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TP 15263E
(03/2025)

**Knowledge Requirements
for Pilots
of Remotely Piloted Aircraft Systems,
250 g up to and including 150 kg,
Basic and Advanced Operations**

Fourth Edition

03/2025

RDIMS 18969237

Canada

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Enquiries

Information concerning the operation of RPAS and pilot certification may be obtained by visiting the Transport Canada Drone Safety web site: <https://tc.canada.ca/en/aviation/drone-safety>

Recommended study material

Transport Canada publications (TP), including the following, may be purchased from retailers, or at the following web site: <http://www.tc.gc.ca/eng/civilaviation/publications/menu.htm>.

- Transport Canada Aeronautical Information Manual (TC AIM) (TP 14371)
<http://www.tc.gc.ca/eng/civilaviation/publications/tp14371-menu-3092.htm>
- AC 903-001 Remotely Piloted Aircraft Systems Operational Risk Assessment
<https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars#900-series>
- Human Factors for Aviation - Basic Handbook (TP 12863),
<https://tc.canada.ca/en/aviation/publications/air-publications-abstracts#tp12863>
- Human Factors for Aviation - Advanced Handbook (TP 12864)
<https://tc.canada.ca/en/aviation/publications/air-publications-abstracts#tp12864>
- Flight Reviewer's Guide for Pilots of Remotely Piloted Aircraft 250 g up to and including 150 kg, Operating within Visual Line-of-Sight (VLOS), Extended Visual Line-of-Sight (EVLOS), Sheltered VLOS, or Level 1 Complex BVLOS - TP 15395
<https://tc.canada.ca/en/aviation/publications/flight-reviewer-s-guide-pilots-remotely-piloted-aircraft-systems-250-grams-g-including-25-kilograms-kg-operating-within-visual-line-sight-vlos-tp-15395>

Canadian Aviation Regulations (CARs) are available online at:

<http://laws-lois.justice.gc.ca/eng/regulations/SOR-96-433/index.html>

Transport Canada Tips and Best Practices for Drone Pilots:

<https://tc.canada.ca/en/aviation/drone-safety/tips-best-practices-drone-pilots>

NAV CANADA publications, including the following, may be purchased from retailers, or at the following web site:

<http://www.navcanada.ca/EN/products-and-services/Pages/aeronautical-information-products.aspx>

- Aeronautical charts for visual navigation (VNC and VTA)
- Canada Flight Supplement (CFS)
- Canada Water Aerodrome Supplement (CWAS)
- Designated Airspace Handbook (DAH) <https://www.navcanada.ca/en/aeronautical-information/operational-guides.aspx>

NAV CANADA VFR Phraseology Guide

<https://www.navcanada.ca/EN/media/Publications/VFR%20Phraseology.pdf>

RIC-21 — Study Guide for the Radiotelephone Restricted Operator Certificate with Aeronautical Qualification (ROC-A) <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01397.html>

Information on the Transportation of Dangerous Goods is available from Transport Canada:

<http://www.tc.gc.ca/eng/tdg/safety-menu.htm>

RPAS 101 A general guide for Canadian RPA pilots
<http://www.aerialevolution.ca/rpas101/>

Additional aviation textbooks and other publications produced by commercial publishers can be obtained through local flying training organizations, aviation bookstores and similar sources.

Preamble

This document was prepared by a joint Transport Canada/industry working group.

This knowledge document serves as the ground training and examination guide for pilots of Remotely Piloted Aircraft (RPA). This guide covers the knowledge required to operate RPAS in Canada in basic operations and advanced operations. It is not necessarily a comprehensive list. RPAS operators and training organizations may find the need to supplement these topics. The written examinations, as set by Transport Canada, will be in accordance with the knowledge listed in this document. Both this document and the examinations may be amended as required.

General RPAS exam information

Where to write the examinations

The examinations required for the operation of RPAS may only be completed online via the Transport Canada Drone Management Portal.

<https://tc.canada.ca/en/aviation/drone-safety>

Examination prerequisites

Candidates for exams must create an account on the Transport Canada Drone Management Portal.

NOTE: Applicants must be able to read the examination questions in either English or French without assistance. Requests for accommodations may be made in advance using the contact information in the Drone Management Portal.

Materials required

The examinations are delivered via computer and require an internet connection. However, we suggest having a pencil and paper handy before beginning the examination, to make diagrams or execute calculations during the examination.

Time limits and pass marks

Examination	Questions	Time limit	Pass mark
Remotely Piloted Aircraft Systems–Basic Operations:	35	1 ½ hour	65%
Remotely Piloted Aircraft Systems–Advanced Operations:	50	1 hour	80%
Remotely Piloted Aircraft Systems–Flight Reviewers:	30	1 ½ hour	80%

Rewriting of examinations

In the case of any examination for operation of RPAS, the examination may be rewritten after 24 hours.

Examination feedback

Feedback statements in the results letter will inform the candidate where questions were answered incorrectly.

Example of feedback statement:

Identify classes of airspace from an aeronautical chart.

RPA pilot knowledge requirements

Knowledge requirements for RPA pilots operating in basic or advanced operations are shown in the following tables. The applicable type of operation (basic and advanced) is shown to the left of the topics. Sample learning objectives are shown to the right of the topics. The list of sample objectives is not all-inclusive, its purpose is to illustrate the depth of knowledge required to operate RPAS in Canadian airspace.

Types of operation (basic operations, advanced operations) are set out in the *Canadian Aviation Regulations*, Part IX. There are minimum knowledge requirements for RPA pilots operating in each of those groups.

Applicants for the pilot certificate – small remotely piloted aircraft (VLOS) – basic operations shall demonstrate their knowledge by writing the Transport Canada multiple choice examination based on the indicated applicable subjects contained in this guide.

Applicants for the pilot certificate – remotely piloted aircraft – advanced operations shall demonstrate their knowledge by writing the Transport Canada multiple choice examination based on the indicated applicable subjects contained in this guide.

Applicants for the flight reviewer rating attached to the pilot certificate – remotely piloted aircraft – advanced operations shall demonstrate their knowledge by writing the Transport Canada multiple choice examination on the indicated applicable subjects contained in the “Knowledge areas” section of this guide related to advanced operations and *the content of “TP15395 Flight Reviewer’s Guide for Pilots of Remotely Piloted Aircraft 250 g up to and including 150 kg, Operating within Visual Line-of-Sight (VLOS), Extended Visual Line-of-Sight (EVLOS), Sheltered VLOS, or Level 1 Complex BVLOS”* related to conducting a flight review covering the subjects set out in Standard 921.03.

Knowledge areas

Section 1: air law, air traffic rules and procedures

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives
Basic	Advanced		
		<i>Aeronautics Act</i>	
✓	✓	Section 3 - Definitions	<p>The RPA pilot operating within Canada must be able to:</p> <ul style="list-style-type: none"> • Define aerodrome, airport, and pilot-in-command. • Demonstrate a basic understanding of the Act.
		<i>Canadian Aviation Regulations (CARs)</i>	
		Part I—General provisions	
		101—Interpretation	
✓	✓	101.01 Interpretation (definitions)	<ul style="list-style-type: none"> • Define common terms used in the <i>Canadian Aviation Regulations</i>, such as day, night, VFR. • State the definition of remotely piloted aircraft. • Define Remotely Piloted Aircraft System (RPAS). • Define Command and Control (C2) link. • Define control station.
		102—Application	
✓	✓	102.01 Application	<ul style="list-style-type: none"> • State that the regulations do not apply to indoor or underground operations.
		103—Administration and compliance	
✓	✓	103.02 Inspection of aircraft, requests for production of documents and prohibitions	<ul style="list-style-type: none"> • State who may demand to inspect aviation documents.
	✓	103.03 Return of Canadian Aviation Documents	

	✓	103.04 Record keeping	<ul style="list-style-type: none"> State that computer-stored records may be used in place of paper records if measures are taken to protect them.
		Part III–Aerodromes and airports	
		301–Aerodromes	<ul style="list-style-type: none"> Explain that persons, vehicles, obstacles, and operations at aerodromes are subject to the approval of the aerodrome operator and the appropriate air traffic control unit. State the restrictions/rules for activities on an aerodrome, or airport.
	✓	301.01 Application	
	✓	301.08 Prohibitions	
	✓	301.09 Fire prevention	
		302–Airports	
	✓	302.10 Prohibitions	
	✓	302.11 Fire prevention	
		Part VI–General operating and flight rules	
		601–Airspace	
		Airspace structure, classification and use	
	✓	601.01 Airspace structure	<ul style="list-style-type: none"> Describe the horizontal and vertical limits of the various classifications of airspace, control areas, special use airspace. Identify the altimeter setting region and the standard pressure region. Recall that operations in Class F restricted airspace require the authorisation of the person specified in the <i>Designated Airspace Handbook</i>. Describe the communications required with air traffic control (ATC) for operating a RPA VLOS within controlled airspace.
	✓	601.02 Airspace classification	
	✓	601.03 Transponder airspace	
	✓	601.04 IFR or VFR flight in class F special use restricted airspace or class F special use advisory airspace	
	✓	601.08 VFR flight in class C airspace	
	✓	601.09 VFR flight in class D airspace	
		Aircraft operating restrictions and hazards to aviation safety	

✓	✓	601.14 Interpretation	<ul style="list-style-type: none"> Recall the restrictions to aircraft (and all RPA) operations in the vicinity of forest fire areas. Describe the circumstances when an RPA is permitted to be operated in the vicinity of a forest fire area.
✓	✓	601.15 Forest fire aircraft operating restrictions	
	✓	601.16 Issuance of NOTAM for forest fire	
✓	✓	601.17 Exceptions	
✓	✓	601.20 Projection of directed bright light source at an aircraft	
✓	✓	601.21 Requirement for notification	
✓	✓	601.22 Requirement for Pilot-In-Command (PIC)	
		602 – Operating and flight rules - general	
		Operation at or in the vicinity of an aerodrome	
	✓	602.96 General	<ul style="list-style-type: none"> Recall the minimum operating conditions for traditional aircraft VFR flight in uncontrolled airspace.
	✓	602.97 VFR and IFR aircraft operations at uncontrolled aerodromes within a Mandatory Frequency (MF) Area	
	✓	602.98 General MF reporting requirements	
	✓	602.99 MF reporting procedures before entering maneuvering area	
	✓	602.100 MF reporting procedures on departure	
	✓	602.101 MF reporting procedures on arrival	
	✓	602.102 MF reporting procedures when flying continuous circuits	
	✓	602.103 Reporting procedures when flying through an MF area	
		Radio communications	
	✓	602.136 Continuous listening watch	<ul style="list-style-type: none"> Describe the actions to be taken by traditional aircraft in the event of a two-way radio communication failure when flying in class C or D airspace.
	✓	602.138 Two-way radio communication failure in VFR flight	
	✓	602.146 The Emergency Security Control of Air Traffic (ESCAT) Plan	

		606–Miscellaneous	
✓	✓	606.01 Munitions of war	<ul style="list-style-type: none"> Recall that weapons may not be carried on RPA unless authorized.
		Part IX Remotely piloted aircraft systems	
		Division I General provisions	
✓	✓	900.01 Interpretation	<ul style="list-style-type: none"> Define common terms used in RPAS operations such as: payload, visual observer, visual line of sight (VLOS) operations, sheltered operation, extended visual line of sight (EVLOS) operations, operating weight, small remotely piloted aircraft, medium remotely piloted aircraft, etc.
✓	✓	900.02 Application	
		900.03 Reserved	
		900.04 Reserved	
		900.05 Reserved	
		Division II General operating and flight rules for all RPAS	
✓	✓	900.06 Reckless or negligent operation	<ul style="list-style-type: none"> Recall that these provisions apply to RPA of any size, including those with operating weight of less than 250 g. Recall the prohibition against endangering aviation safety or the safety of any person. Recall notification requirements when a loss of control of an RPA has occurred or is likely to occur. Recall prohibitions related to operations over or within emergency security perimeters. Recall prohibitions related to commercial air
✓	✓	900.07 Inadvertent Entry into Restricted Airspace	
✓	✓	900.08 Prohibition — Emergency Security Perimeter	
✓	✓	900.09 Prohibition — Commercial Air Service	

			services.
		900.10 Reserved	
		900.11 Reserved	
		900.12 Reserved	
		Division III Registration of remotely piloted aircraft	
✓	✓	900.13 Registration	<ul style="list-style-type: none"> Recall that all RPA are required to display the registration number. Recall that the RPA pilot must have easy access to the certificate of registration when operating a registered RPA.
✓	✓	900.14 Registration number	
✓	✓	900.15 Qualifications to be registered owner of a remotely piloted aircraft	
✓	✓	900.16 Registration requirements	
✓	✓	900.17 Register of remotely piloted aircraft	
✓	✓	900.18 Cancellation of certificate of registration	
✓	✓	900.19 Change of name or address	
✓	✓	900.20 Access to certificate of registration	
		Subpart 1 Small remotely piloted aircraft and medium remotely piloted aircraft	
		Division I General provisions	
✓	✓	901.01 Application	<ul style="list-style-type: none"> State that RPA having an operating weight less than 250 g are not subject to the rules in Part IX Subpart 1 of the <i>Canadian Aviation Regulations</i>.
		901.02 Reserved	
		901.03 Reserved	
		901.04 Reserved	
		901.05 Reserved	
		901.06 Reserved	

		901.07 Reserved	
		901.08 Reserved	
		901.09 Reserved	
		901.10 Reserved	
		In VLOS	
✓	✓	901.11 Visual line-of-sight	<ul style="list-style-type: none"> Recall that RPA shall give way to traditional aircraft at all times. Recall the rules regarding the use of visual observers. State what aeronautical information must be consulted before flight. State that an RPA must remain in Canadian domestic airspace unless the operation is conducted in accordance with an SFOC — RPAS. Recall the requirement to notify air traffic control if a flyaway is likely to enter controlled airspace. State which procedures must be established for normal and emergency operations for all RPA operations. State the minimum distance that an RPA must remain from another person not involved in the operation. State the minimum visibility required for the operation of an RPA. Recall that an RPA may not be operated at or near an aerodrome in a manner that could interfere with aircraft operating in the
✓	✓	901.12 Reserved	
✓	✓	901.13 Prohibition—Canadian domestic airspace	
✓	✓	901.14 Controlled airspace	
✓	✓	901.15 Inadvertent entry into controlled airspace	
✓	✓	901.16 Flight safety	
✓	✓	901.17 Right of way	
✓	✓	901.18 Avoidance of collision	
✓	✓	901.19 Fitness of crew members	
✓	✓	901.20 Visual observers	
✓	✓	901.21 Compliance with instructions	
✓	✓	901.22 Carriage of persons	
✓	✓	901.23 Procedures	
✓	✓	901.24 Pre-flight information	
✓	✓	901.25 Maximum altitude	
✓	✓	901.26 Horizontal distance	
✓	✓	901.27 Site survey	
✓	✓	901.28 Other pre-flight requirements	
✓	✓	901.29 Serviceability of the remotely piloted aircraft system	
✓	✓	901.30 Availability of manuals	
✓	✓	901.31 Instructions and manuals	
✓	✓	901.32 Control of remotely piloted aircraft systems	
✓	✓	901.33 Take-offs, launches, approaches, landings and recovery	
✓	✓	901.34 Minimum weather conditions	

✓	✓	901.35 Icing	<p>established traffic pattern.</p> <ul style="list-style-type: none"> • State the minimum distance that an RPA must remain from an airport and from a heliport when operating under the basic operations rules. • Describe the factors that must be included in a “site survey” for all RPA operations. • State the requirements for position lights when operating an RPA at night.
✓	✓	901.36 Formation flight	
✓	✓	901.37 Prohibition—operation of moving vehicles, vessels and traditional aircraft	
✓	✓	901.38 Use of first-person view devices	
✓	✓	901.39 Night flight requirements	
✓	✓	901.40 Multiple remotely piloted aircraft	
✓	✓	901.41 Special aviation events and advertised events	
✓	✓	901.42 Handovers	
✓	✓	901.43 Payloads	
✓	✓	901.44 Flight termination system	
✓	✓	901.45 ELT	
✓	✓	901.46 Transponder and automatic pressure-altitude reporting equipment	
✓	✓	901.47 Operations at or in the vicinity of an aerodrome, airport or heliport	
✓	✓	901.48 Records	
✓	✓	901.49 Incidents and accidents—associated measures	
✓	✓	901.50 Dropping of Objects	
		901.51 Reserved	
		901.52 Reserved	
		Division IV Basic operations	
✓	✓	901.53 Application	<ul style="list-style-type: none"> • State the requirements to apply for a pilot certificate – small remotely piloted aircraft (VLOS) – basic operations. • State what is required to operate a small RPA in basic operations. • Recall the 24-month recency requirements for holders of pilot certificates - RPA (VLOS).
✓	✓	901.54 Pilot requirements	
✓	✓	901.55 Issuance of pilot certificate—small remotely piloted aircraft (VLOS)—basic operations	
✓	✓	901.56 Recency requirements	
✓	✓	901.57 Access to certificate and proof of recency	
✓	✓	901.58 Examination rules	

✓	✓	901.59 Retaking of an examination or a flight review	
		901.60 Reserved	
		901.61 Reserved	
		Division V Advanced operations	
	✓	901.62 Application	<ul style="list-style-type: none"> • State the requirements to apply for a pilot certificate – RPA – advanced operations. • State what is required to operate an RPA in advanced operations. • Recall the 24-month recency requirements for holders of pilot certificate – RPA – advanced operations. • State the conditions under which it is permissible to operate an RPA at a lateral distance of less than 100 feet from another person not involved in the operation. • State the information that must be given to air traffic services when requesting flight in controlled airspace. • State requirements to conduct operations within an airport or heliport environment. • State the conditions under which it is permissible to conduct extended VLOS operations or sheltered operations. • State visual observer (VO) requirements for extended VLOS operations.
	✓	901.63 Pilot requirements	
	✓	901.64 Issuance of pilot certificate—remotely piloted aircraft—advanced operations	
	✓	901.65 Recency requirements	
	✓	901.66 Access to certificate and proof of recency	
	✓	901.67 Examination rules	
	✓	901.68 Retaking of an examination or a flight review	
	✓	901.69 Declaration—permitted operations	
	✓	901.70 Operation of a modified remotely piloted aircraft system	
	✓	901.71 Operations in controlled airspace	
	✓	901.72 Compliance with air traffic control instructions	
	✓	901.73 Operations at or in the vicinity of an airport or a heliport—established procedure	
	✓	901.74 Extended VLOS Operations and Sheltered Operations	
	✓	901.75 Visual Observers	
		901.76 Reserved	
		901.77 Reserved	
		901.78 Reserved	

		901.79 Reserved	
		901.80 Reserved	
		901.81 Reserved	
		901.82 Reserved	
		901.83 Reserved	
		901.84 Reserved	
		901.85 Reserved	
		901.86 Reserved	
		Division X Training and Flight Review	
	✓	901.175 Prohibition—flight reviewer	<ul style="list-style-type: none"> State that a flight reviewer rating is required in order to conduct a flight review for a pilot certificate – RPA – advanced operations.
	✓	901.176 Flight reviewer rating	
	✓	901.177 Examination rules	
	✓	901.178 Retaking of an examination	
	✓	901.179 Eligibility to Make Declaration	
	✓	901.180 Training provider requirements – Flight Reviews	
	✓	901.181 Conduct of flight reviews	
		Subpart 2 Reserved	
		Subpart 3 Special flight operations—remotely piloted aircraft systems	
	✓	903.01 Prohibition	<ul style="list-style-type: none"> Give examples of types of RPAS operations that would require a special flight operations certificate (SFOC) — RPAS.
	✓	903.02 Application for special flight operations certificate—RPAS	
	✓	903.03 Issuance [or Amendment] of special flight operations	

		certificate—RPAS	
✓	✓	Transportation Safety Board of Canada (TSB)—(refer to TC AIM-GEN 3.0)	<ul style="list-style-type: none"> • State that the purpose of aircraft accident investigation is to prevent recurrence. • State the types of RPA accidents that must be reported to the Transportation Safety Board of Canada.
		Air traffic services and procedures	
	✓	Air traffic and advisory services	<ul style="list-style-type: none"> • Determine who provides coordination or air traffic control service for the airspace being used (if applicable). • Determine the Mandatory Frequency (MF)/Aerodrome Traffic Frequency (ATF) and enroute frequencies (if applicable) for the operating area. • Explain any traffic patterns of passing traditional aircraft. • Anticipate patterns of traditional aircraft sharing the airspace. • Determine the aeronautical radio frequencies in use for this airspace. • Use appropriate phraseology in radio communication. • Recognize clearances and instructions directed to traditional aircraft. • Interpret the Canada Flight Supplement (CFS) with respect to aerodrome airspace and location procedures. • Communicate/interface with NAV CANADA according to their “Best Practices”

			documents. <ul style="list-style-type: none"> Determine how to conduct RPA operations at controlled and uncontrolled aerodromes.
✓	✓	Flight service stations, flight information centres	
	✓	Communication procedures	
	✓	ATC clearances/instructions/mandatory read back procedures	
	✓	Aerodrome operations – controlled	
	✓	Aerodrome operations – uncontrolled	
	✓	Mandatory frequency (MF) and aerodrome traffic frequency (ATF)	

Section 2: RPA airframes, power plants, propulsion and systems

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		Airframes	
✓	✓	1. Handling/care/securing	<ul style="list-style-type: none"> Indicate how RPAS manufacturers identify the repairs and work that can be undertaken by the owner vs. what must be addressed by an authorized repair facility (e.g., how to find your applicable original equipment manufacturer guidelines). Describe the importance of identifying propeller/rotor damage, surface contamination, wiring damage, structural damage. Identify the parts of an airframe.
		Electrical systems	
✓	✓	1. Typical electrical system components (motors, electronic speed controllers, batteries, etc.)	<ul style="list-style-type: none"> Describe typical electrical system components. Describe the actions of a servo. Describe the indications of a failed servo. Explain the importance of keeping components dry.
✓	✓	2. Servo motors	
✓	✓	3. Importance of component integrity/maintenance	
		Redundancies & critical items	
✓	✓	1. Risks of flying with inoperative systems	<ul style="list-style-type: none"> State the value of redundancy in operating scenarios.
		Control station	
✓	✓	1. Orientation	<ul style="list-style-type: none"> State the importance of pilot and antenna

✓	✓	2. Software version control	orientations in reference to the RPA.
✓	✓	3. Flight simulation	
		Data links	
✓	✓	1. Frequency bands (licensed and unlicensed)	<ul style="list-style-type: none"> Describe how to assess the Radio Frequency (RF) environment or conduct and RF sweep. Discuss the importance of radio line-of-sight. Discuss the importance of Ground Control Station (GCS) antenna placement. Discuss the causes of lost link and methods of recovery.
✓	✓	2. Line-of-sight	
✓	✓	3. Antenna and tracking systems	
✓	✓	4. Interference	
✓	✓	5. Gain, signal to noise ratio	
		Batteries	
✓	✓	1. Types and hazards	<ul style="list-style-type: none"> Interpret maintenance log history. Describe the variables affecting batteries (capacity e.g., due to age, history, charge status). Assess battery voltages (understand discharge curves). Describe the regulations applicable to taking lithium-ion batteries on board a commercial flight. Describe the dangers of using water on lithium battery fires.
✓	✓	2. Battery parameters such as Energy Capacity (measured in Ah and Wh), Voltage(V), charge and discharge rates (C-Rating)	
✓	✓	3. Battery configurations (parallel, series)	
✓	✓	4. Charge cycles, storage, and maintenance	
✓	✓	5. Discharge curves	
✓	✓	6. Transportation of batteries in accordance with the Transportation of Dangerous Goods Regulations (TDG) Regulations	
		Fuel systems	
✓	✓	1. Fuel system types and hazards.	<ul style="list-style-type: none"> Describe different fuel systems in RPA. Describes hazards of different fuels. Describe methods to assess fuel quantity and consumption under different flight conditions. Describe safe fuel storage, handling and
✓	✓	2. Fuel quantity measurement.	
✓	✓	3. Fueling and storage techniques.	

			grounding/bonding techniques.
		Autopilots	
✓	✓	1. The role of an autopilot	<ul style="list-style-type: none"> Describe the types of pilot intervention possible during flight. Describe the pre-flight preparation related to flight termination systems. Discuss the possible consequences of improper software version control. Describe the importance of updating verified firmware only from trusted sources.
✓	✓	2. Different levels of control (e.g., stabilization vs. waypoint)	
✓	✓	3. Flight termination systems (internal and remote)	
✓	✓	4. Software version control (control station and RPA)	
		Payloads	
✓	✓	1. Sensor types (electro-optical, infra-red, radio frequency, atmospheric, etc.)	<ul style="list-style-type: none"> Define what comprises the payload vs. the rest of the system.
		Propulsion	
✓	✓	1. Types of electric motors (brush, brushless, inrunner, and outrunner)	<ul style="list-style-type: none"> Describe the characteristics of different motor types. Describe 2-stroke and 4-stroke engines. Explain aircraft behavior following a propulsion system failure.
✓	✓	2. Speed controllers	
✓	✓	3. Types of internal combustion engines	
		Launch and recovery systems	
✓	✓	1. Types of launchers	<ul style="list-style-type: none"> Identify the different danger areas of a safety template. Describe different methods of recovering an RPA.
✓	✓	2. Types of recovery systems—parachute, deep stall, arresting system/hook, normal landing	
✓	✓	3. Safety areas and templates for launch and recovery	
		Maintenance and record keeping	

✓	✓	1. Technical log requirements	<ul style="list-style-type: none"> List the requirements for record-keeping. Give examples of tasks that should be independently verified.
✓	✓	2. Servicing, elementary tasks, critical tasks	
✓	✓	3. 2-person perform/verify practice	
		Magnetic compass	
✓	✓	1. Principles of operation	<ul style="list-style-type: none"> Explain the difference between magnetic and true north. Explain what can affect compass operation and reliability.
✓	✓	2. Variation	
✓	✓	3. Factors adversely affecting compass operation	
✓	✓	4. Importance of calibration	
		Altimeter	
✓	✓	1. Principles of operation	<ul style="list-style-type: none"> Explain the purpose of a barometric altimeter setting. Describe the effect of a blocked static system. Describe the difference between GPS altitude and barometric altitude. Describe how to convert GPS altitude to above sea level (ASL).
✓	✓	2. Errors and malfunctions	
		Airspeed indicator	
✓	✓	1. Principles of operation	<ul style="list-style-type: none"> Describe the difference between indicated and true airspeeds. Describe the effect of a blocked pitot system.
✓	✓	2. Errors and malfunctions	
		Inertial measurement unit (IMU)	
✓	✓	1. Components	<ul style="list-style-type: none"> Describe what the IMU responsible for. Give examples of what can cause the IMU to misbehave.
✓	✓	2. Errors & malfunctions	

Section 3: Human factors

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		Aviation physiology	
✓	✓	1. Vision/visual scanning techniques	<ul style="list-style-type: none"> Describe good scanning techniques (visual, audio) for visual observers (conflicting aircraft). Describe “perspective illusion” when looking at distant aircraft. Describe factors that affect alertness.
✓	✓	2. Hearing	
✓	✓	3. Orientation/disorientation (including visual/perspective/parallax illusions)	
✓	✓	4. Body rhythms/jet lag	
✓	✓	5. Sleep/fatigue	
✓	✓	6. Anaesthetics	
		The pilot and the operating environment	
✓	✓	1. Medications (prescribed and over-the-counter)	<ul style="list-style-type: none"> Describe the effects of medications and other substances on pilot performance, including lasting effects beyond initial impairment. Describe the effects of exposure to cold and excessive heat on pilot performance. Describe the symptoms of carbon monoxide poisoning.
✓	✓	2. Substance abuse (alcohol/drugs)	
✓	✓	3. Heat/cold	
✓	✓	4. Noise	
✓	✓	5. Toxic hazards (including carbon monoxide – GCS vehicle)	
		Aviation psychology	
✓	✓	1. Factors that influence decision-making	<ul style="list-style-type: none"> List factors that interfere with effective decision-making. List the factors that affect situational awareness. Describe how a given operational risk might be managed.
✓	✓	2. Situational awareness	
✓	✓	3. Stress	
✓	✓	4. Managing risk	
✓	✓	5. Attitudes	
✓	✓	6. Workload–attention and information processing	

		Pilot–equipment/materials relationship	
✓	✓	1. Controls and displays–errors in interpretation and control	<ul style="list-style-type: none"> • Explain the benefits of standard operating procedures and considering lessons learned from operating experience. • Explain how to manage an interruption to a checklist.
✓	✓	2. Standard operating procedures–rationale/benefits	
✓	✓	3. Correct use of checklists and manuals	
✓	✓	4. Automation and complacency	
		Interpersonal relations	
✓	✓	1. Communications with flight crew/air traffic services/customers/public/authorities	<ul style="list-style-type: none"> • Resolve differences peacefully. • Promote open communications. • Place safety requirements over hierarchy/position in organization/politics.
✓	✓	2. Operating pressures–family relationships/peer group	
✓	✓	3. Operating pressures–employer	

Section 4: Meteorology

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		The earth's atmosphere	
	✓	1. Composition and physical properties	<ul style="list-style-type: none"> Describe the chemical composition of the atmosphere.
✓	✓	2. Density and pressure	
		Atmospheric pressure	
	✓	1. Pressure measurements	<ul style="list-style-type: none"> Define atmospheric pressure, station pressure, sea level pressure. Explain how atmospheric pressure varies with height. Explain the movement of air resulting from high- and low-pressure systems, convergence, and divergence. Relate weather characteristics to pressure systems.
	✓	2. Station pressure	
	✓	3. Sea level pressure	
	✓	4. Pressure system and their variations	
	✓	5. Effects of temperature	
		Meteorological aspects of altimetry	
	✓	1. Pressure altitude	<ul style="list-style-type: none"> Recall the factors that affect density altitude. Assess weather and density altitude for anticipated performance (take-off and launch) and flight envelope limitations.
	✓	2. Density altitude	
	✓	3. Altimeter settings	
		Moisture	
	✓	1. Temperature variations with altitude	<ul style="list-style-type: none"> Explain the relationship between lapse rate, temperature-dewpoint spread and cloud base. Explain the effect of moisture and temperature on the formation of clouds, height of cloud base. Discuss the significance of cloud base height on potential air traffic.
	✓	2. Relative humidity/dewpoint	
	✓	3. Cloud formation	
	✓	4. Precipitation	

		Stability and instability	
	✓	1. Characteristics of stable/unstable air	<ul style="list-style-type: none"> • Characterize the effects of stable and unstable air masses (visibility, turbulence, and smog layers).
	✓	2. Surface heating/cooling	
	✓	3. Lifting processes	
		Clouds	
✓	✓	1. Types applicable to low level flying and recognition	<ul style="list-style-type: none"> • Identify cloud types and their impact on flying operations. • Discuss the significance of observed vertical cloud development.
✓	✓	2. Associated precipitation and turbulence	
		Surface based layers	
✓	✓	1. Fog formation	<ul style="list-style-type: none"> • Explain how fog is formed. • Identify the elements that can dissipate fog. • Identify different obstructions to vision.
✓	✓	2. Haze/smoke	
✓	✓	3. Blowing obstruction to vision	
		Turbulence	
✓	✓	1. Convection	<ul style="list-style-type: none"> • Explain the sources of mechanical turbulence. • Describe the formation of turbulence around large objects and mountain tops. • Identify sources of micro-climate turbulence and wind shear.
✓	✓	2. Mechanical	
✓	✓	3. Orographic	
✓	✓	4. Wind shear	
		Wind	
✓	✓	1. Pressure gradient	<ul style="list-style-type: none"> • Explain the effect of pressure gradient on the horizontal movement of air. • Explain how wind changes in the friction layer due to surface heating. • Define wind shear and its effect on turbulence. • Explain the formation of land/sea breezes. • Use a picture to explain anabatic and katabatic
✓	✓	2. Low level winds–variation in surface wind	
✓	✓	3. Friction	
✓	✓	4. Diurnal effects	
✓	✓	5. Land/sea breezes	
✓	✓	6. Katabatic/anabatic effects	
✓	✓	7. Topographical effects	

			<ul style="list-style-type: none"> winds. Explain the effects of urban airflow.
		Fronts and frontal weather	
	✓	1. Structure/frontal wave	<ul style="list-style-type: none"> Discuss the relationship between air masses and creation of weather fronts. Describe the changes in weather as a front approaches and passes over your location.
	✓	2. Cold front	
	✓	3. Warm front	
		Aircraft icing	
✓	✓	1. Formation	<ul style="list-style-type: none"> Explain how icing is formed and the conditions that cause it. Recognize weather conditions that can cause surface contamination. Describe the components of an RPA that are susceptible to icing.
✓	✓	2. In-flight–freezing rain	
✓	✓	3. Hoar frost	
✓	✓	4. Effect of frost and ice on launch and recovery systems	
		Thunderstorms	
	✓	1. Requirements for development	<ul style="list-style-type: none"> Describe the three stages of thunderstorm development. Describe the surface weather characteristics of an approaching thunderstorm. Identify hazards likely to occur with thunderstorm activity.
	✓	2. Types–air mass/frontal	
	✓	3. Hazards–updrafts/downdrafts/gust fronts/downbursts/microbursts/hail/lightning/antennas	
	✓	4. Squall lines	
		Meteorological services available to pilots	
	✓	1. Flight Information Centres (FIC) – telephone service	<ul style="list-style-type: none"> Identify the sources for local weather information. Describe the differences in cloud base and wind forecasts between aviation and non-aviation sources.
✓	✓	2. Aviation weather web site	
	✓	3. Automatic Terminal Information Service (ATIS)	
✓	✓	4. Non-aviation sources	

		Aviation weather reports	
	✓	1. Aviation Routine Weather Report (METAR), Automated Weather Observation Station (AWOS), Basic Weather Information System (LWIS)	<ul style="list-style-type: none"> • Compare reported weather with the regulatory requirements. • Demonstrate awareness of coded weather information and identify methods of decoding. • Identify sources of weather reports (websites etc.).
		Aviation forecasts	
	✓	1. Times issued and validity periods	<ul style="list-style-type: none"> • Compare forecast weather with the regulatory requirements. • Assess forecast ceiling, wind, turbulence, precipitation, and visibility against operational objectives. • Assess forecast vs. control station requirements (e.g., lightning).
	✓	2. Aerodrome Forecasts (TAF)	

Section 5: Navigation

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		Definitions	
✓	✓	1. Longitude	<ul style="list-style-type: none"> • Demonstrate operational understanding of these definitions.
✓	✓	2. Latitude	
	✓	3. Variation	
	✓	4. Track	
	✓	5. Heading	
	✓	6. Airspeed	
	✓	7. Bearing	
	✓	8. Wind velocity	
	✓	9. Drift	
		Maps and charts	
✓	✓	1. Aeronautical charts: VNC, VTA	<ul style="list-style-type: none"> • Locate your position on an aeronautical chart. • Interpret topographical information from charts. • Determine your distance from the nearest aerodrome. • Identify a control zone on an aeronautical chart. • Determine the validity/currency of aeronautical charts. • Use the CFS or other approved publication to identify airport operators and air traffic control agencies.
✓	✓	2. Topographical symbols	
✓	✓	3. Elevation and contours (relief)	
✓	✓	4. Aeronautical information	
✓	✓	5. Scale and units of measurement	
✓	✓	6. Locating position by latitude and longitude	
✓	✓	7. Canada Flight Supplement (CFS)	
		Time and longitude	
✓	✓	1. 24 Hour system	<ul style="list-style-type: none"> • Convert UTC to local time & vice versa. • Determine local time of sunrise/sunset.
✓	✓	2. Conversion of Universal Coordinated Time (UTC) to local and vice versa	

✓	✓	3. Sunrise and sunset	
		Pilot navigation	
✓	✓	1. Use of aeronautical charts	<ul style="list-style-type: none"> • Describe location and activities referring to appropriate aeronautical charts and aeronautical reference points. • Identify the class of airspace and proximity of aerodromes to the operating location using aeronautical charts. • Explain the difference between true and magnetic heading.
	✓	2. Measurement of bearing and distance	
	✓	3. Variation	
	✓	4. True track/magnetic track	
	✓	5. True/magnetic/headings	
	✓	6. Airspeed vs groundspeed	
		Flight planning	
✓	✓	1. Factors affecting choice of flying area	<ul style="list-style-type: none"> • Describe the factors that will influence your choice of flying area (restricted airspace, property lines, requirement for an SFOC — RPAS, etc.). • State where to obtain NOTAMs. • Obtain NOTAMs, including GPS NOTAMs, and interpret them. • Demonstrate how to use the CFS to determine type and radius of airspace, frequencies, aerodrome operator contact information, nearest Flight Information Centre (FIC)/Air Traffic Service (ATS) unit for emergency contact, etc. • Determine the contact information for Emergency Services and local authorities. • List the documents that must be available to crew members. • Determine the serviceability of <ul style="list-style-type: none"> ○ Aircraft ○ Control station
✓	✓	2. NOTAM	
✓	✓	3. Use of Canada Flight Supplement (CFS)	
✓	✓	4. Fuel/energy requirements	
✓	✓	5. Weight and balance	
✓	✓	6. Documents to be available to crew members	
✓	✓	7. Aircraft serviceability, configuration	
✓	✓	8. Effect of wind on range and endurance	

			<ul style="list-style-type: none"> ○ Radio frequency (RF) equipment ○ Launch and recovery equipment ○ Software loads and versions ○ Correct databases (e.g., maps) loaded ○ Batteries (capacity (i.e., due to age) history, charge status, demand due to weight) <ul style="list-style-type: none"> ● Demonstrate how to verify the flight plan data file is correct and complete in the autopilot.
		Radio theory	
✓	✓	1. Characteristics of low/high and very & ultra-high frequency radio waves	<ul style="list-style-type: none"> ● Explain the characteristics of radio wave propagation. ● Describe the factors that affect radio reception range. ● Identify sources of RF interference. ● Describe how to assess an RF environment. ● Explain the function of RF spectrum analyzer.
✓	✓	2. Frequency bands used in navigation and communication	
✓	✓	3. Operational limitations, propagation, causes of interference	
		Global navigation satellite system (GNSS/GPS)	
	✓	1. Principles of operation	<ul style="list-style-type: none"> ● Describe how GNSS systems may be enhanced by augmentation systems. ● Provide an example of how Differential Global Positioning Service (DGPS) might be used for landing. ● Discuss the significance of GPS loss in flight. ● Describe what can affect GPS performance (number of satellites, weather).
	✓	2. Causes of signal loss and interference	
		Other radio and radar aids—basic principles and use	
	✓	1. Air traffic control (ATC) transponder	<ul style="list-style-type: none"> ● Describe the function of an ATC radar transponder.
	✓	2. Locator devices	

Section 6: Flight operations

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		General	
✓	✓	1. Pilot-in-command responsibilities	<ul style="list-style-type: none"> Describe the hazards that can occur in different geographic or topographical areas. Describe the normal flow of traditional aircraft traffic at an aerodrome (circuit, taxiing, etc.). Explain how local and portable devices might be controlled to reduce interference.
✓	✓	2. Aircraft defects	
✓	✓	3. Winter operations	
✓	✓	4. Thunderstorm avoidance	
✓	✓	5. Wildlife hazards	
✓	✓	6. Wildlife conservation	
✓	✓	7. Collision avoidance–use of lights	
	✓	8. Runway numbering	
	✓	9. Aerodrome operations (Procedures for the prevention of runway incursions and conflicts)	
✓	✓	10. Radio/electronic interference, portable electronic devices	
		Aircraft performance	
✓	✓	1. Effects of density altitude and humidity	<ul style="list-style-type: none"> Describe the effect of density altitude on launch and climb performance. Describe the effect of airspeed on radius of turn. Determine operating limitations from the aircraft flight manual.
✓	✓	2. Bank/speed vs rate/radius of turn	
✓	✓	3. Use of aircraft flight manual	
		Performance charts/data	
✓	✓	1. Factors affecting launcher performance (e.g., ice, temperature)	<ul style="list-style-type: none"> Describe the effect of temperature on elasticized cord launchers, pneumatic launchers or hydraulic launchers. Identify crosswind limits.
✓	✓	2. Crosswind limits	
✓	✓	3. Factors affecting performance (battery, wind, speeds, climb power, etc.)	

✓	✓	4. Hover ceiling, maximum altitude	<ul style="list-style-type: none"> Using aircraft performance data, determine the maximum altitude at which an RPA can hover.
		Weight and balance	
✓	✓	1. Locating centre of gravity (C of G)	<ul style="list-style-type: none"> Describe methods of determining C of G. Describe how to return a C of G to within limits.
✓	✓	2. Weights—e.g., empty/gross	
✓	✓	3. External loads—effect on performance and stability	
		Aircraft critical surface contamination	
✓	✓	1. Effects of aircraft critical surface contamination on performance	<ul style="list-style-type: none"> Describe the effects of surface contamination on airfoils.
✓	✓	2. Types of contaminants (e.g., water, frost, snow, condensation, tape, etc.)	
		RPAS operations (VLOS)	
✓	✓	1. Landowner authorizations	<ul style="list-style-type: none"> Identify typical functional areas in a VLOS site (e.g., launch, observer). Identify desirable characteristics of alternate recovery areas. Identify the requirements of visual observer locations. Identify and evaluate access routes for both normal and emergency operations. Assess public access and determine crowd control requirements. List typical emergency contacts appropriate to flying site (flyaways, EMS etc.). List the safety equipment necessary for the operation (fire extinguisher, first aid, etc.). List the typical items in a crew briefing. Describe emergency procedures (e.g., airspace
✓	✓	2. Coordination with public safety (municipality)	
✓	✓	3. Charging areas	
✓	✓	4. Site control, safety perimeter	
✓	✓	5. Launch points, recovery points	
✓	✓	6. Obstacles	
✓	✓	7. Emergency procedures	
✓	✓	8. Defining roles and responsibilities	
✓	✓	9. Communications	
✓	✓	10. Post flight actions (download data, safety actions, etc.)	

			<p>conflicts, system faults, lost link, and public interference).</p> <ul style="list-style-type: none"> • List the typical items in a crew briefing (roles, objective & plan, timeline, performance limitations, emergency procedures, airspace conflicts and escape manoeuvres, flyaways, public interference, recovery area, interface with the client and public, site manager, safe areas, expectations of what they will observe, electro-magnetic interference, sterile flight deck (no interference or distractions). • Communicate vital actions (countdown and launch command, emergency abort, transfer of control, air traffic contacts, progress and expected manoeuvres). • List recommended post-flight actions (download data, check for damage, clean and dry as needed, remove batteries, record information into logs, disassemble and pack per system manual, etc.).
		RPAS Operations (Extended VLOS - EVLOS)	
	✓	1. Where EVLOS is permitted	<ul style="list-style-type: none"> • Identify that EVLOS is permitted in uncontrolled airspace away from aerodromes. • Identify that EVLOS operations must be conducted more than 100 feet from people not involved in the operation. • Identify that EVLOS operations must remain within 2 nautical miles of the pilot and visual observer. • Identify that the VO should be positioned in a quiet area with an unobstructed view of the sky. • Identify that the pilot and VO must have a means of communication. • Identify that EVLOS is only permitted with small RPA. • Identify that EVLOS operations puts additional stress on
	✓	2. Maximum range from pilot and visual observer (VO)	
	✓	3. Proximity to people	
	✓	4. Types of RPA appropriate for EVLOS	

			<p>C2 Links.</p> <ul style="list-style-type: none"> Identify that aircraft endurance is a key consideration when performing EVLOS operations.
		RPAS Operations (Sheltered Operations)	
	✓	1. Where sheltered operations are permitted	<ul style="list-style-type: none"> Identify that sheltered operations can take place in controlled and uncontrolled airspace. Identify what constitutes an obstacle. Identify that sheltered operations in controlled airspace need airspace authorization. Identify that RPA performing sheltered operations in controlled airspace needs a Safety Assurance Declaration against CAR Standard 922.04 Identify that structures like buildings will have an impact on C2 link performance. Identify the importance of correctly programming lost link behaviour and return to home (RTH) altitude when performing Sheltered operations. Identify that people not involved with the operation must be more than 100 feet from the RPA at all times during a sheltered operation.
	✓	2. Maximum range from pilot	
	✓	3. Proximity to people	
	✓	4. Concerns related to C2 links during sheltered operations	
	✓	5. Concerns related to lost-link behavior when performing sheltered operations.	
		Occupational safety & health	
✓	✓	1. Charging areas	<ul style="list-style-type: none"> List the safety equipment necessary for the operation (fire extinguishers, first aid kit, etc.). Assess weather threats in relation to ground control station (GCS) operations. Identify and evaluate access routes. List typical emergency contacts appropriate to flying site (flyaways, EMS etc.) Identify legal site access issues (trespass, insurance,
✓	✓	2. Launch points, recovery points	
✓	✓	3. Obstacles	
✓	✓	4. Emergency procedures	
✓	✓	5. Responsibilities	
✓	✓	6. Communications	
✓	✓	7. Post-flight actions	

			<p>permissions, safety training).</p> <ul style="list-style-type: none">• List typical personal safety equipment.• Describe the hazards of launchers and recovery systems.
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Section 7: Theory of flight

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		Principles of flight	
✓	✓	1. Bernoulli's principle	<ul style="list-style-type: none"> Describe how lift is produced.
✓	✓	2. Newton's laws	
		Aircraft parts and components	
✓	✓	1. Fixed wing	<ul style="list-style-type: none"> Explain the function of the vertical fin. Identify basic components including lifting and stabilizing components.
✓	✓	2. Multi-rotor aircraft	
✓	✓	3. Helicopter components	
		Forces acting on an aircraft	
✓	✓	1. Lift	<ul style="list-style-type: none"> Identify the 4 forces acting on an aircraft in flight. Describe how the 4 forces are balanced during manoeuvres and steady flight.
✓	✓	2. Drag-induced/parasite	
✓	✓	3. Thrust	
✓	✓	4. Weight	
✓	✓	5. Equilibrium	
		Stability	
✓	✓	1. Longitudinal, lateral, directional stability	<ul style="list-style-type: none"> Explain how the centre of gravity affects longitudinal stability.
✓	✓	2. Inherent stability	
✓	✓	3. Methods of achieving stability, effect of C of G position	
		Aerofoils	
✓	✓	1. Relative airflow and angle of attack	<ul style="list-style-type: none"> Explain how lift is controlled.
✓	✓	2. Relationship of lift and drag to angle of attack	
✓	✓	3. Aerodynamic stall	

		Propellers & rotors	
✓	✓	1. Handling and care	<ul style="list-style-type: none"> Describe how the condition of the propeller/rotor affects performance.
		Design of the wing	
✓	✓	1. Wing planform	<ul style="list-style-type: none"> Describe how the design of the wing affects performance.
✓	✓	2. Spoilers	
✓	✓	3. Flaps	
		Aeroplane flight controls	
✓	✓	1. Aeroplane axes and planes of movement	<ul style="list-style-type: none"> Describe the function of different control surfaces. Explain the function of trim.
✓	✓	2. Control surfaces	
✓	✓	3. Trim	
		Helicopter flight controls	
✓	✓	1. Cyclic	<ul style="list-style-type: none"> Describe how lift is created with a rotary wing (powered and autorotation). Describe how lift is controlled. Describe the function of the tail rotor, counter-rotating rotors.
✓	✓	2. Collective	
✓	✓	3. Tail rotor	
		Multi-rotor aircraft dynamics	
✓	✓	1. Principles of flight and torque	<ul style="list-style-type: none"> Describe how yaw, pitch, roll, and climb are achieved in a multi-rotor aircraft. Describe how to avoid dynamic rollover in a crosswind. Describe typical multi-rotor autopilot modes (manual, attitude, GPS Position hold). Describe how asymmetric recirculation can upset lateral control of a rotorcraft.
✓	✓	2. Pilot flight controls	
✓	✓	3. Settling with power	
✓	✓	4. Recirculation	
✓	✓	5. Dynamic rollover	

		Load factor	
✓	✓	1. Load factor–turns	<ul style="list-style-type: none"> • Describe what can affect the load factor on an aircraft. • Recall that increasing the load factor produces a requirement for increased lift, thus producing increased drag.
✓	✓	2. Gust loads, turbulence	
✓	✓	3. Structural/power limitations	

Section 8: Radiotelephony

RPAS type of operation		Knowledge areas (topics)	Sample learning objectives The RPA pilot operating within Canada must be able to:
Basic	Advanced		
		Communications	
	✓	1. Operator's certificate (aeronautical) - (Industry Canada Operator Certificate – with Aeronautical Qualification course)	<ul style="list-style-type: none"> • Interpret aeronautical radio communications (position, phase of flight). • Communicate using standard radio terminology. • Give an example of a routine blind broadcast. • List the contents of a routine call to ATC. • Give an example of an emergency (flyaway) broadcast. • Distinguish between “height” and “altitude” in communications. • Give examples of proper radio etiquette, including practices to avoid interfering with other communications.
	✓	2. Terminology	
	✓	3. Common frequencies	
	✓	4. Emergencies	
		Crew member radios	
✓	✓	1. Terminology	<ul style="list-style-type: none"> • Give an example of an advisory describing a possible aircraft conflict. • Describe factors affecting radio reception range. • Describe the verbal communication elements in a positive transfer of control or visual following.
✓	✓	2. Reception performance	