Transport Canada Transports Canada

TP 6533E
(11/2007)

Approved Check Pilot Manual

Ninth Edition

TC-1002096

Canada

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FOREWARD

This manual contains policies, procedures and guidelines that pertain to the Approved Check Pilot (ACP) program and is for the use of Civil Aviation Safety Inspector (CASI) and ACPs. Transport Canada issuing authorities approve ACPs and authorize them to conduct Pilot Proficiency Checks (PPC) and/or Line Checks. When performing their duties, ACPs act as delegates of the Minister according to subsection 4.3(1) of the Aeronautics Act and must follow the policies and procedures specified in this manual.

Where it applies, Transport Canada CASIs will also abide by the policies and procedures specified for the approval and monitoring of ACP's as well as those pertaining to the conduct of PPCs.

When the issuing authority deems it in the public interest and a change is not likely to negatively affect flight safety, TC may issue an exemption from parts of this manual to an operator. The issuing authority will produce a risk assessment; file all applicable documents in Records, Documents and Information Management System, and send a cc to the Program Manager ACP/AQP. The ACP Steering Committee will review the proposed exemption for information.

Don Sherritt

Director of Standards

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GENERAL

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ACRONYMS

ACP – Approved Check Pilot.

AFM – Aircraft Flight Manual.

AOM – Aircraft Operating Manual

TC AIM – Transport Canada Aeronautical Information Manual

ATC – Air Traffic Control.

ATPL – Airline Transport Pilot License – (H) means Helicopter category.

F/A – Flight Attendant(s).

CAR – Canadian Aviation Regulation.

CASS – Commercial Air Service Standards

CBA – Commercial and Business Aviation

CSAOA – Canadian State Air Operators Association

CPL – Commercial Pilot License, (H) means helicopter category.

IAP – Instrument Approach Procedure.

MAP – Missed Approach Point.

OPI – Office of Primary Interest.

PLPM – Personnel Licensing Procedures Manual.

PPC – Pilot Proficiency Check

RMCBA – Regional Manager Commercial & Business Aviation.

SID – Standard Instrument Departure.

SOP – Standard Operating Procedures

STAR – Standard Terminal Arrival.

TC – Transport Canada.

DEFINITIONS

ACP means Approved Check Pilot.

ACP Monitor means the passive observance by a TRANSPORT CANADA Inspector of the manner in which an ACP conducts a flight check, assesses the results and processes the necessary documentation.

ACP Type A means an Approved Check Pilot (ACP) who is authorized to conduct Pilot Proficiency Checks (PPCs), and for CAR 705 operations, Line Checks.

ACP Type B means an ACP authorized to conduct Line Checks (CAR 705 only).

AOM (Aircraft Operating Manual) means a Pilot's Operating Manual, a Pilot's Operating Handbook, a Flight Crew Operating Manual or a manual established by the Air Operator for the use and guidance of flight crewmembers in the operations of its aircraft.

Airborne PPC means the airborne portion of a Pilot Proficiency Check (PPC) that is conducted after the candidate's successful completion of the simulator portion of the PPC.

Aircraft PPC means a Pilot Proficiency Check (PPC) that is conducted onboard an aircraft.

Authorized person means a person who is delegated the authority to issue type ratings and/or instrument ratings by signing the additional privileges section on the back of the candidate's license or by completing the Certification of an Additional Privilege Card (26-0267).

Certificate means an Air Operator Certificate.

Civil Aviation Safety Inspector (CASI) means a Transport Canada Inspector who is trained and authorized to conduct flight checks and monitors.

Conduct means 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 debriefing, and completion of required documents including certification of the candidate's licenses.

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

Flight check means a PPC or a Line Check.

FTAE means Flight Training and Aviation Education database that is maintained by Transport Canada.

Issuing Authority means the Regional Manager, Commercial and Business Aviation, the Chief, National Operations or his/her assigned delegate, as appropriate.

Line check means a flight check conducted in accordance with paragraph 705.106(1)(d) of the *Canadian Aviation Regulations* (CARs) which is undertaken upon completion of line indoctrination and annually thereafter.

Operator means the holder of an Air Operator Certificate.

PPC means a PPC/IFT or a PPC/VFR

PPC/IFT means Pilot Proficiency Check conducted in accordance with the appropriate schedule specified in the Commercial Air Service Standards (CASS) and which is deemed to meet the requirements for an Instrument Rating.

PPC/VFR means Pilot Proficiency Check conducted in accordance with the appropriate schedule specified in the Commercial Air Service Standards (CASS) and which is deemed to meet the requirement for VFR operations only.

POI means a Transport Canada Principal Operations Inspector for a Part VII operator.

Professional suitability means a demonstrated willingness to work cooperatively with Transport Canada to uphold the principles of aviation safety.

Qualified person in the case of a simulator means;

- a pilot who holds a valid PPC (or foreign equivalent) on the same type of aircraft for which the other candidate is being checked on,
- a person who has been recommended for a flight check on that aircraft type, or
- 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 means, in the case of a two crew aircraft, a training pilot or a pilot who holds a valid PPC on the same type of aircraft for which the candidate is being checked on.

Scripted PPC means 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 mandatory events.

Simulator PPC means a PPC conducted in a full-flight simulator (FFS)

SOPs means Standard Operating Procedures established by an Air Operator, which enable the crewmembers to operate the aircraft within the limitations specified in the Aircraft Flight Manual, Aircraft Operating Manual, and/or Company Operations Manual.

Training Pilot means a pilot who meets the requirements of the applicable CAR Standard and for the purpose of line indoctrination, means a Training Captain.

Upgrade training means the training undertaken by a first officer to qualify for aircraft captain.

Vital action means an action that must be taken by flight crew to alleviate a situation that could jeopardize safety of flight. The action shall be taken in a timely manner consistent with the AOM or SOPs as appropriate.

RECORD OF AMENDMENTS

Please note the example below of how a Record of Amendments is to be entered. Insert the correct paragraph number, the date it was originally created, and the date amended to represent the date in which the change was entered and by whom.

Paragraph Number	Original Date	Date Amended	Entered By
2.2.3 a) Pilot in Command	***May 20, 2001***	***June 1, 2002***	***John Smith***

RECORD OF BULLETINS

Amendment Bulletins are issued from time to time to communicate procedural changes that occur within the year and that need to be implemented in a timely manner. These bulletins will be distributed by electronic means and may be printed on contrasting paper such as blue paper. They are to be inserted in the Bulletin section of the ACP manual. Bulletins will remain in effect until cancelled or integrated into the ACP manual at the subsequent amendment cycle

Please note the example below of how a Bulletin is to be entered. Insert the correct Bulletin Number, title, date it was originally created, and the date amended to represent the date in which the change was entered and by whom.

Bulletin Number	Title	Original Date	Date Amended	Entered By
01/06	*Changes to Schedule 1*	***Mar 01, 2006***	***Mar 10, 2006***	***John Smith***

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CHAPTER 1: DELEGATION AND RESPONSIBILITIES

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CHAPTER 1

1.1 PROGRAM DESCRIPTION

The Minister is responsible for the conduct of all qualification flight tests for the purposes of personnel licensing. Pursuant to Part I section 4.3 of the Aeronautics Act, “the Minister may authorize any person to exercise or perform, subject to any restrictions or limitations that the Minister specifies, any of the powers, duties or functions of the Minister under this Part….” The Approved Check Pilot (ACP) program allows an individual the opportunity to conduct flight checks independent of the availability of Transport Canada Civil Aviation Safety Inspectors (hereafter referred to as CASIs).

An ACP delegation is an official authorization to conduct PPC’s that is conditional upon the qualification of the person and the continued requirement for assistance to carry out the powers, duties and functions of the Minister. This delegation is given to qualified individuals on completion of the training required to conduct a particular type of PPC. It is, thereafter, the ACP’s obligation to continue to meet the requirements of the delegation.

An ACP may be authorized to conduct flight checks on any aircraft operating under CAR subparts 702, 703, 704 and 705 in which they hold a type rating, where applicable. All non-high performance, single and multi-engine land and seaplanes for which a type rating is not required are to be considered as “one type”. The Issuing Authority may limit the number of aircraft types on an ACP’s Delegation of Authority, or restrict aircraft models within a type or group, for any of the following reasons:

(a) automation and technology,

An example of this would be models of aircraft within a type that employs systems such as Flight Management Systems, EFIS, navigation systems such as GPS, or other technologies, where the ACP candidate does not have sufficient experience to effectively evaluate the performance of the pilot or crew using these types of systems.

(b) types and complexity of flight operations of client companies,

As flight operations become more complex, the use of SOPs becomes increasingly important thus requiring ACPs to have a comprehensive knowledge of procedures used by the crews being evaluated.

The number of ACPs and their conduct of flight checks are closely monitored by and at the option of Transport Canada. A CASI may conduct any of the flight checks referred to in this manual and a CASI may monitor any ACP conducting any flight check.

Flight checks conducted outside Canada by CASIs will be subject to cost recovery as per the existing policy on Cost Recovery for Regulatory Services Provided Outside Canada as detailed in the Air Carrier Inspector Manual.

1.2 APPROVED CHECK PILOTS (ACP)

An Approved Check Pilot is a pilot authorized to conduct a PPC/IFT, PPC/VFR, or a line check on company pilot employees on behalf of the Minister. Regardless of the ACPs employee status with the Air Operator, The ACP requires the authority of the Operator to conduct PPCs.

1.3 ACP SIMULATOR ONLY (WITHOUT MEDICAL CERTIFICATE)

Where an ACP’s medical expires or where the Minister has suspended or refused to renew a ACP’s medical certificate, the ACP may obtain authority to continue with ACP duties, in a simulator only, provided an application for simulator only authority is submitted to the appropriate TC Regional Office.

ACPs granted PPC (simulator only) authority having no medical certificate:

(a) must have held a valid ATPL pilot license, an Instrument Rating and applicable Type Rating;

(b) have experience as a Line Pilot with an Air Operator; and

(c) have accumulated not less than 100 hours on type with an Air Operator.

An ACP who has been granted a PPC (simulator only) authority will maintain currency by:

(a) attending an ACP (Recurrent) Course every 3 years; and

(b) complete an annual monitor conducted by a CASI.

(c) experience sufficient exposure to line operations to enable the ACP to conduct PPCs.

1.4 AUTHORIZED PERSON

The Authorized Person Training Program for ACPs has been implemented to streamline the licensing process by authorizing ACPs to annotate a pilot's credentials thus allowing the pilot to exercise the privileges of their new or renewed aircraft type and/or instrument rating immediately upon meeting all associated requirements, while waiting for the issue of their formal document.

An ACP will qualify to be an Authorized Person upon completion of an ACP (Initial or Recurrent) Course. The Authorized Person delegation will be made through the issuance of the ACP Delegation of Authority and the delegation will be automatically renewed by completing the ACP (Recurrent) Course.

An Authorized Person's authority is valid to the first day of the 37th month following the date of completion of the theoretical portion of an approved ACP (Initial) Course, or upon completion of an inspector briefing.

An Authorized Person's authority may be renewed by attending an approved Recurrent ACP Training Course/Workshop or by completion of another inspector briefing.

An extension to the validity period of the ACP Course automatically extends the Authorized Person's authority to the same date, with the new validity period calculated in the same manner.

1.5 ACP AUTHORITIES

Type A ACP's may be authorized to conduct a PPC/IFT or PPC/VFR, including an airborne PPC where applicable. Type B ACPs may conduct a line check for 705 operations only.

Below is a summary of ACP types of authority:

ACP Types of Authority	Type A	Type B
PPC/IFT	X	
PPC/VFR	X	
PPC/IFT (simulator only)	X	
Line Checks (CAR 705 only)	X	X

A PPC is considered to meet all skill and knowledge requirements necessary for the issueance of an instrument rating. The applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guides reflect similar performance criteria as outlined in the Instrument Rating Flight Test Guide (TP 9939E).

Type A ACP's are authorized to confer an instrument rating. In addition Type A ACPs are authorised to confer type ratings to a candidate who has completed an approved training program and successfully completed a PPC in accordance with CASS 421.40(3)(a)(iii).

There may be circumstances where a candidate requires only an IFR rating and no PPC. An example of such a circumstance is PC-12 candidates who do not qualify for PPCs because they have not completed the required simulator training, yet they require an instrument rating renewal because they fly cargo operation IFR. The ACP conducts the PPC and completes the Flight Test Report in the usual manner except no circle (initial, upgrade, recurrent, VFR only) is filled in for the pilot proficiency check. The instrument group 3 circle is filled in and this prompts the licensing action.

As per policy letter 116\GA9703, the ACP has the authority to renew and in some cases issue an initial IFR rating on a pilot currently employed under Part VII. The policy letter does not discriminate against what type of airplane the pilot operates. If the Operator deems it necessary to have an IFR the ACP may renew the IFR.

The ACP may do an initial IFR check ride for expired IFR for four reasons listed in the policy letter: Second officer upgrade, furloughed pilot, off for medical reasons and upgraded from VFR to IFR operations.

When the ACP conducts an initial IFR on an individual who never held an instrument rating, the method of compliance is to conduct a PPC on the candidate. When a pilot is not required to hold a PPC on a specific type but still requires an IFR check ride, as per the example above, the ACP will conduct a check ride as if it were a complete PPC. The ACP then annotate only the initial or renewal dots, pass or fail dots, the group and IFR valid to Box, but makes no mark for any PPC information on the Flight Test Report (form 26-0249).

1.6 ACP NOMINATION CRITERIA

1.6.1 General Requirements

The ACP candidate will:

(a) hold a valid Commercial Pilot Licence or Airline Transport Pilot Licence – Aeroplane or Helicopter, as appropriate to the CAR's Part VI or Part VII Subpart;

(b) hold a valid instrument rating where applicable;

(c) hold a Type Rating on each aircraft type requested on the candidate's ACP application form, where that aircraft requires an Individual Type Rating. Where there are similarities, the Issuing Authority may group Type Ratings;

(d) hold a valid PPC on at least one type of aircraft requested on the candidate's ACP application form;

(e) be or have been employed as Pilot-in-Command in the appropriate CAR's Part VI or Part VII Subpart, as applicable for the type of commercial operations and in the same category and class of aircraft for which checking authority is sought;

(f) have experience as a training pilot or have demonstrated equivalent knowledge and ability;

(g) demonstrate a thorough knowledge of an Air Operator's Operations Manual, any applicable Operating Specifications, Standard Operating Procedures and applicable Aircraft Flight and Operating Manuals;

(h) have the following flight experience for the authorities sought:

(i) 3000 Hours Total Time;

(ii) 1500 Hours Pilot-in-Command;

(iii) 500 Hours Multi-Engine (where applicable); and

(iv) 300 Hours Instrument Time (where applicable) of which 150 hours must be actual instrument flight time;

(i) have a satisfactory safety record as a pilot in regard to accidents and incidents;

(j) in relation to aviation, have no personal record that includes:

(i) any conviction under subsection 7.3(1) of the *Aeronautics Act;* or

(ii) two or more convictions, occurring during separate unrelated events, under the *Canadian Aviation Regulations*.

Under extenuating circumstances and with the support of a Short Process Type 2A Risk Analysis (Civil Aviation Directive 30 and TP13905), the Issuing Authority may consider varying the above noted requirements as necessary.

1.6.2 Knowledge

A 704 and 705 ACP applicant must successfully complete an Approved ACP (Initial) Course within the preceding 12 months of being appointed.

The Approved ACP (Initial) Course is NOT required for Subpart 702/703 ACP's and VFR Only ACP authority. However, as a minimum the ACP must undergo successful completion of an Alternate ACP Training Program, which includes a Self Study Assignment (corrected to 100%), an ACP Candidate Briefing, Practical Training and an ACP (Recurrent) Course. The ACP must complete the ACP (Recurrent) Course within 12 months after issuance of an ACP Delegation.

A CASI briefing will assess the knowledge of the ACP candidate on the following topics:

(a) the procedures and technique associated with conducting a flight check;

(b) the technique and standards used in the assessment and evaluation of a flight;

(c) briefing and debriefing procedures and requirements;

(d) completion of the flight check forms; and

(e) the contents and interpretation of the following publications as applicable to the type of flight checks to be undertaken:

(i) CARs Part I, specifically the fee schedule;

(ii) CAR Part IV, Personal Licensing;

(iii) CARs 601, 602, 605, 702, 703, 704, 705, and associated CARs Standards, as appropriate;

(iv) Approved Check Pilot Manual;

(v) Authorized Person's Training Program for ACPs;

(vi) Canada Air Pilot (CAP) or publication acceptable to the minister;

(vii) Instrument Procedures Manual;

(viii) Canada Flight Supplement,

(ix) Transport Canada Aeronautical Information Manual (TC AIM);

(x) Operator's COM, Operating Certificate and Operations Specifications, SOPs and AOM(s), as applicable;

(xi) Appropriate Pilot Proficiency Check Schedule; and

(xii) Commercial and Business Aviation Advisory Circulars.

1.6.3 Experience

The ACP must successfully complete standardization training to ensure competency in exercising the privileges of the ACP delegation. The practical training of an ACP is conducted in two phases. The process as outlined in phases 1 and 2 below is applicable to 702 and 703 ACPs only. For ACPs wishing to operate in subparts 704 and 705 an Approved ACP (Initial) course is required.

The ACP training on PPCs should always be conducted with the consent of the pilot candidate and, if applicable, the Air Operator. The CASI conducting the training in consultation with the Issuing Authority may modify training requirements. When the CASI is satisfied that the ACP trainee meets an acceptable level of Flight Checking performance, a recommendation will be made to the Issuing Authority that the ACP candidate be accredited with the applicable ACP delegation.

Phase 1: the ACP will observe a minimum of two PPCs conducted by a Transport Canada Inspector or a qualified ACP. The PPCs must be conducted in an aircraft or a Level A or higher full flight simulator; and

Phase 2: the ACP will conduct at least one PPC under the supervision of a CASI. In this phase the ACP candidate conducts the monitored Flight Check as the ACP. The applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide will be used to conduct the PPC and assess the skills and performance of the PPC candidate. Once the PPC completed, the ACP candidate will debrief the inspector in private. If both parties agree on the outcome of the PPC, the candidate will debrief the candidate in accordance with section 4.16 of this manual. Should the inspector not concur with the ACP candidate’s assessment, the inspector will debrief the candidate. The ACP candidate will be trained to proficiency.

The above two phases will be considered completed where an ACP candidate completes an Approved ACP (Initial) Course.

1.6.4 Skill

In addition to the experience requirements listed at 1.6.3, for quality assurance purposes, the ACP must undergo the initial ACP monitor by a CASI. During an ACP monitor the ACP will demonstrate the knowledge, skill and suitability to act as an ACP by conducting the appropriate PPC or Line Check on an aircraft or simulator type(s) specified on the ACP Application Form.

The CASI monitors a Type A ACP candidate as they conduct a PPC in an aircraft type (aircraft or simulator as appropriate) for which approval is sought. ACPs with PPC/VFR authority who are seeking PPC/IFT authority must demonstrate they possess the skills to conduct PPC/IFTs.

A CASI will monitor a Type B check pilot candidate as they conduct a Line Check in the aircraft type for which approval is sought.

Where the ACP candidate is seeking authority for more than one type of aircraft, the candidate must demonstrate the skill to conduct a Flight Check on at least one of the aircraft types for which ACP authority is requested. *The aircraft type chosen for the initial ACP monitor will be at the discretion of Issuing Authority.*

Upon successful completion of the initial ACP monitor(s), the CASI will sign the appropriate Flight Test Report and attach a copy of the ACP Monitor Report(s) (26-0387) to the ACP Application Form.

1.6.5 Unsatisfactory performance

If after training and monitoring, an ACP candidate cannot attain a satisfactory standard as determined by the CASI, the candidate will be briefed on the areas to improve before re-applying for a subsequent assessment. Where the candidates are refused issuance they will be advised of the right to appeal the CASI's decision under 1.7.6 of this manual.

1.7 ACP DELEGATION

1.7.1 Letter of Delegation

The Issuing Authority may issue a Delegation of Authority Letter following the successful completion of the ACP's training. The Delegation of Authority allows the ACP to act on the Minister's behalf with conditions. The letter will list the conditions as described below:

(a) the type of ACP approval (i.e. Type A or Type B, including PPC/IFT, PPC/VFR, PPC Simulator Only and Line Checks, as applicable);

(b) the CARs subpart under which the ACP authority is authorized to conduct flight checks;

(c) the aircraft types upon which the ACP is authorized to conduct flight checks;

(d) the person understands that delegation as an ACP may be cancelled or suspended for breach of a condition of issuance, administrative reason or for any other reason set out in sections 6.9 to 7.1 of the Aeronautics Act or in the *Canadian Aviation Regulations*;

(e) the person understands that when privileges of the delegation are exercised, a valid licence and required rating must be held;

(f) the person understands, accepts and will carry out the following privileges, duties and functions of the Minister to:

(i) ensure that a PPC candidate meets the prerequisites pursuant to CAR's subpart;

(ii) ensure that aircraft used for the Flight Check meet the requirements of:

- CAR 602 – *Aircraft Operating Limitations* – operated in accordance with the limitations set out in the AFM/POH, and other approved data with regard to all limitations for the operating envelope and the type of flight (Day/Night/VFR/IFR), appropriate to the licence or rating sought;
- CAR 605- *Aircraft Equipment Standards and Serviceability* – the aircraft and required equipment meet the applicable standards of airworthiness and are serviceable and, where required by operational circumstances, functioning;

(iii) the exercise all reasonable duty and care to ensure safe flight by intervening verbally or physically when any action or lack of action by the candidate jeopardizes safety;

(iv) assess the candidate's skills during a PPC in accordance with the qualification standards expressed in the applicable *Pilot Proficiency Check Schedule and Aircraft Type Rating Flight Test Guide*;

(v) conduct Flight Checks in accordance with the applicable techniques and procedures outlined in the *Approved Check Pilot Manual* (TP 6533E);

(vi) to work harmoniously with the public and avoid any action that may reflect discredit on Transport Canada; and

(vii) to complete all administrative requirements as outlined in the *Approved Check Pilot Manual* (TP 6533E).

(g) the authority to issue aircraft type and instrument ratings as an Authorized Person

(h) the authority to initiate suspension or refusal of rating privileges for which a PPC candidate failed to meet the qualification requirements of the *Personnel Licensing Standards*;

(i) any other appropriate conditions of issuance; and

(j) the expiry date of the Delegation of Authority Letter.

The conditions listed in (a) through (h) will be included in the Delegation of Authority letter.

1.7.2 Duration of Delegation

All initial ACP Delegation of Authority will expire on the first day of the thirteenth month following the date of issuance. All renewals authorities will expire on the first day of the thirty-seventh month following the date of renewal.

1.7.3 Renewal of Delegation

The responsibility to request renewal prior to expiration of their Delegation rests with the ACP. The Transport Canada Regional Office or nearest TCC should be advised, in writing, 90 days prior to the expiry date, indicating if the ACP delegation is to be renewed.

For an ACP Delegation of Authority to be renewed an ACP will:

(a) attend an ACP (Recurrent) Course every 3 years from the date of completion of the ACP (Initial) Course (the ACP course is not required for VFR ACPs). The ACP (Recurrent) Course will be one of the following:

(i) the “theory” portion of an Approved ACP (Initial) Course, or

(ii) an Approved ACP (Recurrent) Course delivered by an Approved ACP training organization,

(b) successfully complete an annual PPC renewal, or where authorized by the Issuing Authority, a biennial PPC renewal; and

(c) successfully complete an annual monitor conducted by a CASI.

In the case of an expired Delegation that has been invalid for the period indicated below the ACP will re-qualify in the following manner:

(a) Up to two years, complete a monitor ride;

(b) Two years but less than three years, attend an ACP (Recurrent) Course and complete a monitor ride;

(c) Over three years, meet initial delegation requirements (ie. attend an Approved ACP (Initial) Course and complete a monitor ride.

If a request is not received, Transport Canada will assume that the ACP does not wish to renew the Delegation of Authority.

All renewals of delegation will be subject to the following requirements:

(a) continuing to meet the requirements for initial Delegation;

(b) having honoured the conditions of issuance of Delegation during the previous period of delegation;

(c) having conducted Flight Checks in accordance with the terms and conditions stipulated in the Letter of Delegation; and

(d) having successfully completed an ACP Recurrent Course Within the previous 36 months.

1.7.4 Administrative Revocation of an ACP Delegation of Authority

The Issuing Authority will issue a Letter of Revocation to an ACP where the ACP advises Transport Canada that the authority is no longer required or Transport Canada determines that an ACP authority is no longer required. It is intended that this provision be exercised only where revocation of the ACP authority is non-contentious.

1.7.5 Cancellation, Suspension, Refusal to Renew or Refusal to Issue

The Issuing Authority may, pursuant to 7.1(1) of the Act, cancel an ACP's authority to conduct flight tests on the basis of any of the following:

(a) a record of conviction of an offence punishable on summary conviction under 7.3 of the *Aeronautics Act* or two or more convictions, occurring during separate unrelated events, under the *Canadian Aviation Regulations*; or

(b) evidence of malpractice or fraudulent use of the designation.

The Issuing Authority - may, pursuant to 7.1(1) of the *Act*, suspend, refuse to renew or refuse to issue an examiner's authority to conduct flight tests on the basis of any of the following:

(a) upon the written request of the ACP;

(b) when there is no longer a need for the ACP's service;

(c) a record of violation of the *Canadian Aviation Regulations* resulting in one or both of the following penalties:

  (i) an administrative monetary penalty assessed in accordance with sections 7.6 to 8.2 of the *Aeronautics Act,* where there has been a violation of a designated provision; or

  (ii) the suspension of a *Canadian Aviation Document* in accordance with section 6.9 of the Act, in respect of any contravention of a provision of Part 1 of the Act.

(d) failure to attend a required ACP recurrent course;

(e) failure to maintain an Instrument Rating except where allowed.

(f) unacceptable performance in any phase of ACP duties or responsibilities, including the inability to accept or carry out the supervising principle inspector's instructions;

(g) the need for repeated direction in the proper conduct and administration of flight tests;

(h) failure to conduct flight tests in accordance with the instructions, techniques and procedures set forth in the *Approved Check Pilot Manual* (TP 6533E), Flight Test Guide or PPC schedule;

(i) for any reason the Issuing Authority considers appropriate and in the public interest.

When it has been alleged that any ACP has acted in a manner specified above, the Issuing Authority must, prior to making a final decision in the matter, ensure:

(a) a comprehensive report from a CASI who has investigated the matter has been submitted for consideration; and

(b) the ACP and where applicable, the company in question have been given a formal opportunity to respond to the allegations, either verbally or in writing.

If the decision of the Issuing Authority is to suspend or cancel or refuse to issue the ACP's authority, a notice of suspension or cancellation or refusal to issue must be issued directly to the individual ACP as per section 7.1(1)(b) or (c) of the *Aeronautics Act*. ACPs are entitled to procedural safeguards, under the *Aeronautics Act*, including recourse to the Transportation Appeals Tribunal of Canada (TATC).

1.7.6 Request for Review

A "Letter of Delegation" as an ACP is a *Canadian Aviation Document* (CAD). The powers to suspend, cancel or refuse to renew a CAD are set out in the *Aeronautics Act*, as amended.

The four distinct grounds for the above powers are as follows:

(a) suspend or cancel for contravention of any provision in Part 1 of the Act or the regulations made under the Act [e.g. the *Canadian Aviation Regulations* (CARs)];

(b) suspend on the grounds that an immediate threat to aviation safety exists or is likely to occur;

(c) suspend, cancel, refuse to renew or refuse to issue on the grounds of:

  (i) incompetence;

  (ii) ceasing to meet the qualifications or to fulfill the conditions of issuance of the document; or

  (iii) public interest reasons;

(d) suspend or refuse to renew for failure to pay monetary penalties for which the Tribunal has issued a certificate of non-payment.

If the decision of the Issuing Authority is to suspend or cancel or refuse to issue the ACP's authority, a notice of suspension or cancellation or refusal to issue will be issued directly to the individual ACP as per section 7.1(1)(b) or (c) of the Aeronautics Act. ACPs are entitled to procedural safeguards, under the Aeronautics Act, including recourse to the Transportation Appeals Tribunal of Canada (TATC). The document holder has the right to request a review of the Minister's decisions, to suspend, cancel, or refuse to issue or renew a CAD, by the Transportation Appeal Tribunal of Canada (TATC).

The TATC may be contacted at:

Transportation Appeal Tribunal of Canada
333 Laurier Avenue West
12th Floor, Room 1201
Ottawa, ON
K1A 0N5
Tel.: (613) 990-6906
Fax: (613) 990-9153
cattac@smtp.gc.ca

1.7.7 Reinstatement of an ACP's Authority:

The Issuing Authority may consider the reinstatement of suspended delegation if in the opinion of the Minister, it is in the public interest and not likely to affect aviation safety. The criteria at 1.7.3 must be met.

1.8 ACP RESPONSIBILITIES

1.8.1 Service

An ACP is an experienced professional who is trained in assessing pilot performance against a national standard and who ensures that all persons seeking a Flight Check or Rating, for which a Flight Check is required, meet the skill and knowledge requirements.

ACP's are appointed to provide a prompt service to any candidate who meets the requirements for a Flight Check and who has been recommended for a Flight Check by a qualified person. If an ACP cancels a Flight Check without rescheduling, the ACP should recommend another ACP or instruct the candidate to contact the nearest TC office exercising operational oversight, as appropriate. The CSAOA or TCC/Regional Office should provide the names of other ACP's, or may arrange to conduct the Flight Check at the candidate's request.

The ACP must conduct the pre flight portion of the Flight Check in a private area free from distractions. The ACP must give the candidate undivided attention during the Flight Check and ensure that any discussion of Flight Check results with the candidate is in private unless, by mutual agreement, a person other than the candidate is present e.g.: the recommending Chief Pilot or Operations Manager.

1.8.2 Prompt Forwarding of Flight Test Reports

Original PPC Flight Test Reports (26-0249 – Aeroplane or 26-0279 – Helicopter) whether pass or fail must be promptly forwarded to CSAOA, when appropriate, or the Transport Canada Regional Office or TCC no later than 5 working days after the Flight Check. A duplicate copy is to be retained in a file maintained by the ACP for a period of 24 months after the Flight Check date. This file is subject to review by Transport Canada – CASI and will be made available upon reasonable notice.

In the event of a failed Flight Check, the ACP will give the candidate a copy of the completed PPC Flight Test Report.

1.8.3 Standardization

ACP's must conduct all PPC's in accordance with the applicable Pilot Proficiency Check schedule and Aircraft Type Rating Flight Test Guide. An ACP must not allow personal prejudices to interfere with objective evaluation of a candidate's skills.

ACP's are required to complete an open-book assignment and attend an ACP standardization Recurrent Course. The validity period of an ACP Course expires on the first day of the 37th month following the month in which the ACP Course was completed. A record of successful completion of the course will be sent to TC to be included in the ACP's NACIS file.

Where an ACP Course is renewed within the last 90 days of its validity period, the validity period is extended by 36 months.

The Issuing Authority may extend the validity period of an ACP Course by up to 90 days. Where the validity period of an ACP Course has been extended and the ACP Course is renewed after the initial expiry date, its validity is extended by 36 months calculated from the date the ACP Course was completed.

1.8.4 Limits of Authority for ACPs while conducting PPCs

An ACP will not conduct a PPC during a flight engaged in a revenue flight.

An ACP may conduct a re-test of a failed PPC provided TC is informed.

An ACP will not conduct a PPC on a candidate to whom he/she has given the initial or upgrade simulator or aircraft flight training. However, an ACP may conduct both the recurrent training and recurrent Flight Check on the same candidate with prior approval from the Issuing Authority for extenuating circumstances. In each case, the written justification must also be placed on the candidates' file for each occurrence, for inspection and audit purposes. Should such a situation occur, the next recurrent PPC will be conducted by a different ACP, or if none is available, a CASI.

An ACP will not conduct a PPC on a CASI unless the Issuing Authority has granted written authority.

1.8.5 ACP's PPC

Where applicable, an ACP will have their PPC conducted at the frequency indicated by the company they are associated. Where an ACP is operating independently of an Air Operator, the ACP requires a PPC at the frequency indicated by the most restrictive subpart under which they operates. An ACP may conduct another ACP's PPC.

Where an ACP maintains PPCs on more than one aircraft type,
the aircraft type upon which the PPC is conducted will be at the discretion of the Issuing Authority.

1.8.6 ACP Records

The responsibility rests with the ACP to ensure their authority is valid before conducting a Flight Check. An ACP will maintain records where applicable to show the following:

(a) the last date that the ACP attended an ACP course and when the next ACP (Recurrent) Course is due;

(b) the last date that an approved Operator's recurrent training program (ground and flight) was completed;

(c) the last date that the ACP had their PPC renewed;

(d) the last date when the ACP was monitored conducting a PPC by a CASI and when their next ACP monitor is due; and

(e) a list of the Flight Checks conducted by the ACP.

All ACP records are to be maintained for a period of at least two years and will be made readily available to TC for inspection and auditing purposes.

1.8.7 ACP's Notification Responsibilities

ACP's will advise Transport Canada when they no longer meet the requirements to hold an ACP authority or when they will not exercise the authority in the coming 24 month period.

The responsibility rests with the ACP to submit a monthly schedule of proposed Flight Checks to the appropriate TC office. The list should be submitted to arrive at least seven days prior to the first scheduled check. Unless alternate method is approved, the form in Appendix B is to be used.

Where the ACP's PPC renewal (where applicable) or ACP monitor becomes due, the ACP will advise the appropriate TC office and arrange an advance booking. *Should the ACP anticipate a delay or problem in arranging either a PPC or*

monitored ride prior to the expiry date, the ACP should contact the TC office concerned by telephone to make alternate arrangements.

1.8.8 Recurrent Monitoring Process

The purpose of recurrent monitoring is to verify a uniform standard is applies during the conduct of PPC's, the application of performance standards and the method of evaluating a candidate's skills. The validity period of a Type A ACP monitor expires on the first day of the thirteenth month following the month in which the ACP monitor was completed. Where a Type A ACP monitor is renewed within the last 90 days of its validity period, the validity period is extended by 12 months.

The Issuing Authority may extend the validity period of an ACP monitor by up to 60 days. Where the validity period of an ACP monitor has been extended and the ACP monitor is renewed after the initial expiry date, the new monitor expires on the first day of the thirteenth month following the month in which the ACP monitor was completed.

ACP's are required to contact a CASI to undergo a monitor of their ACP skills. Where an ACP is authorized to conduct PPCs on more than one aircraft type, the aircraft type upon which the monitor is conducted will be at the discretion of the Issuing Authority. One monitor will cover all types unless TC requests otherwise.

Before scheduling an ACP's Monitor, the issuing authority will review the nominee's application for issues pursuant to section 1.6.1 (j) of this manual. The CASI and ACP shall meet before the flight check to discuss the ACP's previous yearly performance using data collected from TC's Flight Training and Education (FTAE) database. The meeting will also establish the sequence of procedures to be demonstrated and to delineate the extent of the CASI input.

During an ACP monitor, the CASI will ensure that:

(a) the ACP's Flight Test Reports are complete, accurate and meaningful;

(b) where applicable, the ACP's administrative procedures with regards to the issuance of a type and/or instrument rating conform with requirements specified in the *Authorized Person's Training Program* for ACPs;

(c) the ACP covers the required PPC sequences as per the appropriate PPC schedule;

(d) the ACP's conduct of PPC is fair and in compliance with the standards and procedures described in this manual; and

(e) the ACP is acting within the limits of his/her authority.

Upon completion of the airborne portion of the PPC, the CASI and ACP will meet privately to review and concur on the results of the check. Should a disagreement arise between the CASI and ACP on the outcome of the evaluation, the CASI's evaluation will take precedence over the ACP. The CASI's evaluation will be used to debrief the candidate.

After each ACP monitor, CASIs will complete an ACP Monitor Report (26-0387) and will ensure that a copy of the report is provided to the ACP and a copy placed on the ACP's TC regional file.

The Issuing Authority will ensure that the ACP's electronic files located within NACIS are updated with the latest ACP monitor report date.

During recurrent ACP monitors, the CASI will also review the Air Operator's utilization of the ACP.

Where an ACP fails to meet the required skill assessment during the monitor, the ACP's monitor will be deemed to have lapsed in accordance with 1.7.5 of this manual. ACP privileges will be suspended until remedial training as determined by the Issuing Authority is completed and a subsequent monitor successfully completed. Section 1.7.6 Request for Review, of this manual also applies.

The Issuing Authority may take appropriate action, and document that action, if an ACP is observed:

(a) not complying with the Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide(s), which may include, but is not limited to:

  (i) passing rates consistently well above or below the national averages;

  (ii) PPC times that are consistently much shorter or longer than the national averages;

  (iii) PPC remarks that do not support the mark awarded, is the subject of a substantiated public complaint regarding their competence or the conduct of a PPC; or

(b) is involved in an accident, incident or a violation under the *Aeronautics Act.*

If a monitor indicates a deficiency in the conduct of PPCs or application of standards, the supervising inspector will note the deficiency and document educational or remedial action taken to remedy the matter. Suspension of the ACP's authority, if considered, must have the concurrence of the Issuing Authority.

1.8.9 Liability – Delegated Authority

ACP's receive their authority to exercise privileges on behalf of the Minister by means of a "Delegation of Authority" document. External delegates are regarded as Crown agents to the extent that they act on behalf of the Crown. The Government of Canada, under the provisions of the *Crown Liability and Proceedings Act*, will indemnify approved check pilots against personal liability incurred by reason of any act or omission within the scope of their duties, and will make no claim against them (for damages the Crown has to pay) based upon such personal liability, if the approved check pilot acted within the scope of the delegation, honestly, without malice, and with a standard of care like every other reasonable person in their position engaged in the same activity would take.

Reference: TP 11825E – *Liability Through the Exercise of Delegated Authority*.

1.8.10 Conflict of Interest

"*Conflict of Interest*" is defined as any relationship, whether family, financial or otherwise, that might influence an ACP to act, either knowingly or unknowingly, in a manner that does not hold the safety of the flying public as the primary and highest priority.

All ACPs are held to be in a "*perceived conflict of interest*" if they are simultaneously employees (regular or contract) of the company and delegates of the Minister when performing their checking duties. To avoid a "*real conflict of interest*", it is imperative that ACPs strictly adhere to the policy and guidelines contained in this manual. Lack of adherence to the manual may result in a suspension or cancellation of an ACP's delegation.

The following are examples (not exhaustive) of situations that could be considered conflict of interest between the ACP and his/her delegated authority:

(a) level of the ACP's financial interest in the company;

(b) the ACP's direct involvement in company ownership;

(c) the ACP owning a substantial number of voting shares of the company;

(d) the ACP's level of involvement with a pilot union or association:

(e) the relationship between the ACP and the flight check candidate;

(f) the ACP having family ties with company owners; and

(g) any privileges or favours which could bias the ACP's ability to conduct his or her duties.

In order to determine whether a candidate's conflict of interest is real or perceived, each candidate will declare on their resume (which must be attached to their application form), any conflict of interest of which they have knowledge, and will be prepared to discuss at each annual monitor thereafter, any change to their status in this regard. Furthermore, a company will periodically review the status of each ACP in its employ to ensure that they are not in any conflict of interest.

Should any ACP come into a situation that they feel might constitute a "real conflict of interest", a full report of the circumstances must be immediately submitted to the Issuing Authority for review.

The final authority for deciding whether there is any conflict of interest that might affect the ACP's ability to conduct flight checks in an impartial manner rests with the Issuing Authority. Interest in a company will not automatically disqualify a candidate from receiving ACP authority. The approving authority will assess every case with consideration given to all circumstances involved.

It must be stressed that any effort by an Operator or organization employing the services of an ACP to influence or obstruct the ACP in the course of fulfilling their obligations to the Minister will result in the invalidation of the flight checks conducted by the ACP.

CHAPTER 2: APPLICATION AND TRANSPORT CANADA PROCEDURES

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CHAPTER 2

2.1 SUBMITTING THE ACP APPLICATION FORM

The ACP Application Form is located in Appendix A of this manual. ACP applicants must complete and forward the form to the appropriate Transport Canada office with the following documentation attached:

(a) a résumé outlining:

  (i) the applicant's background, qualifications and experience, including previous flight check or supervisory experience;

  (ii) justification for any deviations from the qualifications and experience requirements specified in this manual, and

  (iii) declaration of any interest in the company or other condition that could result in a conflict of interest.

(b) for Type A applicants where training has been completed, a copy of the ACP course certificate(s) which indicate completion of both the theoretical and practical portions of an approved ACP (Initial) Course, including the dates for each portion if completed under separate approved (theoretical/practical) programs. For CAR 702/703 candidates who have completed the Alternate ACP Training Program, a copy of the ACP (Recurrent) Course certificate is required.

If the *applicant* has not yet attended an ACP course, the "proposed" box in the "Approved Check Pilot Course" section of the application form must be checked and the proposed course location and date indicated.

2.2 REVISIONS TO THE ACP AUTHORITY

If a revision to an existing ACP Delegation of Authority is required, the ACP will submit the following to the Issuing Authority:

(a) where the request is for an additional authority, an ACP application form containing only the additional information pertaining to the addition of an aircraft type or requested authority;

(b) where the request is for a PPC (simulator only) authority due to loss of an ACP's medical category, an ACP Application Form together with a declaration that the candidate remains competent to conduct PPCs in a simulator; and

(c) where the request is for removal of an authority, written notification identifying the ACP and detailing the authorities to be removed.

The application forms submitted in paragraphs (a) and (b) must have the "revision" box checked and the application must be signed and submitted in the same manner as the initial application.

2.3 ACP APPLICATION FORM REVIEW

The appropriate Transport Canada office will, upon receipt of the ACP Application Form, confirm that the ACP applicant:

(a) is acceptable in terms of experience, and competency; and

(b) meets the qualifications and training requirements set out in this manual, as applicable, or that any deviation is justified and acceptable

The Issuing Authority may approve an applicant not meeting all of the stated requirements. Justification provided in the ACP applicant's resume (that accompanies the application form) may be considered in making this determination.

An ACP applicant is requesting authority should be prepared to demonstrate a need to the minister considering:

(a) the number and variety of aircraft to conduct PPCs on;

(b) the location of Operator bases and accessibility and;

(c) the type of operation to be checked.

TC will contact the ACP applicant to arrange a meeting between the ACP applicant and a CASI for an initial appointment briefing.

2.4 ACP APPLICATION APPROVAL

Based on the applicant's qualifications, experience and demonstrated ability, the CASI will complete the recommendation block on the ACP Application Form.

Where the ACP applicant is considered satisfactory, the CASI will indicate this by checking the "Yes" box. In addition to this, the Inspector will also recommend that the ACP authority be issued as requested.

The Issuing Authority will then complete the approval block of the application form and where the ACP candidate is successful, issue an ACP Letter of Delegation.

The Issuing Authority will then ensure that the required ACP information has been entered into NACIS and that the following have been placed in the appropriate file:

(a) a copy of the ACP Application Form, including attachments as applicable;

(b) the ACP course certificate including confirmation that the practical portion of the training has been completed;

(c) the ACP Monitor Report (form 26-0387); and

(d) the ACP Letter of Delegation.

CHAPTER 3: PRINCIPLES OF EVALUATION

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CHAPTER 3

3.1 AIM OF THE FLIGHT CHECK

Flight Checks conducted under and Part VII of the *Canadian Aviation Regulations* consist of Pilot Proficiency Checks (PPCs) and Line Checks.

The aim of a PPC is to:

(a) determine that the candidate/crew meets the skill requirements to fulfill their assigned responsibilities in a safe and competent manner for the PPC, Line Check or rating sought;

(b) improve the standards of instruction and training through feedback of information to the air operator or training organization of those tasks, manoeuvres, policies and procedures that are weak or commonly unsuccessful;

(c) to ensure acceptable levels of safety are maintained and, where possible, improved throughout the aviation industry, by requiring the application of sound airmanship and flight discipline.

The role of an ACP is to evaluate the knowledge and skills of candidates to determine whether they meet the required standard for a PPC, Line Check or Rating. ACPs are professional, experienced pilots and have demonstrated they possess the knowledge of the PPC checking criteria.

3.2 EVALUATION PROCESS

Evaluation is the process of defining, observing and measuring a candidate's performance during a Flight Check. When the ACP conducts a Flight Check, it is for the purpose of determining whether the applicant meets all the criteria as outlined in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. Analysis of this evaluation, as recorded on the PPC Flight Test Report, provides information that is used to identify:

(a) candidate deficiencies;

(b) specific degrees of skill;

(c) areas of weak instruction; and

(d) areas of the training syllabus requiring improvement.

This information along with input from other sources such as accident reports and flight safety newsletters, is then integrated into the training program in the form of revisions to training manuals, examinations and flight check standards. This improves the quality of training and enhances aviation safety.

3.3 EVALUATION CYCLE

The evaluation process has the following 5-stage cycle:

3.3.1 Stage 1 (Aim)

The first stage determines the objective of the Flight Check item. Since it would be meaningless to evaluate the candidate's performance without considering what that performance should be, the process of evaluation should begin with clearly defined objectives. These objectives are specified in the *Aim* statement for each PPC flight check item in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. The *Aim* statement embodies the mandatory criteria to be achieved by the candidate.

3.3.2 Stage 2 (Standards)

To be proficient in evaluating a candidate's performance during a Flight Check, the ACP must be completely familiar with the standards for each item. These standards are described in the *Performance Criteria* statement for each item in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. Criteria missed or poorly done in this section should not result in a failure if it is not also found within the *Aim* statement.

3.3.3 Stage 3 (Performance)

During the Flight Check, the ACP assigns the tasks or manoeuvres in accordance with their *Description* and observes the candidate's performance in response to the situations presented.

3.3.4 Stage 4 (Observation)

The ACP observes the performance and compares it to the performance criteria in the Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide.

3.3.5 Stage 5 (Assessment)

Based on observation of the candidate's performance under existing conditions, the ACP assesses the performance and assigns a mark. When a candidate commits significant errors during the performance of an exercise or does not achieve the requirements of the *Aim* statement, the ACP must state the nature of the problem(s), in the *Remarks* column of the PPC Flight Test Report. However, to be useful, the remarks must be clear and they must support the mark that has been assigned.

3.4 CHARACTERISTICS OF EVALUATION

An evaluation may become useless if certain criteria are not respected. The following five characteristics, if used carefully when conducting a Flight Check, will result in an accurate and effective form of evaluation.

3.4.1 Reliability

Reliability ensures consistent results. As applied to the Flight Check, this would mean that two identical performances should result in the same Flight Check score.

Human factors can have a significant affect on Flight Check reliability.

Some of these factors are:

(a) **Fatigue:** insufficient sleep or rest prior to the Flight Check.

(b) **Emotions:** work or home personal problems.

(c) **Health:** cold or flu etc.

(d) **Time of Day:** very early in the morning, or last trip of the day, rushed.

(e) **Distractions:** noise, interruptions etc.

ACP's should be conscious of these factors and attempt to reduce as many variables as possible. The ACP may accept some of these factors as a reason for some lack of smoothness or accuracy in the candidate's performance. ACP's should also be aware that their ability to accurately assess the candidate's performance could be affected by these same factors.

Another factor that may affect the reliability of an evaluation is to allow learning to take place during the Flight Check. It must be emphasized that testing for the purpose of licensing must remain clearly removed from teaching. For example,

oral questions, if worded improperly, may lead the candidate to the correct answer. In air Flight Check items, if given a second or third attempt, the candidate may demonstrate a manoeuvre adequately because of the immediate practice. For this reason, an exercise or manoeuvre will not be repeated unless one of the following conditions applies:

(a) **Discontinuance:** Discontinuance of a manoeuvre for valid safety reasons; i.e., a go-around or other procedure necessary to modify the originally planned manoeuvre.

(b) **Collision Avoidance:** ACP intervention on the flight controls to avoid another aircraft that the candidate could not have seen due to position or other factors.

(c) **Misunderstood Request:** A legitimate instance when a candidate does not understand an ACP's request to perform a specific manoeuvre. A candidate's failure to know the requirements of a specified manoeuvre is not grounds for repeating a task or manoeuvre.

(d) **Other Factors:** Any condition where the ACP was distracted to the point that the candidate's performance of the manoeuvre (radio calls, traffic, etc.) could not adequately be observed.

These provisions have been made in the interest of fairness and safety and do not mean that instruction, practice, or the repeating of a Flight Check item or manoeuvre unacceptably demonstrated, are permitted during the Flight Check evaluation process.

3.4.2 Validity

Flight Checks are valid if they measure what they are supposed to measure and nothing else. Assessment of ground and air items must remain within the bounds of the appropriate Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. The scope of the Flight Check must be such that when candidates pass, they have met the required standards for the issuance of the PPC or Rating sought.

3.4.3 Comprehensive

A Flight Check is comprehensive if it contains a sample of all course material and measures each area of skill and knowledge required to ensure the skill requirements are met.

3.4.4 Discrimination

In Flight Checking, discrimination enables the ACP to detect different levels of achievement among candidates. Discrimination separates standard performance from above and below standard performance. A 1-4 marking scale is designed to reveal how candidates perform and allows for a greater degree of discrimination than one that simply distinguishes between pass and fail.

3.4.5 Objectivity

Objectivity ensures the ACP's personal opinions will not affect the outcome or assessment of the Flight Check. Marks awarded must be made in accordance with the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test performance criteria. Flight Checks are marked to some degree on a subjective basis. Subjective assessments will be more valid if the ACP is an experienced pilot, has a sound and adequate background knowledge of the evaluation process and the expertise to accurately assess Flight Check candidates without prejudice.

3.5 EVALUATION ERRORS

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

3.5.1 Personal Bias Error

Personal bias is indicated by a tendency of an ACP to rate candidates or a particular group of candidates the same.

3.5.2 Central Tendency Errors

Central tendency errors are indicated by a tendency to rate all or most candidates as average. The ACP really “feels” that the performance of most candidates is not as good as it should be and therefore underscores a candidate’s good performance. On the other hand, the ACP is reluctant to cope with the possible emotional response of a candidate or a recommending instructor. This results in padded or inflated assessments of poor performance. This error may also occur because an ACP does not want to put effort into making a decision. An average mark is easier to make.

3.5.3 Generosity Errors

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

3.5.4 Severity Errors

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

3.5.5 Halo Effect

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

3.5.6 Stereotype

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

3.5.7 Logical Error

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

3.5.8 Error of Narrow Criterion

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

3.5.9 Error of Delayed Grading

Should a delay occur in awarding the assessment for an item, there might be a tendency to award average marks due to the lack of information and/or poor recall. By not making an assessment immediately after the event, ACP's may award assessments based upon an overall impression of the Flight Check. This results in an erroneous assessment and a Flight Check Test Report that is of little value to the training system.

3.5.10 Standards Error

All the errors we have discussed result in a standards error. However, if an ACP is not thoroughly familiar with established performance criteria, as outlined in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide, it is virtually impossible to conduct an evaluation to that standard.

While these errors are presented here on paper in a clear and obvious way, under Flight Checking conditions this is not always so. Normally it is a combination of two or more of the errors and clear and obvious is not an apparent trait. Therefore, ACP's must be aware of these errors and consciously prevent such errors from entering, in any degree, into the assessment of flight checks they conduct to ensure the validity of the marks they award.

3.6 ORAL QUESTIONS

The ACP measures and evaluates the extent of practical aeronautical knowledge and determines if the candidate meets the requirements for the PPC and/or rating being sought by using oral questions.

This is an important part of the Flight Check and it is the portion of checking that results in the greatest variance in standardization. For this reason it is essential that questions be prepared beforehand to ensure that the questions are good, worded correctly, relevant and valid.

It is recommended that the ACP have a bank of questions prepared on all the required items or areas for the oral portion of the Flight Check. It is not intended that the candidate be asked all of the questions prepared but the additional questions are available if required. Also a bank of questions will allow the ACP to vary the oral test somewhat from candidate to candidate.

The prepared questions should be of a practical operational nature based upon the aircraft and the trip assigned for the Flight Check. Theoretical type questions are not recommended on the Flight Check as this area is covered on the written examinations.

In preparing questions, it is recommended that ACP's first write down the correct answer, then write a question which will elicit only that answer.

Questions should be carefully worded and not ambiguous. A good question is one that is easily understood and composed of common words. Questions are to be designed to measure knowledge of a subject, not the use of language. The use of sophisticated or high sounding phraseology may be a chance for the ACP to display command of language and

vocabulary but this will only detract from the Flight Check. Remember, if the candidates do not understand the meaning of the words they will not be able to answer the question. ACP's should always keep the vocabulary within the grasp of the candidate.

The candidate must understand the question. Use familiar terms and words. The situation and conditions should be clear so the candidate knows exactly what type of answer is required.

A question should centre on one idea only. The ACP can guide the candidate through a complex procedure by asking "what", "why", "where", "when" and "how" questions after the basic question has been asked.

Keep questions as practical as possible. A Flight Check is an operational exercise where the candidate demonstrates his/her knowledge and skill by going through an actual flight.

Questions should get the candidate thinking. Asking a question that requires a YES/NO answer doesn't really tell the ACP much about the candidate's level of understanding.

It is more effective to guide the candidate's thoughts toward the area to be questioned and then ask the question. In this way the candidate can visualize the situation and then think about the answer to the specific question. Knowing that something happens is not as important as understanding WHY it happens.

Avoid trick or irrelevant questions. Formulate detailed questions that challenge the candidate's intellect.

3.7 HANDLING CANDIDATE ANSWERS

An instructor explains, demonstrates, allows the candidate to practice, observes the practice and finally evaluates what the candidate has learned. The ACP observes and evaluates a candidate and the effectiveness of the operator's training system. The ACP should;

(a) avoid affecting the candidate's self-confidence with statements such as "Yes, you got that right!," "Are you sure?" or "No, that's not right,"

(b) not lead the candidate to the correct answer after an incorrect one; instead, ask the candidate to clarify his or her answer. For example: Asked "what would happen if the aircraft were loaded aft centre of gravity?" Answered, "the nose would pitch down". The ACP might follow up by asking the candidate to demonstrate what he/she means using a model aircraft for the explanation.

(c) if appropriate, use guided questioning when a candidate gives an incomplete answer. For example, Asked "what documents are required on board the aircraft for flight?" answered, "Certificate of Registration". The ACP could ask the candidate if there are any more documents required.

CHAPTER 4: CONDUCTING THE FLIGHT CHECK

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CHAPTER 4

4.1 FLIGHT CHECK PHILOSOPHY

Technologies employed in the design, manufacture and maintenance of aircraft have resulted in improved aviation safety. While the introduction of human factors training and crew resource management have had a positive effect on safety as well, this area must continue to evolve if we are to realise a reduction in the number of accidents attributable to flight operations.

Today's strategies continue to focus on the flight crew yet more attention is now focussed on organizational factors (within the aviation company as well as outside organizations such as air traffic control) as indicated by the introduction of safety management system requirements.

Flight test principles intent is to focus on Threat and Error Management strategies and performance where it is recognized that from time to time, errors or deviations from standard practices will occur. While undesirable, it is a fact that flight crew or others associated with flight operations will make errors and that these errors if not recognized and managed properly could have serious consequences.

Evaluators must focus on how the crew:

(a) recognizes threats (poor weather, aircraft unserviceabilities, unruly passengers, difficult ATC clearances, terrain, distractions, challenging approaches or clearances, etc);

(b) use effective strategies to deal with these threats (personal flight discipline, knowledge, flying skill, rigorous use of SOPs, awareness, communication of threat, use of all resources, etc);

(c) avoid errors using SOPs and good CRM teamwork;

(d) recognize errors when they occur (using good communication, monitoring and feedback, and situational awareness); and

(e) mitigate the effects of errors when they occur (making positive corrections, advising ATC, trusting on-board warning devices such as altitude alerting devices, TCAS and GPWS, and obtaining the assistance of additional resources to deal with the situation).

Assessment techniques for threat and error management require the ACP to go beyond simple error detection. Today's Flight Check evaluators must recognize the potential safety threat for any given situation or commission of errors, and then determine the effectiveness of crew actions in managing the situation so as not to jeopardize safety.

4.2 ADMISSION TO THE PPC – INITIAL/RENEWAL

The candidate will require:

(a) photo identification;

(b) a valid Pilot Licence and Medical Certificate;

(c) if an initial type and/or initial instrument rating is involved, the application for endorsement forms with it's associated experience, written examination requirements (INRAT, IATRA, SARON/SAMRA/HARON/HAMRA) including a written recommendation from a qualified person;

(d) Training files as applicable;

(e) A written recommendation in the training file for all PPCs dated within 30 days prior to the Flight Check. In the case of a re-check, the person who conducted the additional training will sign the letter of recommendation, and;

(f) Aircraft documentation such as Certificate of Registration, Certificate of Airworthiness, Journey Log Book etc where applicable.

Except where company procedures have been established and accepted by Transport Canada, a Flight Check will not be conducted if licensing and/or training documents are not presented, are not valid, or if the company has failed to provide all relevant training for the candidate as specified in the Operator's approved training program.

For PPCs conducted abroad or where training documents are not available due to impracticality, the candidate must provide documentation signed by a Chief Pilot, training pilot, or designated company representative recommending the candidate for the PPC and certifying that the relevant training is completed. Relevant training is initial or recurrent training required for the aircraft type and type of operation and includes ground training, examinations, and flight training but excludes the following:

(a) surface contamination (seasonal);

(b) dangerous goods;

(c) high altitude indoctrination (HAI);

(d) survival;

(e) aircraft servicing and handling;

(f) elementary work.

4.3 THE FLIGHT CHECK

There are two types of flight checks, the Line Check and the Pilot Proficiency Check. A Line Check is a Flight Check conducted during normal flight operations or during a revenue flight. The PPC is “snapshot” of an individual’s performance and a validation of the operator’s training program. Details on the individual checks follow in this section and certain conditions apply universally to all checks. The candidate will have appropriate current maps, enroute, terminal and approach charts (as appropriate) for the area where the flight check is to occur and a current Canada Flight Supplement.

ACPs will refrain from teaching or briefing the candidate on the correct completion of a flight check item or from taking any action that will prompt the candidate towards a specific action. Flight Checks may induce tension and feelings of apprehension in even the most experienced pilots. The ACP must create an environment conducive to a true demonstration of the pilot’s ability. In order to minimize sources of stress and distraction during a PPC or an ACP monitor, admittance should be restricted to the following individuals, as required:

(a) designated pilot flying (PF) ;

(b) designated pilot not flying (PNF);

(c) designated second officer or flight engineer, or Cruise Relief Pilot (CRP) if required by the aircraft type/SOPs;

(d) designated CASI or ACP conducting the PPC ;

(e) designated CASI monitoring the flight check;

(f) ACP under training, approved at the discretion of the CASI or ACP; and

(g) where the check is being conducted in a simulator, the simulator operator.

4.3.1 Line Checks

While Line Checks provide an opportunity to evaluate flight crew under normal line operations, they also provide an opportunity to evaluate the effectiveness of company policies and procedures like operational control, refuelling, de-icing and air traffic control that impact line operations. It is a valuable tool for determining strengths, weaknesses or deficiencies in company policies and procedures and can provide a valuable feedback mechanism for evaluating the efficiency and effectiveness of changes to company systems.

During line checks, ACPs are part of the crew (whether in the jump seat or in a pilot seat), and as such, must take appropriate action to ensure a safe flight and that no violations occur. ACPs conducting the line checks must ensure the safety of the passengers and crew members at all times. When conducting the line check from the jump seat, the ACP must communicate any potential safety issue to the pilots. When conducting the line check from one of the pilot seats, the ACP will carry out the duties of that position to the best of his or her abilities. The ACP will not make errors on purpose as part of the line check.

As part of the line check, ACPs will normally ask “need-to-know” technical questions, especially on items not covered during the PPC or ground training.

4.3.2 Pilot Proficiency Checks

The ACP has final authority on the conduct of the airborne PPC. The ACP will determine if the weather conditions are appropriate to the operation of the aircraft and conducive to the PPC requirements, whether the aircraft is airworthy, and whether the candidate’s documents, as required by the *Canadian Aviation Regulations*, are valid.

The PPC evaluates both the pilot and the operator’s training. An error committed by a crewmember may be indicative of a systemic problem. Companies must evaluate the results of PPCs with the view to improve company wide performance. While it might be desirable, it is unreasonable to evaluate every abnormal and emergency procedure taught during initial and recurrent training. ACPs validate proficiency through the evaluation of only a representative portion of the flight envelope and a sampling of knowledge and skills. Given these constraints, the choice of activities and the manner in which the ACP introduces them is very important. A realistic Flight Check environment will result in an effective assessment.

The PPC schedules define the PPC as a requirement for the flight crew to demonstrate their ability to safely operate a specific type of aircraft throughout the normal, abnormal, and emergency flight envelopes set out in the AFM, HFM, AOM, QRH, and SOPs. ACPs will assess the candidate according to the performance criteria outlined in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. The various PPC schedules published in the Commercial Air Service Standards (CASS) are as follows:

CASS	Title	Schedule	Aircraft / Simulator
722	Aerial Work	Schedule I	Aeroplane
722	Aerial Work	Schedule II	Helicopter
723	Air Taxi	Schedule I	Aeroplane
723	Air Taxi	Helicopter	Helicopter
724	Commuter Operations	Schedule I	Synthetic Training Device
724	Commuter Operations	Schedule II	Aeroplane
724	Commuter Operations	Helicopter	Helicopter
725	Airline Operations	Schedule I	Synthetic Training Device
725	Airline Operations	Schedule II	Aeroplane

Some operators have a requirement to operate the same airplane in two crew and single crew operations. In the case where a pilot is required to demonstrate single pilot proficiency in addition to multi crew proficiency, the candidate will complete a multi crew PPC in accordance with the PPC schedule and as a minimum will perform the following without assistance from the co-pilot:

(a) a normal take off in accordance with the AFM/HFM establishing simulated IFR at or before reaching 200 feet above airport elevation;

(b) a simulated engine failure after take-off, as per the PPC schedule;

(c) one instrument approach performed in accordance with procedures and limits published in the CAP or in the equivalent foreign publication; and

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

Note: Any of the sequences above may be combined.

When acting as ATC for the purposes of the PPC, ACPs must:

(a) provide clear and unambiguous clearances and instructions that are appropriate to the area of operation and to the aircraft involved;

(b) use standard ATC terminology to the extent possible based on their knowledge and experience;

(c) provide assistance that would normally be available from ATC when necessary to facilitate the objectives of the exercise or when requested by the crew and doing so will not compromise those objectives. Providing vectors for an approach, when the script does not require a full procedure, or when requested by the crew to allow time to complete a checklist or evaluate a malfunction is acceptable; and

(d) avoid taking initiatives intended to prevent the crew from making a mistake. Intervening when it appears that a crew will not comply with an acknowledged clearance, or requesting confirmation that the correct facility is tuned and identified is not acceptable.

4.3.3 Flight Checks under the Flight Crew Concept

ACPs will conduct PPC/IFT or PPC/VFR on a multi-crew aircraft under the flight crew concept. Only under extenuating circumstances such as conducting a PPC at a contracted flight training organization using a qualified person as the PNF, will ACPs conduct a PPC on an individual pilot instead of an entire flight crew. Keep in mind that a PPC Flight Check is always a jeopardy ride for the individuals involved. Where the PNF "fills in" for a PPC and commits an error that rates a "1," the ACP will take action as appropriate including having the PNF's PPC and/or IFR suspended. A "1" assessed to the PF due to inappropriate PNF action may also result in a "1" for the PNF. In such a case, assess the PPCs of both candidates as failures.

A candidate, who fails a PPC Fight Check under the crew concept will require retraining before attempting a re-check and may not act as a crewmember for another candidate until recommended for a re-check.

A candidate who attempts an "upgrade to Captain PPC" and fails for whatever reason, has demonstrated to the Minister he or she does not meet a required standard and as such must not be allowed to continue to fly the aircraft for which the PPC was attempted regardless of position until retraining and completing a successful a PPC.

4.3.4 Flight Checks Conducted in an Aircraft

Except as otherwise noted, aircraft used for Flight Checks will:

(a) have a valid and current Canadian or Foreign Flight Authority in accordance with CAR 507;

(b) meet the requirements of CAR 605 – *Aircraft Equipment Standards and Serviceability.* (All required equipment must be serviceable and the maintenance requirements current);

(c) be flown in accordance with the requirements of CAR 602 – *Aircraft Operating Limitations* and operated within the approved flight operating limitations (Day/Night/VFR/IFR), airframe limitations, and engine limitations set out in the approved POH/AFM/HFM or approved POH/AFM/HFM supplements.

All Aircraft used for a Flight Check must be equipped with fully functioning dual controls, and provide for a satisfactory means of audio and verbal communication. In an aircraft certified for single pilot operation, the ACP will occupy the co-pilot position except where the Operator has indicated in its operations manual that all flights will require a two-person crew.

In an aircraft certified for operations with a minimum flight crew of two, the ACP will occupy the jump seat and the candidate(s) will occupy either of the two pilot seats. A fully qualified training pilot must occupy one of the pilot positions if the Flight Check is an initial PPC, or if requested to do so by a CASI.

When the aircraft type certificate requires two pilots but is not equipped with a jump seat, the ACP may occupy a passenger seat nearest to the cockpit for the landing and take-off, and after safety considerations and as circumstances (i.e., turbulence) permit, position him/herself between the pilot and co-pilot seat to observe the ride as applicable. If it is determined that this is not practical, then the ACP may occupy a pilot position providing he/she is endorsed and current on the aircraft type, and trained and competent on company operations.

Where conducting an airborne PPC (following the simulator PPC the ACP may act as the safety pilot and occupy either of the flight positions. In these circumstances, the pre-flight briefing will include flight duties assigned to the ACP. Those duties will be

consistent with company SOPs where applicable, yet kept to a minimum to ensure adequate observation of the pilot's procedures, techniques and performance. An airborne PPC should, whenever possible, be conducted under normal flight conditions. Normal flight conditions are conducive to objectivity and reduce the need for the ACP to make allowances for unusual circumstances.

4.3.5 Flight Checks Conducted in a Simulator

Except as otherwise noted, a synthetic flight training device, whether a simulator (FFS) or flight training device (FTD) used for Flight Checks must:

(a) meet the requirements of the Aeroplane and Rotorcraft Simulator Manual or equivalent document of another contracting state; and

(b) provide visual scenery approved for circling to permit the demonstration of one approach manoeuvre to land, where the flight crew is authorized to conduct circling approaches in accordance with the company operations manual.

When conducting a PPC in a simulator, the ACPs will not participate as a crewmember and will limit their activities to the conduct of the Flight Check. Conduct the PPC in real time to maintain verisimilitude and only use freeze and repositioning sparingly. Do not operate the simulator unless qualified to do so.

Simulators must have for each observer an approved seat secured to the floor and fitted with positive restraint devices. The seat must safely restrain the occupant during any known or predicted motion system excursion. If the simulator has unserviceabilities, the ACP will refer to the Simulator Component Inoperative Guide or the Aeroplane and Rotorcraft Simulator Manual to determine if the Flight Check can proceed with the unserviceabilities. When guidance is not available, the ACP may refer to the CARs, aircraft MEL, AOM/AFM, and use their experience and judgment to continue the Flight Check.

When requesting a monitored check ride for an ACP in a simulator with seating for four persons, the operator will have the following options:

Ask the training centre to add a seat to the simulator. (Observer seats shall be secured to the floor of the flight simulator fitted with positive restraint devices and be of sufficient integrity to safely restrain the occupant during any known or predicted motion system excursion).

Co-ordinate simulator training for the monitored ACP to operate the console (replacing the sim operator). Use a different simulator that has sufficient seating.

TC may also assess:

- The possibility to conduct a monitor on a different aircraft type, where the ACP has authority on more than one type. Special cases will be assessed on an individual basis in conjunction with HQ to determine the particular requirements.
- The possibility to have the inspector trained to operate the simulator console as is already done with some inspectors.

4.3.6 Flight Check Profile

Flight Checks should follow a planned sequence that results in an effective use of flight time. With effective pre-planning, an ACP can combine various items such as high level, low level, and circuit work to minimise transit time and repetitive climbs and descends. The ACP must carefully balance efficiency against rushing the candidate.

4.4 SCRIPTED PPCS

The use of a TC accepted scripted PPC is mandatory for all CAR 705 PPCs conducted in a simulator. CAR 703, 704 Air Operators are strongly encouraged to use scripted PPCs for their simulator PPCs.

A scripted PPC is a document that governs the events presented to candidates during a simulator PPC. It is the detailed plan for the execution of mandatory sequences identified in the appropriate PPC schedule published in the Commercial Air Service Standards (CASS).

The Aim of the scripted PPC is to:

(a) provide consistent, fair and effective flight crew assessment scenarios,

(b) provide a positive and realistic experience for flight crews,

(c) utilize available technology to the maximum,

(d) enhance and encourage effective crew coordination during PPC activities, and

(e) encourage effective training through standardized evaluation processes.

4.5 PRE-FLIGHT BRIEFING

4.5.1 PPC

The ACP's attitude during the pre-flight briefing can greatly affect the outcome of the flight test. It is important to always be respectful of the candidate and to remember that most candidates are apprehensive on a Flight Check. ACPs should conduct themselves in a professional manner and avoid adding to the stress of the test. A detailed PPC pre-flight briefing will prevent misunderstandings and is mandatory.

The pre-flight briefing for a PPC conducted in an aircraft/simulator will include where applicable:

(a) the mandatory items to be demonstrated during the PPC including clearances;

(b) weather briefing (simulator or actual);

(i) For PPC purposes, the weather will be simulated at or below the weather minima for the approaches that will be conducted. The individual or crew must determine if the departure weather is suitable. For PPC's conducted in a simulator the individual or crew will be required to land if the runway environment is seen at the DH or the MAP (MDA for stabilized approaches), otherwise a missed approach should be carried out. The ACP will control the visual system to the weather minimums as appropriate to the PPC sequence conducted;

(c) the probable duration of the ride;

(d) the aircraft/simulator is to be operated in accordance with flight manual requirements and within acceptable tolerances within the Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide;

(e) any restrictions or limits imposed on manoeuvres conducted in the aircraft to enhance flight safety, including minimum altitudes and airspeeds for simulated engine failures;

(f) the role of the ACP in regard to crew duties if he/she occupies a flight crew position;

(g) the identification and role of the Pilot in Command and Second-in-Command, if applicable;

(h) the company SOP method of transferring control from one pilot to the other using the statements, For example: "You have control" and "I have control";

(i) radio procedures and any flight planning considerations;

(j) the manner in which simulated emergencies will be introduced by the ACP;

  (i) In the aircraft, all such events are to be preceded by the word "simulated",

  (ii) For PPCs conducted in a simulator, the crew should treat all malfunctions as real and that should a simulator fault occur, the ACP will advise the crew immediately,

  (iii) The ACP will not give multiple unrelated emergencies, but the candidate is expected to take corrective action on related failures such as a loss of hydraulics or electrical supply due to a failed engine,

(k) the candidate is liable to demonstrate any normal or emergency procedure applicable to the aircraft. The candidate's technical performance will be assessed in accordance with the aircraft flight manual, aircraft operating manual or pilot operating handbook, CAR Part VI and VII, Operator's operations manual; and Operator's SOPs;

(l) normal crew coordination is expected in accordance with the aircraft AOM/AFM/HFM or company SOPs, and that an emergency situation caused by an incorrect or inappropriate action or response on the part of the candidate will not be corrected by the ACP in a simulator but will be corrected in an aircraft if safety is jeopardized;

(m) in the event of a real emergency or malfunction the PPC is stopped and the emergency is dealt with as per AOM, SOPs, etc. Should the PIC assume control of the aircraft, the candidate will acknowledge and respond to directives from the PIC;

(n) if the ACP does not report "*Field in Sight*", the candidate will execute a missed approach at the appropriate minimums;

(o) should the crew requires more time to complete checklists or briefings, they should ask for a hold or delaying vectors and the ACP will make every effort to accommodate the request;

(p) simulator safety features; and

(q) where known to the ACP, any differences between the simulator and the aircraft that may affect the performance of the flight crew. Training on differences between the simulator and the aircraft is required in the training program.

  (i) Some examples of this would be cockpit configuration and layout, instrumentation, power plant simulations, warning and alert display systems, FMS data bases, electronic monitoring systems, etc.

4.5.2 Line Checks

Although a line check is less formal and stressful than a PPC, the ACP must maintain the same level of professionalism as is expected of a PPC. A pre-flight briefing is mandatory. It must clearly detail what the ACP expects from the candidate(s) and what the candidate(s) can expect from the ACP.

The briefing for a line check will include at least the following information:

(a) the duration of line check is from check-in to defect reporting at the end of the flight(s);

(b) the number of flight legs and whether they will be flown as PF or PNF;

(c) that the ACP expects to see normal crew co-ordination and the use of SOPs;

(d) the role of the ACP in terms of crew duties;

(e) the emphasis is on command, decision-making and the application of CRM principles;

(f) the ACP may ask technical questions concerning aircraft operations, rules of the air and ATC procedures, SOPs and the operator's Flight Operations Manual; and

(g) safety is the paramount.

4.6 ASSESSMENT OF PERFORMANCE

The ACP will assess all Flight Checks using the 4-point marking found in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide. The standards specified in the guides are not exhaustive and they do not define all common errors. ACPs must apply their knowledge and experience in conjunction with the rating definitions to arrive at an assessment. The candidate will operation the aircraft in accordance with the manufacturer's specifications, recommended speeds and configurations in the Pilot's Operating Handbook/Aircraft Flight Manual (POH/AFM/HFM) or other approved data under normal circumstances. It is important for an ACP to apply a tolerance for unusual circumstances outside the control of the candidate such as wind, traffic or weather conditions. An ACP may also tolerate an excursion from specified limits in the performance criteria if the candidate recovers in a timely manner. However, an excursion from prescribed limits, with or without a timely recovery, which jeopardizes the safety of the aircraft is unacceptable.

It is neither feasible to develop the definitive book of examples of (1) to (4) for every PPC exercise nor would it be practical. Therefore, the ACP will evaluate each sequence of the Flight Check and assess any errors or mistakes, against established performance criteria in the PPC and Aircraft Type Rating FTG

There are adjectives used to describe common errors and rating assessments. Terms such as unacceptable, unsatisfactory, timely, safe, minor, slight, brief, lack, inadequate and excessive describe the candidate's performance. It is difficult to objectively define these adjectives; however, the dictionary definitions provide amplification of meaning. Terms such as incomplete, incorrect, exceed and failure are more finite and objectively described in the appropriate regulation, AFM/HFM or company procedure.

It is difficult to write clear and concise remarks during Flight Checks. ACPs should make notes during the Flight Check and use them to complete the final copy of the Flight Test Report. ACP may take time to refer to the appropriate Flight Check criteria for writing the final comments.

The demonstration of a procedure or sequence that would normally rate a "2 – basic standard" may be repeated later during the flight check, at the discretion of the ACP if the procedure or sequence does not clearly come under the definition of "1 – below standard".

4.7 GENERAL PRINCIPLES OF FLIGHT CHECKING

An ACP's principle function during a PPC or line check is that of an examiner assigned by the Minister to assess an individual's performance. ACP's should make a concerted effort to be relaxed and non-threatening. ACPs will refrain from making personal remarks

and inappropriate motions such as shaking their heads, stiffening to rigidity or gasping at inappropriate times, laughing at performance or commenting subsequent to a poorly conducted manoeuvre.

Apply the standards in the applicable Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide regardless of the training and experience of the candidate.

Assess the candidate against what would be an "ideal performance under existing conditions". For example, if it is windy and turbulent, the candidate will not be able to maintain altitude, heading and airspeed as well as on a calm day. Ideal does not mean perfect.

Give credit where credit is due, and do not be influenced by poor performance on a previous PPC item when assessing a subsequent PPC item.

Rate each exercise as soon as possible after it has been completed. A 2 or 1 rating requires a written remarks to justify the rating.

4.8 LINE CHECK PROCEDURES

A line check will be terminated and assessed as unacceptable [i.e., "(1)" rating] during any sequence that, in the ACPs opinion, if allowed to continue, may have jeopardized flight safety, loss of control may have resulted, or if the pilot(s) will definitely require further training to meet the standard. The flight, or planned series of flights, may proceed as line indoctrination at the ACPs discretion until all planned legs have been completed. ACPs must take into consideration that the line check is conducted during a revenue flight, and ensure the safety of the passengers and crew at all times.

If, in the ACPs opinion flight safety could be further jeopardized by allowing the flight, or series of flights, to continue, then the flight shall be terminated as soon as practicable.

Except for the situation in the above two paragraphs, the ACP may continue a line check and allow a candidate to repeat a failed item if no other sequence in the line check is rated a "2" or "1." The ACP will proceed as follows;

(a) without commenting on the error committed, allow the candidate to complete the line check to ascertain that there are no other weaknesses in piloting skills then,

(b) without specifying what the error was, advise the candidate that a partial retest is required,

(c) repeat the sequence in question as soon as is practicable during the flight or series of flights,

(d) if the pilot subsequently achieves "standard" ('3') or better, assign a mark of "2" for the sequence. The line check will be deemed a "partial and retest" which will not be recorded as a failure against the candidate's record,

Although the ACP is not permitted to teach or coach during the line check, normal crew feedback regarding a sequence is allowed. This would be similar to what a line Captain might say to a line First Officer regarding a particular sequence at an appropriate time after it occurs.

4.9 POST FLIGHT DEBRIEFING PROCEDURES

A debriefing is mandatory following every Flight Check. Conduct the debriefing in a positive, non-confrontational manner and highlight the strengths and weaknesses of the candidate(s). The debriefing should promote learning and increase the knowledge and confidence of the candidate(s). and conduct the debriefing accordingly. Debriefings should be comprehensive and of reasonable length corresponding to the performance. Use the appropriate Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide to explain the assessment of major deviations or unacceptable performance.

As soon as the ACP knows the outcome of the Flight Check, he or she should advise the candidate(s). Some empathy and discretion may be required for unsatisfactory assessments.

The following items are mandatory to debrief after every Flight Check:

(a) any items assessed as either “(1)” or “(2)”;

(b) anything written on the Flight Test Report or Line Check Report; and

(c) anything the ACP considers to be a safety issue.

ACP’s should highlight strengths and reward good performance during their debriefings. While it is sometimes easier to concentrate on the negative, the debriefing will have more impact if good performance is recognised and crews complimented. This will often set a positive tone for the debriefing and open crew’s minds to suggestions where their performance can improve.

During the debrief for a passed PPC, the ACP’s role is to facilitate discussion and bring out those CRM issues that lead to errors or poor performance. Normally, technical errors have a root cause in CRM issues such as workload management, situational awareness, communication, decision-making, monitoring and feedback, conflict resolution and crew performance. Therefore, the identification of and discussion of the root causes will help the crew avoid these errors in the future.

Inform the candidate(s) when the debrief is complete and ask if there are questions concerning the conduct of the flight check or other related topics.

The debrief for a failed PPC will not use the self debrief method. When a failure occurs, debrief the candidate on the reason for the failure and where applicable, on the administrative suspension procedures that will follow including the candidate’s rights to appeal the assessment to the TATC. In the event of an unsatisfactory performance, the ACP must advise the pilot(s) of the following:

(a) for PPCs, they have the right to appeal the assessment to the Transportation Appeal Tribunal of Canada (TATC) within 30 days;

(b) the re-test will be very similar to the original test and may be conducted by either a Transport Canada Inspector or another ACP;

(c) the ACP must offer to provide a copy of the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) to the candidate(s); and

(d) where applicable and if known, any company-specific procedures to be followed. .

(e) Remember, the wording of remarks to support a “2” must not describe performance that would warrant a failure. A mark of 1 (below standard) describes the appropriate item or items that resulted in an assessment of fail.

4.10 GENERAL ASSESSMENT “FAILED”

In order for a Flight Check to receive a General Assessment of “Failed”, at least one sequence or item must be assessed “(1)”. It also follows that, when any individual sequence has been assessed “(1)”, the PPC must receive a General Assessment of “Failed”.

During a PPC, a “(1)” assessment of an Instrument Rating related sequence constitutes a failure of the Instrument Rating **and** the PPC. The ACP will assess the PPC as "failed" at the bottom of the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279). Appropriate administrative action must be carried out in the suspension of any currently existing PPC and Instrument Rating in accordance with this manual *Where the PF is assessed a “(1)” on an Instrument Rating related sequence, the above failure and associated suspension activity may be relevant to the PNF as well.*

During a PPC/IFT, failure of a **PPC** related flight sequence that is not related what-so-ever to an **instrument** flight sequence constitutes an unsuccessful PPC only. In the case of a Part VII pilot, administrative action is taken in the suspension of the currently existing PPC only. The currently existing Instrument Rating is not affected, hence remains valid. In order to be re-instated on the line, at any flight crewmember position and regardless of the type of PPC (including upgrade), another PPC must be successfully completed.

When an ACP decides that a pilot has failed during the course of a PPC, the PPC must be immediately terminated. ACP's and candidates should keep in mind that it is not the ACP who fails the candidate, but rather it is the candidate whose performance on that day has not met the minimum skill standards needed to safely exercise the privileges of the licence or rating. Candidates may become aware or assume that a PPC item has been performed "Below Standard".

Where a candidate has failed the PPC and the ACP is a training pilot, the time remaining in the session may be used as training provided that:

(a) the candidate is advised at the time of failure and agrees with continuing the flight as a training flight;

(b) the ACP is a designated company training pilot on type;

(c) no other crewmember is being evaluated;

(d) upon completion of the training flight the candidate is debriefed on the reason for failure and where applicable, on the administrative suspension procedures that will follow including the candidate's rights to appeal the assessment to the TATC; and

(e) the ACP completes Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) assessed as "failed" and submits the original to Transport Canada and follows the procedures for PPC and Instrument Rating Suspensions.

CHAPTER 5: ACP ADMINISTRATIVE RESPONSIBILITIES

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CHAPTER 5

5.1 FOLLOW-UP AND ADMINISTRATION

After the conduct of a Flight Check the ACP must complete follow-up and administrative duties.

These include the following:

(a) submit the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) no later than 5 working days after the Flight Check;

(b) provide feedback to the recommending Instructor or Chief Pilot of the Air Operator if they were not present during the post flight debriefing;

(c) confirm and clarify with the Air Operator any recommended retraining requirements; and

(d) discuss any identified problems which may require the provision of extra training with either the Air Operator or the Principle Operating Inspector.

Upon completion of the Flight Test Report, the ACP may provide a copy to a successful candidate or upon request to other parties as per 5.3 para 3. If the Flight Check was assessed 'fail', the candidate must be offered a copy of the Flight Test Report. The ACP will keep a file copy. Copies of all Flight Test Reports must be kept for a period of at least two years.

In the case of permits or licences, "Applications for Flight Crew Permits/Licences" (26-0194) are completed by Authorized Persons in accordance with the Personnel Licensing Procedures Manual.

In the case of ratings, the ACP will confer additional privileges on the reverse side of the applicant's licence or issue a "Certification of Additional Privileges" card (26-0267), following the completion of all documentation to be submitted for application for a rating.

Issuance of a Type Rating or an Instrument Rating, will only be undertaken when the following are submitted together:

(a) *the completed "Application for Endorsement of a Rating" (form 26-0083),*

(b) *the fee for each rating; and*

(c) *the "PPC Flight Test Report".*

5.2 PPC AND/OR INSTRUMENT RATING ADMINISTRATIVE SUSPENSION PROCEDURES

An ACP will carry out the following administrative procedures after failure of a PPC and/or instrument rating by:

(a) notifying the Chief Pilot and/or Operations Manager of failed items and recommendations as to corrective action;

(b) a PPC report will be completed for each Flight Check, including any terminated during pre-flight preparation, or before all air exercises are completed, and the candidate is to be offered a copy of the report;

(c) immediately notifying the issuing authority that the pilot has not met the standards for a PPC (including the Instrument Rating where applicable). If unable to reach any of these TC officials via telephone, a voice message, a facsimile or an email is considered to be an acceptable means of notification; *A copy of the* Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) *will be faxed to Transport Canada for reference purposes;* and

(d) if the Instrument Rating was failed and is still valid on the pilot's license, drawing a line through the English and French endorsements on the license and inscribing the notation: "Instrument Rating Suspended" or "suspension de la qualification de vol aux instruments" as appropriate, and signing and dating the license.

A CASI will carry out the following administrative procedures after failure of a PPC:

(a) notifying the Chief Pilot and/or Operations Manager of failed items and recommendations as to corrective action;

(b) ensuring that ratings and evaluation of the failed Flight Check are recorded in the individual's training and Flight Check records. A PPC report will be completed for each Flight Check, including any terminated during pre-flight preparation, or before all air exercises are completed, and the candidate is to be offered a copy of the report as required by the CARs;

(c) if the PPC failure involves both the PPC and Instrument Rating, then complete the following procedures:

(i) if the Instrument Rating is still valid on the pilot's license, drawing a line through the English and French endorsements on the license and inscribing the notation "Instrument Rating Suspended" or "suspension de la qualification de vol aux instruments" as appropriate, and signing and dating the license;

(ii) issue a Notice of Suspension (form 26-0363) pursuant to subsection 7.1(1) of the Aeronautics Act in consideration of the flight test as such:

- name of candidate with address (same as on the license);
- candidates 5802 file number;
- check the flight test box;
- date of flight test when it occurred;
- specify that he/she no longer meets the required standards for a PPC, including an Instrument Rating where applicable and the reasons why;
- indicate that his/her previous PPC and where applicable, Instrument Rating (including the expiry dates of each as necessary) is hereby suspended;
- specify conditions of re-instatement (i.e. conduct a satisfactory PPC);
- where the form requests an address to which the suspended document is to be returned to, indicate "not applicable";
- specify the date (30 calendar days from the date of the issuance of the suspension) when the candidate's request for a review by the Tribunal must be received. the candidate should be verbally briefed on his/her right for a hearing at the Tribunal, and
- sign and date it.

If the PPC failure involves **only** the PPC or PPC/VFR for a Part VII pilot, then the procedures in (c)(ii) are to be followed with the exception that **no** reference is made to the Instrument Rating.

5.3 PPC FLIGHT TEST RESULTS

The *Privacy Act* protects the privacy of individuals with respect to personal information about themselves held by a government institution. A PPC, and the resulting Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279), measures the performance of the candidate for the PPC, the ACP conducting the PPC, the instructor who recommended the PPC, and, through identification of the Air Operator responsible for the training, the performance of the Chief Pilot of that Air Operator. All of these are identified on the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279).

Personal information may be disclosed in accordance with Section 8(2)(a) of the *Privacy Act*, which allows disclosure… "for the purpose for which the information was obtained or compiled by the institution or for a use consistent with that purpose". The purpose for which PPC information is obtained is to ensure the safety of aviation in Canada. The specific purposes are to measure whether the candidate meets the minimum skill standard for the PPC or rating, whether the recommending instructor is performing competently as an instructor, whether the ACP is conducting the PPC in accordance with the standards, and whether the Air Operator is performing in accordance with the general conditions of their Certificate.

In accordance with 8(2)(a) of the *Privacy Act*, a copy of the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) may be given to the PPC candidate and a copy will be retained by the ACP who conducted the PPC. A copy may also be given upon request to the Chief Pilot responsible for the quality of flight training of the Operator where the training was conducted. Specific information about the results of a PPC will not be given by Transport Canada to anyone but the individuals named on the Flight Test Report Pilot Proficiency Check (form 26-0249/26-0279) except in accordance with the *Privacy Act*.

5.4 SECURITY OF FLIGHT TEST RESULTS

Pursuant to the *Privacy Act*, Flight Test Report Pilot Proficiency Check (form 26-0249/ 26-0279) are records of personal information and as such must be treated as confidential information by all parties privy to the results. Appropriate security measures must be taken to ensure that access to the documents is restricted to those rightfully in possession of them.

5.5 ADVISORY MATERIAL (VALIDITY/RENEWAL EXTENSIONS)

The following advisory material is included to assist in the interpretation of regulatory requirements that pertain to the PPC and IRT.

5.5.1 PPC Validity Period

For CAR 705 (Airline) the PPC validity period expires on the first day (at 23:59 hrs) of the 7th month (or on the first day of the 13th month if the operator is approved for LOFT training) following the month in which the PPC was taken. This means if you did a ride in November 2000, your PPC would expire on either the 1st of June 2001 or the 1st of December 2001 (i.e., count 7 or 13 months starting with December). ref: CAR 705 Division VII personnel requirements, validity period.

For CAR 704 (Commuter) and CAR 703 (Air Taxi) the PPC validity period expires on the first day (at 23:59 hrs) of the 13th month following the month in which the PPC was taken. This means if you did a ride in November 2000, your PPC would expire on the 1st of December 2001 (i.e., count 13 months starting with December). ref: CAR 704 and 703 Division VII personnel requirements, validity period.

For CAR 702 (Aerial Work) the PPC validity period expires on the first day (at 23:59 hrs) of the 25th month following the month in which the PPC was taken. This means if you did a ride in November 2000, your PPC would expire on the 1st of December 2002 (i.e., count 25 months starting with December 2000). ref: 702 Division VII personnel requirements, validity period.

5.5.2 PPC Renewal

Where PPCs are renewed within **90** days of their expiry date, The ACP will add the following to that expiry date: CAR 705 – add 6 months, or if the operator is approved for LOFT training, 12 months; CAR 703 and 704 – add 12 months; CAR 702 – add 24 months.

5.5.3 PPC Extensions

The validity period of a PPC may be extended up to 60 days in accordance with CAR 705.113(5), 704.111(3), 703.91(3) or 702.67(5). Under the current regulations, when the PPC is renewed within the approved extension period, the new expiry date is computed in the same manner as that described under "PPC Validity" above (i.e., the first day of the "x" month following the month in which the PPC was taken).

The following is a repeat of 745.113(5) that provides guidance material pertaining to extensions.

R745.113(5) – Validity Period Extension

Extensions of up to 60 days to the normal expiry date may be granted under the following circumstances, provided the request is made before the expiry date:

(a) illness, accident, injury or medical requirements preclude completion of checking/training within the appropriate time;

(b) simulator, cabin emergency evacuation trainer, or training aid breakdown;

(c) simulator or cabin emergency evacuation trainer unavailability for reasons beyond the operator's control;

(d) pilot or flight attendant inability to attend scheduled session due to aircraft mechanical problems, weather related difficulties, or flight cancellation;

(e) family emergency;

(f) any other item which, in the opinion of the Issuing Authority, merits an extension and will not compromise safety; or

(g) the elapsed time from the date of the last completed check (or required training) does not exceed nine months in the case of a mid year PPC (or training session), fifteen months in the case of a twelve month PPC or line check, or fifteen months in the case of flight attendant annual training. Normally, the validity period will be extended by 30 days and a further 30 day extension will be granted (subject to number 7 above) if required. If it is known at the outset that the issue requiring an extension will not be resolved within 30 days, the validity will be extended for 60 days or compliance with number 7 above, whichever is shorter.

5.5.4 IRT Validity Period

The instrument rating validity period is calculated in a manner similar to the PPC validity period with the exception that the instrument rating validity period is the same regardless of what CAR Subpart you operate under. The instrument rating validity period expires on the first day (at 23:59 hrs) of the 25th month following the month in which the flight check was taken. This means, if you did a ride in

November 2000, your instrument rating would expire on the 1st of December 2002 (i.e., count 25 months starting with December 2000). Reference: 421.48(1).

If you operate under CAR 702 your PPC and instrument rating validity periods are the same; if you operate under CAR 703, 704 or 705, the dates will be different. This should not pose a problem since every PPC that you successfully complete allows you to renew your instrument rating. If your PPC was conducted by an ACP, you may want to renew the instrument rating only when it is necessary, because there is a fee for renewing the instrument rating. This will not be a factor if a CASI has conducted your PPC because fee for the PPC includes one licensing action (type endorsement or instrument rating).

5.5.5 IRT Renewal

Instrument ratings can be renewed within 90 days of the expiry date and the new expiry date is calculated the same as for a PPC renewal (add 24 months to the old expiry date).

5.5.6 IRT Extensions

The validity period of an instrument rating may be extended for a period not to exceed 90 days provided the application is made while the IRT is valid and the applicant can show that there was no reasonable opportunity to take a renewal flight check within the 90 days prior to the expiry of the instrument rating.
Ref: CAR 421 Division XIV – Instrument Ratings – Period of Validity.

When the IRT is renewed within the approved extension period, the new expiry date is computed in the same manner as that described under "IRT Validity" above (i.e., the first day of the 25th month following the month in which the PPC was taken).

5.5.7 IRT Expiry – Airborne PPC

Where the PPC/IFT includes a simulator and an airborne portion, the PPC flight date is the date that the airborne portion of the flight check is completed and this is the date from which the IRT validity period is calculated. The reason for this is that the PPC/IFT is not completed (in the legal sense) until all requirements of the appropriate PPC schedule have been evaluated, and the airborne portion is part of the PPC schedule.

5.6 INSTRUCTIONS FOR COMPLETION OF 0249/0279 FORMS

5.6.1 General

The 26-0249/0279 form is used to record the results of the Pilot Proficiency Check (PPC) and to initiate the issue of a license with the appropriate instrument rating and/or type rating. The form may be used to assess PPCs done in the simulator and/or aircraft. For combined simulator/aircraft PPCs, two different assessments may be made for each check item, when required. In these cases, remarks are required in the comments section to explain if the assessment ratings apply to the simulator or aircraft. *Note that the assessment of the airborne PPC is made on the same 26-0249/0279 form as the simulator portion.*

5.6.2 Completion Blocks

(a) **Name of Applicant** – Use legal name (same as pilot licence). Licence number (all 6 digits including Os); fill in appropriate computer scannable dot.

(b**)** **Name of Check Pilot – simulator / Name of Check Pilot – aircraft** – Use legal name (same as pilot licence). Mark "X" in the appropriate TC ☐, ACP ☐ box (used to verify ACP status and charge fees). Licence number (all 6

digits including Os); fill in appropriate computer scannable dot. Both lines will be filled in for PPCs that include a simulator and an airborne portion.

(c) **Operator/Training Unit** – Name of training unit to be entered in addition to the air operators name if training conducted by an outside agency. (example – "ABC Airlines/Flight Safety–Dallas"). Enter the Operator's 5258 number (all 6 digits including Os); fill in appropriate computer scannable dot. *This number is **not** the companies Operating Certificate number. It is the file number found on the top right hand corner of most TC generated correspondence. ACP's will have to contact each company and ensure their Legal Company name (not Trade Name) and their 5258 file number to entered on the flight test reports.*

(d) **Present Instrument Rating/Present PPC** – Enter instrument rating group and enter expiry dates as they appear on the licence and PPC card, where applicable.

(e) **Valid Medical** – Verify that the medical is valid and fill in Verified ☐ box.

(f) **A/C TYPE** – Enter the aircraft type designator as per Subpart 421, Appendix A (ex., EA34)

(g) **A/C REG** – Enter the aircraft's full registration.

(h) **SIM ID NO.** – Enter number from Transport Canada List of Approved Simulators.

(i) **SCRIPT NO.** – Enter the script number if used.

(j) **Pilot Proficiency Check** – Fill in dot for "Single Pilot" and/or "Multi-Crew." Fill in dot for "Initial", "Recurrent" or "Upgrade", "VFR only" as applicable. Fill in dot for "VFR Only", if applicable, otherwise it is assumed that instrument flight proficiency was checked as part of the PPC.

(k) **Type Rating** – Type Rating – This dot is **only** filled in to add a type rating to the licence. A completed application for endorsement of a rating (form 26-0083) and the $30 fee must accompany the PPC Report. Issuance of a type rating or an initial instrument rating will only be undertaken when the following are submitted:

  (i) Application for Endorsement of a Rating (form 26-0083);

  (ii) the appropriate fees; and

  (iii) the PPC Flight Test Report (form 26-0249/0279).

(l) **Crew Status** – Fill in one dot only. ACP Monitor – For Captains who are A or B type ACP's, fill in the ACP dot.

(m) **Take-off** – CAP, 1200 RVR or 600 RVR – Check block for minimums demonstrated as pilot flying (PF) during PPC.

(n) **Monitor Inspector Licence Number –** Licence number (all 6 digits including Os) of the Inspector conducting the monitor.

(o) **Landing** – CAP, Cat II or CAT III – Check block for minimums demonstrated as pilot flying (PF) during PPC.

(p) **Ground Training/Flight Training/Exam** – Confirm all relevant ground training, flight training and examinations are completed prior to conducting the PPC.

(q) **AQP** – if the carrier is on an approved Advanced Qualification Program and is only using the 0249 form as a "licensing action trigger", the dot must be filled in.

(r) **Check Details** – Enter the appropriate rating beside the applicable test item for the simulator and/or aircraft assessment. For instrument approaches "**Approach (APR)",** mark one type of approach for each approach and circling if applicable. The form provides space to grade two approaches. If additional approaches are flown record the lowest mark attained on the form record the other in the comments section. Example: "Second ILS flown to level 3" In the "Abnormal/Emergencies" section the Check Pilot enters, in his/her own words, a brief description of each abnormal and emergency procedure and assigns a number from the FTAE list of aircraft systems.

(s) **Flt Test Date** – Enter the date when the PPC is completed. For combined simulator/aircraft PPCs enter the date on which the final portion of the PPC is completed (hence, the date of the airborne).

(t) **PPC Valid To** – An Initial PPC is valid to the first day of the seventh month (705), the first day of the thirteenth month (705 with approved LOFT TRG), or the first day of the 25th month (702 and 703, 704 with exemption) following the month in which the PPC was conducted. Use the Flt Test Date as the reference date for when the PPC was conducted. Enter applicable year and month. For a Recurrent PPC completed within the 90-day period prior to the expiry date, add 6, 12 or 24 months, as applicable, to the expiry date that was in effect prior to the flight check.

(u) **IFR Valid To** – An Initial IFT is valid to first day of the twenty-fifth month following the month in which the IFT was conducted (note: use the Flt Test Date as the reference date for when the PPC was conducted). For a **Recurrent IFT** completed within the 90-day period prior to the expiry date, add 24 months to the expiry date that was in effect prior to the flight check.

(v) **Change of Address and phone number** – Fill in computer scannable dot and enter new address and/or phone number.

(w) **Receipt No.** Enter the receipt number issued for payment of the check ride

(x) **Passed/Failed** – The Passed or Failed dot must be darkened as appropriate. In the event of a PPC only failure, write the following in the comments section: "PPC only fail." When the candidate fails only the PPC he may retain his IFR but he cannot renew it.

(y) **Group** – Group 1, 2 or 3 (aeroplane) and 4 (helicopter). The appropriate dot is **only** filled in when licensing action is required (issuance, renewal or suspension). For initial issuance of an instrument rating, a completed application for endorsement of a rating (form 26-0083) and the $30 fee must accompany the PPC Report*. If the fail is "PPC Only" related, the Group 1,2,3 or Group 4 dot **must not** be darkened or the computer will suspend the candidate's IFR rating, regardless of the ACP's intentions.*

(z) **Signature of Check Pilot** – The ACP will sign this block of the form.

(aa) **Date** – Enter the date(s) of the simulator and/or aeroplane flight test(s). If both simulator and aeroplane flight checks are conducted, the **Aeroplane** date will then be used in the Flt Test Date section.

(bb) **Flight Time** – Flight time is to be entered for the Simulator and Aeroplane PPCs as applicable.

Notes:

Due to tolerances of the computer scanner, only original printed forms can be scanned. Marks or holes on blue line will cause scanning problems.

When filling in the dots, ensure they are completely filled in and do not go outside the lines or scanning problems will occur.

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CHAPTER 6: SCRIPTED PILOT PROFICIENCY CHECKS

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CHAPTER 6

6.1 SCRIPTED PPC GENERAL

Before the introduction of scripted PPCs, the conduct of simulator PPCs (specifically the determination of the sequence of events during the PPC) was left entirely up to each ACP or CASI (who developed and enhanced their own “scripts” over time). ACP’s were permitted to introduce whatever faults they desired and in whatever order they felt was effective within the ACP Manual guidelines. For new ACPs, development of effective scripts took time, and in many cases this led to significant variations in PPC duration, number and types of faults, locations and routes used, weather set ups, etc. This meant that flight crews could not be assured of a proven and effective scenario and that they could in fact expect just about anything to occur during a PPC. To the operator this meant that PPCs were not standardized making it more difficult to validate competence of their flight crews and verify the effectiveness of training programs. This was especially true for operators with a large number of flight crew.

To address these issues, the National Operations Division of Transport Canada developed and implemented use of the scripted PPC at the request of Air Operators, and the program has evolved to become accepted practice for managing simulator PPC’s.

The experience gained to date suggests that any operator who uses simulators for training and flight checking can benefit from the use of scripted PPCs.

6.1.1 Script Review and Acceptance

TC has obtained considerable experience in developing and evaluating scripted PPCs and operators can benefit by working cooperatively with their POI during the development and review process.

By participating in this proactive process an ACP and/or Air Operator can be assured that all requirements are satisfied prior to the introduction of the script. The obvious benefit is that the ACP and/or Air Operator can avoid involving the flight crew in a potential conflict at a critical phase in the qualification process. For example, if during an inspection or audit it is noted that a PPC script is missing mandatory events, and the script has not been accepted by Transport Canada, the department would have no choice but to invalidate Flight Checks that had been conducted using that script. This would require the Flight Checks to be redone.

Accepted scripts are also more likely to take advantage of reduced checking requirements permitted in the CASS, specifically Flight Checks conducted under the crew concept. The operator is therefore assured that all appropriate training and qualification tracking procedures are properly addressed.

6.1.2 Required Scripts

An ACP and/or Air Operator’s aircraft type specialists (experienced in training and Flight Checking) are normally responsible for the development of scripted PPCs. There are occasions, however, when CASIs may be required to develop, or assist in the development, of scripts for new aircraft types, companies and simulator locations.

At least two scripts will be developed for initial PPCs and two scripts for recurrent PPCs for each aircraft type. In addition, one initial and one recurrent script must be developed for

(a) PPCs conduct on a crew made up of two captains or two first officers, as dictated by the company, and

(b) single pilot PPCs.

These may take the form of an addendum to an existing script.

Where an operator conducts any annual checks the operator must have a process to ensure crews receive alternating scripts. To achieve this objective scripts must meet the following guidelines:

(a) scripts must be identified by number(s) or letter(s) or a combination thereof,

(b) scripts must have a defined 6-month validity period,

(c) where the operator does not track annual checking requirements by any other means, the script used must be identified in the "SCRIPT ID NO." section of the 0249 forms, and a copy of the 0249 must be retained in each pilots training file, and

(d) re-qualification scripts that address all missed annual check requirements must be available for candidates whose qualifications have lapsed.

Annual checking exercises include takeoff at minimum visibility, Cat II and/or Cat III approaches and circling approach where applicable. These must be done annually and there is no extension provision.

Initial scripts will be reviewed and amended as required but, as a minimum, must be reviewed every two years.

Recurrent scripts will be changed at a frequency that coincides with PPC validity for company flight crew as follows:

(a) every six months for 705 operators. Re-qualification scripts may be required if the operator conducts any annual qualification on alternating scripts.;

(b) every 12 months for 702, 703 or 704 operators whose flight crew undergo an annual PPC; and

(c) every 24 months for 702, 703 or 704 operators whose flight crew undergo a PPC every 2 years.

The intent of this subsection is that a PPC script **not** be given to a candidate more than once. ACP's and/or Air Operators will maintain copies of scripted PPCs for a period of 2 years after expiry. ACP's and/or Air Operators are encouraged to develop a company standard format that meets the criteria defined here.

6.2 SCRIPTED PPC CONTENT

6.2.1 General

All scripts will contain the following minimum information, where applicable:

(a) company name;

(b) aircraft type;

(c) validity period – from and to dates (initial – 2 years; recurrent – 6, 12, 24 months as applicable);

(d) identification of the simulator(s) to which the script is applicable;

(e) an identification number or letter for each script;

(f) identification of initial or recurrent scripts;

(g) identification of the company manuals in which scripts are contained;

(h) page numbering (i.e., 1 of 10);

(i) departure flight plan information;

(j) initial departure load information;

(k) NOTAMS;

(l) applicable weather;

(m) script activity summary page;

(n) amendment numbering (if required);

(o) briefing notes;

(p) identification of any differences between the simulator and the company's aircraft;

(q) 26-0249 completion details (if required); and

(r) a detailed scenario of PPC activities.

6.2.2 Scenario Details

Each portion of the PPC should be described in sufficient detail to ensure that no doubt exists regarding the set-up of the simulator and the information given to candidates prior to, during, and upon completion of each exercise. This includes PF/PNF as applicable.

Script scenarios must provide sufficient clarity to preclude any confusion that may jeopardize the successful completion of the exercises. Scripts must be sufficiently detailed to eliminate the requirement for additional non-scripted input by the ACP. These objectives facilitate the ACP monitoring process by making adherence to the script a straightforward exercise.

The items listed below are considered the minimum and may require additional information in some cases.

6.2.3 Initial Scenario Setup for First and Subsequent Legs

The objective is to clearly describe the PPC scenario in a manner that eliminates any confusion on the part of the flight crew or the ACP. The following contains those items included in a script at the start of each leg:

(a) all normal preflight crew information including weather and NOTAMS (initial leg only);

(b) departure weather only is required for subsequent legs;

(c) simulator settings such as aircraft position;

(d) weather settings to include wind, altimeter, ceiling, visibility, RVR, temperature, precipitation, cloud height, temperature aloft, wind shear, and temperature gradient;

(e) runway in use and runway conditions;

(f) runway lighting;

(g) day or night settings;

(h) fuel on board including fuel distribution;

(i) MEL item simulator configuration;

(j) Navigation facilities configuration;

(k) Clearances;

(l) aircraft weights including aircraft zero fuel weight, load and distribution;

(m) V speeds (if not crew derived);

(n) thrust settings (if not crew derived);

(o) trim settings (if not crew derived);

(p) any notes regarding items which may require verification prior to flight, and

(q) where significant simulator changes are required; the script should provide a quick configuration checklist to preclude overlooking significant items. *It is suggested that on each of these occasions, should the situation warrant, the ACP should accept responsibility for any items missed. This relieves the crew from trying to find the one thing they may have missed and helps speed the next departure.*

6.2.4 Ongoing Scenario Details

The following contains those items that describe the ongoing activities once the crew is airborne:

(a) method of disseminating weather information (i.e., ATIS);

(b) simulator weather settings such as wind, altimeter, ceiling, visibility, RVR, temperature, precipitation, cloud height, temperature aloft, wind shear, and temperature gradient;

(c) runway in use and runway conditions, runway lighting day or night settings;

(d) MEL item simulator configuration;

(e) navigation facilities configuration;

(f) clear identification of the fault; including notes specific to each simulator to which the script is applicable;

(g) clear identification of when the fault is introduced and removed or modified; and

(h) all relevant ATC clearances or communications.

6.3 SCRIPTED PPC ACTIVITIES

6.3.1 General

PPC activities are specified in the appropriate CASS schedule.

This section will discuss how these requirements permit significant latitude in the design of a scripted PPC. Recurrent scripts are valid for a limited time and therefore past scripts will always form the basis for analysing and creating new scripts. In this regard, the assessment of flight crew is an ongoing process and scripts should reflect this philosophy.

By far the most significant assessment is one where the candidate demonstrates an understanding and application of learned techniques and procedures. Duplication of training day faults does not allow assessment of the application of learned techniques and procedures to new situations. It is therefore strongly recommended that scripts include similar but not the exact fault or approach from the training day.

6.3.2 Briefing

In addition to the required items specified in section 4.5.1, a PPC Briefing Guide has been prepared that further expands on briefing requirements. This guide can be found in Appendix F. It is suggested that the information presented in the guide be considered when developing a script briefing. Briefing notes should also indicate what information is not to be included. Operators should remember that the script is not to be briefed in detail but a required item/event list can be briefed if desired.

6.3.3 Assessment Standards

The following information recognizes that flight crews undergoing PPCs have successfully completed an approved ground and simulator training program. To evaluate each specific item, the PPC will be conducted in a manner that enables the crew to demonstrate their knowledge and skill and the ACP to effectively assess these skills. All items/events are to be evaluated against the performance criteria specified in the Pilot Proficiency Check and Aircraft Type Rating Flight Test Guide.

6.3.4 Flight Planning (FLP)

All relevant company flight planning information will be made available to crews as part of the scripted PPC. This includes all computerized flight planning information and computer generated takeoff performance data where applicable. This not only permits the crew to become familiar with the initial departure but reviewing this information gives the crew an opportunity to relax while performing normal crew duties.

Where the flight crew normally develops departure information such as V speeds, thrust settings and so-forth the required information to create this data will form part of the script.

6.3.5 Pre-flight (PRF)

The initial flight leg must be conducted from either an “originating” or “through” state and this will be specified in the script.

Scripts should not contain preflight cockpit setup faults. The reason for this is twofold. First, the simulator is very often different from the company’s aircraft in some regard. Secondly, most simulators have more than their share of minor warm-up problems. This combination can very often contribute to the nervousness of the flight crew and make the assessment more difficult. It is far more effective to ensure the crew become comfortable and observe normal cockpit activities.

6.3.6 Engine Start/Depart (ESD)

Engine start faults are not encouraged, as crews are normally nervous in the first few minutes of the PPC. By giving the crews this period to settle down it reduces the opportunity for problems with the first takeoff event. Furthermore, it reduces the stress on an ACP who may be forced to fail a crew for mishandling an event shortly after starting the PPC.

Initial scripts for 2 captains do not require a cockpit setup and departure taxiing for each captain, as this would make the PPC excessively lengthy. It is acceptable for the second captain to start from the runway with the engines running.

6.3.7 Taxi-out (TXO)

Scripts will include a portion of the taxi from the gate to the runway, including where possible, a runway incursion potential at a complicated intersection. In some cases an excessively long taxi is required and the script will identify if a reposition is permitted. If this is the case, the reposition should follow all normal pre-takeoff activities.

Where 2 captains are undergoing an initial PPC, the first captain does the engine start/depart and taxi-out while the second captain should conduct a taxi-in and ramp shutdown.

Identify in the script if it is acceptable to assist in taxi orientation by reducing the visibility gradually as the aircraft approaches the runway. Except for the very first takeoff, it is acceptable to reposition the aircraft to the button of the runway with the engines running and setup for departure from that point.

For initial PPCs the initial cockpit setup and taxi should not have any faults introduced unless they are MEL items and have been discussed in the briefing.

Recurrent scripts may introduce faults during taxi that lead to an evacuation. This moves the evacuation to a new area and defines this procedure by itself without having it preceded by an RTO or landing.

6.3.8 Takeoff (TOF)

It should be noted that a takeoff with an engine failure above V1 is mandatory while an engine failure on the missed approach is not. The V1 event is not required at the operator's lowest RVR minima. V1 engine failures may occur between V1 and 50 feet RA. It is not acceptable to introduce a fire only as the V1 event must introduce a thrust asymmetry by 50 feet RA.

Most scripts will include only one takeoff configuration since in most cases the simulator scene has an excess of runway for normal PPC weights. However, it is recommended that both initial and recurrent scripts make use of all operational flap settings where they require different operational techniques, limitations, procedures or crew knowledge.

Scripts must also address minimum visibility take-off requirements for all crewmembers. Where applicable, the operator must ensure that PPCs are scheduled such that Captain annual 600 RVR requirements will be met. This is one reason that PPCs have validity periods and why operators are encouraged to clearly identify scripts and record this information on the 0249 form. It is also why training periods should be permanently designated. Moveable windows will make scheduling and scripting very difficult and will result in mandatory checks being missed for some crewmembers.

6.3.9 Rejected Take-off (RTO)

It is desirable to introduce more than one type of fault that initiates the RTO procedure. In reality, a great many faults may cause a reject. These can be engine fires without a failure, engine compressor stall, crew incapacitation, or some other system fault necessitating a reject. It is recommended that the flight training program and operator SOPs be consulted for additional checking considerations.

Where applicable, it is desirable to have the reject occur during the first officer's pilot flying leg on occasion. This adds realism and evaluates the crew control hand-over.

6.3.10 Initial Climb (ICL)/En-route Climb (ECL)/Descent (DST)

Scripts should utilize a SID, where available, and will include departure instructions for each leg. ATC clearances will respect all applicable Noise Abatement Procedures.

STAR transitions are normally too long to accomplish effectively in most scripts. A transition to an approach via a hold at the FAF should be introduced where the operator conducts approaches that do not have published transitions and are not in a radar-controlled environment.

6.3.11 Steep Turns

These requirements are withdrawn provided the ACP and/or Air Operator complies with the stipulated conditions. This is highly recommended since this skill is normally well honed during training and uses valuable PPC time better used elsewhere.

6.3.12 Approach to Stall

These requirements are withdrawn provided the operator complies with the stipulated conditions. Where required, this sequence is best done after the initial departure and prior to any faults being introduced.

6.3.13 Holding

Scripts require at least one complete hold with the aircraft passing twice over the holding fix (once on initial entry and the second after completion of the entry pattern). Crews flying FMS equipped aircraft need only fly the hold once, as the second hold may be a programming exercise only.

This is normally a straightforward exercise and is therefore a good location to introduce faults without overloading the crew. Scripts should, over a period of time, address most of the hold types listed below:

(a) VOR/standard/non-standard;

(b) ADF/standard/non-standard;

(c) VOR/Radial/DME/inbound/outbound/timed/standard/non-standard;

(d) VOR/Radial/DME/DME/inbound/outbound/standard/non-standard;

(e) LOCALIZER/standard/non-standard;

(f) PUBLISHED/enroute/intersection; or

(g) FAF/with a transition to the approach.

In addition to the above, FMS aircraft types may introduce holds at the following waypoints created by the crew:

(a) DATABASE/ including modifications to the stored hold; or

(b) CENTELINE FIX/ with a transition to the approach.

6.3.14 Approach (APR)

Category II and III Approaches

To make full use of simulator time operators should plan to introduce a minor fault prior to the Cat II or III approach to permit observation of the crew's ability to assess the approach capability of the aircraft, if possible.

Both landings and missed approaches should be scripted to keep variety and decision making a part of the qualification process. Variety should be used when scripting the need for a missed approach. Missed approach events should be introduced within 50 feet of DH or alert height.

Non-Precision Approaches

The airports used during the PPC limit the variety and realism of non-precision approaches. It is desirable to mix the type of non-precision given each crew member where possible. If the captain was given an NDB in script 1 then script 2 should be something other than an NDB approach. Scripts should also reflect the use of flight management technology, if appropriate.

Pilot Monitored Approaches

Where an air operator requires the F/O to fly the approach to a decision point/height the following criteria must be considered in preparing scripted activities.

Initial CAT II and/or III Qualification

The F/O will fly the approach and missed approach until such time as the Captain makes the “land” decision and takes control of the aircraft.

In scripting the requirements for Schedule 1,(2) (f)(vi) the following additional Schedule 1 requirements may be met for each crew-member.

Schedule 1	Flight Test Report	Captain	First Officer
(2)(f)(i) normal landing	5A	YES	NO
(2)(f)(ii) IMC landing	5E	YES (if not auto-land)	NO
(2)(f)(iii) X-wind landing	5A	YES (if X-wind)	NO
(2)(f)(v) missed approach	4D,4E	NO	YES
(2)(f)(vii) manual landing		YES (if not auto-land)	NO
(2)(d)(iii) 2 approaches	4B,C	NO	NO

Recurrent CAT II and/or III Qualification

The above chart will apply with the exception of (2)(f)(v). Therefore a missed approach must be scripted elsewhere for the F/O.

CAT I Approaches

Where an Air Operator always conducts PMA approaches, all approaches will be scripted accordingly. However, some Air Operators may conduct PMA approaches only under certain conditions. When this is the case, the PPC script will provide at least one approach where the Pilot Flying (PF) both flies the approach and transitions to a visual manual landing.

Circling Approaches

Where authorized, circling approaches are an annual requirement and may include a landing off the approach or a rejected landing from 50 feet. Where a rejected landing/missed approach is desired scripts should ensure that missed approach instructions are clearly defined.

6.3.15 Landings and Missed Approaches

It is possible to integrate a landing off the non-precision approach in a script. This is the best way to assess of the effectiveness of the non-precision approach and will introduce some variety into the script while meeting the requirement for a landing without the use of an auto-flight.

Some simulators require higher than published weather programmed into the visual controls to ensure proper acquisition of the runway environment.

6.3.16 Go-Around (GOA)

A missed approach with an engine failure is not mandatory. Therefore, it is reasonable to conduct a normal published missed approach. It is reasonable to continue the missed approach to a hold at the clearance limit. This provides effective assessment of a probable situation especially for those operators that conduct approaches in uncontrolled airspace or outside of radar control.

It is also strongly recommended that engine failures, when planned, occur at a variety of points during the missed approach. Each script should clearly specify the window within which the ACP should fail the engine. The window should be unique to each script and crewmember.

Missed approaches may be introduced in a number of ways. The two most common are through ATC or due to lack of acquisition of the runway environment. It is also possible for equipment failures such as navigation aid failure to force a missed approach and this level of variety should be sought where possible.

6.3.17 Landing (LND)

The crosswind requirements for a landing are 10 knots. It is suggested that this not always be a 90 degree wind at 10 knots. It is desirable to have the wind at some other angle and at a higher speed.

Some simulators will shift the upper winds as the surface winds are modified. If the simulator does not do this automatically the upper winds should be reviewed to ensure a significant wind shear is not inadvertently introduced.

6.3.18 Taxi-in (TXI)

It is desirable to have a normal taxi-in and gate shutdown procedures for initial PPCs.

Where 2 captains are undergoing an initial PPC, the first captain does the cockpit setup and departure while the second should conduct a taxi-in and ramp shutdown.

6.3.19 Abnormal/Emergency

The introduction of the system faults requires the greatest planning in the creation of a script. The major criterion is that the faults be realistic and not lead to multiple unrelated failures. The type and number of faults is also an area of significant discussion. An ACP and/or Air Operator may wish to cover every exercise in the QRH over a period of time while others will be restricted somewhat by the complexity of the aircraft, the fidelity of the simulator, and time limitations. The general consensus is one major and one minor abnormal per PF.

Given the vast differences in aircraft types specific guidelines are not possible. However, the following should provide some direction:

(a) Minor Abnormal: The aircraft system fault requires crew recognition and simple action(s) to remedy. The fault is related to a single system or has minimal impact on crew or aircraft operations;

(b) Major Abnormal: The aircraft system fault requires crew recognition and action. The fault may affect several systems and affects crew and aircraft operations;

Note 1: Faults that do not require crew action, advisory or crew awareness messages, will not be considered to meet this standard unless subsequent aircraft operation is affected.

Note 2: A Medical emergency will not be considered an aircraft abnormal but may be recorded as a fault under the Flight Test Report, section 6 for tracking purposes.

(c) where a choice of faults exists the most demanding and assessable fault should be chosen;

(d) faults should be introduced at a time where they can be followed to their logical conclusion;

(e) no unwarranted actions or events will be introduced for training or exposure purposes. Training credits cannot be obtained during the PPC;

(f) dual failures are acceptable where a single QRH or ECAM/EICAS procedure exists to correct the fault;

(g) multiple failures are acceptable where they are the result of a single failure such as an engine failure. A second unrelated fault might be introduced where the first fault has been actioned and is benign for the remainder of the leg;

(h) system faults should change with each recurrent script period and may be compatible with the recurrent training matrix, if applicable. The exact fault from training day is not recommended. In addition, faults from systems not on the training matrix for that period should also be introduced;

(i) system faults should be different for each recurrent script;

(j) system faults should be different for each crew member;

(k) fault pick lists may be used provided each list is identified and once selected the ACP continues with the fault on that list. ie. Option A or B lists may be incorporated but once the ACP starts on the A list he must continue with the A list; and

(l) engine fires and or fire/failures are required by regulation and do not count as system abnormalities.

6.3.20 Automation and Technology

The introduction of new technology has redefined the way a great many tasks are accomplished on the flight deck. Effective assessment of this area requires assessment of the crew's inherent understanding of the system operation and how to properly manage both the technology and the flight deck. Meeting this objective requires the introduction of some challenge to the flight crew beyond normal operations. This may be completed by requiring a simple task such as programming an offset, or a crossing restriction, to a complex task requiring the manual creation of a way-point for a holding fix or the complete loss of part of the flight management or other integrated system.

Events should also be considered to provide realistic opportunities for autopilot off flight operations. This will permit assessment of crew coordination during the different FCU/MCDU operational philosophies.

The level of complexity and the time allotted to these exercises must allow the PPC to be completed within the required timeframe.

6.3.21 Pilot Not Flying (PNF) Duties

Two crew scripts offer a significant opportunity for the PNF to demonstrate his/her ability. However, single crewmember PPC scripts should identify a scenario for the assessment of PNF duties. This cannot be accomplished by merely handing over control to the other pilot for a period of time while airborne. It is recommended that crewmembers operate at least one flight leg from takeoff to touchdown as PNF. During this leg an abnormal or emergency must be introduced.

It is also recommended that scripts allow flight crew to alternate PF duties with each leg thus allowing crewmembers both PF and PNF activities before the break. This provides some variety that can keep crews focused on all the tasks at hand. Operators may also have the first officer fly the first leg for added variety.

6.3.22 Crew Coordination

Scripts must permit effective assessment of flight crew coordination. This can only be accomplished by realistic and timely scripts and is one of the reasons that freezes, repositions, and resets are best avoided.

6.3.23 Pilot Decision Making

Scripts should provide adequate opportunity for each pilot to demonstrate the ability to make timely and effective decisions and to delegate tasks to other crewmembers. Where scripts provide opportunity for crews to request options, the desired option/information should be provided in the script.

6.4 CHARACTERISTICS OF EFFECTIVE SCRIPTS

6.4.1 Diversity

This is a significant challenge since it is in our nature to become familiar and accepting of the status quo. As discussed earlier, ACP's must accept the reality that a PPC permits assessment of but a few abnormal exercises. ACP's must therefore expect that constant repetition of the same types of scenarios will, over time, tend to shift the focus of training towards excellence in these few areas.

Scripts should attempt to cover new areas wherever and whenever possible, to ensure that the training is driven by overall proficiency, and to broaden the scope of the flight crew assessment. This may require that an exercise of lesser difficulty replace the previous fault. Provided this is part of the ongoing diversity of the recurrent scripts, this will tend to enhance the scope of training and proficiency.

6.4.2 Realism

Realistic scenarios are a top priority when reviewing or developing a script. ACP's should therefore address as many real world criteria as feasible and eliminate resets, freezes and repositions, if at all possible. It is also crucial that all contact with outside agencies occur in a realistic method and time frame.

For example, it is unrealistic for emergency response vehicles to leave the station and give feedback to the flight deck in less than 2 minutes following a rejected takeoff. Therefore, any feedback that is given to the pilots should be in a realistic form such as stating: " The first officer sees smoke and flame from the #2 engine when he looks out his window", or "The in-charge flight attendant calls to say that the left wing is on fire." These are realistic, timely and appropriate scripted responses.

6.4.3 Training Effects

Despite the fact that a PPC is an assessment tool, there is always an element of training, and more significantly, a reinforcement of training that occurred prior to the PPC. A script should therefore support effective training and safe, logical operating practices.

One of the characteristics a script must avoid at all costs is a negative training effect. This is most often the result of having a fault removed and the exercise completed before it normally would be in the aircraft. Consider, for example, the case where a crew conducts an RTO due to an engine fire. In this case the exercise was simply to see the RTO and so the procedure is called complete after the aircraft comes to a stop. Yes, the RTO was validated but what behaviour was reinforced in the crew by not completing the fire drill? Did the rescue vehicles respond, and if so, how quickly? Was this realistic? Did this set an unrealistic time frame in the crew's mind? A script that requires cessation of an exercise before it's logical and realistic conclusion should be reviewed carefully for any negative impact it may have on future crew behaviour.

A PPC can also reinforce negative behaviour when it always asks for the same reaction to a decision process. Always evacuating after an RTO or always landing from a specific approach could cause this. Events requiring a decision by the flight crew should always demand that crews make a decision and not be lead into a repetitive regime.

6.4.4 Confidence

This characteristic speaks in many ways to the effectiveness of the script. A good script will balance the needs of the person doing the assessing, the desire of the crew to be challenged, and the need to leave the crew with an experience that gives them the confidence they need to return to line duties feeling comfortable in their abilities.

6.5 REFERENCE MATERIAL

The following is a list of the required reference material to assist in the development and review of a scripted PPC.

CAR 705 and 704 Personnel requirements – Pilot qualifications	Specifies requirement for a PPC, refers to CASS
CASS 725 and 724 Pilot qualifications.1	Specifies general requirements, refers to Schedule 1
CASS 725 and 724 Schedules 1	Specifies the requirements for PPC content
ACP Manual TP 6533	Chapter 4 specifies assessment guidelines
PPC and ATR FTG	Specifies assessment standards
Company Training Manuals	Specify approved training program
Company Approach Plates	Required to review clearances and procedures
Simulator Scene and Fault Guide	• Required to determine simulator capabilities such as: • faults available • scenes available • weather capabilities • navigation database available
Company Flight Operations Manual	• Required reference material for operations specifications, and operations procedures
Aircraft Operating Manuals	• FCOM or AOM • must be current and company specific • Aircraft Operating Manuals must be company aircraft envelope volumes
Recurrent scripts for the past 2 years	Provides the details of the previous simulator PPC activities
Prior and current initial scripts	Details initial PPC program
TC AIM	Reference material
CAP General	Reference material

6.6 SCRIPTED PPC DEVELOPMENT PROCESS

6.6.1 Air Operator Responsibilities

An ACP's and/or Air Operator has the following responsibilities:

(a) develop scripted PPCs for each aircraft type;

(b) submit scripts to the POI for review and acceptance a minimum of 30 days (90 days preferred) before the start date;

(c) assign a contact person responsible for the review/development process;

(d) make all relevant reference material available or submit it with the scripts;

(e) develop a process to test fly the scripts before the start date, if practicable. This may or may not be monitored by TC;

(f) keep a file of all the scripts each aircraft type for a period of not less than two years after the expiration date;

(g) ensure that scripts and any amendments are distributed to all company Type A ACPs;

(h) ensure that all feedback from the check pilots & flight crew regarding scripts is addressed in a timely manner;

(i) follow up on any lessons learned at the end of the usage period;

(j) ensure all check pilots are aware of the correct procedures for the use of a script;

(k) ensure all script amendments are issued to all ACPs and TC CASI; and

(l) ensure all ACPs adhere to the script.

6.6.2 TC Responsibilities

Transport Canada has the following responsibilities:

(a) the Issuing Authority/POI will assign a type-qualified inspector to review the script(s);

(b) the inspector will review the script(s) and initiate feedback to the operator, keeping the POI informed, until the scripts are acceptable;

(c) the inspector should monitor a trial of all new scripts, or assign a company representative to provide feedback, as soon as possible after their introduction. This may coincide with normal PPC monitoring activities;

(d) the inspector will forward copies of the accepted scripts to the POI;

(e) the POI will send a letter to the operator indicating that the scripts are acceptable and specifying the validity period; and

(f) the POI will ensure that copies of acceptable scripts are distributed to each base.

6.7 DEVELOPING SCRIPTS

6.7.1 General

The development process is quite demanding and requires considerable attention to detail and an organized review process. Operators are encouraged to have scripts developed by small teams of two or three ACPs. Teams should be assigned to work on new scripts six months before the script will become effective.

Developing new scripts is best started with a review of the scripts used for the last two years. In addition, it is recommended that ACP's and/or Air Operators review problem areas that they wish to include in the next training checking cycle.

After completion of the script it is recommended that a thorough review take place before submission to the POI. The following sections will provide some information on areas common to all scripts.

6.7.2 Simulator

The choice of locations must meet company requirements and be available in the simulator database. It is suggested that a nearby city pair be used if possible and that the city pairs be varied from one script to the next.

Ideally, identification of major differences in FMGS database should be noted where the company's database is not loaded for the PPC.

Differences between the aircraft and the simulator should be noted on the script and passed to the crew before the PPC.

6.7.3 Content

The script must meet the CARS/CASS mandatory items. It is suggested that the company operations specifications be reviewed to determine what special requirements exist, such as circling or 600 RVR checks.

It is suggested that the CARS/CASS requirements be listed in point form for each crewmember. The script should then be reviewed to ensure that each mandatory item is conducted. Having a well-written script summary page simplifies this process.

6.7.4 Faults

Review the list of faults assigned to each crew to determine if they meet the requirements and ensure the workload is evenly distributed. Reviewing past scripts can provide opportunities to assign faults to crewmembers as PF, who have always handled the fault as PNF, for example.

The simulator fault guide should be consulted to ensure the faults listed are possible and duplicate the desired fault.

Airbus simulators contain a variety of FWC standards and this may play a role in the PPC. Differences are sometimes difficult to note, but where major differences become apparent the briefing notes should indicate the differences.

6.7.5 Level of Detail

Does the script clearly define where activities start and stop? Is it detailed enough that you could run the simulator and have no doubt about when each activity is to be accomplished?

6.7.6 Realism

This is a difficult area to quantify but now that the basics of the script are reviewed and acceptable, the flow and pace of the script should be reviewed.

This is best done with a view to making the scenarios flow as much as a line flight as is possible. The following questions can help in this regard.

(a) Are there any resets, and if so, can they be eliminated by changing the order or position of an event?

(b) Do faults occur in the same place consistently or would it be logical to assume the fault could occur elsewhere? Is this possible?

6.7.7 Accuracy

This is a test of every part of the script. Errors often occur in clearances and simulator setups. Does the weather in the setup match that required in the approach plate?

6.7.8 Fairness

This review determines that the activities are set to meet the criteria but are not more difficult than required. The script should keep the flight crew challenged but periods of high workload should be distributed where possible. Are there periods where the flight crew can relax for even a minute? If not, then the script should be modified to provide some time to collect their thoughts. Time is perceived differently by crew and ACP and what seems like a long time of inactivity can, in fact, be only 30 seconds.

6.7.9 Timing

Does the script meet the time criteria? This is best done in the simulator but can be done if each leg is timed out and the total time calculated. This is also an opportunity to again ensure that events are not too rushed.

6.7.10 Script Trials

Where it is practical a CASI should be available during the script trial. Whether this is done by using the script to qualify a line crew or as part of a review trial is up to the ACP and/or Air Operator. Some ACP's and/or Air Operator's trial run the new scripts on annual ACP check-rides with TC present. This achieves both the evaluation and the monitoring goals and has worked quite well. If the scripts are prepared well in advance of the introduction date this is almost always possible. It should be noted that for timing purposes the trial PPC flown by an ACP(s) should be completed with at least one half hour to spare. This accounts for the extra time needed by the average line crew.

The most important aspect of a trial is to establish an accurate time criteria and verify simulator operation. As the script progresses, any areas of concern should be noted and solutions defined. Attention should be paid to how the simulator reacts to each fault, to ensure it accurately reflects the company's aircraft. Differences in the operation and configuration of each simulator the company has identified for use, should also be noted.

This is also an excellent time to review the exact simulator button/switch that commands the desired fault. Some simulators have more than one way to enter a fault but each way produces a different reaction. Scripts should include this level of detail where problems may arise or the action is not intuitive.

6.7.11 Acceptance Process

The cooperative nature of the script development process makes it difficult to define one process that will work for every operator and aircraft type. It should always be remembered that a proactive system would be the most rewarding and effective way to meet the significant challenges of building a script. The key is to keep the lines of communication open and always work towards the net objectives.

It is normal practice for TC to accept the PPC scripts without reviewing minute details of the script such as every clearance and simulator setup. This requires the ACP and/or Air Operator to change the script as required and this is acceptable provided the following conditions are met:

(a) the ACP and/or Air Operator will identify the person in charge of amending the script,

(b) all required changes are forwarded to this person who will issue an amendment to each ACP and forward a copy to the POI, and

(c) all ACPs will use the amended copy.

Just A Reminder

Always try to:

(a) provide consistent, fair and effective flight crew assessment scenarios;

(b) provide a positive and realistic experience for flight crews;

(c) utilize available technology to the maximum;

(d) enhance and encourage effective CRM practices during PPC activities; and

(e) encourage effective training through standardized evaluation processes.

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APPENDICES

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APPENDIX A – ACP APPLICATION FORM

☐ Initial ☐ if initial then – training rides completed

☐ Revision

Today's Date (yy/mm/dd)

ACP Nominee

Name _____ License # _____ ☐ ATPL ☐ CPL

ACP Authority Requested:

☐ Type A ☐ Type B ☐ PPC (simulator only)

☐ ACP ☐ Line Checks

☐ PPC/IFR ☐ PPC/VFR

Aircraft Types:	CAR (to be operated under)			
1) _____	☐ 702	☐ 703	☐ 704	☐ 705
2) _____	☐ 702	☐ 703	☐ 704	☐ 705
3) _____	☐ 702	☐ 703	☐ 704	☐ 705

Approved Check Pilot Course

☐ completed ☐ proposed ☐ N/A

☐ ACP Initial ☐ ACP Recurrent ☐ Alternate ACP Trng Program (703, 702)

Location(s) _____ Date (s) (yy/mm/dd) _____

_____ _____

Declarations

The following authorizes Transport Canada to publish a ACP's name and phone number for the purpose of conducting flight checks.

_____
Name

☐ **Authorise** ☐ **Do not Authorise**

_____
Signature

This certifies that the information provided in this application and the attached resume (for initial applications only) is accurate and that I will abide by the policies and procedures specified in the Approved Check Pilot Manual (TP 6533E).

_____ _____
Signature Date (yy/mm/dd)

For Transport Canada use only

Inspector Verification:

Initial Authority:

The ACP Nominee

- ☐ meets all applicable requirements of the ACP Manual, or deviations from the required qualifications and experience are justified.
- ☐ has been briefed on flight check procedures, and
- ☐ has successfully completed an initial ACP monitor where applicable.

Revised Authority

- ☐ meets all applicable requirements of the ACP Manual for the revised authority.

Recommendation for Approval ☐ Yes ☐ No

☐ as requested ☐ recurrent PPC only

Comments:

Inspector's Name	Signature	Date (yy/mm/dd)

ACP Authority Approval: ☐ Yes ☐ No

☐ as requested ☐ recurrent PPC only

Comments:

Issuing Authority	Signature	Date (yy/mm/dd)

Revised Authority ☐

This approval supersedes and cancels the approval dated _____ Date (yy/mm/dd)

APPENDIX B – SCHEDULE OF FLIGHT CHECKS

Date:

From

To: Transport Canada Regional Office

Dear Sir/Madam:

In accordance with the requirements of the *ACP Manual* (subsections 1.8.7), the following is the list of Flight Checks scheduled for the month of _____ of 20____.

Please Type or Print

Candidate			**Type of Flight Check**					
Name	**Licence**	**Company 5258**	**A/C**	**Sim[1]**	**PPC/ IFT**	**PPC/ VFR**	**Line Check**	**Proposed Date[2]**
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	

Signature of Approved Check Pilot

Date (yy/mm/dd)

[1] Please indicate type and location.
[2] If known

Notes:

_____
_____
_____
_____
_____

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APPENDIX C – SAFE FLIGHT CHECKING PRACTICES GUIDE

Checking Philosophy

No list of “Do's” or “Don'ts” can cater to all the situations that may occur during flight tests or checks. TC therefore relies on the ability of its ACPs to fully assess the consequences of their actions and demands. Flight safety shall always take top priority.

One of the purposes of any flight check is to enable a candidate to demonstrate his/her ability to operate a given aircraft in accordance with prescribed standards, limitations and procedures. There is no need whatsoever to place a flight crewmember in a position in which he/she may have to call upon superior knowledge and skills to ensure successful recovery.

The practices described in the succeeding paragraphs form part of Transport Canada’s philosophy towards safe flight checking. ACPs are required to abide by these practices. Operators may have flight checking practices that are more restrictive than those described below; ACPs shall in such cases adhere to the most limiting practice.

Flight Check Practices – General

Make every effort to make candidates feel at ease. Be realistic in your demands and simulations.

Always give candidates a thorough briefing before flight. Such briefings shall be conducted using the pre-flight briefing items specified in section 4.5. Particular emphasis must be placed on ensuring that all participants have a clear understanding of:

(a) crew positions (e.g., PIC / SIC),

(b) considering the aircraft involved, the weather conditions (visual vs. instrument purpose and scope of the flight check;

(c) the proposed sequence of events;

(d) any aircraft or operational restrictions imposed to enhance safety;

(e) their respective role, including that of the ACP, and what is expected from them; and

(f) the meteorological conditions (VMC vs. IMC), thunderstorms, wind, etc.) outside of which the flight check should not take place or continue.

Verify aircraft dual control availability, including brakes (several aircraft types have brake pedals on the left side only), to prevent any last split-second surprise, and discuss the effects of any unusual features on the conduct of the flight check.

Ensure radio communications between candidates and ATS can be monitored (serviceable and functioning headset assembly or cockpit/cabin loudspeaker).

Maintain a good lookout during the flight.

Discuss action to be taken by flight crewmembers before any leave their station (e.g., seat change, short duration absences, etc).

Discuss verbal calls that may be made by the ACP as well as minimum airspeeds, altitudes or other conditions required for each planned exercise or sequence, where applicable.

Operational Checklist

The following represents a checklist of flight checking practices that should be adhered to in order to ensure that safety is maintained through-out the flight check process.

Aircraft Systems

Once the flight check has begun, do not change the position of any system control without the Pilot in Command's consent except for simulating failures, and then only following proper, prior warning to the flight crewmembers.

Approach to Stall

Required on initial PPC only.

To be performed in the appropriate simulator in lieu of aircraft whenever available.

When demonstration in the aircraft is required, the following practices must be adhered to:

(a) ensure recovery is initiated on first symptoms of a stall,

(b) do not initiate below the minimum altitude recommended in the Aircraft Flight Manual (AFM) or Aircraft Operating Manual (AOM), and in no case

(i) below 5,000 feet AGL;

(ii) in clouds;

(iii) on top of clouds unless a well defined horizon is available; or

(iv) below 2,000 feet above the top of well defined clouds.

Balked Landing (All Engines Operating)

Do not initiate below:

(a) 50 feet AGL; and

(b) indicated airspeed (IAS) normally used for flap setting selected during final approach.

Circuit Breakers

Never pull any circuit breaker to simulate equipment failure.

Dutch Roll

To be performed in appropriate simulator only.

Emergency/Rapid Descent

To be performed in appropriate simulator when available.

Emergency/Rapid Descent – All Aeroplanes (Simulator not available)

Subpart 702,703,704 Operators

To be completed

(a) clear of clouds; and

(b) at 5,000 feet above MSL, or 3,000 feet AGL, whichever is higher.

Subpart 705 Operators

To be completed at 10,000 feet above MSL, or 2,000 feet above the minimum enroute altitude (MEA), whichever is higher.

Engine Failure(s) on Take-Off (Before Decision Speed)

Both for safety and maximum training value, rejected take offs in aeroplanes are to be conducted in simulators only. If a simulator is not available, flight check candidates will brief the ACP on the actions of the PF and where applicable, the PNF, based on a RTO scenario specified by the check pilot.

For helicopters, rejected take-offs may be conducted at the discretion of the ACP. In this case, the candidate should be briefed prior to the flight check to anticipate the possibility of a rejected takeoff, and the ACP must be vigilant to ensure that the candidate does not strike the tail due to an excessive nose high attitude during the flare and touchdown sequence.

Engine Failure on Take Off (After Decision Speed) Aeroplanes

No engine failure simulation should be initiated unless the conditions given below are met.

Single Engine Aeroplanes

A suitable area for forced landing must be within reach of the aeroplane.

Not below 400 feet above ground level (AGL).

Subpart 703,704 Aeroplanes – Multi-engine

The landing gear and flaps are fully retracted and safe single engine flight can be maintained.

Not below 400 feet AGL.

Subpart 705 Aeroplanes

Not below 400 feet AGL.

Not below minimum control speed with critical engine inoperative (VMCA) plus 20 (KIAS), or take off safety speed (V2) plus 10 KIAS, as applicable.

Engine Failure– Rotorcraft

During Hover/Take off

Shall be conducted within a safe flight envelope over a level, firm surface.

During Cruise Flight

Not below 500 feet AGL; and

Within normal autorotational range of a suitable engine out landing area.

Engine Out Missed Approach

(Do not confuse with “Balked Landing All Engines Operating”)

Should not to be initiated unless the conditions specified below are met.

Subpart 702,703,704 Aeroplanes

Not below 500 feet AGL or other higher altitude necessary to ensure single engine safe flight.

Not below IAS normally used for flap setting selected during final approach.

Subpart 705 Aeroplanes

Not below 200 feet AGL.

Not below IAS normally used for flap setting selected during final approach.

Flapless Approach – Subpart 705 Aeroplanes

To be cancelled at a minimum of 50 feet AGL and followed by a missed approach where flapless approach IAS exceeds normal landing flap approach IAS by more than 20 KIAS.

Flight Controls Manual Reversion

To be performed in appropriate simulator only.

Float Plane

Other than Glassy Waters

Waves less than 18 inches high and no predominant swell.

Glassy Waters

Defined objects must be available for height reference.

Two nautical mile (NM) long clear run required for take-off and landing.

Forced Landing (Practice)

Recovery must be completed above 200 feet AGL.

Rejected Take-off

To be performed in the appropriate simulator only.

Runaway Trim/Jammed Stabilizer

Subpart 702,703,704 aeroplanes

Not below 1,000 feet AGL.

Subpart 705 Aeroplanes

To be performed in the appropriate simulator only.

Ski Plane

Must complete the following sequence before making full stop landing:

(a) low level inspection;

(b) touch and go; and

(c) aerial final inspection of tracks.

Stop and Go

Subpart 702, 703, 704 Aeroplanes

Same as “Touch and Go's” below.

Subpart 705 Aeroplanes

Not allowed. Must use full available runway length.

Touch and Go

Subpart 702, 703, 704 Aeroplanes

Must have sufficient runway remaining from touch-down point.

Subpart 705 Aeroplanes

Must meet critical field length or balanced field length requirements, as applicable.

A full briefing of all applicable procedures and verbal calls shall be conducted by the ACP prior to this exercise.

APPENDIX D – FTAE EMERGENCY CODES

AIR CONDITIONING 21	**FUEL 28 Continued**	**FUSELAGE 53**
ACM Failure	Fuel Dumping	Lower Aft Body Overheat
Air Condition Exhaust Hot	Fuel Quantity Indicator Failure	Nacelle Overheat
Duct Overheat	Emergency Generator Extension	**WINDOWS 56**
Emergency Descent	Landing Gear Indication Fault	Windshield Crack
Low Cabin Pressure Warning	Landing Gear Problem	Window Damage/Failure
Pack Trip Off	Strut Overheat	NESA Inoperative
Slow Depressurization	Tire Failure	**WINGS 57**
Pres./Air Conditioning Failure	Minimum Fuel Operations	Pylon Overheat
Rapid Depressurization	Inadvertent Transfer	Wing Overheat
AUTO FLIGHT 22	Fuel Pump Low Pressure	**PROPELLERS 61**
Auto Pilot Failure/Disconnect	Fuel Heat Value Failure	Auto Feather System Failure
Auto Pilot Hardover	Secondary Fuel Pump Pressure Warning Light	Beta Indicator
Flight Director Failure	**HYDRAULICS 29**	Decouple
Roll/Pitch Channel Fail	Brake Failure	Propeller Brake Failure
Rudder Trim Inoperative	Hydraulics Leak/Loss	Propeller Outside Allowable Limits
Runaway Trim	Hydraulic System Overheat	Prop Low Oil Light
Trim Failure	Hydraulic Pump Failure	Unscheduled Prop Feather
COMMUNICATIONS 23	Manual Reversion	Prop Fails to Feather
Communication Failure	Standby Hydraulic Low Pressure/Quantity	**ROTORS 62**
ELECTRICAL POWER 24	Suction Boost Warning Light	Blade Integrity (BIM)
AC Generator Failure	Loss/Excessive Hydraulic System Pressure	Tail Rotor Gear Box Failure
Alternator Failure	**ICE AND RAIN 30**	Tail Rotor Failure
AMC Failure	Anti Ice Failure	**ROTOR DRIVE 65**
Battery Feeder Failure	Carburetor Icing	Transmission Chip
Battery Overheat/Overtemp	De-Icing System Failure	**POWERPLANT 71 OR ENGINE 72**
Bus Off	Icing Conditions	2 Engine Failed Operations
Bus Tie Disconnected	Induction Ice	Auto Thrust Fault
CDS Failure	Pitot Static System Fault	Chip Detector Warning Light
Circuit Breaker Trip	**INDICATING/RECORDING 31**	Emergency Power
Current Limiter Failure	ADI Failure	Engine Chip
DC Bus Fault	Air Data Computer (ADC) Fail	Engine Clearing
DC Generator Failure	Airspeed Indicator Failure	Engine Limit/Surge/Stall
ECU Fault/Failure	Attitude Indicator Failure	Engine Loss at V1 or V2
Electrical Failure	Beta Indicator	Engine Overheat
Emergency Generator Extension	CSD Failure	Engine Vibration
Emergency Power	Flight Recorder Off	Engine Failure
Generator Failure	EFIS Control Failure	Engine Severe Damage
Load Meter Indicator	EFIS Display Failure	Engine Turbine Overheat
Loss of One Phase ESS AC	Gyro Failure	Torque Fluctuations
Low Voltage Light	Heading Indicator Failure	Thrust Reverser Arm/Unlock/Deploy
Over Voltage	Instrument Failure	Reverser Unlock
Inverter Failure	Limited Panel/Partial Panel	
Select Power Out		
continued on next page	**on next page**	**on next page**

ELECTRICAL POWER 24	**LANDING GEAR 32**	**ENGINE FUEL & CONTROL 73**
ELECTRICAL POWER 24 Cont.	**LANDING GEAR 32**	**ENGINE FUEL & CONTROL 73**
Standby Power Off	Anti Skid Failure	High ITT
Transfer Bus Off	Gear Box Failure	N1 Governor Failure
EQUIPMENT/FURNISHINGS 25	Emergency Gear Extension	**IGNITION 74**
Safety Harness	**LIGHTS 33**	**BLEED AIR 75**
Seat Structure/Configuration	Misc. Light Failure	Bleed Air Leak
FIRE EMERGENCIES 26	**NAVIGATION 34**	Bleed Trip Off
APU Fire	ADC Failure	Bleed Air Overheat Warning Light
Cabin Fire	ADI Failure	**ENGINE CONTROLS 76**
Cargo Hold Fire	**NAVIGATION 34**	Throttle Control Cable Failure
Fire Ground	Avionics Failure	**ENGINE INDICATING 77**
Fire in Flight		High ITT
Heater Fire	GPS Failure	EPR/N1/N2/Failure
Electrical Smoke	ILS Glideslope Failure	Fluctuation/High TIT
Electrical Fire	ILS Failure	Start Valve Open Light
Engine Fire	Nav Failure (IRS/IRU/ADF)	**ENGINE EXHAUST 78**
Smoke in Cockpit	NDB Failure	High EGT
Wheel Well Fire	VOR Failure	Tailpipe Smoke
Wing Fire	TCAS Warning	**ENGINE OIL 79**
FLIGHT CONTROLS 27	Timed Turns	Oil Temperature
Alternate Flap Operation	**OXYGEN 35**	Oil Pressure
Feel Differential Pressure	Passenger & Crew Oxygen Levels	Filter Bypass Light Illum.
Flap Failure	**PNEUMATIC 36**	Quantity
Flap Faults (Asymmetric/Split)	Pneumatic Failure	Engine Oil Filter Bypass
Flight Control Low Pressure	Bleed Trip	Loss of Oil Pressure
Jammed or Restricted Flight Controls	Low Duct Pressure	**STARTING 80**
Led Faults	Dual Bleed Light	Abnormal Start
Runaway Stabilizer	**VACUUM/PRESSURE 37**	Start Fault
SAS Failure	High Duct Pressure	Air start
Slat Fault	Pitot Static System Fault	Hot Start
Speed Brake Do Not Arm	Suction Failure	Hung Start
Steep Turns	Vacuum System Failure	Aborted Engine Start
Yaw Damper	**WATER/WASTE 38**	**WATER INJECTION 82**
FUEL 28	**CENTRAL MAINTENANCE 45**	**SPECIAL PURPOSE 95**
AFCS Failure	**AIRBORNE AUXILIARY 49**	Bird strike
Fuel Cross feed	APU Failure	Hijacking
Fuel Filter Failure	APU High Oil Temp. or Low Oil Pressure	In Flight Release of Life Raft
Fuel Leak	APU Overheat	Passenger Emergency
Fuel Imbalance	**DOORS 52**	Passenger Evacuation
Fuel Pump Failure	Door Unlock	Pilot/Crew Incapacitation
Transfer Pump Failure	Door/Hatch Open	PNF Duties
Low Fuel Light	Door Light(s) Illuminated in Flight	

APPENDIX E – SAMPLE PPC SCRIPT

Summary of PPC-A 2/99

Captain Flying Leg #1	First Officer Flying Leg #2
• Gate 30 YVR	• T/O RWY 08R
• 600 RVR T/O RWY 08R	• Crosswind Takeoff
• Crosswind Takeoff	• Return Due Power Failure YYC
• #2 Engine Fire/Fail	• NDB Hold At ROSS Fix
• Rejected Takeoff	• Equipment Cooling Fault
• Passenger Evacuation	• NDB DME 08R
• T/O Rwy 08R	• @ 50ft Go-Around Due Vehicle
• Crosswind Takeoff	• #2 Eng Fire And Failure 50-1200 Ft
• Engine Cowl Anti-Ice Valve Fail	• Single Engine ILS Rwy 08R
• Rapid Decompression	•
• Emergency Descent	•
• Cat II 08R	•
• Crosswind Landing	•

Captain Flying Leg #3	First Officer Flying Leg #4
• T/O Rwy 08R	• T/O RWY 26L
• #2 Engine Flameout @ V_1 On Rotation	• #1 Engine Flameout @ V_1 On Rotation
• Restore @ MCT	• Restore @ MCT
• YYC Airport Closed	• Loss Of System A
• Forces Return	• ILS RWY 26L
• Hold At The VR NDB	• Crosswind Landing
• #1 CSD Low Oil Pressure	•
• LOC 26L Approach	•
• Runway Light Failure	•
• Forces Missed Approach	•
• #1 Engine Fire/Failure 50 To 1200 Ft	•
• Single Engine ILS 26L	•

Simulator Setup / Scenario Description

AIRPORT – YVR LEG #1 PF – CAPTAIN

CAE Page	___	**C Of G**	**20.2**	**Ceiling**	**120'**
CAE Fault Page	___	**Stab Trim**	**5.2**	**RVR Ft/M**	**600/200m**
Gate CAE/RSL	**30/30**	**QNH**	**29.80**	**Visibility**	**1/8 Sm**
Runway	**08R**	**Surface Temp**	**1**	**Cloud Tops**	**7000**
CAE Gate Code	**679**	**Level 1 Temp (3000)**	**-5**	**Flap 1 – Fra**	**1020'**
CAE Rwy Code	**697**	**Level 2 Temp (8000)**	**-15**	**Flap 1**	**136,137,142,157**
RSL Visual	**21**	**Surf Wnd Dir/Sp**	**350/10**	**Flap 5 – Fra**	**1030'**
RSL Ils	**072**	**Lev 1 Wnd Dir/Sp**	**020/10**	**Flap 5**	**129,129,134,149**
ZFW	**83.6**	**Lev 2 Wnd Dir/Sp**	**020/00**	**Airway**	**J534**
Fuel	**13.8**	**Entry Door**	**Open**	**Radial**	**070º**
Gross Weight	**96.7**	**Cargo Door**	**Open**	**Stand EPR/N1**	**1.90/87.6**
Fuel Temp	**-15**	**CAE Crash Reject**	**On**	**Max EPR/N1**	**2.02/92.0**
CAE Map Scale	**2**	**CAE Copy Pos**	**Rwy 08R**	**Takeoff Alt**	**YYJ**

1. ATIS RECORDING 124.6:

   "Vancouver International Airport Information Alpha. Wind 350º at 10 knots. Visibility 1/8 mile in fog, temperature 1º, dewpoint 1º, altimeter 29.80 inches. Arrivals expect ILS CAT 111 runway 08L, departures runway 08R. Advise clearance delivery on initial contact you have information Alpha."

2. CLEARANCE 121.3:

   "Flight 007 is cleared to the YYC airport, YVR _____SID, flight planned route, depart runway 08R, Squawk 6363."

3. CLOSE CARGO DOORS: **CAE 40-27 LINE ____ RSL – Depress Switch**

   Action before Ground Crew establishes contact. Ground Crew contacts Captain & advises the cargo doors closed, confirms park brake is set and requests permission to remove ground power.

4. CSD: Advises 90 passenger on board and ready to close the doors.

5. CLOSEOUT 130.8:

   "Flight 007, revision 0, flight plan revision 0, aircraft 796/756, TOW 96.7, fuel 13.1, ZFW 83.6, stab all flaps 5.2, C of G 20.2%, 90 passengers, my sign Tango 2."

6. GROUND 121.7:

   "Flight 007 cleared for pushback at your discretion, call for taxi."

7. GROUND 121.7:

   "Flight 007 cleared to taxi to runway 08R via Lima, cleared to cross runway 12/30."

8. TOWER 118.7: Clear to position reset RVR's

   "Flight 007 RVR's A600, B600 wind 350º at 10 knots cleared for takeoff runway 08R, contact YVR DEP 120.5 airborne."

9. Instructor 115k to 125k:

[FIRE & FAIL ENGINE #2]	**Line ____ + Line ____**	**Line ____**
PASSENGER EVACUATION	**CAE 34-7 + CAE 43-4**	**RSL 24-4**

10. Instructor:

Reposition on the threshold of 08R

11. TWR 118.7:

"Flight 007 RVR's A600, B600 wind 350º at 10 knots cleared for takeoff runway 08R, contact YVR DEP 120.5 airborne."

12. YVR DEP 120.5:

"CDN 900 radar identified leaving 3000' cleared DCT BLI VOR climb to and maintain 13000"

13. Instructor prior to 7000':

[ENGINE COWL ANTI-ICE VALVE RIGHT FAIL ENGINE #1]

LINE____	**LINE____**
CAE 39-5	**RSL 23-5**

Cancel fault if crew recycles switch

14. YVR DEP 120.5:

"Flight 007 contact YVR CTR 134.4"

15. YVR CTR 134.4:

"Flight 007, radar identified, cleared to climb to and maintain FL330."
Instructor ensures the 10,000' check is accomplished and time off is called in.

16. Instructor @ 11,000':

Boost to FL300 Allow crew normal time for a proper level off.
IE: ATC call, EPR setting, flight plan entry etc…

17. Instructor once stable at FL330 insert fault:

[DECOMPRESSION FAST]	**LINE ____**	**LINE____**
	CAE 30-1	**RSL 21-5**

18. YVR CTR 134.4:

"Flight 007 check your declaring an emergency, turn ____, descend to and maintain 10,000 feet. BLI A29.80. Call YVR ARR 120.8 Level 10,000."

19. Instructor:

When crew calls level 10,000' clear Flight 007 to 3,000'

20. Instructor:

At 9000' advise the crew that the exercise is complete, clear all faults, and reposition east of YVR. Advise crew to anticipate radar vectors for the CAT 11 approach to runway 08R.

21. YVR ARR 120.8:

"Flight 007 turn ____ descend to and maintain 3000', radar vectors for the ILS CAT 11 Runway 08R approach."

22. YVR WX:

350/10, ¼ fg, OVC001, 1º/1º, A29.80…..RVR A1200 B600…CAT 11 08R

23. INSTRUCTOR INSERT – LANDING SETUP

Approach	ILS CAT 11	Surf Wind Dir/Spd	
Runway	**08R**	QNH	
CAE RWY Code		Ceiling (Feet)	
RSL VIS/ILS		**VIS/ RVR**	**¼sm / 1200 ft**
Type of Emergency	None	**RVR (m)**	**400m**

24. YVR ARR 120.8:
Clear crew for the approach and to contact Tower 118.

25. YVR TWR 118.7:
Flight 007 wind 350/10, RVR A1200 B600 cleared to land Rwy 08R.

- END OF LEG 1

AIRPORT – YVR LEG #2 PF – FIRST OFFICER

CAE Page	___	**C Of G**	**20.2**	**Ceiling**	**220'**
CAE Fault Page	___	**Stab Trim**	**5.2**	**RVR Ft/M**	**2600/800m**
Gate CAE/RSL		QNH		**Visibility**	**1/2 Sm**
Runway	08R	Surface Temp		Cloud Tops	
CAE Gate Code		Level 1 Temp (3000)		Flap 1 – Fra	1020'
CAE Rwy Code		Level 2 Temp (8000)		Flap 1	136,137,142,157
RSL Visual		**Surf Wnd Dir/Sp**	**350/10**	Flap 5 – Fra	1030'
RSL Ils		Lev 1 Wnd Dir/Sp		Flap 5	129,129,134,149
ZFW		Lev 2 Wnd Dir/Sp		Airway	J534
Fuel	**13.1**	Entry Door		Radial	070º
Gross Weight		Cargo Door		**Stand EPR/N1**	**1.90/87.6**
Fuel Temp		CAE Crash Reject		Max EPR/N1	2.02/92.0
CAE Map Scale		CAE Copy Pos			

26. WX:

Wind 350/10, ½ fg, OVC002, 1º/1º, A29.80

27. Clearance:

Flight 007 is cleared to the YYC airport, YVR _____SID, flight planned route, depart runway 08R, Squawk 6363.

28. YVR TWR 118.7:

Flight 007 wind 350/10, RVR A2600 B2600 cleared for takeoff runway 08R contact YVR DEP 120.5 airborne.

29. YVR DEP 120.5:

Flight 007 radar identified leaving 3000', cleared DCT to the BLI VOR climb to and maintain 7000, expect higher east of Bellingham.

30. Instructor leaving 5000:

"Flight 007 the YYC airport has been closed indefinitely due to a power failure advise your intentions. Crew should contact dispatch and dispatch requests they return to YVR."

WX: Wind Calm, 1¼ fg, OVC005, 1º/1º, A29.80….. NDB DME 08R

31. YVR DEP 120.5:

Flight 007 cleared DCT the Victor NDB contact YVR ARR 120.8.

32. YVR ARR 120.8:

Flight 007 radar identified cleared DCT the Victor beacon maintain 3000 advise when able to copy hold clearance.

33. HOLD:

Flight 007 cleared present position DCT the Victor NDB DCT the ROSS fix to hold west on an inbound track of 080º, maintain 3000', EAT _____ A29.80.

34. Instructor:

FAIL STATION CAE _____ RSL – Depress Fail Station

35. Instructor in the hold:

[EQUIPMENT COOLING FAN FAIL] **LINE____** **LINE ____**

CAE 30-25 **RSL 21-7**

36. WX:

Calm, 1¼ fg, OVC005, 1º/1º, A29.80….. NDB DME 08R

37. INSTRUCTOR INSERT – LANDING SETUP

Approach	NDB DME	Surf Wind Dir/Spd	Calm
Runway	**08R**	QNH	
CAE RWY Code		**Ceiling (Feet)**	**520 ft**
RSL VIS/ILS		**VIS/ RVR**	**1¼sm / 6600 ft**
Type of Emergency:	None	**RVR (m)**	**2100m**

38. YVR ARR 120.8:

"Flight 007 hold clearance canceled cleared the NDB DME 08R approach contact YVR TWR 118.7"

39. TWR 118.7:

"Flight 007 call by the ROSS FIX final. By ROSS advise crew to expect a late landing clearance as a runway inspection is being carried out due to a bird strike."

40. At 50 feet:

"Flight 007 vehicle on the runway go-around contact YVR ARR 120.8"

41. Instructor 50' to 1200':

[FIRE FAIL ENGINE #2] **LINE____+ LINE____** **LINE ____**

CAE 34-7 + CAE 43-4 **RSL 24-4**

42. YVR ARR 120.8:

"Flight 007 check you declaring an emergency climb to and maintain 3000', turn right ___ radar vectors ILS Rwy 08R."

43. Instructor:

RESTORE STATION CAE _____ RSL – Depress Restore Station

44. WX:

Calm, ½ fg, OVC002, 1º/1º, A29.80…ILS 08R

45. INSTRUCTOR INSERT – LANDING SETUP

Approach	ILS DME	Surf Wind Dir/Spd	
Runway	**08R**	QNH	
CAE RWY Code		**Ceiling (Feet)**	**220 ft**
RSL VIS/ILS		**VIS/ RVR**	**½ sm / 2600 ft**
Type of Emergency:	Engine out	**RVR (m)**	**800m**

YVR ARR 120.8:

"Flight 007 cleared the ILS DME RWY 08R approach contact YVR TWR 118.7 at ROSS"

YVR TWR 118.7:

"Flight 007, RVR A2600 B2600, cleared to land runway 08R"

- END OF LEG 2

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APPENDIX F – SAMPLE BRIEFING GUIDE

Introductions (if applicable)

Check Documentation

- pilot licence, instrument rating, medical validation
- pilot training file (refer to section 4.2 for details)
- PPC Initial Application for Endorsement of a Rating (form 26-0083)

  Exam completion IATRA, ATPL, INRAT

  "KEST" knowledge, experience, skill, time (12 months)

Purpose of Check

- To renew PPC which is done as a crew on a normal flight (from….to…., a/c has flown…., first leg of new crew pairing)
- give candidates a copy of flight plan (as appropriate), and other information necessary for flight (NOTAMs, weight and balance info, etc.)
- approximate duration of the flight check

Mandatory Items

- pre-flight
- take-offs (including x-wind, min RVR, rejected and power loss)
- instrument procedures (including departure, enroute arrival and hold,
- steep turns, stalls, holding procedure (where required)
- 2 approaches – 1 precision and 1 non-precision (where possible/required)
- landings (including x-wind, rejected, single engine, manual and Cat II/Cat III if applicable)
- both PF and PNF duties be assessed (where applicable)
- abnormal – at least 2 x engine failures and 2 other system related failures

Weather

- assume the weather will be at or below minimums for approach being flown
- brief on system to use for ATIS information
- use of anti-ice (same as for normal line operations or as appropriate for sim capabilities)

Check Pilot Role

- in addition to administering the flight check, the ACP will act as ground servicing, ATC, dispatch, maintenance and I/C flight attendant as required
- During a monitor of the simulator portion of a check flight, the CASI will pass all requests through the ACP

Crew Coordination

- aircraft is to be flown in accordance with the AOM, FOM, SOP requirements and within acceptable tolerances (refer section 10.5)
- normal crew coordination and use of SOPs are expected at all times (work as a team)
- the PF will be expected to initiate the necessary response to any event and direct any required follow-up action – the PNF should **assist** but **not lead**
- any situation caused by the candidate's incorrect or inappropriate action or response **will not** be corrected by the check pilot

General

- when required, transfer of control should be done in a positive manner by using the statement "I have control/you have control"
- use of headsets, shoulder harness, O2 masks, smoke goggles, and radios/frequencies will be the same as normal line operations
- use of auto-flight systems under FMS guidance and/or auto-pilot use is as per normal line operations

Abnormals / Emergency Procedures

- multiple unrelated failures will not be introduced, but the candidates must be prepared to take corrective action on related failures such as loss of hydraulics/electrics on a failed engine
- assume **any** fault is real unless advised otherwise
- normally, faults will be carried through to landing unless they are corrected through checklist procedures or the re-setting of circuit breakers
- use of the **MEL** will be the same as normal line operations

Stress Clearly

- ensure that candidates clearly understand all instructions, particularly ATC instructions/clearances
- encourage candidates to **ask/clarify** any uncertainties
- candidates should not be in doubt or put in a position where they are required to make assumptions
- advise the candidates to take their time **(Do Not Rush)**
- if an error is made, correct it if able. **Do not dwell on it** or let it impact on the rest of the flight
- emphasize the importance of **error management** (i.e., humans will make errors from time to time – what is most important is that the errors are identified and corrected in a timely manner)

Finally

- brief the candidates on any simulator differences where known (part of the script for scripted PPCs)
- brief the candidates on all known simulator faults
- brief on the actions to take in event of a real emergency or malfunction such as fire/smoke, runaway motion system or hydro failure/lightning strike, etc.

APPENDIX G – ACP MANUAL GRADING GUIDE

Threat and Error Management

6 ACP Manual Elements	Element Description
Aircraft Handling	Hands and Feet Flying Skill
Technical Skills and Knowledge	Practical Understanding, Following SOPs/Rules/Regulations
Cooperation	Team Building, Conflict Resolution, Considering and Supporting Others
Leadership and Managerial Skills	Use of Authority, Assertiveness, Maintaining Standards, Planning and Coordinating, Workload Management
Situational Awareness	System, Environmental Awareness and Anticipation

Safety of Flight

1- 4 Grading Scale

Below Standard (1)
Basic Standard (2)
Standard (3)
Above Standard (4)

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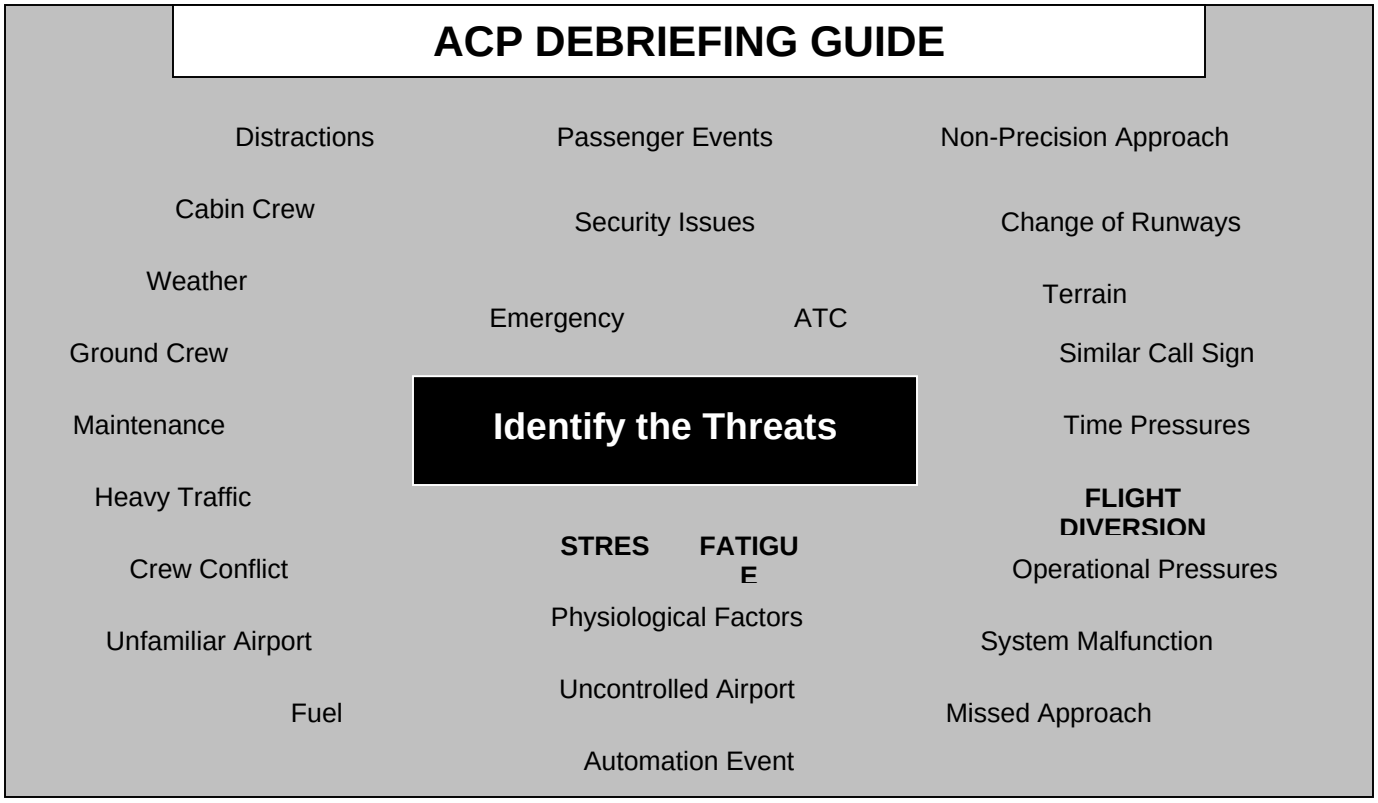
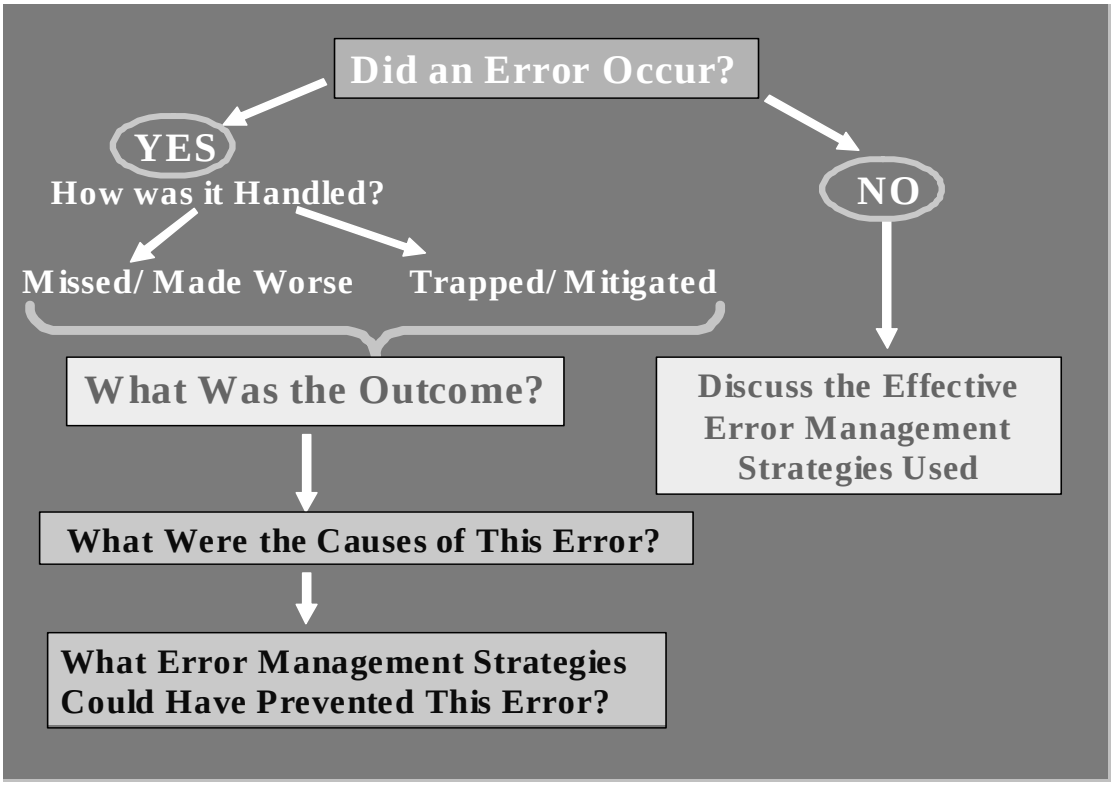
APPENDIX H – ACP DEBRIEFING GUIDE





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APPENDIX I – C-A-L DEBRIEFING GUIDELINE

ACPs should use the CRM-Analysis-Line Flying (C-A-L) debriefing method developed by the NASA/AMES Research Centre with funding from the FAA. This debriefing method ensures participation by the pilot/crew and in-depth review and analysis of the threats, errors and error management. While the main goal of this debriefing method is to ensure that underlying CRM issues are adequately covered, it is equally appropriate for technical issues. Just substitute the technical issue for the CRM issue. Use the same techniques in this debriefing method for both weak and excellent performances. However, while TC expects ACPs to employ this method for debriefing good and weak sequences, it is inappropriate and not to be used for failed flight tests.

Self-debriefing by the crew is most valuable where there are several contributing factors such as weak CRM, poor techniques, SOP deviations or errors in use of automation, aircraft handling or technical knowledge. It is an excellent tool for discussing the pilot/crew's threat and error management technique. However, it is better to use a traditional debriefing method for minor errors, instead of the C-A-L method.

ACPs should use Appendix H – *ACP Debriefing Guide* in conjunction with the C-A-L method. The two combined form a good framework for identifying threats and errors, which will lead the ACP to a focused discussion. As CRM skills are frequently the underlying causes of poor and excellent performance, it is imperative that the ACP discusses these skills in detail during the debriefing. The information contained in the ACP Manual section 3.81 *Understanding the Four Point Marking Scale*, and the associated document found at Appendix J – *Using the ACP Manual Elements*, will help the ACP identify the CRM skills in question.

ACPs must keep in mind that the goal of the debriefing is to assist the pilots in reaching a higher standard, promote learning that will help them better perform their flying duties. Each debriefing topic using the C-A-L method should finish with a discussion concerning how the issue relates to line operations and how to avoid a similar error on the line.

THE C-A-L METHOD:

CRM

- Tie CRM concepts and techniques to operational issues
- Put CRM into practice
- Crew discussion of the flight test should be interactive

ANALYSIS AND EVALUATION

- How effective was the management of the situation?
  - What went well, and why?
  - What could be improved, and how?
- Interactively analyze the situation confronted:
  - What happened?
  - How was it managed (include CRM techniques utilized)?
  - Why was it managed that way?

LINE OPERATIONS – APPLYING LESSONS LEARNED

- Discuss how performance and associated CRM issues relate to line operations
- Discuss related line incidents that illustrate CRM issues
- Discuss how to apply flight test success to line operations
- Discuss how things could have been done differently to improve the outcome
  - What CRM techniques could have helped?
  - How could you turn areas of weakness into strengths?
- What can be done to prevent or manage similar situations on the line?

For a more detailed review of the C-A-L method and the facilitation techniques listed below, see the following website: http://ntl.bts.gov/lib/000/900/962/Final_Training_TM.pdf

FACILITATION BASICS:

The points listed below are only suggested guidance for the ACP. TC expects that the ACP will develop a technique best suited to his or her personality and operational requirements.

- Keep discussion crew-centered
- Encourage crewmembers to do most of the talking
- Don't lecture or make long speeches
- Participation encourages adult learning
- Promote transfer of learning to line flying
- Balance dual role of ACP and facilitator (ensure that all of your points are covered)
- Reinforce good crew performance following crew analysis
- Use facilitation to meet debriefing objectives
- Ensure the crew analyzes performance and discusses how to do better
- Adapt facilitation to level of crew experience and performance to meet crew needs
- Ensure that both CRM and technical issues are discussed

INTRODUCTION AND FORMAT:

- Clarify your role and set expectations for crew participation
- Provide rationale for the use of facilitation debriefing
- Explain the format that will be used
- Explain that all critical areas will be covered

FACILITATION TECHNIQUES:

- Use questions to promote in-depth crew participation
- Re-direct crew comments and questions back to them
- Adjust your facilitation to the level needed to engage crew to the maximum extent
- Ask questions that begin with what, how and why (open-ended questions)
- Ask quiet crewmembers to comment on what other crewmembers said
- Re-word questions instead of giving the answer
- Use silence/pauses to elicit thoughtful crew responses
- Discuss positive as well as negative performance when able
- Get crew to talk about what could be improved and how
- Ask follow-up questions that require in-depth analysis
- Ask crew to analyze the reasoning behind their decisions
- Have crew discuss how they can apply what they have learned to line operations
- DO NOT give your own analysis before the crew have given theirs
- DO NOT interrupt the crew or leave a topic while they still want to talk
- DO NOT lecture or make it instructor-centered
- DO NOT give the impression that only your views are important

SUMMARY:

Briefly summarize the debrief

Reiterate important issues and tie flight test events to line operations

APPENDIX J – USING THE ACP MANUAL ELEMENTS

ELEMENT	SUB-ELEMENT	GOOD PRACTICE	POOR PRACTICE
AIRCRAFT HANDLING	**Quality and Accuracy**	- Smooth use of controls; control input appropriat - Using approved techniques - Action taken when deviations occur - Within tolerances	- Unable to fly aircraft smoothly and accurately - Not always using the best techniques - Overcorrecting and/or reacting late to deviations - Outside tolerances; rough use of controls - Unable to easily control aircraft during abnormal or emergency situations
TECHNICAL SKILLS AND KNOWLEDGE	**Practical Understanding**	- Practical use and understanding of aircraft systems, automation, data, charts, weather and physiological factors - Competency that gets the job done safely and efficiently	- Lacking in-depth understanding of aircraft systems, automation, data, charts, weather and physiological factors - Lack of knowledge detracts from outcome - Poor competency has potential to affect safety
	Following SOPs/Rules/ Regulations	- Knowledge of all applicable SOPs, rules and regulations - Follows all SOPs, rules and regulations - Advises other crewmembers and takes precautions when going outside SOPs	- Not aware of some SOPs, rules or regulations - Does not follow all SOPs, rules or regulations - When deviating from SOPs does not consider potential problems or adverse outcomes or advise other crewmembers
COOPERATION	**Team Building and Maintaining**	- Establishes atmosphere for open communication - Encourages input and feedback; does not compete with others	- Blocks open communication - Keeps barriers between crewmembers - Competes with others
	Consideration of Others	- Takes notice of suggestions of other CM even if he or she does not agree - Takes condition of other CM into account - Gives personal feedback	- Ignores suggestions of other CM - Does not take into account condition of other CM - Shows no reaction to other CM
	Support of Others	- Helps other CM in demanding situation - Offers assistance	- Hesitant to help other CM in demanding situations - Does not offer assistance
	Conflict Solving	- Keeps calm in interpersonal conflicts - Suggests conflict solutions - Concentrates on what is right rather than who is wrong	- Overreacts in interpersonal conflicts - Sticks to own position without considering a compromise - Accuses other CM of making errors

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LEADERSHIP AND MANAGERIAL SKILLS (Con't)	**Providing and Maintaining Standards**	- Subscribes to SOPs, makes sure SOP compliance in crew - Intervenes if task completion deviates from standards - With crew being consulted, deviates from standards if necessary - Demonstrates will to achieve top performance	- Does not comply to SOPs; does not monitor crew for compliance - Does not intervene in case of deviations - Deviation from standards are neither announced nor consulted - Does not care for performance effectiveness
	Planning and Coordination	- Encourages crew participation in planning and task completion - Plan is clearly stated and confirmed - With crew being consulted, changes plan if necessary - Clearly states goals and boundaries for task completion	- Plans only for him/herself, crew not involved - Intentions not stated or confirmed - Changes plan without informing crew or follows plan blindly - Goals and boundaries remain unclear
	Workload Management	- Distributes tasks among the crew, checks and corrects appropriately - Secondary operational tasks are prioritized to retain sufficient resources for primary flight duties - Allots adequate time to complete tasks - Notifies signs of stress and fatigue	- Flying "solo" without other crewmembers involved - Secondary operational tasks interfere with primary flight duties - Workload is increased through inadequate planning - Ignores signs of stress and fatigue
SITUATIONAL AWARENESS	**System Awareness**	- Monitors and reports changes in systems' states - Acknowledges entries and changes to systems	- Does not ask for updates - Does not signal awareness of changing systems
	Environmental Awareness	- Collects information about environment (position, weather and traffic) - Shares key information about environment with crew - Contacts outside resources when needed (to maintain situational awareness)	- Does not enquire about environmental changes - Does not comment on relevant environmental factors, or is surprised by them - Operates a "closed shop"
	Awareness of Time and Anticipation of Future Events	- Discusses time constraints with crew - Discusses contingency strategies - Identifies possible future problems	- Does not set priorities with respect to time limits - Does not discuss relationship between past events and present/future
DECISION MAKING	**Problem Definition / Diagnosis**	- Gathers information to identify problem - Reviews casual factors with other crew members	- Nature of problem not stated or failure to diagnose - No discussion of probable causes
	Option Generation	- States alternative options - Asks crew members for options	- Does not search for information - Does not ask crewmembers for alternatives
	Risk Assessment	- Considers and shares estimated risk of alternative options - Talks about possible risks for action in terms of crew limits	- Inadequate discussion of limiting factors with crew - No consideration of limiting factors
	Option Selection	- Confirms and states selected option / agreed action	- Does not inform crew of decision path being taken
	Outcome Review	- Checks outcome against plan	- Fails to check selected outcome against goal