowledge and skill by going through an actual flight.

Questions should get the candidate thinking. Asking a question that requires a YES/NO answer doesn't really tell the Flight Reviewer much about the candidate's level of understanding. It is more effective to guide the candidate's thoughts toward the area to be questioned and then ask the question. In this way the candidate can visualize the situation and then think about the answer to the specific question. Knowing that something happens is not as important as understanding WHY it happens.

Tricky or irrelevant questions should be avoided. Questions should be challenging for the candidate but all the necessary background to come to the answer must be provided.

# Handling candidate answers

The Flight Reviewer's role is different from the instructor's. Flight Reviewers are strictly there to observe and evaluate. Instructors are involved in the training experience with the student. They explain, demonstrate, allow students to practice, supervise practice and, finally, evaluate to confirm learning. Flight Reviewers should avoid confirming an answer. Moreover, responding, "No, that's not right" to an answer, may undermine a candidate's self-confidence and affect performance for the remainder of the flight review. Flight Reviewers should avoid leading candidates to the correct answer. However, a Flight Reviewer may ask for clarification. For example: The answer "The nose would pitch down!" to the question "What would happen if the aircraft was loaded with a center of gravity close to the aft limit?" could be followed with a demand to explain what is meant by demonstrating the answer with a model aircraft. Flight Reviewers should ask for a complete answer. For example: A candidate should be asked if more documents are required when their answer to the question "What documents are required to be accessible during the aircraft's flight?" is "Certificate of Registration".

Good	Not so good
Easily understood: Describe the steps to be	Bewildering: If you wanted to take off in a
followed on a crosswind takeoff.	crosswind, what would the aircraft do?
Composed of common words: If you had an	<b>Oversize:</b> List all the steps you would take if you
engine failure, what would be your first priority?	had an engine failure.
<b>Promotes thinking:</b> Why is it so important to	<b>Toss – up:</b> Is the glide speed for your aircraft
maintain the ideal glide speed for the aircraft?	important during a forced approach?
Practical – operational: What documents are	Irrelevant: What fee is charged for an aircraft's
needed for the aircraft for a flight?	Certificate of Registration?
Applicable / appropriate: What would happen if	Leading: If an aircraft were loaded with an aft C
the aircraft were loaded with an aft C of G?	of G would it tend to pitch nose up?
Only one correct answer: What is the normal	Trick: What types of climb speeds are there for
climb speed for this aircraft?	this aircraft?

# Qualities of oral questions

# General principles of flight reviewing

- Flight Reviewers are evaluators and observers during flight reviews. The candidate must do the flying. Flight Reviewers should make a concerted effort to be relaxed and nonthreatening. The candidate is probably nervous enough without Flight Reviewers shaking their heads, stiffening to rigidity or gasping at inappropriate times. If Flight Reviewers remain calm and neutral the candidate will perform better.
- 2. Apply the standards in the applicable flight review guide regardless of the training and experience of the candidate.
- 3. Assigned tasks should be evaluated in relation to the standard for each item as stated in the Aim and prescribed Performance Criteria. Avoid the tendency to start with the ideal and reduce the assessment by one position for each error.
- 4. Assess the candidate against what would be an "ideal performance under existing conditions". For example, if it's windy and turbulent, the candidate will not be able to maintain altitude, heading and airspeed as well as if the day was calm.
- 5. Give credit where credit is due, and do not be influenced by poor performance on a previous item when assessing any other item.
- 6. Make use of the available Performance Criteria, (a poor performance or an ideal one should be credited with the appropriate assessment). Consider each pass/fail mark awarded. First, decide whether the aim of the item has been achieved. Award the pass/fail mark that best describes the weakest element(s) applicable to the candidate's performance of the particular flight review sequence/item demonstrated.
- 7. Mark each item as soon as possible after it has been completed.

# Conduct of the flight review

Flight Reviewers must conduct flight reviews in accordance with CAR 901.87 – Conduct of Flight Reviews, the relevant CAR Standard 921.02 and the policies expressed in the Flight Reviewer's Guide (TP 15395 E) A Flight Reviewer must conduct the oral portion of the flight review in a private area free from distractions. A Flight Reviewer must give the candidate undivided attention during the test and ensure that any discussion of flight review results with the candidate is done in private. Flight Reviewers are expected to vary the flight review profile, routing/location and emergency scenarios from candidate to candidate to avoid a situation in which student pilots might be trained specifically for that "predictable" Flight Reviewer's flight review. The result would be certification of RPAS pilots with major gaps in training that are not identified through the flight review "snapshot event".

Flight Reviewers should evaluate all ground items prior to terminating the flight review and declaring that an item has been unacceptably performed.

This measure will provide a more constructive and thorough debriefing and improve a candidate's chances of success with the ground portion for the subsequent attempt.

Except under extenuating circumstances, the practice of planning to complete the ground portion of flight reviews for candidates on one day and the air portion on subsequent days is not recommended.

This practice may compromise flight review reliability. Human factors can also have a significant effect on flight review reliability. Flight Reviewers should be conscious of these factors and attempt to limit their effects as much as possible for they may result in a lack of smoothness or accuracy in the candidate's performance. Flight Reviewers should be aware that their ability to accurately assess the candidate's performance can also be adversely affected by these same factors, especially fatigue.

For flight reviewing reliability, Flight Reviewers are expected, except under extenuating circumstances, to not conduct more than the following number of complete flight reviews on a given day: 8 RPAS flight reviews.

**Note:** These numbers are based on an average flight review total time and represent a reasonable day of work for a Flight Reviewer.

# Flight Reviewer's responsibility during a flight review

During the conduct of flight reviews, the Flight Reviewer will remain alert for other traffic at all times and has a duty of care to intervene to maintain the safety of the flight.

The Flight Reviewer may not assist the candidate in the management of the aircraft, radio communications, navigational equipment, and navigational charts. The Flight Reviewer may role-play as ATC and issue simulated ATC clearances if the flight is flown outside of controlled airspace. Regardless, the candidate will be pilot-in-command and will be held responsible for the safety of the flight. In the case of a flight review conducted on a RPAS requiring a crew of two, the Flight Reviewer will evaluate the candidate's performance as the pilot-in-command and evaluate the candidates CRM skills in relation to the other crewmembers.

# Aircraft equipment requirements

Aircraft used for flight reviews will:

- 1. have a valid and current registration pursuant to CAR 901.03
- 2. be flown in accordance with the requirements of CARs Part IX
- operated within the approved flight operating limitations (Day/Night/VLOS/), airframe limitations, and engine limitations set out in the approved POH/AFM or approved POH/AFM supplements provided by the OEM
- 4. in all cases, the Flight Reviewer will ensure that the candidate provides or has access to current charts, Canada Flight Supplement and NOTAM's for the area (digital or paper)

# Meeting the candidate

Flight Reviewers have a lot more experience conducting flight reviews than their candidates have being flight reviewed. It's important to remember this and to always respect the candidate's situation. A certain level of nervousness will always be present in flight review candidates. Flight Reviewers must conduct themselves in a manner that does not add to the normal stress of the flight review situation.

# **Briefing the candidate**

The briefing is commonly divided into two parts, one outlining the ground portion of the flight review, the other, a thorough pre-flight briefing following the ground portion. Time should be taken to clear up any questions the candidate may have regarding the flight review. It is a good time to confirm that the candidate is aware of the standards as outlined in the appropriate flight review guide. Flight Reviewers are required to brief flight review candidates on the following details:

# The sequence of flight review items

There is no need for the candidate to memorize this sequence, as the Flight Reviewer will assign each item in accordance with the item's Description.

# If in doubt - Ask!

Candidates who do not clearly understand what they are being asked to do should feel free to ask. It may be that the Flight Reviewer was not clear in giving instructions.

# Who is pilot-in-command?

In all cases, the candidate is the pilot-in-command, however the Flight Reviewer reserves the right to exercise all reasonable duty of care to ensure a safe flight by immediately notifying the candidate when any action or lack of action by the candidate seriously jeopardizes flight safety or if a breach of the regulations is imminent.

# **Emergency situations**

The candidate and Flight Reviewer should proceed as follows in the event of an actual emergency. Although the Flight Reviewer may not be PIC, the candidate as a PIC, shall provide a briefing to the Flight Reviewer detailing the actions to be taken by the candidate and Flight Reviewer in the event of an actual emergency. The Flight Reviewer may question or supplement the briefing, as required, to ensure the highest possible level of safety in the event of an actual emergency.

# **Ground references**

Intended touchdown zones and specific touchdown points will be indicated by the Flight Reviewer. The Flight Reviewer will clearly specify any simulated surface conditions, obstacles on approach, and length of surface available to the candidate.

# Method of simulating emergencies

Engine failures will only be simulated in accordance with the manufacturer's recommendations or, in their absence, verbally by the Flight Reviewer. The failure of electronic flight displays can be simulated according to the operating manual supplied by the manufacturer or the appropriate supplements of the POH or, in their absence, verbally by the Flight Reviewer.

# **Flight review**

All of the flight review items required by the flight review report and described in the applicable flight review guide must be completed and the applicable minimum pass mark on all items must be achieved. Ground flight review items are those exercises or tasks performed prior to the pre-flight inspection of the aircraft. Ground flight review items will be assessed before the flight portion of the flight review.

Air flight review items are those exercises, tasks or manoeuvres performed with the aircraft, including the pre-flight inspection, start-up, run-up, taxiing and emergency procedures.

# Post flight debriefing

- When a flight review has been completed or discontinued, a thorough debriefing of all phases of the flight review will be given to the candidate. For a debriefing to be meaningful and beneficial, the Flight Reviewer must first inform the candidate how the flight review has been assessed pass or fail. Words of wisdom and debriefing comments will be useless until the candidate knows this assessment.
- 2. Many industry Flight Reviewers have found that a good way to inform the candidate that the standards have not been met is to ask the candidate how they feel the flight review went. The debriefing can then proceed. In order to take full advantage of the Flight Reviewer's role of assisting Transport Canada's goal for improvement of the quality of flight training, it is important that the candidate receive a complete debrief.
- 3. Depending on the outcome of the flight review, the Flight Reviewer is expected to utilize one of three (3) post-flight briefing methods. The methods are as follows:
  - a) The traditional method for a routine flight review with only minor errors where a facilitated debriefing would add no value. During the traditional method of debriefing, the Flight Reviewer should highlight strengths and reward good performance. While it is sometimes easier to concentrate on the negative, the debriefing will have more impact if good performance is recognized and complimented. This will often set a positive tone for the debriefing and open the candidate's mind to suggestions where performance can improve;
  - b) The facilitated method (more in-depth) is used to ensure the underlying Threat and Error Management (TEM) and Single-pilot Resource Management (SRM) or Crew Resource Management (CRM) issues are adequately addressed to promote

participation, self-assessment and enhance future performance. The underlying principle for the facilitated debriefing is that adults learn and remember more when they participate actively and make their own analyses rather than when they listen passively. The goals of the facilitated debriefing are the discussion and transfer of the flight review lessons learned to the flight performance. The facilitated debriefing emphasizes self-discovery and self-critique; this approach draws upon the candidate's experience to enhance learning;

c) The facilitated method for failed flight reviews should focus on a review of strengths, weaknesses and opportunities for improvement.

The planning and organization for professional post-flight activities is essential. The debriefing must be valid and comprehensive. The candidate should be advised of the outcome as soon as practicable. Debrief using the flight review report. The debriefing should begin with the strong points and work towards the weaker performance areas. The candidate may express where they did poorly. Facilitation does not require that you withhold your own perspectives, although you should use facilitation to promote self-discovery by the candidate and encourage analysis of their performance to the fullest extent possible. Once the candidate has completed the analysis, you should reinforce what was done well.

Using discussion and/or facilitation, within a reasonable time frame, leads the candidate to selfdiscovery for his or her performance, including threats, errors and error management and methods available to correct the errors and to enhance future performance. Assist the candidate to focus on the actions taken during the flight review by limiting extraneous discussions. Use the flight review guide to explain the reason for assessment of major errors, deviations or unacceptable performance. Offer recommendations to correct any errors or deficiencies. Do not belabour the debriefing; keep it to important points only. Do not get involved in arguments about the conduct of the flight review or the result. If there is a problem, record the details and actions and inform your associated TP 15263E training provider.

# Handling a failed flight review

#### General

During the flight review and the debriefing, actions or comments by the Flight Reviewer must be respectful toward the candidate. Flight Reviewers and candidates should keep in mind that it is not the Flight Reviewer who fails the candidate, but rather it is the candidate whose performance on that day has not met the minimum skill standards needed to safely exercise the privileges of the certificate, licence, or rating sought.

Candidates may become aware or assume that a flight review item has been performed at an unacceptable level. Flight Reviewers should encourage candidates to continue their flight training.

Flight Reviewers will stop the flight review when air items are failed and it becomes evident that a complete redo of the flight review will be required, unless after being advised, the candidate wishes to complete a few remaining items. This measure could provide additional debriefing points to enhance

the possibility of success during a redo of the flight review. Keep this practical from the point-of-view of efficient use of aircraft cost.

If not satisfied with the conduct of the flight review, a candidate may wish to file a written complaint regarding the conduct or the performance of a Flight Reviewer with their Transport Canada regional office.

In order to succeed with a complaint, the applicant will have to satisfy Transport Canada that the flight review was not properly conducted. Mere dissatisfaction with the flight review result is not enough. After due consideration of the individual case, the Minister may authorize that a redo of the flight review be conducted, without prejudice (with a clean record in regard to the disputed flight review), by a Transport Canada Inspector or an alternate Flight Reviewer.

#### Note to Flight Reviewers - do not strike through any privilege on a Canadian aviation document

A Pilot Certificate – Small Remotely Piloted Aircraft (VLOS), including any ratings or endorsements attached to that certificate, is a Canadian Aviation Document (CAD). The powers to suspend, to cancel or to refuse to renew a CAD, or any of its additional privileges, are set out in the *Aeronautics Act*.

Section 6.8 of the Act states: "In addition to any grounds referred to in any of sections 6.71, 6.9 to 7.1 and 7.21, the Minister may suspend, cancel or refuse to issue, amend or renew a Canadian aviation document in the circumstances and on the grounds prescribed by regulation of the Governor in Council". (e.g.: CAR 401.17) Section 6.8 of the Act has no provision for appeal before the Transportation Appeal Tribunal of Canada (TATC). The only avenue for appeal of a failure for which a candidate has not reached a resolution with Transport Canada is an appeal before the Federal Court of Canada.