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(01/2026)

PILOT PROFICIENCY CHECK, LINE CHECK AND AIRCRAFT TYPE RATING

Flight Test Guide (Aeroplane)

Second Edition

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Canada

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Foreword

This document provides guidance on flight test exercises within Pilot Proficiency Checks (PPCs) and Line Checks as prescribed in *Canadian Aviation Regulations* (CARs) Part VII and associated *Commercial Air Service Standards* (CASS).

Guidance is primarily intended for Approved Check Pilots (ACPs) and Transport Canada Civil Aviation Safety Inspectors (CASIs). **Important policies, procedures and guidelines regarding PPCs and Line Checks are provided in the following document: ACP Manual, TP 6533.**

Transport Canada Civil Aviation (TCCA) issuing authorities approve ACPs and CASIs, and authorize them to conduct PPCs and Line Checks. When performing their duties, ACPs and CASIs act as delegates of the Minster according to subsection 4.3(1) of the *Aeronautics Act* and must follow the procedures specified in the ACP Manual, TP 6533 and this guide.

Description of Changes

This revision improves the quality and standardization of existing policies and incorporates program changes consistent with the ACP Manual, TP 6533 and other documents. There are changes in all areas of the Second Edition. Reviewing this document in its entirety is recommended. For more information, consult ACP Bulletin no. 01/24.

Pilot Proficiency Checks

Flight test exercises found in this guide are based on examinations, manoeuvres and procedures specified in CARs Part VII, CASS, PPC Schedules. They are numbered consistent with the Transport Canada Online PPC Flight Test Report (previously form 26-0249).

Alternative Phased PPC - Air operators operating under CARs 702 to 704 may utilize the Alternate Phased-PPC. Advisory Circular (AC) 700-062 contains important information in addition to the ACP Manual, TP 6533 and this guide.

Competency Based Training (CBT) / Evidence Based Training (EBT) Integrated PPC - (Reserved)

Skills test requirements found in CARs Part IV - PPCs may be used to satisfy skills test requirements for certain flight crew licenses (e.g., Airline Transport Pilot License (ATPL)) and ratings (e.g., aircraft and instrument). In these instances, important information is found in the ACP Manual, TP 6533 and this guide.

Line Checks

Flight test exercises in this guide adhere to Line Check requirements prescribed in CARs Part VII, Subpart 705 and associated CASS. This includes pilot, Cruise Relief Pilot (CRP), ETOPs Line Checks and where a Line Check is used to satisfy in-flight check requirements on the use of area navigation systems (RNAV).

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Acronyms

ABAS	Aircraft-Based Augmentation System
ACP	Approved Check Pilot
AFM	Aircraft Flight Manual
AOC	Air Operator Certificate
AOM	Aircraft Operating Manual
APU	Auxiliary Power Unit
APV	Approach with Vertical Guidance
ATC	Air Traffic Control
ATPL	Airline Transport Pilot Licence, AA – Aeroplane; AH – Helicopter
CARs	*Canadian Aviation Regulations*
CASI	Civil Aviation Safety Inspector
CASS	*Commercial Air Service Standards*
CBT	Competency Based Training
CFS	Canada Flight Supplement
COM	Company Operations Manual
CPL	Commercial Pilot Licence (CA – Aeroplane or CH – Helicopter)
CRP	Cruise Relief Pilot
CRM	Crew Resource Management
DA	Decision Altitude
DH	Decision Height
EASA	European Aviation Safety Agency
EBT	Evidence Based Training
EFIS	Electronic Flight Instrument System
ETOPS	Extended Twin Engine Operations
FAA	Federal Aviation Administration
FARs	*Federal Aviation Regulations*
FCOM	Flight Crew Operations Manual
FMS	Flight Management System
FFS	Full Flight Simulator
FOM	Flight Operations Manual
FMGC	Flight Management Guidance Computer
FSTD	Flight Simulation Training Device
FTD	Flight Training Device
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
IAP	Instrument Approach Procedure

IFR	Instrument Flight Rules
IFT	Instrument Flight Test
INS	Inertial Navigation System
IRS	Inertial Reference System
LP	Localizer Performance without Vertical Guidance
LPV	Localizer Performance with Vertical Guidance
LNAV	Lateral Navigation
LNAV/VNAV	Lateral Navigation/Vertical Navigation
MAP	Missed Approach Point
MDA	Minimum Descent Altitude
MEL	Minimum Equipment List
MMI	Missing, Malfunction or Inoperative (components)
NPA	Non-Precision Approach
NSEP	National Simulator Evaluation Program
OM	Operations Manual
PA	Precision Approach
PBN	Performance Based Navigation
PIC	Pilot-in-Command
PF	Pilot Flying
PM	Pilot Monitoring
POH	Pilot Operating Handbook
PPC	Pilot Proficiency Check
QRH	Quick Reference Handbook
RAIM	Receiver Autonomous Integrity Monitoring
RF	Radius to Fix
RNAV	Area Navigation
RNP	Required Navigation Performance
RNP APCH	Required Navigation Performance Approach
ROC	Required Obstacle Clearance
SBAS	Satellite-Based Augmentation System
SCDA	Stabilized Constant Descent Angle
SCIG	Simulator Component Inoperative Guide
SIC	Second-in-Command
SID	Standard Instrument Procedure
SOP	Standard Operating Procedure
STAR	Standard Terminal Arrival
TATC	Transportation Appeal Tribunal of Canada
TCC	Transport Canada Centre

TC AIM	Transport Canada Aeronautical Information Manual (TP 14371)
TEM	Threat and Error Management
UAS	Undesired Aircraft State
VPA	Vertical Path Angle
WAAS	Wide Area Augmentation System

Definitions

ACP (Type A) - An ACP who is authorized to conduct PPCs and Line Checks (Subpart 705 of the CARs only).

ACP (Type A - VFR Only) - An ACP who is authorized to conduct PPC/VFR flight checks only.

ACP (Type B) - An ACP who is authorized to conduct Line Checks (Subpart 705 of the CARs only).

ACP (Type M) - An ACP who is authorized to conduct an ACP Monitor (Recurrent) on an ACP (Type A).

ACP/SFE - An ACP who gains their qualification on the basis of their EASA or UK CAA Synthetic Flight Examiner (SFE) qualification and experience.

ACP/TCE - An ACP who gains their qualification on the basis of their FAA (Part 142) Training Center Evaluator (TCE) qualification and experience.

Airborne PPC - The airborne portion of a PPC that is conducted in conjunction with the simulator portion of the PPC. This may be as a result of a simulator's level of approval and fidelity, the particulars of an approved training program or the status of the candidate. See Aircraft PPC

Aircraft Operating Manual (AOM) - A pilot operating manual, a pilot operating handbook (POH), a flight crew operating manual (FCOM) or a manual established by the operator for the use and guidance of flight crewmembers in the operations of its aircraft.

Aircraft PPC - A PPC that is conducted entirely in an aircraft. Note: For consistency with CASS PPC Schedules, PPC Applicability statements in this guide makes use of the term Aeroplane.) See Airborne PPC

Approved Check Pilot (ACP) - A person holding an official authorization to conduct flight checks on behalf of the Minister of Transport pursuant to Part 1, Section 4.3(1) of the *Aeronautics Act*.

Authorized Person - A person who is delegated the authority to act as a Licensing Agent for the purpose of issuing temporary privileges (i.e., type ratings and/or instrument ratings) in the candidate's Aviation Document Booklet (ADB) or by signing the additional privileges section on the back of the candidate's temporary licence or by completing the certification of an Additional Privileges Card (Form 26-0267). Within the ACP program, ACPs (Type A) are normally delegated this privilege within a defined scope of activities.

Canadian Aviation Document (CAD) - Subject to subsection (3) of the *Aeronautics Act*, any licence, permit, accreditation, certificate or other document issued by the Minister under Part I of the *Aeronautics Act* to or with respect to any person or in respect of any aeronautical product, aerodrome, facility or service.

Certificate - Certificate means an air operator certificate in this document.

Civil Aviation Safety Inspector (CASI) - A group of inspectors with various aviation backgrounds. In this document, a CASI refers to a Transport Canada inspector who is trained and authorized to conduct flight checks and ACP monitors (i.e., a Civil Aviation Inspector (CASI)).

Commercial Air Service Standards **(CASS)** - CARs Standards published under the authority of the Minister that apply in respect of commercial air services operated by air operators. Referred to as the CARs Standard(s) in this guide.

Company Check Pilot Manual (TP 6533) - Predecessor of the Approved Check Pilot Manual (TP 6533).

Company Employee - A person that is employed on a part time basis, full time basis or on contract on a seasonal basis.

Competency - A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions. Definition source: ICAO Doc 9868. See Proficiency

Competency Based Training (CBT) - Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement and the development of training to the specified performance standards. Definition is synonymous with Competency-based training and assessment (CBTA). Definition source ICAO Doc 9868

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

Contemporary Crew Resource Management (Contemporary CRM) - The current expression of crew resource management (CRM). Contemporary CRM integrates technical skills development with communications and crew coordination training and operational risk management by applying threat and error management (TEM) concepts. See CRM

Crew Resource Management (CRM) - The effective utilization of all available resources to achieve safe and efficient operations. The objective of CRM is to enhance communications, human factors and management skills of the crew members concerned. Emphasis is placed on the non-technical aspects of crew performance. See Contemporary CRM

Deviation - Within the 4-Point Marking Scale, a variation in precision from a specified parameter. See Error

Error - Within the 4-Point Marking Scale, an action or inaction that leads to a variation from flight crew standards. See Deviation

Evidence Based Training (EBT) - Training and assessment based on operational data that is characterized by developing and assessing the overall capability of a trainee across a range of core competencies rather than by measuring the performance in individual events or manoeuvres. Definition source ICAO Doc 9995.

Flight Check - In this document, refers to a PPC or Line Check.

Flight Test Exercise - A manoeuvre, task or item listed in this guide.

Flight Simulation Training Device (FSTD) - A Transport Canada-approved Full Flight Simulator (FFS) or Flight Training Device (FTD) as defined in the Aeroplane and Rotorcraft Simulator Manual (TP 9685) and certified in accordance with Section 606.03 of the CARs.

IFR-Related Sequence - A flight test exercise that is associated with instrument flight procedures such as, but not limited to, flight planning, standard instrument departures (SIDs), holds, standard terminal arrival routes (STARs), instrument approaches and missed approaches.

Instrument Proficiency Check (IPC) - A recurring event to confirm retention of a level of proficiency that meets the standards of performance required for the issuance of an instrument rating. Refer to Advisory Circular (AC) 401-004.

Licensing Agents - see Authorized Person.

Line Check - A flight check conducted in accordance with Paragraph 705.106(1)(d) of the CARs which is undertaken upon completion of line indoctrination.

Line Check Pilot - An individual currently employed as a pilot-in-command by a Subpart 705 of the CARs operator who is appointed to conduct Line Checks under the operator’s Line Check program. These Line

Checks exclude those required for extended twin engine operations (ETOPS), Cruise Relief Pilot (CRP) and RNAV operations.

Manager, Simulator Program (MSP) - The person responsible (at Transport Canada) for the overall administration and operation of the National Simulator Evaluation Program (NSEP).

Manually Flown - Controlled by the pilot without coupling the flight controls to any of the autopilot automation modes as applicable to aircraft type.

Missing, Malfunction or Inoperative (MMI) Components - Under the FAA, a component of the Flight Simulator Training Device (FSTD) that is required to be present and correctly operate for the satisfactory completion of a manoeuvre, procedure, or task. Refer to FAA National Simulator Program Guidance Bulletin No. 08-01. See Simulator Component Inoperative Guide (SCIG) found in TP 9685 - Aeroplane and Rotorcraft Simulator Manual

Non-Technical Proficiency Elements - In this guide, refers to cooperation, leadership and managerial skills, situational awareness and decision making. These elements are incorporated in the 4-Point Marking Scale.

Operator - means the holder of an air operator certificate under Part VII of the CARs or the holder of a private operator registration document under Subpart 604 of the CARs.

Pilot Flying (PF) - The term pilot flying (PF) refers to the pilot responsible for managing the current and projected flight path of the aircraft in a multi-crew crew cockpit.

Pilot-In-Command (PIC) - In relation to an aircraft, the pilot having responsibility and authority for the operation and safety of the aircraft during flight time.

Pilot Monitoring (PM) - The term pilot monitoring (PM) replaces pilot not flying (PNF). The PM is responsible for monitoring the current and future projected flight path vector of the aircraft in a multi-crew cockpit.

Pilot Not Flying (PNF) - Pilot not flying (PNF) has been replaced by pilot monitoring (PM) in this [guide]. See pilot monitoring (PM)

Pilot Proficiency Check (PPC) - A flight check conducted by an Approved Check Pilot (ACP) or Civil Aviation Safety Inspector (CASI) in accordance with the appropriate PPC Schedule specified in Part VII Standards of the CARs.

Plan of Action - Terminology adopted from the Federal Aviation Administration (FAA). A plan of action is similar to a scripted PPC, however is less formal. It is a document prepared by an ACP or CASI to guide the assessment of a PPC candidate. A plan of action must contain, as a minimum, a list of flight test exercises from the appropriate CARs Part VII Commercial Air Service Standard (CASS) - PPC Schedule and applicable Flight Test Guide. It may also include (as appropriate) one or more scenarios that group several required flight test exercises together.

PPC/IFR - A pilot proficiency check (PPC) conducted under instrument flight rules (IFR). A PPC/IFR is deemed to meet various requirements of an instrument rating including the initial issuance.
Note: A PPC/IFR may also include VFR manoeuvres.

PPC/VFR - A pilot proficiency check conducted under visual flight rules (VFR). A PPC/VFR is deemed to meet the requirement for VFR operations only.

Proficiency - The degree of skill or competence that can be reliably demonstrated by an individual in the performance of a task. See Competency

Qualified Person - In the case of PPCs conducted in a simulator means:

(a) a pilot who holds a valid PPC (or foreign equivalent) on the same type of aircraft for which the other candidate is being checked;

(b) a person who has been recommended for a Flight Check on that aircraft type; or

(c) a qualified training pilot on the same type of aircraft for which the candidate is being checked on, and that person is acceptable to both the operator and the PPC candidate.

Safety Pilot - In the case of a multi-crew aircraft, a training pilot or a pilot who holds a valid PPC on the same type of aircraft on which the candidate is being checked.

Scripted PPC - A document that governs the events presented to candidates during a PPC that is conducted in a simulator. The script provides a detailed plan for the execution of flight test exercises (i.e., manoeuvres) in accordance with the CARs Part VII Commercial Air Service Standard (CASS) – PPC Schedule. Additional information such as Air Traffic Control (ATC) communications and simulator device instructions are provided. For more information, consult ACP Bulletin 04/20.

Seat Substitute – A pilot that is normally qualified and current on type that has been assigned to occupy a pilot seat during a multi-crew PPC for the sole purpose of providing competent support to the candidate being evaluated.

Second-In-Command (SIC) - In relation to an aircraft, a pilot who reports to the pilot-in-command (PIC) on an aircraft type certificated for, or in operations requiring more than one required pilot flight crewmember.

Simulator Component Inoperative Guide (SCIG) - Under Transport Canada, a guide providing relief from initial simulator approval requirements. Refer to TP 9685 - Aeroplane and Rotorcraft Simulator Manual for more information. See Missing, Malfunction or Inoperative (MMI) Components for related FAA definition.

Simulator PPC - A PPC conducted in a full-flight simulator.

Special Authorization - An approval which is documented in the Operations Specifications. The term is interchangeable with Specific Approval. The term special authorization replaces ‘Ops Spec’. Refer to TP 4711 for more information.

Specific Approval - An approval which is documented in the Operations Specifications. The term is interchangeable with Special Authorization. Refer to TP 4711 for more information.

Standard Operating Procedure(s) (SOPs) - procedures established by an operator enabling the crewmembers to operate the aircraft within the limitations specified in the aircraft flight manual (AFM), aircraft operating manual (AOM), and/or company operations manual (COM).

Technical Proficiency Elements - In this guide, refers to knowledge and technical skills, and aircraft handling. These elements are incorporated in the 4-Point Marking Scale.

Threat and Error Management (TEM) - Threat and error management (TEM) can be considered defensive flying. It equips a pilot with skills and behaviour to recognize and avoid problems which if ignored or left unattended could result in an undesired aircraft state (UAS) and possibly lead to an incident or accident. TEM proposes that threats, errors and even undesired aircraft states (such as an altitude deviation) are everyday occurrences that pilots must manage to maintain safety. TEM is central to contemporary CRM.

Training Pilot - A pilot who meets the requirements of the applicable CARs Part VII Commercial Air Service Standard (CASS).

Transportation Appeal Tribunal of Canada (TATC) - A quasi-judicial body established in 2003 pursuant to the *Transportation Appeal Tribunal of Canada Act*. The Tribunal replaced the Civil Aviation Tribunal, which was established under Part IV of the *Aeronautics Act* in 1986.

Undesired Aircraft State (UAS) - An aircraft position, speed, attitude or configuration that results from a flight crew error, action or omission which clearly reduces safety margins.

General

Approved Check Pilot (ACP) Manual, TP 6533

(1) The ACP Manual, TP 6533 is the parent document to this guide. It must be consulted regarding the conduct of a PPC or Line Check.

(2) With the exception of the 4-Point Marking Scale (Grading Matrix) and some information below, information from the ACP Manual, TP 6533 is no longer duplicated in this guide.

Aim of a PPC

(1) The aim of a PPC is to determine that the candidate meets the knowledge and skill requirements to operate an aircraft, its systems and components under normal, abnormal and emergency conditions in a safe and competent manner, and if applicable, in accordance with the air operator's approved SOPs and policies (i.e., stabilized approach).

(2) The aim of a PPC is also to improve standards of instruction and training through feedback to the operator or training organization of those flight test exercises, policies and/or procedures (i.e., SOPs) that are out of date, weak or commonly unsuccessful.

(3) Consult the ACP Manual, TP 6533 for more information.

Aim of a Line Check

(1) The aim of a Line Check is to determine that a candidate meets the requirements to operate an aircraft, its systems and components during normal line operations in a safe and competent manner.

(2) The aim of a Line Check is also to improve aspects of safety and the effectiveness of company policies and procedures that impact line operations. These include operational control measures, aircraft loading, fueling, de-icing, air traffic control interactions and cabin/ground crew interactions.

(3) Consult the ACP Manual, TP 6533 for more information.

Assessment of Performance

(1) Each flight test exercise in this guide contains the following sections:

- (a) **PPC Applicability -** Information on mandatory versus optional PPC flight test exercises (e.g., examinations, manoeuvres and procedures).
- (b) **Aim** - The goal of the flight test exercise.
- (c) **Description** - How the flight test exercise is to be performed.
- (d) **Performance Criteria** - Items to be observed in order to assess a candidate's level of proficiency.

(2) Performance Criteria provided are often general in nature and assume that the operation of the aeroplane is in accordance with manufacturer specifications including recommended speeds and configurations found in a pilot operating handbook (POH), aircraft flight manual (AFM), aircraft operating manual (AOM) and/or other similar approved information.

Note: Seaplane Operations - This flight test guide does **not** provide performance criteria unique to seaplane operations. Completion standards found in the Instructor Guide - Seaplane Rating (TP 12668) should be referenced as necessary, during flight test exercises 1. Technical Knowledge, 3. Pre-Flight, 5. Engine Start/Depart, 6. Taxi-Out, 18. Landing and 19. Ground Arrival.

(3) Guidance on assessment of performance provided in this document must be read in conjunction with information on principles of evaluation and the conduct of a flight check found in the ACP Manual, TP 6533.

Mandatory versus Optional Exercises and Items

(1) **Pilot Proficiency Checks (PPCs) - General**

(a) Aeroplane PPCs must be developed and delivered with reference to various PPC Schedules found in CARs Part VII, *Commercial Air Service Standards* (CASS) and other relevant documentation

Note: Other relevant documentation implies applicable Special Authorizations or Specific Approvals (SA) (e.g., RNP AR APCH), and special emphasis/special flight characteristics as provided in applicable OEB/FSB/OSD reports.

(b) **Mandatory Flight Test Exercises**

(i) Mandatory flight test exercises are those typically required within the CASS PPC Schedules.

(c) **Optional Flight Test Exercises**

Note: In this guide, the word optional implies not required, not mandatory, or that certain assessment options exist based on the CASS PPC Schedules.

(i) Optional flight test exercises are those not commonly required within the CASS PPC Schedules. Optional flight test exercises are frequently associated with recurrent PPCs as opposed to initial or upgrade PPCs. Assessment options may also be listed. See associated Notes for important information.

(ii) While an ACP conducting a PPC may require any manoeuvre or procedure from the appropriate schedule necessary to determine the proficiency of a candidate/crew and to confirm that a candidate/crew can operate the aeroplane safely, this allowance should be exercised judiciously.

(d) **Optional Performance Criteria Items**

(i) Not all performance criteria items are required to be checked to assess a level of proficiency. The ACP or CASI must determine if sufficient observations have been acquired to make an assessment.

(ii) Some guidance is provided in this guide where certain Performance Criteria items may be omitted. This often occurs where two candidates are undergoing a recurrent PPC in a multi-crew setting, or during a check ride in a simulator. Guidance on Scripted PPCs (provided in ACP Bulletin 04/20) may provide additional flexibilities.

(2) **Pilot Proficiency Checks (PPCs) – Cruise Relief Pilots**

(a) CARs Part VII, CASS 725.106, Schedule III specifies PPC requirements for Cruise Relief Pilots (CRPs).

(b) Regarding PPC requirements for CRPs, information on optional flight test exercises is **not** inclusive at this time. Consult CASS 725.106, Schedule III.

(3) **Line Checks**

(a) CARs Part VII, CASS 725.106(3)(a) and (b) specifies Line Check requirements. There are no exercises listed as either not required or not mandatory.

(b) Regarding Line Checks requirements, information on optional flight test exercises is **not** inclusive at this time. Consult CASS 725.106(3)(a) and (b).

Flight Test Tolerances

The following flight test tolerances apply unless otherwise indicated.

Item	Tolerance
Heading, Track and Bearing All Engines Operating and with Engine Failure(s)	±10 degrees
Angle of Bank Steep Turns	±5 degrees
Altitude Normal Flight and Steep Turns Approach	±100 feet At or above minimums (See Note 1)
Airspeed Normal Flight Take-off, Initial/Enroute Climb and Landing Approach, Go-around and Rejected Landing	±10 knots - 5/+10 knots - 5/+10 knots
Course, Bearing and Glide Slope/Path Approach and Hold - RNAV(GNSS), ILS, LOC and VOR Approach - NDB Hold - NDB	±½ scale ±5 degrees ±10 degrees

Note 1: Descent Below Minimums - During certain authorized SCDA procedures (e.g., CARs Exemption NCR 008-2020), momentary descent below minimums is allowed. During circling approach maneuvering, while the tolerance is - 0/+ 100 feet, ACPs should exercise discretion on technical proficiency element grades based on environmental conditions as stated in the ACP Manual, TP 6533.

Note 2: Steep Turns - Normal flight tolerances for heading and altitude apply as applicable during the manoeuvre, in addition to the angle of bank tolerance specified.

Note 3: Landing – Touch down should be accomplished with the runway centerline between the main landing gear at the appropriate speed and pitch attitude at the runway aiming point markings -250/+500 feet, or where there are no runway markings 750 to 1,500 feet from the approach threshold of the runway. Where a full stop is planned, taxi speed should be achieved within the calculated landing distance plus 25% for the actual conditions with the runway centerline between the main landing gear. These parameters are approximate and for reference, ACPs may use touchdown markings and/or runway lighting to judge distances.

4-Point Marking Scale (Grading Matrix)

(1) The following two pages contain the 4-Point Marking Scale (Grading Matrix) from the ACP Manual, TP 6533.

(2) Consult the ACP Manual, TP 6533 for more information regarding its use.

		4-Point Marking Scale (Grading Matrix) - Page 1 of 2			
		4	3	2	1
Technical Proficiencies	Knowledge and Technical Skills	• Practical knowledge was effective. • Following of SOPs, rules and regulations was effective. **Slight Error** • Flight crew actions resulted in an aircraft position, speed, attitude and configuration that maintained effective safety margins.	• Practical knowledge was acceptable. • Following of SOPs, rules or regulations was acceptable. **Minor Error** • Flight crew actions or inactions resulted in an aircraft position, speed, attitude or configuration that maintained acceptable safety margins.	• Practical knowledge was poor. • Following of SOPs, rules or regulations was poor. **Major Error** • Flight crew actions or inactions resulted in an aircraft position, speed, attitude or configuration that maintained poor (i.e., reduced) safety margins.	• Practical knowledge was unacceptable. • Following of SOPs, rules or regulations was unacceptable. **Critical Error / UAS** • Flight crew actions or inactions resulted in an aircraft position, speed, attitude or configuration that maintained unacceptable (i.e., clearly reduced) safety margins.
	Automation	**Subject to grading under Knowledge and Technical Skills, and Aircraft Handling.** This element may also be discussed during a Flight Check debrief based on information found in Advisory Circular (AC) 700-042 and the air operator's own CRM training program.			
	Aircraft Handling (PF)	• Effective compliance with regulations and aircraft limitations. **Slight Deviation** • A variation in precision that was less than or equal to a flight test exercise tolerance and quality of aircraft handling was effective.	• Acceptable compliance with regulations and aircraft limitations. **Minor Deviation** • A variation in precision that was less than or equal to a flight test exercise tolerance and quality of aircraft handling was acceptable.	• Poor compliance with regulations and/or aircraft limitations. **Major Deviation** • A variation in precision that exceeded but was not more than double a flight test exercise tolerance and/or quality of aircraft handling was poor.	• Unacceptable compliance with regulations and/or aircraft limitations. **Critical Deviation** • A variation in precision that exceeded but was not more than double a flight test exercise tolerance and/or quality of aircraft handling was unacceptable. - OR - • A variation in precision that was more than double a flight test exercise tolerance.

		4-Point Marking Scale (Grading Matrix) – Page 2 of 2			
		4	3	2	2 - Minimum Grade
Non-Technical Proficiencies	Situational Awareness	• Effective system awareness • Effective environmental awareness • Effective awareness of time • Effective anticipation of future events	• Acceptable system awareness • Acceptable environmental awareness • Acceptable awareness of time • Acceptable anticipation of future events	• Poor system awareness • Poor environmental awareness • Poor awareness of time • Poor anticipation of future events	• Unacceptable system awareness • Unacceptable environmental awareness • Unacceptable awareness of time • Unacceptable anticipation of future events
	Cooperation	• Effective team building and maintaining • Effective consideration of others • Effective support of others • Effective resolving conflicts	• Acceptable team building and maintaining • Acceptable consideration of others • Acceptable support of others • Acceptable resolving conflicts	• Poor team building and maintaining • Poor consideration of others • Poor support of others • Poor resolving conflicts	• Unacceptable team building and maintaining • Unacceptable consideration of others • Unacceptable support of others • Unacceptable resolving conflicts
	Decision-Making	• Effective problem definition / diagnosis • Effective option generation • Effective risk assessment and option selection • Effective outcome review	• Acceptable problem definition / diagnosis • Acceptable option generation • Acceptable risk assessment and option selection • Acceptable outcome review	• Poor problem definition / diagnosis • Poor option generation • Poor risk assessment and option selection • Poor outcome review	• Unacceptable problem definition / diagnosis • Unacceptable option generation • Unacceptable risk assessment and option selection • Unacceptable outcome review
	Leadership and Managerial Skills	• Effective use of authority (PIC) and/or assertiveness • Effective providing and maintaining standards • Effective planning and coordination • Effective workload management	• Acceptable use of authority (PIC) and/or assertiveness • Acceptable providing and maintaining standards • Acceptable planning and coordination • Acceptable workload management	• Poor use of authority (PIC) and/or assertiveness • Poor providing and maintaining standards • Poor planning and coordination • Poor workload management	• Unacceptable use of authority (PIC) and/or assertiveness • Unacceptable providing and maintaining standards • Unacceptable planning and coordination • Unacceptable workload management
	Pressure and Stress	**Not subject to grading.** These non-technical elements may be discussed during a Flight Check debrief based on information found in Advisory Circular (AC) 700-042 and the air operator's own CRM training program.			
	Fatigue				
	Communication				
	Workload Management	**Subject to grading under Leadership and Managerial Skills (above)**. This element may also be discussed during a Flight Check debrief based on information found in Advisory Circular (AC) 700-042 and the air operator's own CRM training program.			
	Threat and Error Management (TEM)	**Not subject to grading as a standalone item**- TEM performance may be considered by an ACP where grading discretion is available. TEM performance may also be discussed during a Flight Check debrief based on information found in Advisory Circular (AC) 700-042 and the air operator's own CRM training.			

Flight Test Exercises – Normal

1. Technical Knowledge

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory
704 and 705	Optional - See Notes 2 and 3 in the Description section.

Aim

To assess the candidate's practical knowledge of selected systems, components, normal, abnormal and emergency procedures in accordance with a pilot operating handbook (POH), aircraft flight manual (AFM), aircraft operating manual (AOM) and/or other similar approved information.

Description

The ACP or CASI will conduct an equipment examination requiring the candidate to demonstrate practical knowledge of the airframe, engine, major components and systems including the normal, abnormal, alternate and emergency operating procedures and limitations relating thereto.

Note 1: The technical oral exam should consist of approximately 10 questions for each candidate and is considered successful if the candidate answers a minimum of 70 percent of the questions correctly. Use of reference material is permitted.

Note 2: An assessment of technical knowledge (i.e., equipment examination) is optional when the pilot's training record contains a valid written examination, from initial or annual training.

Note 3: Skills Test/CARs Part IV - An assessment of technical knowledge (i.e., equipment examination) is required during initial PPCs that will also serve as a CARs Part IV skills test for a new license or rating **other than** an individual aircraft type rating. This includes situations where a PPC/IFR will serve as a CARs Part IV skills test in support of a new or revised instrument rating.

Performance Criteria

Assess the candidate's ability to explain the operation of the following systems:

a) Landing gear.

b) Powerplant.

c) Propellers.

d) Fuel system.

e) Oil system.

f) Hydraulic system.

g) Electrical system.

h) Environmental systems.

i) Avionics and communications equipment such as autopilot, flight director, Electronic Flight Instrument Systems (EFIS), Flight Management System (FMS), radar, Inertial Navigation Systems, (INS), Global Navigation Satellite System (GNSS), ground-based navigation systems and components, Automatic Dependent Surveillance - Broadcast (ADS-B), traffic awareness/warning/avoidance systems, terrain awareness/warning/alert systems, Ultra High Frequency (UHF)/Very High Frequency (VHF)/High Frequency (HF), satellite communications, data link, Controller Pilot Data Link Communication (CPDLC), indicating devices, transponder, emergency locator transmitter (ELT) and Head Up-Display (HUD).

j) Ice protection.

k) Crewmember and passenger equipment (oxygen system, survival gear, emergency exits, evacuation procedures and crew duties, and quick donning oxygen mask for crewmembers and passengers).

l) Flight controls (ailerons, elevator(s), rudder(s), winglets, canards, control tabs, balance tabs, stabilizer, flaps, spoilers, leading edge flaps/slats and trim systems).

m) Pitot-static system with associated instruments and the power source for the flight instruments.

n) Systems and components listed above with regard to the POH, AFM, AOM and/or the Minimum Equipment List (MEL), if appropriate, and the Operations Specifications, if applicable.

2. Flight Planning (FLP)

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory
704 and 705	Optional - See Notes 2 and 3 in the Description section.

Aim

To assess the candidate's proficiency to plan a flight utilizing performance charts, weight and balance calculations, conforming to the VFR or IFR flight rules as applicable and retrieving and interpreting aviation weather information necessary for the safe conduct of the flight.

Description

The ACP will conduct a flight planning practical examination requiring the candidate to demonstrate a knowledge of the air operators approved standard operating procedures and the POH, AFM or AOM including aeroplane and runway performance charts where applicable, loading, weight and balance procedures and Flight Manual Supplements.

Note 1: The flight planning oral exam should consist of approximately 10 questions for each candidate and is considered successful if the candidate answers a minimum of 70 percent of the questions correctly. Use of reference material is permitted.

Note 2: An assessment of flight planning is optional when the pilot's training record contains a valid written examination, from initial or annual training.

Note 3: Skills Test/CARs Part IV - An assessment of technical knowledge (i.e., equipment examination) is required during initial PPCs that will also serve as a CARs Part IV skills test for a new license or rating **other than** an individual aircraft type rating.

Note 4: Instrument Rating Skills Test/CARs Part IV - Where a PPC/IFR will serve as a CARs Part IV skills test in support of a new or revised instrument rating, in addition to Performance Criteria item d. below, ACPs should consult the section titled IFR Operational Knowledge in Flight Test Guide, Instrument Rating Groups 1, 2 and 3 Aeroplane, TP 9939 for additional requirements regarding basic IFR knowledge.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate a practical knowledge of performance and limitations, including the adverse effects of exceeding any limitation.

b) Demonstrate proficient use of (as appropriate to the aeroplane) performance charts, tables, graphs, or other data relating to items, such as:

   i) Accelerate-stop distance.

   ii) Accelerate-go distance.

   iii) Takeoff performance - all engines operating.

   iv) Climb performance including obstacle clearance departure profiles and/or noise abatement procedures; with all engines operating, with one or more engines inoperative and with other engine malfunctions as may be appropriate.

   v) Service ceiling - all engines, engine(s) inoperative, including drift down, if appropriate.

   vi) Cruise performance.

   vii) Fuel consumption, range and endurance.

   viii) Descent performance.

   ix) Go-around from rejected landings.

x) Other performance data (appropriate to the aeroplane).

c) Describe (as appropriate to the aeroplane) the airspeeds used during specific phases of flight.

d) Retrieve and interpret items such as weather reports and forecasts, pilot and radar reports, surface analysis charts, significant weather prognostics, winds and temperatures aloft, freezing level charts, and SIGMETs. Describe the effects of meteorological conditions upon performance characteristics and correctly apply these factors to a specific chart, table, graph or other performance data - **See Note 4 in the Description section** .

e) Compute the centre-of-gravity location for a specific load condition, including adding, removing or shifting weight.

f) Determine if the computed centre-of-gravity is within the forward and aft centre-of-gravity limits, and that lateral fuel balance is within limits for takeoff and landing for the proposed flight.

g) Demonstrate acceptable planning and knowledge of procedures in applying operational factors affecting aeroplane performance.

h) Select an appropriate route, altitude and alternate.

i) Locate and apply information essential to the flight.

j) Obtain and correctly interpret appropriate aeronautical references and information (e.g., NOTAMs) information.

k) Calculate the estimated time enroute and total fuel requirement based on factors such as power settings, operating altitude or flight level, wind and fuel reserve requirements.

l) Determine that the required performance for the planned flight is within the aircraft’s capability and operating limitations.

m) Make a competent ‘GO/NO-GO’ decision based on available information for the planned flight.

n) Complete a flight plan in a manner that reflects the conditions of the proposed flight.

o) Demonstrate sufficient practical operational knowledge of the regulatory requirements relating to instrument and visual flying, as applicable.

3. Pre-Flight (PRF)

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory
704 and 705	Optional (Simulator) - See Note in the Description section. Mandatory (Aeroplane)

Aim

To assess the candidate's proficiency to systematically complete internal and external checks in accordance with the POH, AFM, AOM and/or SOPs to ensure that the aeroplane is ready for the intended flight. The candidate will also demonstrate knowledge of how to deal with irregularities, if found.

Description

The candidate will determine that the aeroplane is ready for the intended flight. The pre-flight aeroplane inspection (where required) will include a visual inspection of the exterior and interior of the aeroplane, locating each required item and explaining the purpose of the inspection in accordance with the POH, AFM, AOM and/or SOPs.

The candidate will carry out, in accordance with the POH, AFM or AOM, a visual check for fuel quantity, proper grade of fuel, fuel contamination and oil levels. If, due to aircraft design, the POH, AFM or AOM does not prescribe a visual check of fuel levels, the candidate will use fuel chits, fuel logs or other credible procedures to confirm the amount of fuel on board the aircraft.

At the request of the ACP or CASI, the candidate will conduct an oral passenger safety briefing where applicable.

Note: Skills Test/CARs Part IV - While a visual pre-flight check is normally optional, it is required during initial PPCs that will also serve as a CARs Part IV skills test for a new license or rating. The use of visual aids and/or videos is permitted in a simulator.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate a knowledge of the pre-flight inspection procedures, while briefly explaining the purpose of inspecting the items, which must be checked, how to detect possible defects and the corrective action to take.

b) Demonstrate knowledge of the operational status of the aeroplane by locating and explaining the significance and importance of related documents, such as airworthiness and registration certificates, operating limitations, handbooks, and manuals, minimum equipment list (MEL) (if appropriate), weight and balance data and maintenance requirements, tests, and appropriate records applicable to the proposed flight or operation; and maintenance that may be performed by the pilot or other designated crewmember.

c) Inspect the aeroplane externally and internally in accordance with the approved checklist.

d) Use the challenge-and-response (or other approved) method with the other crewmember(s), where applicable to accomplish the checklist procedures.

e) Verify the aeroplane is safe for flight by emphasizing (as appropriate) the need to look at and explain the purpose of inspecting items, such as:

   i) Powerplant, including controls and indicators.

   ii) Fuel quantity, grade, type, contamination safeguards, and servicing procedures.

   iii) Oil quantity, grade, and type.

   iv) Hydraulic fluid quantity, grade, type, and servicing procedures.

   v) Oxygen quantity, pressures, servicing procedures, and associated systems and equipment for crew and passengers.

vi) Hull, landing gear, float devices, brakes, and steering system.

vii) Tires for condition, inflation, and correct mounting, where applicable.

viii) Fire protection/detection systems for proper operation, servicing, pressures, and discharge indications.

ix) Pneumatic system pressures and servicing.

x) Ground environmental systems for proper servicing and operation.

xi) Auxiliary power unit (APU) for servicing and operation.

xii) Flight control systems including trim, spoilers, and leading/trailing edge.

xiii) Anti-ice, deice systems, ice warning systems, servicing, and operation.

f) Coordinate with ground crew and ensure adequate clearance prior to moving any devices, such as door, hatches and flight control surfaces.

g) Comply with the provisions of the appropriate Operations Specifications, if applicable, as they pertain to the particular aeroplane and operation.

h) Demonstrate preparation of avionics and communications equipment such as autopilot, flight director, Electronic Flight Instrument Systems (EFIS), Flight Management System (FMS), radar, Inertial Navigation Systems, (INS), Global Navigation Satellite System (GNSS), ground-based navigation systems and components, Automatic Dependent Surveillance – Broadcast (ADS-B), traffic awareness/warning/avoidance systems, terrain awareness/warning/alert systems, Ultra High Frequency (UHF)/Very High Frequency (VHF)/High Frequency (HF), satellite communications, data link, Controller Pilot Data Link Communication (CPDLC), indicating devices, transponder, emergency locator transmitter (ELT) and Head Up-Display (HUD).

i) Demonstrate proper operation of all applicable aeroplane systems.

j) Take note of any discrepancies, determine if the aeroplane is airworthy and safe for flight or take the proper corrective action with respect to unsatisfactory conditions identified.

k) Check the general area around the aeroplane for hazards to the safety of the aeroplane and personnel.

l) Ensure the aeroplane and surfaces are free of ice, snow, and frost. If icing conditions are present, demonstrate satisfactory knowledge of deicing procedures

4. Engine Start/Depart (ESD)

PPC Applicability

CARs Subpart	Applicability
702 and 703	Optional (Simulator) - See Note in the Description section. Mandatory (Aeroplane)
704 and 705	Optional (Simulator) - See Note in the Description section. Mandatory (Aeroplane)

Aim

To assess the candidate's proficiency to complete the correct engine start procedures including the use of an auxiliary power unit (APU) or external power source under various atmospheric conditions, conducting warm-up, run-up and system checks, recognize normal and abnormal situations, and take proper action in the event of a malfunction.

Description

The candidate will demonstrate the proper use of the pre-start, start and pre-taxi check lists and check the appropriate radio communications, navigation and electronic equipment and selection of the appropriate communications and navigation frequencies prior to flight.

Note: Recurrent PPCs - Where two candidates are paired in a multi-crew environment, the first candidate may complete engine start/depart and taxi-out exercises while the second candidate may conduct a taxi-in and full ramp shutdown – See Flight Test Exercises 5 and 19.

Performance Criteria

Assess the candidate's ability to:

a) Ensure ground safety procedures are followed during the before-start, start, and after-start phases.

b) Ensure the appropriate use of ground crew personnel during the start procedures.

c) Perform all items of the start procedures by systematically following the approved checklist items for the before-start, start, and after-start phases.

d) Demonstrate sound judgment and operating practices in those instances where specific instructions or checklist items are not published.

e) Use the challenge-and-response (or other approved) method with the other crewmember(s), where applicable, to accomplish the checklist procedures.

f) Coordinate with ground crew and ensures adequate clearance prior to moving any devices, such as door, hatches, and flight control surfaces.

g) Demonstrate adequate knowledge of the pre-takeoff checks by stating the reason for checking the items outlined on the approved checklist and explaining how to detect possible malfunctions.

h) Divide attention properly inside and outside cockpit.

i) Ensure that all systems are within their normal operating range prior to beginning, during the performance of, and at the completion of those checks required by the approved checklist.

j) Explain, as may be requested by the ACP, any normal or abnormal system operating characteristic or limitation; and the corrective action for a specific malfunction.

k) Verify as required that the aeroplane is safe for the proposed flight or requires maintenance.

l) Verify as required that the aeroplane's takeoff performance, considering such factors as wind, density altitude, weight, temperature, pressure altitude, and runway condition and length.

m) Verify as required that airspeeds/V-speeds and properly sets all instrument references, flight director and autopilot controls, and navigation and communications equipment.

n) Review procedures for emergency and abnormal situations, which may be encountered during takeoff, and states the corrective action required of the pilot in command and other concerned crewmembers.

o) Perform an avionics and navigation equipment cockpit check.

p) Obtain and correctly interpret the takeoff and departure clearance as issued by ATC.

5. Taxi-Out (TXO)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory - See Notes 1 and 2 in the Description section.

Aim

To assess the candidate's proficiency to manoeuvre the aeroplane safely on the ground and avoid unnecessary interference with the movement of other traffic as appropriate to the aeroplane including pushback or power-back, as applicable.

Description

The candidate will taxi the aeroplane to and from the runway in use and as otherwise required during the PPC. While taxiing, the candidate will follow taxiing procedures. In addition, the taxi check will include the use of the taxiing checklist, taxiing in compliance with clearances and instructions issued by the appropriate air traffic control unit or by the ACP or CASI.

Note 1: Second-in-Command (SIC) PPC - Assessment of taxing must be accomplished to the extent normally practicable from a SIC seat position normally occupied and consistent with SOPs.

Note 2: Recurrent PPCs - Where two candidates are paired in a multi-crew environment, the first candidate may complete engine start/depart and taxi-out exercises while the second candidate may conduct a taxi-in and full ramp shutdown – See Flight Test Exercises 4 and 19.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of safe taxi procedures (as appropriate to the aeroplane including push-back or power back, as may be applicable).

b) Demonstrate proficiency by maintaining correct and positive aeroplane control.

c) Maintain proper spacing on other aircraft, obstructions, and persons.

d) Accomplish the applicable checklist items and perform recommended procedures.

e) Maintain desired track and speed.

f) Perform an instrument check.

g) Comply with instructions/clearances issued by ATC.

h) Observe runway hold lines, localizer and glide slope critical areas and other surface control markings and lighting.

i) Maintain constant vigilance and aeroplane control during taxi operation.

6. Take-Off (TOF)

Note: Refer to Flight Test Exercise 7 for guidance on a rejected take-off and Flight Test Exercise 23 for guidance on an engine failure after take-off or an engine failure at a speed greater than V1.

PPC Applicability

CARs Subpart	Applicability
702 to 703	Mandatory (Simulator) - See Note 1 and 2 Optional (Aeroplane) - See Notes 2, 3 and 4
704 and 705	Mandatory (Simulator) - See Note 1 and 2 Optional (Aeroplane) - See Notes 2, 3 and 4

Aim

To assess the candidate's proficiency to take off safely using correct techniques and procedures given runway surface, length and wind conditions anticipating (as appropriate) other factors such as wind shear and wake turbulence.

Description

The candidate will demonstrate a normal, instrument and crosswind takeoff performed in accordance with the Aircraft Flight Manual. The minimum visibility approved for the operator and a minimum crosswind component of 10 kts are normally required. An ACP or CASI may combine take-offs as appropriate.

Note 1: It is acceptable to satisfy instrument takeoff requirements at the required minimum visibility in Flight Test Exercise 7 (i.e., rejected take-off) **and** Flight Test Exercise 23 (i.e., engine failure after take-off or an engine failure at a speed greater than V1).

Note 2: An instrument take-off is not required where an Air Operator Certificate (AOC) authorizes operations under day VFR only or the air operator assigns the pilot to day VFR flight only.

Note 3: Where performed in an aeroplane, the candidate will demonstrate an instrument take-off in the same manner as the normal take-off with simulated instrument conditions established at or after reaching an altitude of 200 feet above the airport elevation.

Note 4: Where performed in an aeroplane, a crosswind component is limited to that which is practical under existing meteorological, airport or airport traffic conditions.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of normal and crosswind takeoffs and climbs including (as appropriate to the aeroplane) airspeeds, configurations, and emergency/abnormal procedures.

b) Note any surface conditions, obstructions, or other hazards that might hinder a safe takeoff.

c) Verify and correctly apply correction for the existing wind component to the takeoff performance.

d) Complete required checks prior to starting takeoff to verify the expected powerplant performance. Performs all required pre-takeoff checks as required by the appropriate checklist items.

e) Aligns the aeroplane on the runway centreline.

f) Apply the controls correctly to maintain longitudinal alignment on the centreline of the runway prior to initiating and during the takeoff.

g) Adjusts the powerplant controls as recommended by the POH, AFM or AOM and/or other approved guidance for the existing conditions.

h) Monitor powerplant controls, settings, and instruments during takeoff to ensure all predetermined parameters are maintained.

i) Adjusts the controls to attain the desired pitch attitude at the predetermined airspeed/V-speed to attain the desired performance for the particular takeoff segment.

j) Perform the required pitch changes and, as appropriate, performs or calls for and verifies the accomplishment of, gear and flap retractions, power adjustments, and other required pilot-related activities at the required airspeed/V-speed within the tolerances established in the POH, AFM or AOM.

k) Use the applicable noise abatement and wake turbulence avoidance procedures, as required.

l) Accomplish or calls for and verifies the accomplishment of the appropriate checklist items.

m) Maintain the desired heading and airspeed/V-speed within flight test tolerances or the appropriate V-speed range.

7. Rejected Take-Off (RTO)

Note: Refer to Flight Test Exercise 6 for guidance on normal take-offs and Flight Test Exercise 23 for guidance on an engine failure after take-off or an engine failure at a speed greater than V1.

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory (Simulator) - See Notes 1 and 2 in the Description section Optional (Aeroplane) - See Note 3 in the Description section.
704 and 705	Mandatory (Simulator) - See Notes 1 and 4 in the Description section Optional (Aeroplane) - See Note 3 in the Description section.

Aim

To assess the candidate's proficiency to recognize an abnormal situation requiring a rejected takeoff and to carry out the appropriate procedure in accordance with the POH, AFM, AOM and/or SOPs.

Description

When performed in a simulator, the candidate will demonstrate a rejected take-off before reaching lift-off speed or if conducted in the aeroplane, the candidate will verbally explain this manoeuvre during the briefing.

Note 1: It is acceptable to satisfy instrument takeoff requirements at the required minimum visibility specified in Flight Test Exercise 6 (i.e., Take-off) in this Flight Test Exercise **and** Flight Test Exercise 23 (i.e., engine failure after take-off or an engine failure at a speed greater than V1).

Note 2: The candidate must demonstrate a rejected take-off prior to reaching lift-of speed.

Note 3: Where conducted in an aeroplane, a rejected take-off is explained by the candidate prior to the flight.

Note 4: The candidate must demonstrate a rejected take-off from a speed not less than 90% of the calculated V1 or less as appropriate to the aeroplane type.

Note 5: Second-in-Command (SIC) PPC - Assessment of a rejected take-off must be accomplished to the extent practicable from a SIC seat position normally occupied and consistent with SOPs.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of the technique and procedure for accomplishing a rejected takeoff after powerplant/system(s) failure/warnings, including related safety factors.

b) Consider, prior to beginning the takeoff, operational factors which could affect the manoeuvre, such as Takeoff Warning Inhibit Systems or other aeroplane characteristics, runway length, surface conditions, wind, obstructions that could affect takeoff performance and could adversely affect safety.

c) Align the aeroplane on the runway centreline.

d) Perform all required pre-takeoff checks as required by the appropriate checklist items.

e) Adjust the powerplant controls as recommended for the existing conditions.

f) Apply the controls correctly to maintain longitudinal alignment on the centreline of the runway.

g) Reject the takeoff if, in a single-engine aeroplane the powerplant failure occurs prior to becoming airborne, or in a multiengine aeroplane, the powerplant failure occurs at a point during the takeoff where the rejected take-off procedure can be initiated, and the aeroplane can be safely stopped on the remaining runway/stop way.

h) Reduce the power smoothly and promptly, if appropriate to the aeroplane, when powerplant failure is recognized.

i) Use spoilers, prop reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, maintaining control in such a manner as to bring the aeroplane to a stop. Accomplishes the appropriate powerplant failure or other procedures and/or checklists as set forth in the POH, AFM, AOM and/or SOPs.

8. Initial Climb (ICL)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory - See Note in the Description section.

Aim

To assess the candidate's proficiency to accomplish initial climb and departure procedures.

Description

Initial climbs are associated with obstacle clearance departure profiles and/or noise abatement procedures. The candidate will complete initial climb and departure procedures IFR or VFR.

Note: An initial climb may be flown manually or with the use of automation. Where flown manually, an air operator's training program should be consulted to ensure adequate skills training has been provided.

Performance Criteria

Assess the candidate's ability to:

a) Transition from visual meteorological conditions to actual or simulated instrument meteorological conditions, where applicable.

b) Monitor powerplant controls, settings, and instruments during the initial climb to ensure all predetermined parameters are maintained.

c) Adjust the controls to attain the desired pitch attitude at the predetermined airspeed/V-speed to attain the desired performance for the particular takeoff and climb.

d) Perform the required pitch changes and, as appropriate, performs or calls for and verifies the accomplishment of, gear and flap retractions, power adjustments, and other required pilot-related activities at the required airspeed / V-speed within the tolerances established in the POH, AFM, AOM and/or SOPs.

e) Use the applicable obstacle clearance, noise abatement and wake turbulence avoidance procedures, as required.

f) Accomplish or call for and verify the accomplishment of the appropriate checklist items.

g) Maintain the desired heading and airspeed/V-speed within flight test tolerances or the appropriate V-speed range.

h) Comply with ATC clearances and instructions issued by ATC.

i) Use avionics equipment as appropriate for initial climb.

9. Enroute Climb (ECL)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory (IFR) - See Note 1 in the Description section. Optional (VFR) - See Note 2 below in the Description section.

Aim

To assess the candidate's proficiency to accomplish departure and enroute climb procedures.

Description

Enroute climbs are associated with the climb segment following obstacle clearance departure profiles and/or noise abatement procedures until an initial cruise level altitude.

The candidate will complete departure procedures (e.g., terminal and area) and establish the aeroplane on the enroute course IFR or VFR (as required).

Note 1: An enroute climb may be flown manually or with the use of automation. Where flown manually, an air operator's training program should be consulted to ensure adequate skills training has been provided.

Note 2: Enroute climb assessments are not normally associated with day VFR only operations or where a pilot is assigned to VFR flights only. Enroute climb assessments may be accomplished, however, within VFR circuits and/or VFR enroute climb segments where provided.

Performance Criteria

Assess the candidate's ability to:

a) Establish communications with ATC, using proper phraseology.

b) Select and identify use the appropriate communications and navigation systems associated with the proposed departure phase.

c) Perform the aeroplane checklist items relative to the phase of flight.

d) Intercept, in a timely manner, all tracks, radials and bearings appropriate to the procedure, route or clearance.

e) Adhere to departure, noise abatement and transition procedures or ATC instructions.

f) Comply, in a timely manner, with all instructions and airspace restrictions.

g) Maintain proper aeroplane control and flight within operating configurations and limitations.

h) Maintain assigned headings within flight test exercise tolerances.

i) Maintain assigned tracks and bearings within flight test exercise tolerances.

j) Maintain altitude within flight test exercise tolerances.

k) Exhibit adequate knowledge of two-way radio communications failure procedures.

l) Conduct the departure phase to a point where, in the opinion of the examiner, the transition to the enroute environment is complete.

m) Use avionics equipment as appropriate for enroute climb.

10. Cruise (CRZ)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory (IFR) Optional (VFR) - See Note in the Description section.

Aim

To assess the candidate's proficiency to establish the aeroplane in cruising flight at the pre-planned power settings in accordance with the POH, AFM or AOM, and to determine the candidate's ability to comply with enroute procedures as cleared.

Description

The candidate will establish the aeroplane in cruise flight in accordance with performance charts in the POH, AFM, AOM, placards displayed in the aeroplane or other means specified by the manufacturer. In addition, the candidate will maintain the aeroplane on the enroute course and comply with enroute procedures, as cleared, in accordance with VFR or IFR, as applicable.

Note: Enroute cruise assessments are not normally required with day VFR only operations or where a pilot is assigned to VFR flights only. Enroute cruise assessments may be accomplished, however, within VFR circuits and/or VFR cruise segments where provided.

Performance Criteria

Assess the candidate's ability to:

a) Select and use the appropriate communications frequencies.

b) Select and identify the navigation aids associated with the proposed enroute phase.

c) Perform the aeroplane checklist items relative to the phase of flight.

d) Intercept, in a timely manner, all tracks, radials and bearings appropriate to the route or clearance.

e) Adhere to the enroute procedures.

f) Maintain proper aeroplane control and flight within operating limitations.

g) Maintain assigned heading, track (or bearing) and altitude within flight test exercise tolerances.

h) Set the power/throttle(s), propeller and mixture controls at the pre-planned power setting, as recommended by the POH, AFM or AOM.

i) Synchronize propellers.

j) Apply any additional measures recommended by the manufacturer with respect to aeroplane configuration or other considerations.

k) Confirm cruise performance and demonstrate good decision-making to deal with the consequences of variances from the expected performance (ETA revision, fuel management).

l) Use avionics equipment as appropriate for cruise.

11. Steep Turns

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory
704 and 705	Optional (Simulator) - See Note in the Description section. Mandatory (Aeroplane)

Aim

To assess the candidate's proficiency to perform level and coordinated steep turns.

Description

The candidate will execute at least one steep turn in each direction with a bank angle of 45° and a change in heading of at least 180° but not more than 360°. The candidate will specify the selected altitude, airspeed and initial heading before entering the turn.

In a multi-crew setting, assistance from the pilot monitoring (PM) is allowed.

Note: PPCs Conducted in a Simulator (CARs Subparts 704 and 705) - Steep turns are not required where a PPC is conducted using a LOFT scenario, a scripted PPC or a fly-by wire aeroplane, and:

Initial PPCs - Steep turns were satisfactorily demonstrated during initial training, or

Recurrent PPCs - Steep turns are required in an annual training syllabus and were satisfactorily demonstrated or are not required in an annual training syllabus.

LOFT Scenario – A Plan of Action incorporating LOFT scenarios for the purpose of not requiring steep turns or stalls during a PPC must be acceptable to an ACP's TCCA Issuing Authority. At present, there is no established criteria for what a LOFT scenario entails. ACPs seeking to develop a Plan of Action with a LOFT scenario should consult information on Scripted PPCs found in ACP Bulletin no. 04/20, sections D, E and F. Additional information is available in FAA AC 120-35D, Chapter 3 (regarding LOFTs in general) and Chapter 7, section 7-12 (regarding Plan of Action development).

Performance Criteria

Assess the candidate's ability to:

a) Where applicable, divide attention appropriately between outside visual references and instrument indications.

b) Roll into and out of turns, using smooth and coordinated pitch, bank, yaw and power control to maintain the specified altitude and desired airspeed within flight test tolerances.

c) Establish the recommended entry airspeed.

d) Maintain the bank angle of 45º within flight test exercise tolerances while in smooth and coordinated stabilized flight.

e) After 180° of turn, roll out of the turn at approximately the same rate used to roll into the turn and reverse the direction of turn and repeat the manoeuvre in the opposite direction.

f) Roll out of the turn at the reversal heading and the entry heading within flight test tolerances.

g) Avoid any indication of an approaching stall, abnormal flight attitude, or exceeding any structural or operating limitation during any part of the manoeuvre.

12. Stalls

PPC Applicability

CARs Subpart	Applicability
702 and 703	Optional (Simulator) - Seen Notes 1 and 2 in the Description section. Optional (Aeroplane) - See Note 1 in the Description section.
704 and 705	Optional (Simulator) - See Notes 1, 2 and 3 in the Description Section. Optional (Aeroplane) - See Note 1 in the Description Section.

Aim

To assess the candidate's proficiency to recognize and recover promptly and correctly from an approach to stall in various configurations and avoid a full stall.

Description

For the purpose of this manoeuvre, an approach to stall may be identified at:

a. the first indication of aerodynamic buffeting, a lack of pitch authority, a lack of roll control, an inability to arrest a descent rate; and/or

b. the activation of stall warning devices, stick shaker and/or stick pusher devices (where installed).

Note 1: Initial and Upgrade PPCs - The following approaches to stall are required: take-off configuration (except where a zero-flap take-off configuration is normally used in that model and type of aeroplane), clean configuration and landing configuration.

Note 2: One of the approaches to stall will be performed while in a turn with a bank angle of between 15° and 30°.

Note 3: PPCs Conducted in a Simulator (CARs Subparts 704 and 705) - Approaches to stall are not required where a PPC is conducted using a LOFT scenario, a scripted PPC or a fly-by wire aeroplane, and:

Initial PPCs - Approaches to stall were satisfactorily demonstrated during initial training, or

Recurrent PPCs - Approaches to stall are required in an annual training syllabus and were satisfactorily demonstrated or are not required in an annual training syllabus.

LOFT Scenario – A Plan of Action incorporating LOFT scenarios for the purpose of not requiring steep turns or stalls during a PPC must be acceptable to an ACP's TCCA Issuing Authority. At present, there is no established criteria for what a LOFT scenario entails. ACPs seeking to develop a Plan of Action with a LOFT scenario should consult information on Scripted PPCs found in ACP Bulletin no. 04/20, sections D, E and F. Additional information is available in FAA AC 120-35D, Chapter 3 (regarding LOFTs in general) and Chapter 7, section 7-12 (regarding Plan of Action development).

Performance Criteria

Assess the candidate's ability to:

a) Recognize the first indication of an approach to a stall (as listed in the Description section above).

b) Disconnect autopilot and autothrottle (if installed and engaged).

c) Apply nose down pitch control until indications of stall and/or stall warning significantly diminish or disappear, and trim as needed.

d) Roll to wings level using ailerons and apply rudder only as necessary to control sideslip.

e) Add or adjust power/thrust as needed.

f) Carry out configuration changes as recommended and ensure that speed brakes/spoilers (if installed) are retracted.

g) Recover to a safe airspeed and stabilized flight.

h) Ensure that the aeroplane is in a suitable configuration by checking pertinent items from an appropriate checklist.

13. Holding

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory (IFR) - See Note in the Description section Optional (VFR) - Not Required

Note: Information on mandatory versus optional exercises for Cruise Relieve Pilot (CRP) PPCs and Line Checks is not provided in this guide. With respect to all PPCs, the appropriate CASS schedule must be consulted.

Aim

To assess the candidate's proficiency to establish the aeroplane in a holding pattern using an actual or simulated ATC clearance.

Description

In actual or simulated instrument conditions, the candidate must demonstrate adequate knowledge of a holding procedure for a standard or non-standard, published or non-published holding pattern. If appropriate, the candidate must demonstrate adequate knowledge of holding endurance, including, but not necessarily limited to, fuel on board, fuel flow while holding, fuel required to alternate, etc.

Based on an actual or simulated clearance, the candidate will select a suitable entry procedure, enter the hold and establish the aeroplane in the holding pattern.

Note: Two Candidates in a Multi-crew Setting - Where automation is used, not all holding performance criteria below must be observed after programming is completed correctly regarding the assessment of the **second** candidate as Pilot Flying (PF).

Performance Criteria

Assess the candidate's ability to:

a) Change to the recommended holding airspeed appropriate for the aeroplane and holding altitude, so as to cross the holding fix at or below maximum holding airspeed.

b) Recognize arrival at the clearance limit or holding fix and initiate entry into the holding pattern.

c) Follow appropriate entry procedures for a standard, nonstandard, published, or non-published holding pattern.

d) Comply with ATC reporting requirements.

e) Use the proper timing criteria required by the holding altitude and ATC.

f) Comply with the holding pattern leg length when a DME distance is specified.

g) Use the proper wind-drift correction techniques to accurately maintain the desired radial, track, courses, or bearing.

h) Arrive over the holding fix as close as possible to the "expect further clearance" time.

i) Maintain the appropriate airspeed/V-speed, altitude, headings/tracks/course within flight test exercise tolerances.

j) Maintain proper aeroplane control and flight within operating configurations and limitations while in the hold.

k) Use avionics equipment as appropriate for holding.

14. Descent (DST)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory (IFR) Optional (VFR) - See Note in the Description section.

Aim

To assess the candidate's proficiency to comply with visual or instrument arrival procedures, as applicable.

Description

Descent begins when the aircraft departs the cruise altitude for the purpose of an approach at a particular destination and ends when the candidate initiate changes in aeroplane configuration and/or speeds to facilitate a landing on a particular runway.

The candidate will complete the arrival procedures, as cleared, in accordance with Instrument Flight Rules or Visual Flight Rules, as applicable.

Note: Descent assessments are not normally required with day VFR only operations or where a pilot is assigned to VFR flights only. Descent assessments may be accomplished, however, within VFR circuits and/or VFR descent segments where provided.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of En Route Low and High-Altitude Charts, STARs/FMS Procedures, Instrument Approach Procedure Charts, VFR Charts, as applicable, and related pilot and controller responsibilities.

b) Select and identify the navigation aids associated with the proposed arrival phase.

c) Select and correctly identify all instrument references, flight director and autopilot controls, and navigation and communications equipment associated with the arrival.

d) Perform the aeroplane checklist items appropriate to the arrival.

e) Select and establish communications with ATC, using proper phraseology.

f) Comply, in a timely manner, with all ATC clearances, instructions, and restrictions.

g) Demonstrate adequate knowledge of two-way communications failure procedures.

h) Intercept, in a timely manner, all tracks, radials and bearings appropriate to the procedure, route, ATC clearance, or as directed by the ACP or CASI.

i) Correctly adhere to visual or instrument arrival procedures.

j) Adhere to airspeed restrictions and adjustments required by regulations, ATC, the POH, AFM, AOM and/or SOPs or the ACP or CASI.

k) Establish, where appropriate, a rate of descent consistent with the aeroplane operating characteristics and safety.

l) Maintain the appropriate airspeed / V-speed, heading, altitude within flight test exercise tolerances.

m) Complies with the provisions of the Profile Descent, STAR, and other arrival procedures, as appropriate.

n) Maintain proper aeroplane control and flight within operating limitations.

o) Use avionics equipment as appropriate for descent.

15. Approach (APR)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory - See Notes in the Description sections.

Aim

To assess the candidate's proficiency to fly an instrument or visual approach.

I - Instrument Approaches (IFR)

Description

As provided in CARs Part I, a non-precision approach implies an approach using azimuth information. A precision approach implies an approach using azimuth and glidepath information. While modern RNAV(GNSS) systems provide approaches with vertical guidance, not all are considered precision approaches. For the purpose of a PPC, the following approach classifications and allowances are provided:

> **Precision Approach (PA)** - An instrument approach that provides course and glidepath deviation information meeting precision standards of ICAO Annex 10. For example, ILS, PAR, and GLS.
>
> An LPV may be considered a precision approach for PPC purposes.
>
> **Approach with Vertical Guidance (APV)** - An instrument approach based on a navigation system that is not required to meet the precision approach standards of ICAO Annex 10 but provides course and glidepath deviation information. For example, BARO-VNAV, LDA with glidepath, LNAV/VNAV and LPV are APV approaches.
>
> An LPV may not be considered a non-precision approach for PPC purposes. Other APVs may be considered a non-precision approach for PPC purposes where that PPC is not also being used as a skills test for a new instrument rating.
>
> **Non-precision Approach (NPA)** - An instrument approach based on a navigation system that provides course deviation information but no glidepath deviation information. For example, VOR, TACAN, LNAV, NDB, LOC, and ASR approaches are examples of NPA procedures.

The candidate will demonstrate at least two instrument approaches performed in accordance with procedures and limitations in the Canada Air Pilot, in equivalent foreign publications, or approved company approach procedure for the approach facility used. Unless otherwise required, where practicable the candidate will fly one precision approach, one non-precision approach and, conditions permitting and where authorized, a circling approach.

Descent Profile Management - The candidate may fly at altitudes higher than the applicable minimum altitudes depicted on the approach chart, but descent during the final segment of the approach should result in reaching the MDA consistent with achieving a continuous descent to a point approximately 50 ft. above the landing runway threshold or the point where the flare manoeuvre should begin for the type of aircraft flown.

Descent below MDA During a Non-precision Approach - In accordance with Exemption to CAR 602.128(2)(b), NCR 008-2020, a pilot may descend below the MDA which is likely to occur during a missed approach following a stabilized constant descent angle non-precision approach. Consult NCR 008-2020 for further requirements.

Note 1: **Manually Flown Approaches** - A manually flown approach using a flight director is recommended provided the air operator's training program ensures that adequate skills training has been provided. Manual flying should commence no later than when the aeroplane is established on the final approach course and continue until either touchdown or in a missed approach.

Note 2: **Multi-engine Aeroplane PPCs** – Subject to CASS requirements, at least one approach with a simulated failure of one powerplant must be completed. A simulated powerplant failure should occur before initiating the final approach segment and must continue to touchdown or throughout the missed approach procedure. Where an abnormal or emergency situation is used to provide a simulated engine failure, a separate assessment under flight test exercise 22 should be considered. The assessment of an approach, however, should be completed under this flight test exercise. Double jeopardy must be avoided which means that observations leading to an assessment must **not** be documented twice under this and flight test exercise 22.

Note 3: **CARs Subparts 704 and 705 PPCs (Simulator)** - One of the approaches will be a precision and one a non-precision. In addition, where authorized to conduct circling approaches in their COM, the flight crew will demonstrate, during an initial qualification check and annually thereafter, one approach and manoeuvre to land using a scene approved for circling.

Note 4: Instrument Rating Skills Test/CARs Part IV - Where a PPC will also serve as a skills test in support of an initial or revised instrument rating under CARs Part IV, the PPC candidate must demonstrate two different types of instrument approaches. During an initial instrument rating skills test, a precision approach (ILS or LPV) is mandatory. During both initial and revised instrument rating skills test, a non-precision approach without vertical guidance is required. Additionally, at least one of the approaches must be an RNAV(GNSS) approach. These requirements are consistent with the Flight Test Guide, Instrument Rating Groups 1, 2 and 3 Aeroplane, TP 9939.

Note 5: If not practical in an aeroplane (i.e., airborne environment) and not required for an instrument rating skills test, an APV to the lowest approach limits possible may be used.

Performance Criteria

Assess the candidate's ability to:

a) **RNAV(GNSS) Approach** - confirm the correct loading of the approach from the database, verify waypoints and conduct a RAIM check (as applicable).

b) Tune, identify and monitor the operational status of the applicable ground and aeroplane navigation equipment for the approach.

c) Obtain and interpret appropriate aeronautical references and information (e.g., NOTAMs) and apply temperature corrections, as applicable.

d) Conduct an approach briefing as per SOPs.

e) Accurately complete the applicable checklist(s) and ensure the aeroplane is in the proper configuration (including ancillary systems such as anti-ice).

f) Fly the instrument approach in accordance with the applicable approach chart.

g) Complete required radio calls using appropriate terminology and comply with ATC instructions and clearances.

h) Comply with stabilized approach criteria specified in the SOPs.

i) **Non-Precision Instrument Approach** - In the case of an SCDA, compute a stable approach path and fly a continuous descent while remaining at or above minimum IFR altitudes prior to reaching the DA.

j) Maintain heading, track, airspeed and altitudes in compliance with the approach procedure and applicable ATC clearance(s).

k) Monitor instrumentation, systems and automation and respond appropriately to any faults or abnormal situation(s), including a RAIM alert or degraded RNP.

l) Demonstrate competency in the use of any systems related to aeroplane automation such as a flight director, autopilot, FMS or GNSS.

m) Comply with company SOPs, including the correct use of standard calls.

n) **Non-Precision Instrument Approach** - Maintain the MDA until the MAP or the point at which the visual portion of the approach can be carried out, with a normal rate of descent and minimal manoeuvring. In the case of an SCDA, maintain an appropriate vertical profile to the MDA/DA.

o) **Precision Instrument Approach** - Maintain a stabilized descent to the DH/DA to permit completion of the visual portion of the approach and landing with minimal manoeuvring.

p) Initiate a missed approach procedure if the required visual reference for the intended runway is not obtained at the MAP, the MDA/DH/DA as applicable.

q) Execute a normal landing if the required visual reference is obtained.

II - Visual Approaches (VFR)

Description

While approaches are most commonly associated with IFR procedures, there are instances where an approach to landing is required without external or internal glideslope information (i.e., a visual approach).

Note: Under CARs 702, 703, 704 (Aeroplane) and 705 (Aeroplane), a visual approach is required during a normal landing. Consult the appropriate CARs Part VII, CASS, PPC Schedule regarding landings and approaches to landings.

Performance Criteria

Assess the candidate's ability to:

a) Obtain and interpret appropriate aeronautical references and information (e.g., NOTAMs) as applicable.

b) Conduct an approach briefing as per SOPs.

c) Accurately complete the applicable checklist(s) and ensure the aeroplane is in the proper configuration (including ancillary systems such as anti-ice).

d) Fly the visual approach in accordance with airport procedures found in the Canada Flight Supplement (CFS).

e) Complete required radio calls using appropriate terminology and comply with ATC instructions.

f) Comply with stabilized approach criteria specified in the SOPs.

g) Maintain heading, track, airspeed and altitudes in compliance with applicable ATC instructions.

h) Monitor instrumentation, systems and automation and respond appropriately to any faults or abnormal situation(s).

i) Comply with company SOPs, including the correct use of standard calls.

j) Initiate a missed approach procedure if unable to land safely.

k) Execute a normal landing if able to do so safely.

16. Approach (APR)

Note: All information pertaining to approaches is found in Flight Test Exercise 15. This corresponds with the Transport Canada Online PPC Flight Test Report.

17. Go-Around (GOA)

Note: Refer to Flight Test Exercise 18 for guidance on rejected landings (50 ft).

PPC Applicability

CARs Subpart	Applicability
702 to 705	Optional - See Note 1 in the Description section.

Aim

To assess the candidate's proficiency to carry out a successful go-around (i.e., missed approach).

Description

Following an instrument approach, the candidate will conduct a missed approach at any time from intercepting final approach to touch down on the runway. Except where ATC amends it, the candidate must follow the published missed approach profile.

Note 1: Consult the appropriate CARs Part VII, CASS, PPC Schedule regarding missed approach requirements. In some cases, a missed approach may be combined with rejected landing (50 ft).

Note 2: A missed approach may be manually flown or through the use of automation. The air operator's training program must be consulted to ensure adequate skills training has been provided.

Performance Criteria

Assess on the candidate's ability to:

a) Demonstrate adequate knowledge of missed approach procedures associated with standard instrument approaches.

b) Initiate the missed approach procedure promptly by the timely application of power, establish the proper climb attitude, and reduces drag in accordance with the approved procedures.

c) Report beginning the missed approach procedure when appropriate.

d) Comply with the published or alternate missed approach procedure.

e) Report with ATC anytime the aeroplane is unable to comply with a clearance, restriction, or climb gradient.

f) Follow the recommended aeroplane check list items appropriate to the missed approach procedure.

g) Request a clearance, if appropriate, to the alternate airport, another approach, a holding fix, clearance limit, or as directed by the ACP or CASI.

h) Maintain recommended airspeeds within flight test tolerances.

i) Maintain heading, track or bearing within flight test tolerances.

j) Climb to and maintain the published missed approach altitude, or as cleared by ATC or the examiner within flight test tolerances.

k) Use avionics equipment as appropriate for missed approach.

18. Landing (LND)

Note: Refer to Flight Test Exercise 17 for guidance on normal go-arounds prior to landing and this flight test exercise for guidance on normal and rejected landings (50 ft).

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory - See Notes in the Description section.

I – Normal and Other Landings

Aim

To assess the candidate's proficiency to carry out a normal or crosswind landing and, where practical, a landing from an instrument approach by visual descent from an approach MDA or DA. If required by the operations manual, within the conduct of the approach, complete a successful circling approach.

Description

The candidate will demonstrate:

a) One normal landing which, where practical, be conducted without external or internal glideslope information.

b) One landing from an instrument approach and, where prevailing conditions prevent an actual landing, an approach to a point where a landing could have been made. This is not required where the air operator's certificate authorizes operations under day VFR only, or the air operator assigns the pilot to day VFR flights only.

c) One crosswind landing, where practicable, under existing meteorological, runway and airport traffic conditions.

d) One landing and manoeuvring to that landing with a simulated failure of 50 percent of the available engines.

e) One landing under simulated circling approach conditions except that where prevailing conditions prevent a landing, an approach to a point where a landing could have been made.

Note 1 - 704 and 705: In a simulator, a normal landing without external or internal glideslope information is not required.

Note 2: Any of the landings and approaches to landings specified in this section may be combined. A minimum of two landings is required.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of normal and crosswind approaches and landings including recommended approach angles, airspeeds, V-speeds, configurations, performance limitations, and ATC or examiner instructions.

b) Consider factors to be applied to the approach and landing such as displaced thresholds, meteorological conditions, wake turbulence, wind shear, microburst, gust/wind factors, visibility, runway surface, braking conditions, and other related safety factors (as appropriate to the aeroplane).

c) Establish the approach and landing configuration appropriate for the runway and meteorological conditions and adjusts the powerplant controls as required.

d) Perform the aeroplane checklist items relative to the phase of flight.

e) Maintains a ground track that ensures the desired traffic pattern will be flown, taking into account any obstructions and ATC or ACP instructions.

f) Verify existing wind conditions, makes proper correction for drift, and maintains a precise ground track.

g) Maintain a stabilized approach and the desired airspeed/V-speed within flight test tolerances.

h) Execute a landing from an approach MDA or DA when the required visual references for the intended runway are obtained.

i) Accomplish a smooth, positively controlled transition from final approach to touchdown or to a point in the opinion of the ACP or CASI that a safe full stop landing could be made.

j) Maintain positive directional control and crosswind correction during the after-landing roll.

k) Use spoilers, prop reverse, thrust reverse, wheel brakes, and other drag/braking devices, as appropriate, in such a manner to bring the aeroplane to a safe stop.

l) Complete the applicable after-landing checklist items in a timely manner and as recommended by the manufacturer.

II - Rejected Landing (50 Ft)

Aim

To assess the candidate's proficiency to carry out a successful rejected landing.

Description

The candidate will conduct a rejected landing after having completed the instrument portion of the approach with the runway in sight; the aeroplane configured for landing and in final descent to the runway. Initiate this manoeuvre at approximately 50 feet above the runway and just about over the runway threshold.

Note: Where required, the ACP or CASI may combine the rejected landing with the missed approach. Consult the appropriate CARs Part VII, CASS, PPC Schedule.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of a rejected landing procedure including the conditions that dictate a rejected landing, the importance of a timely decision, the recommended airspeed/V-speed, and also the applicable clean-up procedure.

b) Make a timely decision to reject the landing for actual or simulated circumstances and make appropriate notification when safety-of-flight is not an issue.

c) Apply the appropriate power setting for the flight condition and establish a pitch attitude necessary to obtain the desired performance.

d) Retract the wing flaps/drag devices and landing gear, if appropriate, in the correct sequence and at a safe altitude, establishes a positive rate of climb and the appropriate airspeed/V-speed within flight test tolerances.

e) Trim the aeroplane as necessary and maintain the proper ground track during the rejected landing procedure.

f) Accomplish the appropriate checklist items in a timely manner in accordance with approved procedures.

19. Ground Arrival

PPC Applicability

CARs Subpart	Applicability
702 to 705	Optional - See Notes 1 and 2 in the Description section.

Aim

To assess the candidate's proficiency to conduct after landing taxi in, arrival/engine shutdown, post-flight and flight close procedures as appropriate.

Description

The candidate will demonstrate the ability to manoeuvre the aeroplane under its own power to an arrival area for parking, shut down the engine(s) and ancillary systems and conduct required post flight procedures such as securing the aeroplane.

Note 1: Ground arrival assessments are optional unless used to satisfy other PPC requirements.

Note 2: Recurrent PPCs - Where two candidates are paired in a multi-crew environment, the first candidate may complete engine start/depart and taxi-out exercises while the second candidate may conduct a taxi-in and full ramp shutdown – See Flight Test Exercises 4 and 5.

Performance Criteria

Assess the candidate's ability to:

a) Maintaining aircraft control.

b) Consider the safety of nearby persons or property by maintaining proper look-out, spacing between aeroplane and obstructions.

c) Accomplish the applicable checklist items and performs the recommended procedures;

d) Maintain the desired taxi speed.

e) Comply with instructions issued by ATC (or the examiner simulating ATC).

f) Observe runway hold lines, localizer and glide slope critical areas, and other surface control markings and lighting to prevent a runway incursion.

g) Maintain constant vigilance and aeroplane control during the taxi operation.

h) Complete engine shutdown and securing checks.

i) Record forms/logs and flight time/discrepancies.

20. Flight Close (FLC)

PPC Applicability

CARs Subpart	Applicability
702 to 705	Optional - See Note in the Description section.

Aim

To assess the candidate's proficiency to complete postflight duties following engine shutdown and securing.

Description

The candidate will demonstrate the ability complete necessary actions following engine shutdown and securing.

Note: Not required during a PPC, however this flight test exercise is relevant to Line Checks under CASS 705.106(3)(a) and (b).

Performance Criteria

Assess the candidate's ability to:

a) Conduct a postflight inspection, record defects, clearing and other servicing requirements.

b) Complete flight logs and other records.

c) Secure the aeroplane.

21. PM Duties

PPC Applicability

CARs Subpart	Applicability
702 and 703	Mandatory
704 and 705	Mandatory

Note: Pilot Monitoring (PM) implies Pilot Not Flying (PNF) as found in other documents.

Aim

To assess the candidate's proficiency to demonstrate proper division of PM duties in accordance with the COM and SOPs.

Description

Each pilot will demonstrate PM duties sufficient to determine compliance with and knowledge of aeroplane procedures and company SOPs. This will include normal and abnormal procedures while operating as PM.

Flight crew may conduct PM duties from a seat position that they do not normally occupy (e.g., PPC with two PICs or two SICs). In this situation, the training unit will provide PM training to the candidates in the seat they will occupy during the PPC.

Note 1: Not applicable to single pilot operations.

Note 2: Single candidate in a multi-crew environment - As a minimum, PM duty performance must be assessed during a take-off, an initial climb, an abnormal or emergency event requiring the use of a checklist, an approach and landing. Where practical and applicable to scope of operations, this checking segment should be undertaken IFR.

Performance Criteria

Assess the candidate's ability to:

a) Adhere to PM duties as outlined in the COM and/or SOPs.

b) Complete necessary duties assigned by the pilot flying.

c) Maintain crew discipline during normal and abnormal procedures.

d) Demonstrate familiarity with the procedures contained in the QRH or paper checklist.

e) Demonstrate FMS inputs, as applicable.

f) Maintain situational awareness as a crew member.

g) Effectively share cockpit workload.

h) Maintain crew awareness, or attention to flight mode annunciations.

Flight Test Exercises – Abnormal/Emergency

22. Engine Failure

Note: This flight test exercise provides guidance on engine failures NOT associated with take-off.

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory

Aim

To assess the candidate's proficiency to maintain control of the aeroplane and carry out the appropriate engine failure procedures in accordance with the POH, AFM, AOM and/or SOPs.

Description

The pilot will demonstrate the ability to maintain control and safely handle malfunctions during an engine failure(s) at any time during the check.

I - Engine Failure (Not Associated with Take-Off) - Multi-Engine

Performance Criteria

Assess the candidate's ability to:

a) Recognize an engine failure or the need to shut down an engine as simulated by the ACP or CASI.

b) Complete engine failure vital action checks from memory.

c) Maintain positive aeroplane control. Establish a bank of approximately 5°, if required, or as recommended by the manufacturer, to maintain coordinated flight, and properly trim for that condition.

d) Set powerplant controls, reduce drag as necessary, correctly identify and verify the inoperative powerplant(s) after the failure (or simulated failure).

e) Maintain the operating powerplant(s) within acceptable operating limits.

f) Establish the best engine inoperative airspeed as appropriate to the aeroplane and condition of flight.

g) Establish and maintain the recommended flight attitude and configuration for the best performance for all manoeuvring necessary for the phase of flight.

h) Follow the prescribed aeroplane checklist and verify the procedures for securing the inoperative powerplant(s).

i) Determine the cause for the powerplant(s) failure and if a restart is a viable option.

j) Maintain desired altitude within flight test tolerances when a constant altitude is specified and is within the capability of the aeroplane.

k) Maintain the desired airspeed within flight test tolerances.

l) Maintain the desired within flight test tolerances of the specified heading.

m) Demonstrate proper powerplant restart procedures (if appropriate) in accordance approved procedure/checklist or the manufacturer's recommended procedures and pertinent checklist items.

n) Monitor all functions of the operating engine and make necessary adjustments.

II - Engine Failure (Not Associated with Take-Off) - Single Engine

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of the flight characteristics, approach and forced (emergency) landing procedures, and related procedures to use in the event of a powerplant failure (as appropriate to the aeroplane).

b) Maintain control throughout the manoeuvre.

c) Establish and maintain the recommended best glide airspeed within flight test tolerances, and configuration during a simulated powerplant failure.

d) Select a suitable airport or landing area, which is within the performance capability of the aeroplane.

e) Establish a proper flight pattern to the selected airport or landing area, taking into account altitude, wind, terrain, obstructions, and other pertinent operational factors.

f) Follow the emergency checklist items appropriate to the aeroplane.

g) Determine the cause for the simulated powerplant failure (if altitude permits) and if a restart is a viable option.

h) Use configuration devices, such as landing gear and flaps in a manner recommended by the manufacturer.

23. Abnormal/Emergency (Engine Failure)

Note: This flight test exercise provides guidance on engine failures associated with take-off. Refer to Flight Test Exercise 7 for guidance on a rejected take-off.

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory (Multi-Engine Aeroplanes) Optional (Single-Engine Aeroplanes) - See Note 2 in the Description section.

Aim

To assess the candidate's proficiency to recover from an engine failure at the most critical stage of flight while maintaining control of the aeroplane and carrying out the appropriate engine failure procedures in accordance with the POH, AFM, AOM and/or SOPs.

Description

The pilot will demonstrate a take-off with failure of an engine in accordance with the table below.

Note 1: The following information has been consolidated for reference only. Consult the appropriate CASS PPC Schedule.

CARs Subpart - Device	Engine Failure Parameters
702 and 703 - Simulator	A failure of the critical engine shall occur at the takeoff safety speed plus 10 kts or under **CARs 703 only,** failure of the critical engine shall occur at a speed greater than V1 and at an altitude of less than 50 feet AGL; or at a speed as close as possible to, but greater than V1 when V1 and V2, or V1 and Vr are identical.
702 and 703 - Aeroplane	A simulated engine failure at a safe altitude as close to the take-of safety speed plus 10 kts (or under **CARs 703 only** V2 + 10 kts) as is safe and appropriate to the aeroplane type under the prevailing conditions. Consult Safe Checking Practices found in Appendix A of the ACP Manual, TP 6533 for additional information.
704 and 705 - Simulator	A take-off with failure of the critical engine at a speed greater than V1 and at an altitude of less than 50 feet AGL; or at a speed as close as possible to, but greater than V1 when V1 and V2, or V1 and Vr are identical.
704 and 705 - Aeroplane	A simulated engine failure after take-off at a safe altitude and as follows: **CARs 704 only** - no lower than V2 + 10 airspeed and appropriate to the aeroplane type under the prevailing conditions, or if V speeds are not published in the Aeroplane Flight Manual, as close to the take-off safety speed as is safe and appropriate to the aeroplane type under the prevailing conditions. **CARs 705 only** - an airspeed appropriate to the aeroplane type under the prevailing conditions. Consult Safe Checking Practices found in Appendix A of the ACP Manual, TP 6533 for additional information.

Note 2: Single-Engine Aeroplanes - CASS PPC Schedules refer to takeoff safety speed or V2 which are not applicable to single-engine aircraft, however, performance criteria are provided below.

Note 3: It is acceptable to satisfy instrument takeoff requirements at the required minimum visibility specified in Flight Test Exercise 6 (i.e., Take-off) in this Flight Test Exercise **and** Flight Test Exercise 7 (i.e., Rejected Take-off).

I - Engine Failure (Take-Off) – Multi-Engine

Performance Criteria

Note: Tolerances are published and applicable to the heading swing an aeroplane may **initially** experience during an engine failure. ACPs should, however, factor their assessment on the particular aeroplane type and failure conditions.

Assess the candidate's ability to:

a) Recognize the engine failure promptly.

b) Control the aeroplane.

c) Set the power controls and reduce drag by using control application, in the proper sequence.

d) Identify and verify the inoperative engine.

e) Bank toward the operating engine, as recommended for best performance.

f) Maintain directional control within the flight test tolerance of an assigned heading.

g) Establish a positive rate of climb if the aeroplane is capable.

h) Accelerate to and maintain one engine inoperative required airspeed/V-speeds and trim the aeroplane, as required.

i) Locate the necessary controls and switches to carry out and complete the emergency procedures in accordance with the approved emergency procedures checklist:

   i) Complete prescribed engine failure vital action checks from memory.

   ii) Complete the emergency drill, in accordance with the emergency checklist.

   iii) Complete engine shutdown checks and other necessary checks in accordance with the appropriate emergency checklist(s).

j) Monitor the operating engine and take appropriate action to keep the operating engine parameters within limitations.

II - Engine Failure (Take-Off) – Single-Engine

Performance Criteria

Assess the candidate's ability to:

a) Recognize the engine failure promptly.

b) Control the aeroplane.

c) Set the power controls and reduce drag by using control application, in the proper sequence as appropriate to the aeroplane.

d) Identify and verify that the engine is inoperative.

e) Establish a power-off descent approximately straight-ahead if the powerplant failure occurs after becoming airborne and before reaching an altitude where a safe turn can be made.

f) Locate the necessary controls and switches to carry out and complete the emergency procedures in accordance with the approved emergency procedures checklist

   i) Complete prescribed engine failure vital action checks from memory.

   ii) Complete the emergency drill, in accordance with the emergency checklist.

iii) Complete engine shutdown checks and other necessary checks in accordance with the appropriate emergency checklist(s).

g) Carry out forced landing - Not required where a successful landing would have occurred.

24 - 27. Abnormals/Emergencies

System Malfunctions and Other Situations

PPC Applicability

CARs Subpart	Applicability
702 to 705	Mandatory

Aim

To assess the candidate's proficiency to complete recommended checks and procedures in accordance with POH, AFM, AOM and/or SOPs, and other applicable publications in event of system malfunctions or other situations.

Description

Note: Flight test exercises 24 to 27 pertain to system malfunctions and other situations requiring the use of SOPs, abnormal and emergency procedures.

System malfunctions will consist of a selection adequate to determine that the pilot has satisfactory knowledge and ability to safely handle malfunctions. The candidate will be required to demonstrate the use of as many simulated abnormal and emergency procedures as is necessary to confirm that the pilot has an adequate knowledge and ability to perform these procedures.

Performance Criteria

Assess the candidate's ability to:

a) Demonstrate adequate knowledge of the emergency procedures appropriate to the POH, AFM or AOM (as may be determined by the ACP or CASI) relating to the particular aeroplane type.

b) Promptly identify the malfunctions.

c) Promptly apply correct checks and procedures in accordance with the POH, AFM, AOM or other approved publication.

d) Consider and apply any restrictions or limitations to the operation of a system(s) and procedures in order to continue the flight.

e) Demonstrate knowledge and discipline in the use of the electronic checklist and alerting system, as applicable.

f) Develop a reasonable course of action for the remainder of the flight.

Flight Test Exercises – Additional

A - Rejected Landing 50 FT

Note: Content moved - see Flight Test Exercise 18.

B - Power Loss on Initial Climb (ICL)

Note: Content moved - see Flight Test Exercise 23.

C - Special Authorizations or Specific Approvals (SAs)

Note: Special Authorizations and Specific Approvals may specify additional checking requirements regarding (for example) EFVS and RNP AR APCH. ACPs are to select and use an appropriate Flight Test Exercise for assessment criteria.

D - Special Emphasis or Special Flight Characteristics

Note: Special emphasis and special flight characteristics checks may be specified in TCCA OEB reports (or FAA FSB reports or EASA OSD reports). ACPs are to select and use the appropriate Flight Test Exercise for assessment criteria.

E - Upset Prevention and Recovery Training (UPRT)

Note: (Reserved)