

Commercial Pilot

PLAR Candidate Guide

Prior Learning Assessment and
Recognition (PLAR)



Tomorrow
in the making.

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Saskatchewan Polytechnic

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The Commercial Pilot program is dedicated to removing barriers and broadening the access to programs at Saskatchewan Polytechnic. We believe that adults acquire knowledge and skills through life and work experience that may align with courses within our programs.

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Why consider a PLAR assessment?

Prior learning assessment and recognition (PLAR) refers to the combination of flexible ways of evaluating people's lifelong learning, both formal and informal against a set of established standards. Saskatchewan Polytechnic recognizes prior learning in the following ways:

- Previous formal learning from a recognized post-secondary education institution through transfer credit.
- Previous training or accreditation from other sources, informal learning, and experiential learning through a comprehensive prior learning and recognition process.

Through the PLAR process, you can receive academic credit for the Commercial Pilot Diploma without relocating to complete program courses.

PLAR options for the Commercial Pilot Diploma

The Commercial Pilot program prepares the student pilot for a career in commercial aviation. PLAR allows you to earn credit for relevant knowledge and skills gained through education, licenses and ratings achieved, and employment experience as a commercial pilot.

Credit for the complete Commercial Pilot Diploma may be granted through the Prior Learning Assessment and Recognition (PLAR) process. This guide explains the process, eligibility criteria, and assessment tools. PLAR credit in this program is not available for individual courses, only for the complete diploma.

Background

Pilots may obtain a commercial license through a certified flight school in Canada. The Group 1 Instrument rating (multi-engine) can be added to the CPL through a certified flight school in Canada.

The Saskatchewan Polytechnic Commercial Pilot diploma program requires the commercial license with Group 1 Instrument rating along with ground school courses to support an entry level career as a commercial pilot on single-engine or multi-engine aircraft.

There is a need to recognize the knowledge and skills that experienced commercial pilots have acquired through previous training, licensing, workplace and experiential learning in order to provide a means of obtaining educational credentials.

Following an equivalency review, the Commercial Pilot diploma program has established conditions for eligibility, and developed a PLAR evaluation process and assessment methods to evaluate prior skill and knowledge in order to provide access to the diploma.

Are you eligible

You may be eligible for program-level PLAR certification if you meet all of the following eligibility criteria:

- Currently hold, or have held, the following licenses and ratings:
 - A Canadian CPL and Group 1 Instrument rating
 - Or, a Canadian ATPL
- Are currently, or have been employed as a commercial pilot
- Have a minimum of 1000 hrs. flying experience
- Have been recommended by a Saskatchewan Polytechnic Commercial Pilot diploma PLAR representative following an interview
- Are registered in the program and have paid the applicable application fee

How many courses can be challenged through PLAR in the Commercial Pilot program?

The entire Commercial Pilot program can be challenged through PLAR. Credit for 11 courses is based on an equivalency review of pilot licensing requirements and validation of your credentials. Credit for the remaining 8 courses is based on assessing your knowledge and skills related to course learning outcomes. You must successfully complete credential validation and academic assessment for all courses as a comprehensive process in order to qualify for the diploma.

Which courses are PLAR-ready?

Commercial Pilot Program Profile			
COURSE CODE	COURSE NAME	PLAR Challenge(s) available through course-specific assessment	PLAR Challenge(s) available through validation of licensing
AVIA 180	Theory of Flight		✓
AVIA 181	Navigation		✓
AVIA 182	Meteorology 1		✓
AVIA 183	Flight Operations 1	✓	
AVIA 184	Canadian Aviation Regulations 1	✓	
AVIA 191	Cultural Awareness and Aviation History	✓	
COMM 393	Communications 1	✓	
ENGN 180	Aircraft Engines		✓
INST 185	Aircraft Instruments		✓
MATH 389	Mathematics	✓	
PHYS 185	Physics	✓	
AVIA 186	Meteorology 2		✓
AVIA 192	Advanced Aircraft Systems		✓
AVIA 193	Flight Operations 2		✓
AVIA 280	Canadian Aviation Regulations 2		✓
BUS 183	Aviation Business	✓	
ELTR 183	Aircraft Pilot Electronics	✓	
HUMR 187	Human Factors and Crew Resource Management		✓
INST 186	Instrument Flying		✓

For assistance call the Saskatchewan Polytechnic Contact Centre toll-free at 1-866-467-4278 and ask to speak with the Program Head for the Commercial Pilot diploma program.

Is PLAR available at any time of the year?

PLAR challenges are currently being offered from September to June. Please contact the Commercial Pilot program for more information.

Is it *easier* to challenge a course through PLAR or take the course?

Neither is easier. By using PLAR you may reduce the repetition of studying information that you already know. The PLAR process allows you to demonstrate knowledge you already have.

PLAR is not an easy way to certification, rather a “different” way to obtain certification. Your personal level of skill and experience will dictate which courses you choose to challenge. The self-audit section found later in this guide will help you decide if you have a good match of skill and knowledge for a specific course.

If I live out of town, do I have to travel to a main campus to do PLAR?

There will be times that you will need to meet with the program on campus. However, we will try to keep travel to a minimum.

What if I have a disability & need equity accommodations?

At Saskatchewan Polytechnic, we understand that sometimes services must be provided to students in a variety of ways to achieve the goals of fair representation. Therefore, the range of services provided for Education Equity students is as diverse as the needs of those students. We strive for equity (not uniformity) and provide varied services for students with differing needs. If more information is required, please contact a Saskatchewan Polytechnic counsellor at a campus closest to you or refer to the Saskatchewan Polytechnic website:
<http://saskpolytech.ca/student-services/support/counselling-services.aspx>

Are there other methods to gain Saskatchewan Polytechnic course credits for prior learning?

Transfer Credit

Yes, Saskatchewan Polytechnic will grant credit for previous training that is similar in content, objectives, and evaluation standards to Saskatchewan Polytechnic training. Transfer of credit is different from the PLAR process. Transfer Credit guidelines may be found at:
<http://saskpolytech.ca/admissions/resources/transfer-credit.aspx>

It is the student’s responsibility to check with Registration Services for specific campus procedures on this policy. For specific information and guidelines regarding transfer of credit, contact a [Saskatchewan Polytechnic educational counsellor](#).

Equivalency Credit

Equivalency credit refers to the application of credit you may have earned in a previously taken Saskatchewan Polytechnic course to your current Saskatchewan Polytechnic course. Apply at registration services for *equivalency credit*. This process should also be completed prior to your PLAR challenge. If these credits cannot be used for *equivalency credit*, you may use these accredited courses as part of your evidence for your PLAR challenge.

Contact us

If more information is required, please contact a designated PLAR counsellor at a campus closest to you.

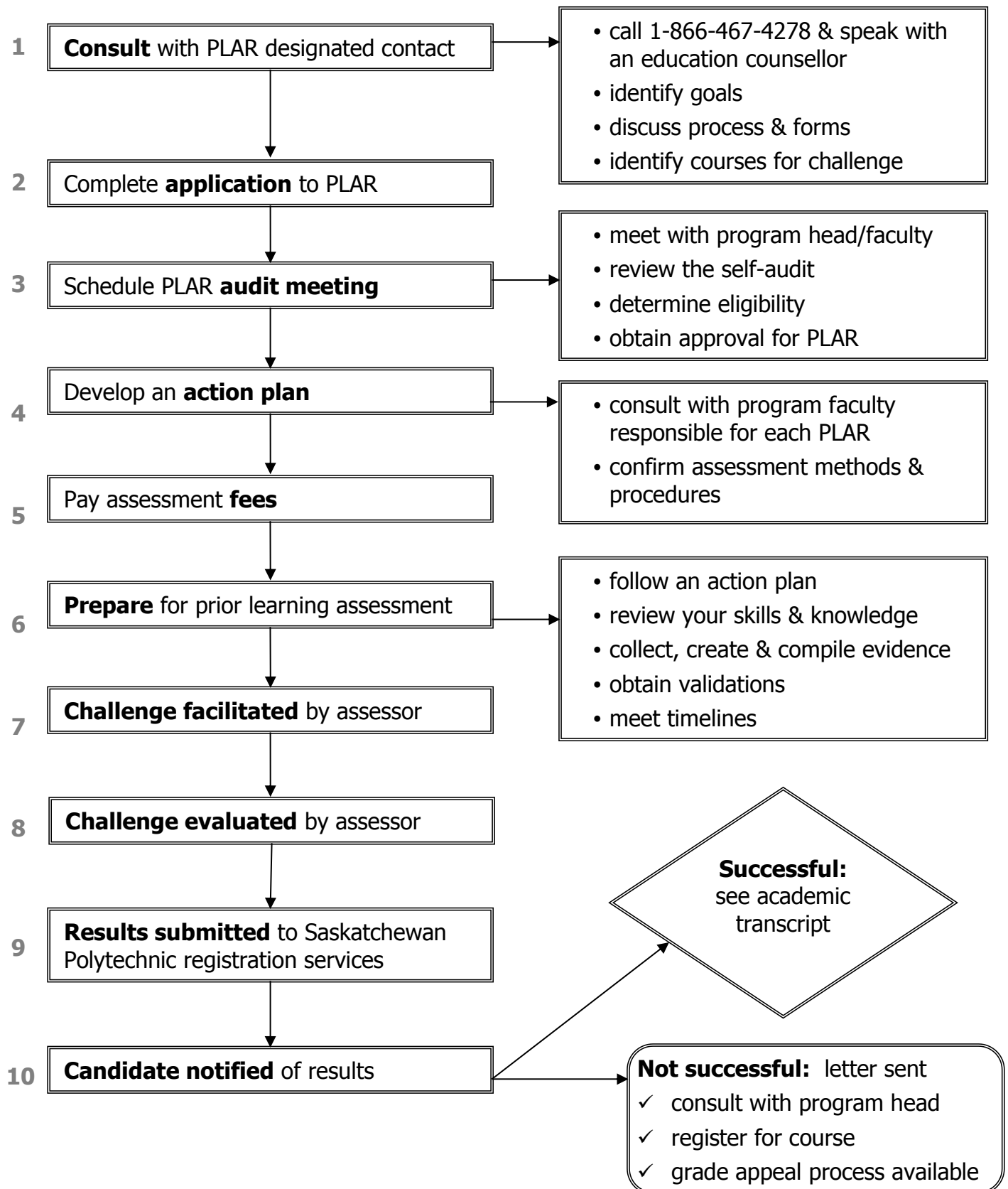
Saskatchewan Polytechnic in Moose Jaw
Counselling Services, Room 2.203
306-691-8311 or 306-691-8310
MooseJawCounselling@saskpolytech.ca

Saskatchewan Polytechnic in Prince Albert
Counselling Services, Room F203 (Technical Centre)
306-765-1611
PrinceAlbert.Counselling@saskpolytech.ca

Saskatchewan Polytechnic in Regina
Counselling Services, Room 228
306-775-7436
ReginaCounselling@saskpolytech.ca

Saskatchewan Polytechnic in Saskatoon
Counselling Services, Room 114
306-659-4050
SaskatoonCounselling@saskpolytech.ca

Prior Learning Assessment and Recognition process



Guiding principles for developing a PLAR evidence file

In order to be granted PLAR credit for courses in the Commercial Pilot diploma program, the candidate must submit proof that he/she has met the criteria for each class. This requires an evidence file of documentation indicating the necessary skills and knowledge have been met.

A consultation meeting is required with the PLAR designated contact before you begin to gather evidence. ([Step 1 – PLAR Process](#))

Equivalency has been determined for the following courses based on documentation of licensing. No further evidence for these courses is required.

- ✓ Theory of Flight (AVIA 180)
- ✓ Navigation (AVIA 181)
- ✓ Meteorology 1 (AVIA 182)
- ✓ Aircraft Engines (ENGN 180)
- ✓ Aircraft Instruments (INST 185)
- ✓ Meteorology 2 (AVIA 186)
- ✓ Advanced Aircraft Systems (AVIA 192)
- ✓ Flight Operations 2 (AVIA 193)
- ✓ Canadian Aviation Regulations (CARs 2) (AVIA 280)
- ✓ Instrument Flying (INST 186)
- ✓ Human Factors/CRM (HUMR 187)

Additional evidence is required for the following remaining courses.

- ✓ Flight Operations 1 (AVIA 183)
- ✓ Canadian Aviation Regulations (CARs 1) (AVIA 184)
- ✓ Cultural Awareness and Aviation History (AVIA 191)
- ✓ Communications 1 (COMM 393)
- ✓ Aircraft Pilot Electronics (ELTR 183)
- ✓ Mathematics (MATH 389)
- ✓ Physics (PHYS 185)
- ✓ Aviation Business (BUS 183)

For more details on the specific evidence required for each course, see [PLAR Self-audits](#).

Required documentation to include in your evidence file:

- Copies of all aviation licenses, and ratings. Must include CPL and Group 1 Instrument rating, or ATPL.
- A current resume.
Include details of other employment, community or volunteer work that may be relevant.
- Completion of required [self-audits](#). You must submit evidence that you have met the knowledge/skills requirements for each of the courses. Evidence is summarized for each course and may include any of the following:
 - Challenge assignments
 - Challenge exams
 - Interviews
- Work samples
 - Copies of relevant logbook pages
- Completion of [Appendix A – Employment Audit and Checklist](#).
Note: You must include a completed Employment Audit from all applicable employers. Please make copies of form as needed.
- Copies of relevant logbook pages.
- Evidence of completion of formal training (transcript required*), classes, workshops, seminars, company or recurrent aircraft type training, and other applicable courses. (Copies of course outlines, learning outcomes, and/or a certificate of attendance must be provided.)

Note: Following an assessor’s review of the submitted evidence file, a follow up interview must be required to clarify evidence.

How long will it take to prepare evidence for PLAR?

Since the requirements are different for each course, and each candidate has different experiences, the amount of time it takes to prepare your evidence will vary.

Steps to complete a self-audit

1. Read through the levels of competence as listed below.

Mastery:	I am able to demonstrate the learning outcome well enough to teach it to someone else.
Competent:	I can work independently to apply the learning outcome.
Functional:	I need some assistance in using the outcome.
Learning:	I am developing skills and knowledge for this area.
None:	I have no experience with the outcome.

Learning outcomes

For each learning outcome listed, please self-evaluate your competency levels and record in the appropriate column for each self-audit.

2. Take a few minutes and read through the following self-audit for each course you are interested in as a PLAR candidate.
3. Check your level of competence as you read through each of the learning outcomes for each course. The information will help you in your decision to continue with your PLAR application.
4. In order to be successful in a PLAR assessment, your abilities must be at the competent or mastery level for the majority of the learning outcomes. Some things to consider when determining your level of competence are:
 - How do I currently use this outcome?
 - What previous training have I had in this outcome: workshops, courses, on-the-job?
 - What personal development or volunteer experience do I have in this area?

Be prepared to explain the reason you chose this level if asked by an assessor.

5. Bring the completed self-audit to a consultation meeting with the program head or faculty member in [step 3 – PLAR process](#) of the candidate process for prior learning assessment.

Self-audit guide(s)

AVIA 183 – Flight Operations 1

You will study aircraft performance and operational procedures.

Credit unit(s): 3.0

AVIA 183 – Flight Operations 1 Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Plan a variety of cross-country flights.					
2. Differentiate dispatch and flight following procedures.					
3. Assess aircraft in a variety of flight operations.					
4. Use aircraft performance charts.					
5. Perform weight and balance calculations.					
6. Prepare documentation for private and commercial cross-border flights.					
▪ Plan VFR cross-country flight to USA					
▪ Locate FAA and TC trans-border information on websites					
▪ List required FAA and TC documents					
▪ List required Customs and Immigration documents					
▪ Prepare ICAO flight plan					
7. Choose appropriate de-ice procedures.					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence file

Submit a log book entry to provide evidence you have flown a cross-border flight as pilot-in-command, or first officer.

OR

2. Challenge exam

Assignment: Demonstrate competency for cross-border flights by documenting processes based on a scenario.

AVIA 184 – Canadian Aviation Regulations (CARs 1)

You will study the Canadian Aviation Regulations (CARs) with emphasis on Visual Flight Rules (VFR) procedures and requirements.

Credit unit(s): 1.0

AVIA 184 – Canadian Aviation Regulations (CARs 1)					
Mastery: I am able to demonstrate it well enough to teach it to someone else.	Mastery	Competent	Functional	Learning	None
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Interpret the Aeronautics Act and CARs.					
2. Identify aerodrome ground traffic control procedures.					
3. Analyze flight procedures in Canadian airspace.					
4. Distinguish USA and Canadian airspace systems and procedures.					
▪ Access FAA website					
▪ Compare USA and Canadian airspace classifications					
▪ Compare FAA/CARs VFR procedures					
▪ Compare FAA/Canadian Customs and Immigration procedures for international flights					
5. Determine validity of aircraft documents.					
6. Discuss implications of CARs violations.					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence file

Submit a log book entry to provide evidence you have flown a cross-border flight as pilot-in-command, or first officer.

OR

Assignment: Demonstrate competency for cross-border flights by documenting processes based on a scenario.

AVIA 191 – Cultural Awareness

You will examine Canadian society from a sociological perspective. The elements of culture and differences between cultures will be discussed. Social stratification in Canadian culture and how the stratification impacts various cultural groups will also be examined. Other topics include race, ethnicity and prejudice. Barriers to intercultural communication will also be included.

Credit unit(s): 2.0

AVIA 191 – Cultural Awareness Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Describe the basic elements of sociology.					
<ul style="list-style-type: none"> ▪ Explain the sociological perspective 					
<ul style="list-style-type: none"> ▪ Describe the sociological paradigms of structural functionalism, social conflict, and symbolic interactionism 					
2. Discuss the elements of culture.					
<ul style="list-style-type: none"> ▪ Identify the components of culture 					
<ul style="list-style-type: none"> ▪ Outline dimensions used to describe differences in cultural groups 					
3. Describe the impact of power and privilege on Aboriginal people in Canadian society.					
<ul style="list-style-type: none"> ▪ Examine social stratification in Canadian society 					
<ul style="list-style-type: none"> ▪ Discuss inequality in Canada 					
<ul style="list-style-type: none"> ▪ Describe the social classes in Canada 					
<ul style="list-style-type: none"> ▪ Define ascribed and achieved status 					
<ul style="list-style-type: none"> ▪ Use the Indian Policy Development Process as an example of use of power and privilege 					
<ul style="list-style-type: none"> ▪ Discuss the Tribal origins 					
4. Examine the social meaning of race and ethnicity.					
<ul style="list-style-type: none"> ▪ Identify the concepts of race, ethnicity and minorities 					
<ul style="list-style-type: none"> ▪ Describe the theories of prejudice 					
<ul style="list-style-type: none"> ▪ Discuss institutional prejudice and discrimination 					
<ul style="list-style-type: none"> ▪ Describe patterns of interaction between majority and minority group members 					
<ul style="list-style-type: none"> ▪ Describe racial and ethnic groups which comprise Canadian society 					
<ul style="list-style-type: none"> ▪ Discuss interpersonal communication with various cultural groups 					
5. Examine cultural diversity in Canada.					

AVIA 191 – Cultural Awareness		Mastery	Competent	Functional	Learning	None
Mastery:	I am able to demonstrate it well enough to teach it to someone else.					
Competent:	I can work independently to apply the outcome.					
Functional:	I need some assistance in using the outcome.					
Learning:	I am developing skills and knowledge for this area.					
None:	I have no experience with the outcome.					
▪ Discuss the changes in ethnic diversity in Canadian society						
▪ Explore a variety of ethnic groups that exist in Canadian society						
▪ Discuss interpersonal communication with various cultural groups						

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Challenge Exam

Assignment demonstrating competency through response to case study scenarios

AND/OR

2. Evidence file

Evidence of completion of workplace training in cultural awareness or sensitivity training, provided in Employment Audit and Checklist ([Appendix A](#))

AND/OR

Evidence of course completion in sociology, native studies or other related fields, with course outlines provided

AND/OR

3. Structured interview

Resources

A PLAR candidate may find it beneficial to review the following material in preparation for the assessment. The resources may be referred to, but are not required.

Johnsrude, S. *Sociology: The intersections collection for CPU*. Current edition available through the Saskatchewan Polytechnic bookstore.

COMM 393 – Communications 1

You will develop the oral and written skills needed to communicate effectively in a variety of situations. You will also demonstrate appropriate customer service skills and use job search skills.

Credit unit(s): 3.0

COMM 393 – Communications 1 Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Use job search skills.					
2. Apply job related oral and interpersonal communication.					
▪ Describe characteristics of effective communicators					
▪ Discuss factors influencing perception and common perceptual errors					
▪ Explain principles of verbal and nonverbal communication					
▪ Describe elements of effective and ineffective listening					
▪ Identify attitudes and language which may provoke defensiveness					
▪ Explain conflict styles and conflict management					
▪ Discuss effective oral presentation skills					
▪ Deliver an oral presentation					
3. Apply job related written information.					
▪ Explain the characteristics of effective written workplace communication					
▪ Discuss format for electronic correspondence					
▪ Prepare workplace email messages					
▪ Discuss incident reports					
▪ Prepare an incident report					
▪ Discuss memo format					
▪ Prepare a memo					
4. Demonstrate customer service skills.					
▪ Discuss quality customer service					
▪ Identify the qualities of a good customer service employee					
▪ Identify correct telephone customer service skills					
▪ Identify interpersonal skills used in delivering quality customer service					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence file

Completion of [Employment Audit and Checklist \(Appendix A\)](#)

AND/OR

Evidence of successful completion of a communications, or customer relations course

AND/OR

Evidence of prepared personal resume, cover letter, and personal interview

Resources

A PLAR candidate may find it beneficial to review the following material in preparation for the assessment. The resources may be referred to, but are not required.

Adler, R.B., Towne, N., Rolls, J.A., & Procter, R.F. (2012) *Looking out, looking in (Canadian Edition)*. Nelson College. (Or recent edition)

CARs – Transport Canada website

ELTR 183 – Aircraft Pilot Electronics

You will apply electrical theory to the generation and distribution of electricity to aircraft systems. You will also examine various avionics and electrical systems including EFIS. Troubleshooting electrical problems and appropriate emergency procedures will also be discussed.

Credit unit(s): 3.0

ELTR 183 – Aircraft Pilot Electronics Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Distinguish properties of AC and DC generation and current.					
▪ Describe the four faults of an electrical circuit					
▪ Compare structure and function of AC and DC generators					
▪ State factors producing resistance					
▪ Explain the relationship of current flow and heat production					
▪ Compare uses of ac/dc					
▪ Explain rectification					
2. Interpret Pilot Operating Handbook (POH) diagrams of electrical distribution.					
▪ Identify components of electrical systems					
▪ Discuss voltages, amperages, and resistances of electrical components					
▪ Compare electrical systems of various aircrafts					
▪ Explain emergency checklist procedures					
3. Apply pre-flight, in-flight and emergency checklist procedures relating to electrical problems.					
▪ Determine seriousness of electrical problems					
▪ Analyze seriousness of electrical problems					
4. Distinguish useful redundancies in AC electrical systems to troubleshoot atypical problems.					
▪ Compare POH information of different AC types					
▪ Distinguish common and atypical electrical problems					
5. Identify sources of electrical fires.					
▪ Identify markers of electrical fires					
▪ Explain instrument indications of potential fire					

ELTR 183 – Aircraft Pilot Electronics		Mastery	Competent	Functional	Learning	None
Mastery:	I am able to demonstrate it well enough to teach it to someone else.					
Competent:	I can work independently to apply the outcome.					
Functional:	I need some assistance in using the outcome.					
Learning:	I am developing skills and knowledge for this area.					
None:	I have no experience with the outcome.					
<ul style="list-style-type: none"> ▪ Explain POH procedures in identifying fire sources 						
<ul style="list-style-type: none"> ▪ Select fire control techniques to electrical fires 						

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence file

Evidence of completion of flight safety training, company training on aircraft system electricity, or similar training with a course outline being provided

OR

Evidence of a current or previously held PPC (Pilot Proficiency certificate)

2. Challenge exam

MATH 389 – Mathematics

You will study the mathematics, algebra and geometry needed to solve various aviation-related mathematical and physics problems.

Credit unit(s): 3.0

MATH 389 – Mathematics Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Solve a variety of mathematical problems.					
<ul style="list-style-type: none"> ▪ Calculate sums, differences, products, quotients, order of operation, units of measurement 					
<ul style="list-style-type: none"> ▪ Calculate ratios, percentages, proportions 					
<ul style="list-style-type: none"> ▪ Solve algebraic equations 					
<ul style="list-style-type: none"> ▪ Solve geometric and trigonometric problems 					
2. Solve in-flight mathematical problems using calculators and mental techniques.					
<ul style="list-style-type: none"> ▪ Perform mathematical calculations using approximations, estimates, and significant figures 					
<ul style="list-style-type: none"> ▪ Calculate descent rates, ground speed, distances, time 					
3. Solve various aviation-related mathematical problems.					
<ul style="list-style-type: none"> ▪ Compute interpolations using aircraft performance charts 					
<ul style="list-style-type: none"> ▪ Calculate cloud bases, freezing levels, temperatures, lapse rates 					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Challenge exam

OR

Assignment demonstrating competency through completing various aviation-related scenarios.

AND/OR

2. Evidence file

Evidence of mathematics and/or aviation-related courses, with course outlines supplied

Resources

A PLAR candidate may find it beneficial to review the following material in preparation for the assessment. The resources may be referred to, but are not required.

Dreska, N.S., & Wiesenthal, L. (1992). *Physics for aviation*. Jeppesen Sanderson.

Dole, C.E. (1991). *Mathematics and physics for aviation personnel*. Jeppesen Sanderson.

PHYS 185 – Physics

You will study the principles of basic physics with emphasis on various aviation topics including motion and energy.

Credit unit(s): 3.0

PHYS 185 – Physics	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.					
1. Examine basic physics concepts.					
<ul style="list-style-type: none"> Examine concepts of matter including weight and mass, density, specific gravity, pressure, temperature and gravitation 					
<ul style="list-style-type: none"> Examine properties of matter including sound transmission, heat, thermal expansion, stress and strain 					
<ul style="list-style-type: none"> Compare forms of energy – potential, kinetic, gravitational 					
2. Discuss physical properties of the atmosphere.					
<ul style="list-style-type: none"> Describe the composition of the atmosphere including International Standard Atmosphere (ISA) 					
<ul style="list-style-type: none"> Discuss atmospheric pressure concepts 					
<ul style="list-style-type: none"> Discuss the gas laws 					
3. Discuss electrical energy concepts.					
<ul style="list-style-type: none"> Explain voltage, resistance, potential difference, electromagnetic spectrum, wave theory, Doppler effect 					
<ul style="list-style-type: none"> Discuss the production and storage of electricity including currents and circuits 					
4. Discuss the concepts of dynamics and aerodynamics.					
<ul style="list-style-type: none"> Explain force, motion and acceleration 					
<ul style="list-style-type: none"> Discuss Newton’s Laws of Motion 					
<ul style="list-style-type: none"> Discuss momentum and conservation of energy 					
<ul style="list-style-type: none"> Review the equation of lift and Bernoulli’s principle 					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Challenge exam

OR

Assignment demonstrating competency through completing various aviation-related scenarios

AND/OR

2. Evidence file

Evidence of physics and/or aviation-related courses, with course outlines supplied

Resources

A PLAR candidate may find it beneficial to review the following material in preparation for the assessment. The resources may be referred to, but are not required.

Dreska, N.S., & Wiesenthal, L. (1992). *Physics for aviation*. Jeppeson Sanderson.

Dole, C.E. (1991). *Mathematics and physics for aviation personnel*. Jeppeson Sanderson.

BUS 183 – Aviation Business

You will acquire essential business knowledge that will contribute to the success of the flight operation that employs you. The course content includes commercial aviation in the business world, business plans and marketing.

Credit unit(s): 2.0

BUS 183 – Aviation Business	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else.					
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Describe commercial aviation in the business world.					
▪ Describe the role of aviation business in the Canadian economy					
▪ Discuss the development of commercial aviation in Canada					
▪ Discuss the growth of the aviation industry in Saskatchewan					
▪ Identify the strengths, weaknesses, opportunities and problems of contemporary Canadian aviation businesses					
▪ Explain the role of the pilot in a business and in the industry					
2. Analyze the contents of an aviation business plan.					
▪ Identify the intended market					
▪ Explain equipment requirements					
▪ Outline regulation, personnel, maintenance and training issues					
▪ Identify business goals					
3. Explain profit and loss as a function of operational factors in an aviation operation.					
▪ Analyze business operations and financial position using the income statement and balance sheet					
▪ Create a cash flow projection for a typical charter operation					
▪ Perform a break-even analysis for a typical charter operation					
4. Use spreadsheet features.					

PLAR assessment methods

If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence file

Evidence of successful completion of a business course with course outline

OR

Evidence of having experience in the owning and/or operating of a small business. (May be provided via [Employment Validation Letter, Appendix A.](#))

OR

2. Challenge exam

OR

Assignment demonstrating competency through a combination of business case study scenarios

Resources

A PLAR candidate may find it beneficial to review the following material in preparation for the assessment. The resources may be referred to, but are not required.

Commercial Pilot Program Master Business Workbook

Commercial Pilot

Appendices

Appendix A: Employment validation letter

Prior Learning Assessment and Recognition

Instructions: The employment validation letter provides a statement of verification of employment in an exceptionality focused setting. The employment validation letter must be printed on letterhead of your current employer and signed by the human resources department indicating the length of employment and working environment(s). A letter template has been provided for your use. Please copy the content below and fill in the fields as directed. The completed letter should be included with your PLAR evidence and submitted to the PLAR assessor for the Commercial Pilot program.

Letter template (On employer's business letterhead)

Date

To Whom It May Concern:

I have reviewed the employment records of _____ and
Name of employee/candidate

can verify that the above candidate has been employed by _____
Name of employer

for _____
Length of employment

Please contact me at _____ or _____
Phone email

with any questions or for additional information.

Sincerely,

Name

Job title

Signature

PLAR Validation Checklist

(To be completed by direct work supervisor)

Please complete the PLAR Validation Checklists below to verify that the candidate has performed each of the following skills/tasks required for Saskatchewan Polytechnic Commercial Pilot Certification.

Criteria for the performance descriptors are as follows:

Descriptor	Criteria
Satisfactory	Employee/PLAR Candidate independently performs this skill/task as a requirement of their employment.
Unsatisfactory	Employee/PLAR Candidate performs this skill/task but not to standards of industry competency or independently
N/A	Not applicable - Employee/PLAR Candidate has no experience with skill/task, or is not required to perform task as part of their employment.

Communications/Interpersonal Relations

	Satisfactory	Unsatisfactory	N/A
Demonstrates effective listening skills			
Demonstrates effective speaking skills			
Writes memos as required			
Writes company reports as required			
Completes company forms, as required			
Demonstrates standard word processing skills (e.g. use of Microsoft Word)			
Demonstrates ability to find information online and electronically			
Demonstrates acceptable customer service skills			

Business

	Satisfactory	Unsatisfactory	N/A
Demonstrates an understanding of a business plan			
Communicates maintenance and training issues			
Demonstrates an understanding of business goals			
Demonstrates an understanding of a financial statement			
Applies the objectives of a business marketing plan			
Applies the company SOP requirements to effective management principles			
Demonstrates an understanding of regulations regarding employee performance and supervision			