

FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS



Foreword

FLYING SCHOOLS GUIDANCE MATERIALS FOR SINGLE-PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

FOREWORD

With the rapid progress of aviation industry and numerous training flights conducted, the intent of this material is to provide guidance to instructors when teaching compliance-based skills for single-pilot operations. In addition to the theoretical knowledge component of this material, this document concentrates on the application of non-technical skills in the flying environment. Every flight crew license, rating and endorsement flight test, proficiency check, and flight review should include assessment of these skills. This material is intended for Approved Training Organizations and instructors alike.

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Civil Aviation Authority of the

Philippines

FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT
OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW
LICENSES AND RATINGS

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0 Administration and Control

0.1 Abbreviations

0 Administration and Control

0.1 Abbreviations

VXSE

The acronyms and abbreviations used in this guidance material are listed in the table below.

Acronym AC	Description advisory circular
ATC ATS	air traffic control air traffic services
FAA HF ICAO	Federal Aviation Administration (of the USA) human factors International Civil Aviation Organization
NOTAM NTS SOP	notice to airmen non-technical skills standard operating procedure
TEM USA VFR VYSE	threat and error management United States of America visual flight rules best single-engine rate of climb speed [blue line speed]

best single-engine angle of climb speed



Civil Aviation Authority of the Philippines Flying schools guidance material for single pilot operations under pcar 3.2: training for flight crew licenses and ratings

0 Administration and Control

0.2 Definitions

0.2 Definitions

Airmanship

Airspace cleared procedure

Behavioral markers

Error

The consistent use of good judgement and well developed skills to accomplish flight objectives (International Civil Aviation Organization definition).

A procedure that is performed before all turns and maneuvers. A commonly used technique for this procedure is: when turning left, 'clear right, clear ahead, clear left-turning left'; or when turning right, 'clear left, clear ahead, clear right-turning right' If an object is closing and remains on a line of constant bearing (stays at the same point on the windscreen), a collision will occur if avoiding action is not taken. A short, precise statement describing a single non-technical skill or competency. They are observable behaviors that contribute to competent or not yet competent performance within a work environment. 'Actions or inactions by the pilot that lead to deviations from organizational or pilot intentions or expectations' (Maurino, 2005). When undetected, unmanaged or mismanaged, errors may lead to undesired

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aircraft states



0 Administration and Control

0.2 Definitions

Flight environment

The environment internal and external to the aircraft that may affect the outcome of the flight.

The aircraft's internal environment can include, but is not limited to, aircraft attitude and performance, instruments, observations, flight controls, equipment, warning and alerting devices, cockpit physical and interpersonal climate and conditions, crew members, aircraft position, procedures, publications, checklists and automation.

The external environment may include, but is not limited to, airspace, meteorological conditions, terrain, obstacles, the regulatory framework, other stakeholders and operating culture.

Formative evaluation monitors learning progress during instruction and provides continuous feedback to both trainee and instructor concerning learning success and failures.

The minimization of human error and its consequences by optimizing the relationship within systems between people, activities and equipment.

An opinion formed after analysis of relevant information.

The ability of the pilot in command to induce the trainee member(s) to use their skills and knowledge to pursue a defined objective.

To plan, direct and control an operation or situation.

Specific human factors competencies, such as lookout, situation awareness, decision making, workload management and communications.

Formative assessment

Human factors

Judgement

Leadership

Manage(ment)

Non-technical skills



0 Administration and Control

0.2 Definitions

Safe(ly)

Means that a maneuver or flight is completed without injury to persons, damage to aircraft or breach of aviation safety regulations, while meeting the standards specified by the Civil Aviation Safety Authority.

Safest outcome

Means that the maneuver or flight is completed with minimum damage or injury under the prevailing circumstances.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS 0 General

0.3 References

0.3 References

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FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

1 The Introduction

1.1 Threat and Error Management

1 The Introduction

1.1 Threat and Error Management

Effective threat and error management (TEM) in aviation training is reliant on the application of good human factors (HF) knowledge. Worldwide statistics indicate that about 75% of aircraft accidents are caused by HF deficiencies. These deficiencies may involve a variety of factors, including:

- poor lookout
- poor situation awareness
- poor decision-making
- lack of task organization
- insufficient communication
- failure to recognize threats to safety
- commission of errors.

The International Civil Aviation Organization (ICAO) has acknowledged the need for guidance related to the teaching and assessment of HF and TEM and recommends that these subjects should be introduced into all pilot training.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

1 The Introduction

1.2 Competency-based training

1.2 Competency-based training

In a competency-based training system, a person must be assessed by weighing evidence of their competence against published standards. The evidence must be valid, authentic, sufficient and current. However, before a person can be assessed, they must be trained. Therefore, it is essential that flight training organizations develop techniques and material for teaching Human Factors (HF) and Non-Technical Skills (NTS) in their competency based training program to ensure that their assessors have methods and tools to assess competency during flight tests.

Instructors must recognize and appreciate the importance of HF knowledge and NTS and make them an integral part of training; and assessors must be prepared to incorporate HF principles into flight tests. This requires diligence in the preparation of training plans by instructors and assessment plans by flight examiners.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

2 Private Pilot License Training Course

2.1 Introduction

2 Private Pilot License Training Course

2.1 Introduction

2.1.1 Overview

This syllabus describes the flight training and assessment activities to be undertaken during the private pilot license – aeroplane category rating training course. The aim of the course is to provide the student with the required skills, knowledge and attitudes to safely exercise the privileges of the PPL (A).

Flight training lessons include navigation exercises incorporating operations at controlled aerodromes and in controlled airspace, basic and advanced manoeuvres, circuit operations, basic instrument flight and procedures in the event of abnormal situations. Human factors and non-technical skills awareness and application are also included.

The privileges and limitations of the private pilot license – aeroplane category rating are defined in PCAR 2.3.3.2

2.1.2 Competency Standards

2.1.2.1 Practical Flight Competency Standards

Flight training is provided to allow the student to meet the prescribed competency standards. Student performance is assessed against these flight competency standards. The standards required for the completion of this course and the issue of the license are captured by the following units of competency:

Unit code	Unit of competency
C1	Communicating in the aviation environment
C2	Perform pre- and post-flight actions and procedures
C3	Operate aeronautical radio
C4	Manage fuel
C5	Manage passengers and cargo (only if required)
NTS1	Non-technical skills 1
NTS2	Non-technical skills 2
NAV	Navigate aircraft
A1	Control aeroplane on the ground
A2	Take-off aeroplane
A3	Control aeroplane in normal flight
A4	Land aeroplane
A5	Aeroplane advanced manoeuvres
A6	Manage abnormal situations – single-engine aeroplanes
IFF	Instrument flight full panel
ONTA	Operate at non-towered aerodrome
OGA	Operate in Class G airspace
CTR	Operate at a controlled aerodrome
CTA	Operate in controlled airspace



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

2 Private Pilot License Training Course

2.1 Introduction

2.1.2.2 Aeronautical Knowledge Standards

The knowledge required to meet the aeronautical knowledge standards prescribed by the PCAR 2.3.3.2 may be attained through student self-study and formal training. Theory topics and content are described in the following units of knowledge:

Unit of knowledge
PPL Air Law
PPL Aircraft General Knowledge
PPL Flight Performance and Planning
PPL Human Performance
PPL Meteorology
PPL Navigation
PPL Operational Procedures
PPL Principles of Flight
PPL Radio telephony

2.1.3 Course prerequisites

This course has been developed for students already holding a Student Pilot Authorization (SPA) - aeroplane category rating.

Students must be at least 16 years old to apply for a Student Pilot Authorization and Students must be at least 17 years old to apply for a Private Pilot license.

2.1.4 Course duration

The course may be undertaken on a part-time or full-time basis.

The syllabus is based on a total flight time of 46.0 hours inclusive of the PPL aeroplane category flight test; however, the total flight time required to achieve competency will vary from student to student.'

2.1.5 Course Resources

Flight training is usually undertaken in the C-172; however any ATO approved training aircraft may also be used.

Other resources include a model aeroplane, cockpit cut-out, instrument flight hood, navigation charts and navigation equipment.

2.1.6 Syllabus Documentation

Syllabus documentation includes:

- a planning matrix
- a flight training and theory examination summary
- a lesson plan and training record for each flight

Refer to the ATO operations manual for a guide to the use of the syllabus documents.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

2 Private Pilot License Training Course

2.1 Introduction

2.1.7 Lesson Sequence and Allowable Variations

The flight training and theory examination summary provides the sequence of flight training lessons.

Any variations to the lesson sequence are only to be made with the prior approval of the HOT or authorizing instructor.

2.1.8 Solo Flight

The course includes a minimum of 10 hours solo flight time, including a solo cross-country (150 NM) flight time of 5 hours.

Prior to authorizing a student to conduct a solo navigation exercise, instructors must ensure the requirements of PCAR 2.3.3.1 are met. The student's flight plan and fuel calculations must be reviewed for accuracy.

2.1.9 Aeronautical Knowledge Examination

Successful completion of the following examination is required during the course:

2.1.9.1 Prior to flight test recommendation

PPL(A) aeronautical knowledge examination

The pass mark for the examination is 70%.

The flight training and theory examination summary sets out the recommended sequence for aeronautical knowledge examination and navigation exercises. To avoid training delays, instructors should ensure students complete the examination in this sequence.

Aeronautical knowledge examinations are conducted in the ground examination facility.

2.1.9.2 Knowledge Deficiency Report

If a student passes the PPL(A) aeronautical knowledge examination with a score of less than 100%, a report shall be prepared about the competency standards in which the student's knowledge is deficient (a knowledge deficiency report). Following further self-study, a senior instructor must orally assess the student's knowledge to ensure the deficiencies noted on the knowledge deficiency report have been addressed (i.e. knowledge corrected to 100%).

A copy of the knowledge deficiency report for the PPL(A) aeronautical knowledge examination must be provided to the flight examiner who is to conduct the flight test.

2.1.10 Flight Test

Upon successful completion of the course students must pass the PPL aeroplane category flight test, prior to making application for the private pilot license.

The test is conducted by a flight examiner and involves a ground component and a flight component of approximately 1.0 hour. An assessment of general handling competencies is included in the test.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

2 Private Pilot License Training Course

2.1 Introduction

Flight test standards are contained in PCAR IS 2.3.3.2 Appendix B and must be performed within the flight tolerances specified in the Advisory Circulars and ATO Training Manual.

2.1.11 Document Control and Access Information

This syllabus is a managed document and is uncontrolled if printed. Refer to the version number and date in the footer to ensure that the current syllabus is being referenced.

It is available in electronic format. Paper copies are also provided for use by instructors and students.

Syllabus documentation is to be read in conjunction with the ATO's operations manual.

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2 Private Pilot License Training Course

2.2 Planning Matrix

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Perfor	mance Standards	u c		3	4	3	U	/	0	7	10	. 1	. 4	13	14 1		
consist qualift $2 = \Gamma$ safe to $1 = A$ issue.	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue. Demonstrates a developing level of proficiency, and is deemed to conduct solo practice under direct supervision * chieves competency to the standard required for qualification operations for authorised sequences only	Ground Operations and Orientation	Airworks	Airworks	Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	Traffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First Solo	First SOLO	Re-solo Flight	Airworks, T-PATT, TOL	Progress Check for GHP	Solo Area Out	Cross Country Orientation	150 NM Cross Country Flight	Total hours
	Dual day	2.0	2. 0	2.	2.0	2.0	2.0	2.	1.						5. 0		20.
	Solo day Instrument flight time Aeronautical knowledge examinations		PP							.2 5	2. 0	6. 0	2. 0	4.7 5		5. 0	20. 0 40.
Units	, Elements and Performance Criteria																
	Navigate aircraft																
	Prepare documents and flight plan																
(a)	select and prepare appropriate navigation charts for the intended flight														2		
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas														2		
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight														2		
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times														2		
	complete a flight plan to the planned destination and alternates														2		
NAV.	Comply with airspace procedures while navigating																
(a)	identify airspace restrictions and dimensions applicable to the flight														2		
(b)	obtain and comply with air traffic clearances, if applicable														2		
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight														2		
NAV.	Conduct departure procedures																
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat														2		
(b)	comply with all departure procedures, clearances and noise abatement requirements														2		
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required														2		
(d)	calculate estimated time of arrival (ETA) for first waypoint														2		
NAV.	Navigate aircraft enroute																
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination														2		
(b)	maintain heading to achieve a nominated track														2		
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination														2		



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Perfor	mance Standards	tion				. 1											
consideration qualification qualification $2 = 1$ safe to $1 = \mathbf{A}$ issue.	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue Demonstrates a developing level of proficiency, and is deemed to conduct solo practice under direct supervision * chieves competency to the standard required for qualification to operations for authorised sequences only	Ground Operations and Orientation	Airworks	Airworks	Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	Traffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First Solo	First SOLO	Re-solo Flight	Airworks, T-PATT, TOL	Progress Check for GHP	Solo Area Out	Cross Country Orientation	50 NM Cross Country Flight	Total hours
5010	Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	1.	F	R	V	P	S	5.	1	20.
	Solo day		0	0				0	0	.2	2.	6.	2.	4.7	0	5.	20.
	Instrument flight time									5	0	0	0	5		0	0
	Aeronautical knowledge examinations		PP	L LA		-											40.
(d)	novigate using accepted man reading techniques		Ι	1		ı		l							2		0
(e)	navigate using accepted map-reading techniques maintain navigation and fuel log to monitor tracking, ETAs														2		
(5)	and fuel status														2		
(f)	use appropriate techniques to obtain a positive fix at suitable intervals														2		
(g)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions														2		
(h)	perform pre-descent and turning point checks														2		
(i)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used														2		
(j)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives														2		
NAV. 5	Navigate at low level and in reduced visibility																
(a)	configure the aircraft as required for the following environmental and operational conditions:																
	(i) reduced visibility														2		
	(ii) low cloud base														2		
(b)	navigate aeroplane at minimum heights (not below 500 ft AGL, clear of built-up areas) and remain in VMC														2		
(c)	maintain separation from terrain, obstacles, allowing for wind and turbulence at low level														2		
(d)	operate appropriately in the vicinity of aerodromes and landing areas														2		
NAV.	Perform lost procedure																
(a)	acknowledge positional uncertainty in a timely manner														2		
(b)	configure aircraft for range and endurance as required														2		
(c)	apply recognised method to re-establish aircraft position														2		
-	fix position							-							2		
	use radio to request assistance, if applicable							<u> </u>							2		
(f)	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome														2		
NAV.	Perform diversion procedure																
(a)	make timely decision to divert														2		
(b)	identify an acceptable alternate aerodrome														2		
(c)	select a suitable route and cruising level														2		



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Perfor	mance Standards	ion															
consist qualiff $2 = \Gamma$ safe to	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue Demonstrates a developing level of proficiency, and is deemed to conduct solo practice under direct supervision * chieves competency to the standard required for qualification	Ground Operations and Orientation	Airworks	Airworks	Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	Fraffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First Solo	First SOLO	Re-solo Flight	Airworks, T-PATT, TOL	Progress Check for GHP	Solo Area Out	Cross Country Orientation	50 NM Cross Country Flight	Total hours
*Solo	operations for authorised sequences only	Grou	Air	Airw	Airw	Airw	Trafi	Trafi	Prog	First	Re-s	Airw	Prog	Solo	Cros	150]	To
	Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	1.						5. 0		20.
	Solo day									.2	2.	6.	2.	4.7 5		5. 0	20.
	Instrument flight time									3	U	U	U	3		U	0
	Aeronautical knowledge examinations		PP	LA				ļ									40. 0
(d)	revise flight plan considering weather, terrain, airspace and fuel available														2		
(e)	advise ATS of an intention to divert														2		
NAV.	Execute arrival procedures																
(a)	obtain updated relevant aerodrome information														2		\exists
(b)	determine landing direction and aerodrome suitability														2		
(c)	conduct arrival														2		
(d)	identify and avoid all traffic														2		
	Operate at non-towered aerodromes																
A	N																
ONT A.1	Non-towered aerodrome – pre-flight preparation																
(a)	using a current NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	3	3	2	1		1	1	1								
(b)	interpret the extracted information	3	3	2	1		1	1	1								
(c)	identify all special aerodrome procedures	3	3	2	1		1	1	1								
(d)	check current weather forecast and local observations	3	3	2	1		1	1	1								
(e)	identify all relevant radio and navigation aid frequencies	3	3	2	1		1	1	1								
ONT A.2	Taxi aircraft at a non-towered aerodrome or landing area																
	refer to aerodrome or landing area chart (if available)	3	3	2	1		1	1	1								
(b)	set local QNH or area QNH	3	3	2	1		1	1	1								
(c)	broadcast intentions on appropriate frequency	3	3	2	1		1	1	1								
(d)	obtain and interpret traffic information	3	3	2	1		1	1	1								
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	3	3	2	1		1	1	1								
(f)	recognise ground markings during taxi and take appropriate action	3	3	2	1		1	1	1								
	taxi aircraft to holding point	3	3	2	1		1	1	1						Ш		
(i)	use strobes when crossing any runway	3	3	2	1		1	1	1								
ONT A.3	Perform departure at a non-towered aerodrome or landing area																
(a)	check and ensure runway approach is clear prior to entering a runway	3	3	2	1		1	1	1								
(b)	correctly set transponder code and mode prior to entering runway for take-off	3	3	2	1		1	1	1								
(c)	confirm runway approaches clear in all directions prior to entering runway	3	3	2	1		1	1	1								
(d)	broadcast line up details	3	3	2	1		1	1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Perfor	mance Standards	uo															
consist qualif $2 = \Gamma$	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue Demonstrates a developing level of proficiency, and is deemed	Ground Operations and Orientation			Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	TOL	TOL	for First Solo			TT, TOL	Progress Check for GHP		Cross Country Orientation	50 NM Cross Country Flight	
	o conduct solo practice under direct supervision * chieves competency to the standard required for qualification	Operati	S	s	s & Em	s,Groun	Traffic Pattern, TOL	Fraffic Pattern, 7	Progress Check	ГО	Re-solo Flight	Airworks, T-PATT,	Check	Solo Area Out	ountry C	Cross (Total hours
issuc.		punc	Airworks	Airworks	vork	work	ffic F	ffic F	gres	First SOLO	olos	work	gress) Are	ss Co	NM	otal
*Solo	operations for authorised sequences only	Ğ;	Airw	Air	Air	Air		Trai	Pro	Firs	Re-	Air	Prog	Sole	Cro	150	T
	Dual day	2.0	2. 0	2.	2.0	2.0	2.0	2. 0	1. 0						5. 0		20. 0
	Solo day									.2	2.	6.	2.	4.7 5		5. 0	20.
	Instrument flight time		Ì								Ů	Ů	Ů	J		Ü	
	Aeronautical knowledge examinations		PP	LA													40. 0
	transmit appropriate radio calls and maintain separation with other aircraft	3	3	2	1		1	1	1								U
(g)	advise air service provider of departure details, if required	3	3	2	1		1	1	1								
(h)	conduct departure	3	3	2	1		1	1	1								
ONT	Perform arrival and landing at a non-towered aerodrome or landing																
(a)	area	2	2	2	1		1	1	1						\vdash		
(b)	check NOTAM prior to entering circuit area set correct area or local QNH	3	3	2	1		1	1	1						\vdash		
(c)	use correct radio frequency to transmit inbound calls as	3	3	2	1		1	1	1						\vdash		
	required							1									
(d)	maintain effective lookout	3	3	2	1		1	1	1						Ш		
(e)	maintain aircraft separation and avoid other traffic	3	3	2	1		1	1	1						Ш		
(f)	maintain tracking tolerances	3	3	2	1		1	1	1						Ш		
(g)	determine wind velocity	3	3	2	1		1	1	1						<u> </u>		
(h)	determine landing direction	3	3	2	1		1	1	1						\sqcup		
(i)	confirm runway is serviceable for the operation	3	3	2	1		1	1	1						\square		
(j)	determine circuit direction	3	3	2	1		1	1	1						\square		
(k)	conduct landing area inspection (if applicable)	3	3	2	1		1	1	1						Щ		
(1)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	3	3	2	1		1	1	1								
(m)	make all necessary circuit radio calls	3	3	2	1		1	1	1						Ш		
(n)	verify runway is clear of other traffic, wildlife and other obstructions	3	3	2	1		1	1	1								
(0)	land the aircraft	3	3	2	1		1	1	1								
(p)	vacate runway	3	3	2	1		1	1	1								
OGA	Operate in Class G airspace																
OGA	1																
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	3	3	2	1		1	1	1								
(b)	when using an aircraft radio:																
	(i) monitor appropriate radio frequency	3	3	2	1		1	1	1						Щ		Щ
	(ii) make appropriate radio calls	3	3	2	1		1	1	1						Щ		Щ
	(iii) obtain operational information from air services provider and other aircraft	3	3	2	1		1	1	1						Щ		
	(iv) use information to ensure aircraft separation is maintained	3	3	2	1		1	1	1						Щ		
	(v) apply loss of radio communication procedures		-		2	1	1								Щ		
(c)	using a suitable chart:	_	<u> </u>	_				-									$\parallel \parallel$
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	3	3	2	1	1	1	1	1						\bigsqcup		oxdot
	(ii) identify and remain clear of controlled and restricted airspace	3	3	2	1	1	1	1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14 I	15	
Perfor	mance Standards	no															
consi	las received training in the element, however is not able to stently demonstrate competency to the standard required for	Ground Operations and Orientation			ies	Airworks, Ground Ref. Man, TOL			st Solo)L	IP		ion	150 NM Cross Country Flight	
	fication issue Demonstrates a developing level of proficiency, and is deemed	ıs an			Airworks & Emergencies	Ref.]	TC	7	Progress Check for First			I, TOI	Progress Check for GHP		Cross Country Orientation	untry	
safe t	o conduct solo practice under direct supervision *	ratio			Emer	punc	n, T(n, TOL	ck f		ıt	PAT	ck fc	ıt	y Or	ss Cc	ırs
1 = A issue.	chieves competency to the standard required for qualification	Ope	S	S	s & 1	s,Gre	atter	atter	S Che	ГО	Fligh	s, T-	Che	a Ou	ountr	Cros	hor
issuc.		punc	Airworks	Airworks	vork	work	Traffic Pattern, TOL	Traffic Pattern,	gres	First SOLO	Re-solo Flight	Airworks, T-PATT,	gress	Solo Area Out	ss Co	NM	Total hours
*Solo	operations for authorised sequences only	Ğ	Air	Air	Air	_	Tra	Tra	Prc	Firs	Re-	Air	Pro	Sole	Cro	150	T
	Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	1. 0						5. 0		20.
	Solo day									.2	2.	6.	2.	4.7		5.	20.
	Instrument flight time									5	0	0	0	5	H	0	0
	Aeronautical knowledge examinations		PP	LA			ļ	_									40.
	(iii) take appropriate action when operating in the vicinity of a danger area	2	2	2	1	1	1	1	1								0
(d)	perform actions in the event of abnormal operations and	3	3	2	2	1	1	1	1						Н		
(u)	emergencies				2				1								
(e)	recall transponder emergency code and communication failure code				2				1								1
CTR	Operate at a controlled aerodrome																
CTR.	Controlled aerodrome pre-flight preparation																
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	3	3	2	1		1	1	1								
(b)	interpret the extracted information	3	3	2	1		1	1	1								
(c)	identify all special aerodrome procedures	3	3	2	1		1	1	1								
(d)	check current weather forecast and local observations	3	3	2	1		1	1	1								
(e)	racinity and refer that radio and havigation are frequencies	3	3	2	1		1	1	1								
CTR.	Taxi aircraft at a controlled aerodrome																
(a)	obtain and comply with ATC clearances	3	3	2	1		1	1	1								
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	3	3	2	1		1	1	1								
(c)	recognise ground markings during taxi and take appropriate action	3	3	2	1		1	1	1								
(d)	recognise lighting signals and take appropriate action	3	3	2	1		1	1	1								
-	identify airport runway incursion hotspots	3	3	2	1		1	1	1						Ш		
(f)	request taxi guidance if unsure of position	3	3	2	1		1	1	1						Щ		
(g)	use strobes when crossing any runway	3	3	2	1		1	1	1								
3	Perform departure from controlled aerodrome																
(a)	receive and correctly read back an airways clearance	3	3	2	1		1	1	1								
(b)	check and ensure runway approach is clear prior to entering a runway	3	3	2	1		1	1	1								
(c)	correctly set transponder code and mode prior to entering runway for take-off	3	3	2	1		1	1	1								
(d)	comply with ATC departure instructions	3	3	2	1		1	1	1								
(e)	advise ATC as soon as possible if unable to comply with clearance	3	3	2	1		1	1	1								
(f)	contact approach with airborne report or give departure call to tower	3	3	2	1		1	1	1								
(g)	maintain lookout	3	3	2	1		1	1	1								
(h)	avoid wake turbulence	3	3	2	1		1	1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	5	
Perfor	mance Standards	ion				,											
	as received training in the element, however is not able to	Ground Operations and Orientation				Airworks, Ground Ref. Man, TOL			Solo							zht	
	stently demonstrate competency to the standard required for ication issue	id Ori			ies	Man,			rst Sc			TOL	IP.		tion	Cross Country Fligh	
	Demonstrates a developing level of proficiency, and is deemed	ns an			senc	Ref.	OL	OL	or Fi			•	or GF		ienta	untr	
	o conduct solo practice under direct supervision *	ratio			Emei	puno	m, T	rn, T	eck f		ht	PAT	ck fo	ut	ry Or	ss Cc	urs
I = A issue.	chieves competency to the standard required for qualification	odo 1	ks	S	28 S2	s,Gr	Patte	Patte	s Ch	OTO	Fligl	cs, T-	s Che	ea O	ounti	Cro	l ho
		Ground	Airworks	Airworks	Airworks & Emergencies	work	Traffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First	First SOLO	Re-solo Flight	Airworks, T-PATT	Progress Check for GHP	Solo Area Out	Cross Country Orientation	50 NM	Total hours
*Solo	operations for authorised sequences only	_	1—	7	_			-	Pr	Fir	Re	Air	Prc	Sol	-	1	
	Dual day	2.0	2.	2.	2.0	2.0	2.0	2. 0	0						5. 0		20.
	Solo day									.2 5	2.	6. 0	2. 0	4.7 5		5. 0	20. 0
	Instrument flight time																
	Aeronautical knowledge examinations		PP	LA													40. 0
(i)	comply with airways clearances within tracking and altitude	3	3	2	1		1	1	1								_
	tolerances and maintain traffic lookout until clear of the																
CTR.	aerodrome control zone Perform arrival and landing at controlled aerodrome															-	_
4																	
(a)	check NOTAM prior to entering control area and extract	3	3	2	1		1	1	1								
(b)	required operational information receive ATIS and correctly set the appropriate QNH	3	3	2	1		1	1	1						\vdash		=
	request and receive ATC clearance and set correct transponder	3	3	2	1		1	1	1						H		\dashv
	code prior to entering control area			_	•		•		_								
(d)	advise ATC as soon as possible if unable to comply with	3	3	2	1		1	1	1								
(a)	clearance	2			4		4	4	1								
(f)	maintain lookout at all times	3	3	2	1		1	1	1						\vdash		\dashv
	update QNH as required establish aircraft on the correct leg of the circuit in preparation	3	3	2	1		1	1	1						H		=
(8)	for landing and maintain separation from traffic)	3	2	1		1	1	1								
(h)	confirm clearance to land	3	3	2	1		1	1	1								
(i)	vacate runway and obtain taxi clearance	3	3	2	1		1	1	1						Ш		
CTA	Operate in controlled airspace					ì											
CTA.	Operate aircraft in controlled airspace																
(a)	comply with airways clearance requirements for operating in	3	3	2	1		1	1	1						П		
	all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and																
	'readback' requirement																
(b)	reconfirm any clearance items when doubt exists	3	3	2	1		1	1	1						П		
(c)	advise ATC as soon as possible if unable to maintain clearance	3	3	2	1		1	1	1								\exists
/£\	due to adverse weather conditions	_	_	_	4		4	_	4						\square		4
(d)	perform appropriate actions in the event of abnormal operations and emergencies	3	3	2	1		1	1	1								
(e)	recall transponder emergency code and communication failure	3	3	2	1		1	1	1						H		\dashv
	code														Ш		
A3	Control aeroplane in normal flight																
A3.2	Maintain straight and level flight (manoeuvres required for PPL and above)																4
	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path,																
	balance and trim the aeroplane accurately, and apply smooth,																
	coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:																
	(v) at maximum range	3	3	2	1		1	1	1						H		\dashv
<u> </u>	-		9		1	l		1	1						Ш		



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14 I	.5	
Perfor	mance Standards	ion															
consis qualif 2 = I	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue Demonstrates a developing level of proficiency, and is deemed to conduct solo practice under direct supervision *	Ground Operations and Orientation			ergencies	Airworks, Ground Ref. Man, TOL	TOL	TOL	Progress Check for First Solo			TT, TOL	for GHP		Orientation	Country Flight	80
1 = A issue.	chieves competency to the standard required for qualification	Fround Operat	Airworks	Airworks	Airworks & Emergencies	irworks, Grour	Traffic Pattern, TOL	Traffic Pattern,	rogress Check	First SOLO	Re-solo Flight	Airworks, T-PATT,	Progress Check for GHP	Solo Area Out	Cross Country Orientation	150 NM Cross Country Flight	Total hours
.3010	operations for authorised sequences only Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	<u>а</u>	E	R	A	Pı	Š	5.	-	20.
	Solo day	2.0	0	0	2.0	2.0	2.0	0	0	.2	2. 0	6.	2.	4.7	0		20.
	·		-							5	0	0	0	5	\square	0	0
	Instrument flight time Aeronautical knowledge examinations		PP	ΙΔ												\dashv	40.
						ı											0
	(vi) at maximum endurance	3	3	2	1		1	1	1								
IFF	Full instrument panel manoeuvres																
IFF.2	Perform manoeuvres using full instrument panel (manoeuvres required for PPL and above)																_
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:																
	(i) straight and level performance during normal cruise within the flight tolerances	3	3	2	1		1	1	1								
	(ii) nominated climb performance within the flight tolerances	3	3	2	1		1	1	1								
	(iii) descent performance within the flight tolerances	3	3	2	1		1	1	1								
NTS 1	Non-technical skills 1																
NTS 1.1	Maintain effective lookout																
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	3	3	2	1		1	1	1								
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	3	3	2	1		1	1	1								
(c)	perform airspace-cleared procedure before commencing any manoeuvre	3	3	2	1		1	1	1								
NTS 1.2	Maintain situational awareness																
(a)	monitor all aircraft systems using a systematic scan technique	3	3	2	1			1	1								
(b)	collect information to facilitate ongoing system management	3	3	2	1			1	1								
(c)	monitor flight environment for deviations from planned operations	3	3	2	1			1	1								
(d)	collect flight environment information to update planned operations	3	3	2	1			1	1								
NTS 1.3	Assess situations and make decisions																
(a)	identify problems		3	2	2			1	1								\dashv
(b)	analyse problems		3	2	2			1	1						П		ヿ
(c)	identify solutions		3	2	2			1	1								
(d)	assess solutions and risks		3	2	2			1	1								
(e)	decide on a course of action		3	2	2			1	1								
(f)	communicate plans of action (if appropriate)		3	2	2			1	1								
(g)	allocate tasks for action (if appropriate)		3	2	2			1	1								
(h)	take actions to achieve optimum outcomes for the operation		3	2	2			1	1								\neg
(i)	monitor progress against plan		3	2	2			1	1								
(j)	re-evaluate plan to achieve optimum outcomes		3	2	2			1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	5	
Perfor	mance Standards	ion				,											
consist qualification $2 = 1$ safe to $1 = \mathbf{A}$ issue.	as received training in the element, however is not able to stently demonstrate competency to the standard required for fication issue Demonstrates a developing level of proficiency, and is deemed to conduct solo practice under direct supervision * chieves competency to the standard required for qualification	Ground Operations and Orientation	Airworks	Airworks	Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	Traffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First Solo	First SOLO	Re-solo Flight	Airworks, T-PATT, TOL	Progress Check for GHP	Solo Area Out	Cross Country Orientation	50 NM Cross Country Flight	Total hours
-3010	operations for authorised sequences only Dual day	2.0	2.	2.	2.0	2.0	2.0	<u>-</u> 2.	1.	Ë	R	A	P ₁	Š	ت 5.	1;	20.
	Solo day		0	0				0	0	.2	2.	6.	2.	4.7	0		20.
	Instrument flight time									5	0	0	0	5		0	0
	Aeronautical knowledge examinations		PP:	LA		<u> </u>											40. 0
NTS 1.4	Set priorities and manage tasks																
(a)	organise workload and priorities to ensure optimum outcome of the flight	3	3	2	2			1	1								\exists
(b)	plan events and tasks to occur sequentially	3	3	2	2			1	1								
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	3	3	2	2			1	1								
(d)	use technology to reduce workload and improve cognitive and manipulative activities	3	3	2	2			1	1								
NTS 1.5	Maintain effective communications and interpersonal relationships																
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	3	3	2	1			1	1								
(b)	define and explain objectives to stakeholders	3	3	2	1			1	1								
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	3	3	2	1			1	1								
NTS 2	Non-technical skills 2																
NTS 2.1	Recognise and manage threats																
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight		3	2	2		2	1	1								
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight		3	2	2		2	1	1								
(c)	develop and implement countermeasures to manage threats		3	2	2		2	1	1								
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured		3	2	2		2	1	1								
NTS 2.2	Recognise and manage errors																
	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors		3	2	2		2	1	1								\dashv
(b)			3	2	2		2	1	1								
(c)	monitor the following to collect and analyse information to identify potential or actual errors:																
	(i) aircraft systems using a systematic scan technique		3	2	2		2	1	1								
	(ii) the flight environment		3	2	2		2	1	1								
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state		3	2	2		2	1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	5	
Performance Standards	uo															
3 = Has received training in the element, however is not able to	Ground Operations and Orientation				LOL			0							t.	
consistently demonstrate competency to the standard required for	Orie			S	Airworks, Ground Ref. Man, TOL			t Solo			J	•		on	150 NM Cross Country Fligh	
qualification issue	and			encie	ef.M	. 1	. 1	Firs			TOI	GHF		ntati	ntry	
2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision *	tions			nerg	nd R	TOI	TOL	k for			۱TT,	for		Orie	Con	S
1 = Achieves competency to the standard required for qualification	pera			& En	Grou	tern,	tern,	Thec	0	ight	T-P/	heck	Out	ntry	ross	our
issue.	O pu	orks	orks	rks e	orks,(c Pat	c Pat	ess (OL	lo Fl	ırks,	ess C	Area	Con	MC	Total hours
*Solo operations for authorised sequences only	Grou	Airworks	Airworks	Airworks & Emergencies	irwc	Traffic Pattern, TOL	Traffic Pattern,	Progress Check for First	First SOLO	Re-solo Flight	Airworks, T-PATT,	Progress Check for GHP	Solo Area Out	Cross Country Orientation	50 N	Tot
Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	1.	F	R	A	P	S	5.	_	20.
		0	0				0	0	2			2	4.7	0	_	0
Solo day									.2 5	2. 0	6. 0	2. 0	4.7 5		5. 0	20. 0
Instrument flight time																
Aeronautical knowledge examinations		PP	LA													40. 0
NTS Recognise and manage undesired aircraft state															T	\neg
(a) recognise an undesired aircraft state	3	3	2	2		2	1	1								-
(b) prioritise tasks to ensure an undesired aircraft state is managed	3	3	2	2		2	1	1								\dashv
effectively						_	1	1								
(c) apply corrective actions to recover an undesired aircraft state	3	3	2	2		2	1	1								
in a safe and timely manner																
Verification of current competencies (competencies attained during flight training for the RPL(A) and flight radio endorsement)																
C1 Communicating in the aviation environment																
C1.1 Communicating face-to-face	3	3	2	1				1								
C1.2 Operational communication using an aeronautical radio	3	3	2	1				1								
C2 Perform pre- and post-flight actions and procedures																
C2.1 Pre-flight actions and procedures	3	3	2	1				1								
C2.2 Perform pre-flight inspection	3	3	2	1				1								
C2.3 Post-flight actions and procedures	3	3	2	1				1								
C3 Operate aeronautical radio																
C3.1 Operate radio equipment	3	3	2	1				1								
C3.2 Manage R/T equipment malfunctions	3	3	2	1				1								
C3.3 Operate transponder	3	3	2	1				1								
C4 Manage fuel																
C4.1 Plan fuel requirements	3	3	2	1												
C4.2 Manage fuel system	3	3	2	1												
C4.3 Refuel aircraft	3	3	2	1												
A2 Take-off aeroplane																
A2.1 Carry out pre take-off procedures	3	3	2	1		1	1	1								
A2.2 Take off aeroplane	3	3	2	1		1	1	1								
A2.3 Take off aeroplane in a crosswind	3	3	2	1		1	1	1								
A2.4 Carry out after take-off procedures	3	3	2	1		1	1	1								
A2.5 Take off aeroplane from 'short field'	3	3	2	1		1	1	1								
A3 Control aeroplane in normal flight																
A3.1 Climb aeroplane	3	3	2	1		1	1	1								
A3.2 Maintain straight and level flight	3	3	2	1		1	1	1								
A3.3 Descend aeroplane	3	3	2	1		1	1	1								
A3.4 Turn aeroplane	3	3	2	1		1	1	1								
A3.5 Control aeroplane at slow speeds	3	3	2	1		1	1	1								
A3.6 Perform circuits and approaches	3	3	2	1		1	1	1								



2 Private Pilot License Training Course

2.2 Planning Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Performance Standards	ion				į											
3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision * 1 = Achieves competency to the standard required for qualification issue. *Solo operations for authorised sequences only	Ground Operations and Orientation	Airworks	Airworks	Airworks & Emergencies	Airworks, Ground Ref. Man, TOL	Traffic Pattern, TOL	Traffic Pattern, TOL	Progress Check for First Solo	First SOLO	Re-solo Flight	Airworks, T-PATT, TOL	Progress Check for GHP	Solo Area Out	Cross Country Orientation	150 NM Cross Country Flight	Total hours
Dual day	2.0	2.	2.	2.0	2.0	2.0	2.	1. 0						5. 0		20.
Solo day								O	.2	2.	6.	2.	4.7	U	5. 0	20.
Instrument flight time									3	U	U	U	3		U	0
Aeronautical knowledge examinations		PPLA		<u> </u>		ļ	ļ								40.	
A3.7 Local area airspace		2	2	1	l	1	1	1								0
A4 Land aeroplane	3	3	2	1		1	1	1								
A4.1 Land aeroplane	3	3	2	2	2	1	1	1								
A4.2 Land aeroplane in a crosswind	3	3	2	2	2	1	1	1								
A4.3 Conduct a Go-Around		-	_	2	2	1	1	1								
A4.4 Perform recovery from missed landing				2	2	1	1	1								
A4.5 Short landing	3	3	2	2	2	1	1	1								
A5 Aeroplane advanced manoeuvres																
A5.1 Enter and recover from stall				2	2			1								
A5.2 Recover from incipient spin				2	2			1								
A5.3 Turn aeroplane steeply				2	2			1								
A5.4 Sideslip aeroplane (where flight manual permits)				2	2			1								
A6 Manage abnormal situations – single-engine aeroplanes																
A6.1 Manage engine failure - take-off (simulated)				2	2		1	1								
A6.2 Manage engine failure in the circuit area (simulated)				2	2		1	1								
A6.3 Perform forced landing (simulated)				2	2		1	1								
A6.4 Conduct precautionary search and landing (simulated condition)				2	2		1	1								
A6.5 Manage other abnormal situations (simulated)				2	2		1	1								
A6.6 Recover from unusual flight attitudes				2	2		1	1								
IFF Full instrument panel manoeuvres																
IFF.1 Determine and monitor the serviceability of flight instruments and instrument power sources				2	2			1								
				2	2			1								-1



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

2 Private Pilot License Training Course

2.3 Training Course Syllabus

2.3 Training Course Syllabus

2.3.1 Training Curriculum

- A. Training Curriculum (incl. Time Scale and Scale in Weeks)
 - (41.0 hours Actual Flight Time & ** 5.0 hours Synthetic Flight Trainer Time / 10-16 weeks)
 - a. Private Pilot Ground Training (**130.0-hours, 4 weeks)
 - b. Private Pilot Flight Training (40.0 hours, 7 weeks)
 - 1. Synthetic Flight Trainer (5.0 hours, 3-5 Days)**
 - 2. Pre-Solo, First Solo, and General Handling Phase (15.25 hours, *3 weeks*)
 - 3. Cross-Country and Solo Phase (24.75 hours, 3-4 weeks)
 - c. CAAP Checkride (1.0-hour, 1 day)

2.3.2 Ground Training Subjects Covered

SUBJECT	**HOURS
Air Law	12.0
Aircraft General Knowledge	16.0
Flight Performance and Planning	16.0
Human Performance	8.0
Meteorology	12.0
Navigation	18.0
Operational Procedures	10.0
Principles of Flight	14.0
Threat and Error Management	4.0
Radiotelephony	12.0
Equipment Qualification Course	8.0
TOTAL HOURS	130.0

^{**}Recommended hours only

1. <u>LESSON 1</u>

LESSON NAME: AIR LAW (PCAR 2.3.3.2 (b)(1)(i))

GROUND SCHOOL 12.0 HOURS

LESSON DESCRIPTION:

- (i) Relevant parts of ICAO Convention and Annexes 2, 7, 8, 11 and 14
- (ii) ICAO Document 4444: General provisions, Area control service, Approach control service, Aerodrome control service, Flight information and alerting service;
- (iii) National law

LESSON OBJECTIVES:

To inform students of the rules of the air and regulations relevant to airmen.

2. LESSON 2

LESSON NAME: AIRCRAFT GENERAL KNOWLEDGE (PCAR 2.3.3.2 (b)(1)(ii))

GROUND SCHOOL 16.0 HOURS

LESSON DESCRIPTION:

- (i) Airframe: Airframe structure and loads
- (ii) Powerplant: engines general, engine cooling, engine lubrication, ignition

systems, carburetion, aero engine fuel, fuel systems, propellers, engine



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handling

- (iii) Systems: electrical system, vacuum system
- (iv) Instruments: Pitot/static system, Airspeed indicator, Altimeter, Vertical speed indicator, Gyroscopes, Turn indicator, Altitude indicator, Heading indicator,

Magnetic compass, Engine instruments, Other instruments

(v) Airworthiness

LESSON OBJECTIVES:

To inform students the basic components of an airplane, it's system, instruments and engine.

3. LESSON 3

LESSON NAME: FLIGHT PERFORMANCE AND PLANNING (PCAR 2.3.3.2 (b)(1)(iii))

GROUND SCHOOL 16.0 HOURS

LESSON DESCRIPTION:

- (i) Mass and balance
- (ii) Performance: Take-off, Landing, In-flight

LESSON OBJECTIVES:

To provide the student with an understanding of the effects of weight and balance conditions, terminology, and method of computing loads

LESSON STANDARDS:

4. <u>LESSON 4</u>

LESSON NAME: HUMAN PERFORMANCE (PCAR 2.3.3.2 (b)(1)(iv)) (ICAO Doc. 9583 as per PCAR 3.2.2)

GROUND SCHOOL 8.0 HOURS

LESSON DESCRIPTION:

- (i) Basic physiology: Concepts, Effects of partial pressure, Vision, Hearing, Motion sickness, Flying and health, Toxic hazards
- (ii) Basic psychology: The information process, the central decision channel, stress; judgment and decision making

LESSON OBJECTIVES:

To provide students with an understanding and awareness of human factors and performance.

5. LESSON 5

LESSON NAME: METEOROLOGY (PCAR 2.3.3.2 (b)(1)(v))

GROUND SCHOOL 12.0 HOURS

LESSON DESCRIPTION:

(i) The atmosphere. Pressure, density and temperature, Humidity and precipitation, Pressure and wind; Cloud information, Fog, mist and haze, Airmasses, Frontology, Ice accretion, Thunderstorms; Flight over mountainous areas, Climatology, Altimetry, The meteorological organization, Weather analysis and forecasting, Weather information for flight planning, Meteorological broadcasts for aviation

LESSON OBJECTIVES:



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Incorporate to students the basic weather theory and phenomena. Teaching them how to interpret weather information.

6. LESSON 6

LESSON NAME: NAVIGATION (PCAR 2.3.3.2 (b)(1)(vi))

GROUND SCHOOL 18.0 HOURS

LESSON DESCRIPTION:

- (i) Form of the earth, mapping, conformal orthomorphic projection (ICAO 1.500.000 chart), Direction, Airplane magnetism, Distances, Charts in practical navigation, Chart reference material/map reading, Principles of navigation, The navigation computer, Time, Flight planning, Practical navigation
- (ii) Radio navigation: Ground direction finding (D/F), automatic direction finding (ADF), including associated beacons (non-directional beacons (NDBs) and use of the radio magnetic indicator (RMI). VHF omni-directional range/distance measuring equipment (VOR/DME), GPS, Ground radar; Secondary surveillance radar

LESSON OBJECTIVES:

To introduce the student to the conventional way of navigation, flight computation and calculations, and flight plan for route.

7. LESSON 7

LESSON NAME: OPERATIONAL PROCEDURES (PCAR 2.3.3.2 (b)(1)(vii)

GROUND SCHOOL 10.0 HOURS

LESSON DESCRIPTION:

(i) Relevant parts of ICAO Annex 6, Part II; Annex 12, 13 and 16 (relevant parts), Contravention of aviation regulations

LESSON OBJECTIVES:

To provide the student with an awareness of the international guidelines in general aviation.

8. LESSON 8

LESSON NAME: PRINCIPLES OF FLIGHT (PCAR 2.3.3.2 (b)(1)(viii)

GROUND SCHOOL 14.0 HOURS

LESSON DESCRIPTION:

(i) The atmosphere, Airflow around a body, sub-sonic, Airflow about a two-dimensional aerofoil; Three-dimensional flow about an aerofoil; Distribution of the four forces, Flying controls, Trimming controls, Flaps and slats, The stall, Avoidance of spins, Stability, Load factor and maneuvers, Stress loads on the ground

LESSON OBJECTIVES:

Provide the students with a fundamental understanding of aerodynamic principles and forces.



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9. LESSON 9

LESSON NAME: THREAT AND ERROR MANAGEMENT (Resource Booklet 8 Threat and Error Management, Australian Government: Civil Aviation Safety Authority)

GROUND SCHOOL 4.0 HOURS

LESSON OBJECTIVES:

Providing students the relevant limitations of human performance and adherence to correct procedures. Emphasizing the importance of situational awareness.

10. <u>LESSON 10</u>

<u>LESSON NAME: COMMUNICATIONS (PCAR 2.3.3.2 (b)(1)(ix))</u> GROUND SCHOOL 12.0 HOURS

HOURS LESSON DESCRIPTION:

(i) Radio telephony and communications, Departure procedures, En-route procedures, Arrival and traffic pattern procedures, Communications failure, Distress and urgency procedures

LESSON OBJECTIVES:

Provide students with a fundamental knowledge of communicating that is required for flight.

11. **LESSON 11**

LESSON NAME: EQUIPMENT QUALIFICATION COURSE

GROUND SCHOOL 8.0 HOURS

LESSON OBJECTIVES:

Provide the student with a thorough knowledge of the aircraft specifications, including the normal and emergency procedures outlined for a particular aircraft.

2.3.3 Flight Time Breakdown

PRIVATE PILOT FLIGHT TIME BREAKDOWN									
TRAINING PHASE	LO	OCAL	CROSS COUNTRY		TOTAL				
	DUAL	SOLO	DUAL	SOLO					
**SYNTHETIC					**(5+00)				
FLIGHT TRAINER									
PRE-SOLO, FIRST	15+00	0+15			15+15				
SOLO AND									
GENERAL									
HANDLING PHASE									
CROSS-COUNTRY		14+45	5+00	5+00	24+45				
AND SOLO PHASE									
CAAP CHECKRIDE		1+00		•	1+00				
GR	GRAND TOTAL (including **) 46+00								
1 1 1									

^{**}Recommended only



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2.3.4 Competency Based Syllabus

2.3.4.1 Part I Pre-Solo, First Solo, and General Handling Phase

LESSON NO.	EXERCISE	DUAL	SOLO	TOTAL
		TIME	TIME	TIME
1	Ground Operations and Orientation Flight	2.0		2.0
2	Airworks	2.0		2.0
3	Airworks	2.0		2.0
4	Airworks and Emergencies	2.0		2.0
5	Airworks, Ground Reference Maneuvers, Take-off and	2.0		2.0
	Landings			
6	Traffic Pattern, Take-off and Landings	2.0		2.0
7	Traffic Pattern, Take-off and Landings	2.0		2.0
8	Progress Check for First Solo	1.0		2.0
9	First Solo Flight		.25	.25
	TOTAL	15.0	.25	15.25

Phase Objective: After completion of this phase, the Student should be able to:

- Safely conduct his/her first solo flight
- Perform all the necessary maneuvers within the required allowable limits for the issuance of the Private Pilot License

LESSON 1

Ground Operations and Orientation Flight (IS 2.3.3.2)

A. Objective

The applicant should –

1. Be introduced to and become familiarized with preflight inspections and checklist operations, starting and taxi procedures, and the function and use of the airplane controls.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has -

- 1. Competently conducted the preflight with minimum assistance, properly use all checklists, start the airplane, taxi and operate the controls.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees

LESSON 2

Airworks (IS 2.3.3.2)

A. Objective

The applicant will —

1. Become proficient with the four basics of flight: Straight and Level, Climbs, Turns, Descents, and collision avoidance procedures.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has –

- 1. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots

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- c. Heading +/- 10 degrees
- d. Touchdown on landing: First 1/3 of the runway
- 2. Competently demonstrated understanding of the four basics of flight and collision avoidance procedures.

LESSON 3

Airworks (IS 2.3.3.2)

A. Objective

The applicant will —

- 1. Be introduced to become proficient in postflight and trimming procedures.
- 2. Be introduced to Slow Flight and their related human factors.
- 3. Be oriented with different training areas and demonstrate good situational awareness.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency in the art of trimming and postflight operations.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness when oriented to different training areas, and be familiarized with Slow Flight and its related human factors.

LESSON 4

Airworks and Emergencies (IS 2.3.3.2)

A. Objective

The applicant will —

- 1. Be introduced to Power-on Stalls, Power-off stalls, Steep Turns, and spin awareness and its related human factors.
- 2. Be oriented to and asked to perform on ground and in-flight emergencies
- 3. Be introduced to and demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 1. Been proficiently introduced to Power-on and Power-off Stalls, Steep turns, and spin awareness and its related human factors.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making when performing on ground and in-flight emergencies.

LESSON 5

Airworks, Ground Reference Maneuvers, Take-off and Landings (IS 2.3.3.2(a)(6))

A. Objective

The applicant will —

- 1. Become proficient in the previous maneuvers discussed.
- 2. Be introduced to S-turns, Turns around a Point, Radio communications, and Collision



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avoidance and its related Human Factors.

3. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 1. Demonstrated proficiency in all the previous maneuvers discussed.
- 2. Competently demonstrated S-turns, Turns around a point, radio communications, and Collision Avoidance and its related human factors.
- 3. Adequately demonstrated proficiency, general handling skills, and performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 4. Competently demonstrated good situational awareness, cockpit management and decision making.

LESSON 6

Traffic Pattern, Take-off and Landings (IS 2.3.3.2)

A. Objective

The applicant will —

- 1. Be introduced to the Rectangular Course and traffic-pattern operations, with normal and crosswind takeoffs and landings, and its related human factors.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 1. Been proficiently introduced to the Rectangular Course and traffic-pattern operations, with normal and crosswind takeoffs and landings and its related human factors.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making.

LESSON 7

Traffic Pattern, Take-off and Landings (IS 2.3.3.2)

A. Objective

The applicant will —

- 3. Be introduced to Go-arounds, Aborted takeoff procedures, Power-off approaches, Slips to landings, and its related human factors.
- 4. Become proficient with normal and crosswind take-offs and landings.
- 5. Be able to demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

4. Proficiently demonstrated traffic pattern operations, aborted take-off procedures, Forward Slips, and its related human factors.



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- 5. Demonstrated the ability to take off and land being the sole manipulator of the controls.
- 6. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 7. Competently demonstrated good situational awareness, cockpit management and decision making when performing on ground and in-flight emergencies in all phases of flight.

LESSON 8

Progress Check for First Solo

A. Objective

The applicant will —

- 1. Undergo a Progress check with the CFI or FI designated by the CFI to determine his/her ability to safely conduct his/her first solo flight.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency his/her ability to safely conduct his/her first solo flight.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making when performing the first solo flight.

LESSON 9

First Solo Flight

A. Objective

The applicant will —

- 1. Be able to demonstrate one normal take-off, traffic pattern, approach, and landing to a full stop as the sole manipulator of the aircraft.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has —

- 4. Demonstrated with proficiency one normal take-off, traffic pattern, approach, and landing to a full stop as the sole manipulator of the aircraft.
- 5. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 6. Competently demonstrated good situational awareness, cockpit management and decision making when performing the first solo flight.



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2.3.4.2 Part II Cross-Country and Solo Phase

LESSON NO.	EXERCISE	DUAL	SOLO	TOTAL
		TIME	TIME	TIME
1	Re-solo flight		2.0	2.0
2	Airworks, Traffic Pattern, Take-off and Landings		6.0	6.0
3	Progress check for Basic General Handling Phase		2.0	2.0
4	Solo Area Out		4.75	4.75
5	Cross Country Orientation	5.0		5.0
6	150 NM Cross Country Flight		5.0	5.0
	TOTAL	5.0	19.75	24.75

Phase Objective: After completion of this phase, the Student should be able to:

- Fly solo in and outside the traffic pattern and cross-country routes.
- Develop good situational awareness, cockpit management and decision making flying as the sole occupant of the aircraft.
- Perform one 150 NM distance cross country flight in the course of which full-stop landings at two different aerodromes are made

LESSON 1

Re-solo flight

A. Objective

The applicant will -

- 1. Demonstrate his/her re-solo flight by performing a series of take-offs and landings to a full stop.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has –

- 1. Demonstrated proficiency in performing a series of take-offs and landings to a full stop as his/her re-solo flight.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making.

LESSON 2

Airworks, Traffic Pattern, Take-off and Landings (IS 2.3.3.2)

A. Objective

The applicant will –

- 1. Be introduced to Short-field and Soft-field take-offs and landings.
- 2. Demonstrate proficiency and skill in simulated emergency situations and performing all private pilot maneuvers previously discussed.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has –

- 1. Demonstrated proficiency in Short-field and Soft-field take-offs and landings, and in private pilot maneuvers previously discussed.
- 2. Adequately performed maneuvers within the allowable limits of



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- a. Altitude +/- 100 feet
- b. Airspeed +/- 10 knots
- c. Heading +/- 10 degrees.

LESSON 3

Progress Check for General Handling Phase

A. Objective

The applicant will –

- 1. Undergo a Progress check with the CFI or FI designated by the CFI to determine his/her proficiency in General Handling.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has –

- 1. Demonstrated his/her proficiency in the maneuvers associated with General Handling.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management, and decision-making.

LESSON 4

Solo area out

A. Objective

The applicant will -

- 1. Be able to perform correct Traffic Exit procedures, perform private pilot maneuvers within an available training area, and perform correct traffic entry procedures.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision-making.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has –

- 1. Demonstrated the knowledge and skills needed to fly to an assigned training area outside the aerodrome, and land back safely flying as the sole occupant of the aircraft.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management, and decision-making.

LESSON 5

Cross-Country Flight Orientation (IS 2.3.3.2 (a)(7))

A. Objective

The applicant will –

- 1. Be introduced to at least two cross-country VFR routes and learn necessary aeronautical knowledge and skills to fly solo in cross-country flights and their related human factors.
- 2. Gain experience in cross-country flight planning, Air Traffic Services Procedures, Pilotage and Dead Reckoning, radio navigation (GPS, VOR, and ADF) and radar services, diversion,



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and lost procedures.

B. Completion Standards

This Lesson is complete when the applicant has –

- 1. Demonstrated the knowledge and skills needed to fly solo in cross-country flights.
- 2. Adequately performed proficiency in navigation using pilotage, Dead Reckoning, and radio navigation.
- 3. Competently explained and demonstrated diversion and lost procedures and their related human factors.

LESSON 6

150 NM Cross-Country Flight (2.3.3.2(c)(2))

A. Objective

The applicant will —

- **1.** Be able to fly solo in a 150NM Distance flight in which full-stop landings at two different aerodromes should be made (excluding departure aerodrome).
- 2. Be able to demonstrate good situational awareness, cockpit management and decision making.

B. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately performed the 150NM flight as the sole occupant of the aircraft.
- 2. Competently demonstrated good situational awareness, cockpit management and decision making.

2.3.4.3 **Part III Synthetic Flight Trainer (Recommended Only)

LESSON NO.	EXERCISE	DUAL	SOLO	TOTAL
		TIME	TIME	TIME
		(synthetic)		(synthetic)
1	Ground Operations and Orientation Flight	1.0		1.0
2	Airworks	4.0		4.0
	TOTAL	5.0		5.0

Phase Objective: After completion of this phase, the Student should be able to:

- Understand the basic foundation on how to fly an airplane using a synthetic flight trainer.
- Demonstrate flight by reference solely to instruments.
- Learn and perform the maneuvers for the issuance of the Private Pilot's license.

LESSON 1

Ground Operations and Orientation Flight

A. Objective

The applicant will –

1. Be oriented and introduced to Ground Operations, Basic ground maneuvers, and the effects of controls and their proper usage.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has -

1. Adequately demonstrated proficiency in Ground Operations, Basic ground maneuvers, and the effects of controls and their proper usage.



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LESSON 2 Airworks

A. Objective

The applicant should –

- 1. Be able to perform maneuvers previously introduced by the instructor.
- 2. Be introduced and demonstrate proficiency in Basic Maneuvers namely: Climbs, Descents, Turns, and Straight-and-Level flight.
- 3. Demonstrate flight by reference solely to instruments.
- 4. Be introduced and demonstrate proficiency in Private Pilot Maneuvers (Stalls, Slow Flight, Ground-Reference Maneuvers, Emergency Procedures) as applicable.

B. Completion Standards (AC 02-007)

This Lesson is complete when the applicant has -

- 1. Adequately performed the lessons assigned by the FI and performed Basic Private Pilot Maneuvers with proficiency.
- 2. Demonstrated maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees

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3 Commercial Pilot License Training Course

3.1 Introduction

3 Commercial Pilot License Training Course

3.1 Introduction

3.1.1 Overview

This syllabus describes the flight training and assessment activities to be undertaken during the commercial pilot license aeroplane category rating training course.

The aim of the course is to provide the student with the required skills, knowledge and attitudes to safely exercise the commercial pilot license– aeroplane category rating.

Flight training lessons include general handling and navigation exercises incorporating operations at controlled aerodromes and in controlled airspace, basic and advanced manoeuvres, circuit operations, basic instrument flight and procedures in the event of abnormal situations and emergencies. Human factors and non-technical skills awareness and application are also included.

Manual propeller pitch control and retractable undercarriage design feature endorsement training is conducted following the completion of the CPL course (for students not already holding these endorsements). Details of this training course are contained in a separate guidance material.

The privileges and limitations of the commercial pilot license – aeroplane category rating is defined in PCAR 2.3.3.3.

3.1.2 Competency Standards

3.1.2.1 Practical Flight Competency Standards

Flight training is provided to allow the student to meet the prescribed competency standards. Student performance is assessed against these flight competency standards. The standards required for the completion of this course and the issue of the license are captured by the following units of competency:

Unit of competency
Communicating in the aviation environment
Perform pre- and post-flight actions and procedures
Operate aeronautical radio
Manage fuel
Manage passengers and cargo (Only if required)
Non-technical skills 1
Non-technical skills 2
Navigate aircraft
Control aeroplane on the ground
Take-off aeroplane
Control aeroplane in normal flight
Land aeroplane
Aeroplane advanced manoeuvres
Manage abnormal situations – single-engine aeroplanes
Instrument flight full panel
Limited instrument panel manoeuvres
Radio navigation – enroute
Operate at non-towered aerodrome
Operate in Class G airspace



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.1 Introduction

Operate at a controlled aerodrome
Operate in controlled airspace

3.1.2.2 Aeronautical Knowledge Standards

The knowledge required to meet the aeronautical knowledge standards prescribed by the PCAR 2.3.3.3 may be attained through student self-study and formal training. Theory topics and content are described in the following units of knowledge:

Unit of knowledge
CPL Air Law
CPL Aircraft General Knowledge
CPL Flight Performance and Planning
CPL Human Performance
CPL Meteorology
CPL Navigation: Air Navigation
CPL Operation Procedures
CPL Principles of Flight
CPL Radio Telephony

3.1.3 Course prerequisites

This course has been developed for students who already hold a private pilot license and aeroplane category rating.

Students must be at least 18 years old to apply for a commercial pilot license.

3.1.4 Pre-Course Assessment Flight and Course duration

The course may be undertaken on a part-time or full-time basis.

The syllabus is based on a total flight time of 111.0 hours inclusive of the CPL aeroplane category flight test; however, the time required to achieve competency will vary from student to student.

Prior to commencing the course, students will undertake an assessment flight with the CFI or nominated senior instructor. A training plan will be tailored in order to meet the training needs of each student, as determined by their level of competency and prior experience. Adjustments to this syllabus will be made to meet the training plan, where required.

3.1.5 Course Resources

Flight training is usually undertaken in the C-172; however any ATO approved training aircraft may also be used.

Other resources include a model aeroplane, cockpit cut-out, instrument flight hood, navigation charts and navigation equipment.

3.1.6 Syllabus Documentation

Syllabus documentation includes:

• a planning matrix



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.1 Introduction

- a flight training and theory examination summary
- a lesson plan and training record for each flight

Refer to the ATO operations manual for a guide to the use of the syllabus documents.

3.1.7 Lesson Sequence and Allowable Variations

The Planning Matrix provides the sequence of flight training lessons.

Any variations to the lesson sequence are only to be made with the prior approval of the HOT or authorizing instructor.

3.1.8 Pilot in Command

The course should include a minimum of 70 hours of Pilot-in-command time (20 hours cross-country pilot-in-command time & 50 hours local pilot-in-command time) and 10 hours of instrument flight time (a maximum of 5 hours may be instrument ground time). For reference, this syllabus includes 90.0 hours of pilot-in-command flight time as a prerequisite to the instrument rating training course.

Prior to authorizing a student to conduct a solo exercise, instructors must ensure the requirements of PCAR Part 2 are met. The student's flight plan and fuel calculations must be reviewed for accuracy.

3.1.9 Non-technical Skills

Non-technical skills do not appear in the 'lesson content' section of every lesson plan and training record, however apply to every flight lesson. Instructors are to continually monitor the student's application of these skills.

3.1.10 Aeronautical Knowledge Examinations

Successful completion of the following examinations is required prior to or during the course:

Subject	Pass
	standard
	%
CPL Navigation	70
CPL Meteorology	70
CPL Human factors	70
CPL Flight rules and air law – aeroplane	70
CPL Aerodynamics – aeroplane	70
CPL Aircraft general knowledge – aeroplane	70
CPL Operation, performance and planning -	70
aeroplane	

Aeronautical knowledge examinations are conducted in the ground examination facility. Refer to the ATO operations manual for further information regarding the conduct of these exams.

3.1.10.1 Knowledge Deficiency Report

If a student passes any of the CPL(A) aeronautical knowledge examinations with a score of less than 100%, a report shall be prepared about the competency standards in which the student's knowledge is deficient (a



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.1 Introduction

knowledge deficiency report). Following further self-study, a senior instructor must orally assess the student's knowledge to ensure the deficiencies noted on the knowledge deficiency report have been addressed (i.e. knowledge corrected to 100%).

A copy of the knowledge deficiency report for each CPL(A) examination must be provided to the flight examiner who is to conduct the flight test.

3.1.11 Flight Test

Upon successful completion of the course students must pass the CPL aeroplane category flight test, prior to making an application for the Commercial pilot license.

The test is conducted by a flight examiner and involves a ground component and a flight component of approximately 1.0 hour. An assessment of general handling competencies is included in the test.

Flight test standards are contained in PCAR IS 2.3.3.3 Appendix B and must be performed within the flight tolerances specified in the Advisory Circulars and ATO Training Manual.

3.1.12 Document Control and Access Information

This syllabus is a managed document and is uncontrolled if printed. Refer to the version number and date in the footer to ensure that the current syllabus is being referenced.

It is available in electronic format. Paper copies are also provided for use by instructors and students.

Syllabus documentation is to be read in conjunction with the ATO's operations manual.



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

3.2 Planning Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	151	161	71	8	
mance Standards																			
ed safe to conduct solo practice under direct supervision																			
chieves competency to the standard required for		vers			se.	on													
ication issue.	g	aneu	evers		Phas	ntati		ight	ion		S								
	ndlin	e Ma	anne	TOL	HĐ)	Orie		ry Fl	entat		cise								
Y – LESSON PHASE	al Ha	nanc	Se M	ern, ¯	for A	light	light	ount	t Orie	_	Exel								
E – PROGRESS CHECK	nera	rforr	eren	Patte	heck	try F	try F	ss C	men	atior	very								nrs
	ë Ge		Ref	.s, T-	ss Cl	Soun	Soun	1 Crc	nstru	Vaviç	Seco								일
	vanc	vanc	puno	work	ogres)-ssc)-ssc	Ž	sic II	dio l	set F								Total hours
2.11	Ė	1		Air	Pr	-	Cr	30		-	$\overline{}$							_	
Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	0							2	23.0
PIC/Solo day	8. 0			3 5	2. 0		3	7. 0										9	0.0
Instrument flight time										6.								1	0.0
Aeronautical knowledge examinations	С	PL	A <i>F</i>	\er	ona	ı auti	cal	Kr			lge	Ex	kam	nina	tio	าร			
, Elements and Performance Criteria																		T	
Communicating in the aviation environment																			
Communicating face-to-face																	T		_
pronounces words clearly, using an accent that does not	2	2			2	1	1											1	
cause difficulties in understanding																			
conveys information in clearly structured sentences	2	2			2	1	1												
without confusion or ambiguity																			
uses an extensive vocabulary to accurately communicate	2	2			2	1	1												
on general and technical topics, without excessive use of																			
																	4	-	
	2	2			2	1	1												
	_	2			1	1	1										+	-	_
·	2	2			2	1	1												
understood																			
exchanges information clearly in a variety of situations	2	2			2	1	1										\top		
with both expert and non-expert English speakers while																			
giving and receiving timely and appropriate responses																			
uses appropriate techniques to validate communications	2	2			2	1	1										_		
Operational communication using an aeronautical radio																			
maintain effective communication with others on	2	2			2	1	1												
																	+		
•	2	2			2	1	1												
	2	2			2	1	1									-	+	+	_
															\dashv	+	+	+	\dashv
					-		_								+	+	+	+	\dashv
phraseology	2	2			2	_	1												
·	2	2			2	1	1										\dagger	\dagger	\dashv
inadequate																			
receive appropriate responses to transmissions	2	2			2	1	1												
respond to transmissions and take appropriate action	2	2			2	1	1											Ī	
	se received training in the element, however is not able to tently demonstrate competency to the standard required alification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision hieves competency to the standard required for ication issue. Y — LESSON PHASE E— PROGRESS CHECK Dual day PIC/Solo day Instrument flight time Aeronautical knowledge examinations is, Elements and Performance Criteria Communicating in the aviation environment Communicating face-to-face pronounces words clearly, using an accent that does not cause difficulties in understanding conveys information in clearly structured sentences without confusion or ambiguity uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language speaks fluently without long pauses, repetition or excessive false starts responds to communications with actions that demonstrate that the information has been received and understood exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses uses appropriate techniques to validate communications Operational communication using an aeronautical radio maintain effective communication with others on operational matters communicate effectively in unfamiliar, stressful or non-standard situations apply the phonetic alphabet transmit numbers make appropriate transmissions using standard aviation phraseology use plain English effectively when standard phraseology is inadequate receive appropriate responses to transmissions	Instrument flight time Aeronautical knowledge examinations Aeronautical knowledge examinations Communicating in the arbitish does not cause difficulties in understanding conveys information or ambiguity uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language speaks fluently without long pauses, repetition or excessive false starts responds to communications with actions that demonstrate that the information has been received and understood exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses uses appropriate techniques to validate communications Operational matters Operational matters Communication swith actions that demonstrate that the information has been received and understood exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses uses appropriate techniques to validate communications Operational communication using an aeronautical radio maintain effective communication with others on operational matters communicate effectively in unfamiliar, stressful or non-standard situations apply the phonetic alphabet transmit numbers make appropriate transmissions using standard aviation phraseology use plain English effectively when standard phraseology is inadequate receive appropriate responses to transmissions 2	mance Standards Is received training in the element, however is not able to tentify demonstrate competency to the standard required alification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision hieves competency to the standard required for ication issue. 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Instrument flight time Aeronautical knowledge examinations Aeronautical knowledge examinations Aeronautical knowledge examinations Aeronautical in the aviation environment Communicating face-to-face pronounces words clearly, using an accent that does not cause difficulties in understanding conveys information in clearly structured sentences without confusion or ambiguity uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language speaks fluently without long pauses, repetition or excessive false starts demonstrate that the information has been received and understood exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses uses an propriate techniques to validate communications Doperational communications with actions that demonstrate that the information has been received and understood exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses uses appropriate techniques to validate communications Department of the provided of	mance Standards is received training in the element, however is not able to tentify demonstrate competency to the standard required allification issue as received training in the element, however is not able to tentify demonstrate competency to the standard required allification issue as a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision hieves competency to the standard required for cation issue. 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Y - LESSON PHASE	mance Standards is received training in the element, however is not able to tently demonstrate competency to the standard required alification issue as received training in the element, however is not able to tently demonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision hieves competency to the standard required for ication issue. **Profice of the element of ication issue.** **Profice of the element of the element of the element of the element of ication issue.** **Profice of the element of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of the element of ication issue.** **Profice of the element of ication is element of ication ication in clearly structured sentences without confusion or ambiguity **Structured Sentence** **Profice of the element of ication icati	mance Standards serecived training in the element, however is not able to tently demonstrate competency to the standard required allification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision hieres competency to the standard required for reation issue. Y - LESSON PHASE = - PROGRESS CHECK Dual day 2 2 5 5 5 4 6 3 7 1 1 1 1 1 1 1 1 1



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	rmance Standards																			
	as received training in the element, however is not able to stently demonstrate competency to the standard required																			
	ralification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision																			
	chieves competency to the standard required for		lvers	S		se	ioi													
qualif	ication issue.	g	ane	ever		Phase	entat		Flight	tion		Si								
		andlii	Se M	Jann	TOL	AGH	t Ori		2	enta		rcise								
*GRA	Y – LESSON PHASE	al He	Performance Maneuvers	lce ∿	tern,	for ,	-ligh	-ligh	Country	ıt Ori	ㅁ	/ Exe								S
*BLU	E – PROGRESS CHECK	ener	erfor	ferer	-Pat	heck	otry F	ıtry F	Cross (ımer	gatio	overy								Sur
		e G		d Re	ks, T	ss C	Coul	Coul	M Cr	nstrı	Navi	Reco								۱ ۲
		Advance General Handling	Advance	Ground Reference Manuevers	Airworks, T-Pattern,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country Flight	300 NM	Basic Instrument Orientation	Radio Navigation	Upset Recovery Exercises								Total hours
	Dual day	ì	۲ 2.	<u>ග</u> 2.	Ā	Ē	5.	Ō	30	ă 4.	6.									23.0
			5	5	1	2	0	2	7	0	0	0								
	PIC/Solo day	0			3 5	2. 0		3 8	7. 0											90.0
	Instrument flight time									4. 0	6. 0									10.0
	Aeronautical knowledge examinations	С	PL	A A	Aer	ona	auti	cal	Kr	IOW	led	lge	E	kam	nina	atio	ns	,		
(i)	recognise and manage communication errors and	2	2			2	1	1												
	misunderstandings effectively																			
(j)	seek clarification in the time available if a message is	2	2			2	1	1												
(14)	unclear or uncertainty exists	_																		
<u> </u>	react appropriately to a variety of regional accents	2	2			2	1	1												
(1)	communicate effectively in unexpected, stressful or non-	2	2			2	1	1												
	standard situations using standard phraseology or plain English																			
C2	Perform pre- and post-flight actions and procedures																			-
C2.1	Pre-flight actions and procedures																			
	complete all required pre-flight administration	2	2			2	1	1												
	documentation																			
(b)	obtain, interpret and apply information contained in the																			
	required pre-flight operational documentation, including the following:																			
	(i) minimum equipment list (MEL)	2	2			2	1	1												_
	(ii) maintenance release	2	2			2	1	1												-
	(iii) weather forecasts					2		1											-	
	(iv) local observations	2	2				1	1												
	(v) Notice to Airmen (NOTAM)	2	2			2	1	_												
	(vi) Aeronautical Information Package (AIP)	2	2			2	1	1											-	
(c)		2	2			2	1	1											\dashv	_
-	identify special aerodrome procedures	2	2		<u> </u>	2	1	1											\dashv	\dashv
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	2	2			2	1	1												
(e)	determine the suitability of the current and forecast	2	2			2	1	1								Ī		Ī	1	
	weather conditions for the proposed flight	_																	_	
	using the aircraft documents, calculate the following for a																			
	given set of environmental and operational conditions: (i) weight and balance	Ļ	_																4	\blacksquare
	· · · · · · · · · · · · · · · · · · ·	2	2		_	2				1									_	_
	(iii) take-off and landing performance	2	2			2				1									_	
	(iv) fuel requirements	2	2			2				1									_	
(g)	determine whether the aircraft is serviceable for the proposed flight	2	2			2	1	1												
<u> </u>	-		<u> </u>		1														1	



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	161	1718	8	
3 = Ha	mance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required halification issue																			
deem 1 = Ac	emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue.	Idling	Maneuvers	ınuevers	OF	3H Phase	Orientation		y Flight	ntation		ises								
	Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOI	Progress Check for AGH Phase	Cross-Country Flight Orientation	Cross-Country Flight	O NM Cross Country	Basic Instrument Orientation	Radio Navigation	Upset Recovery Exercises								Total hours
	Dual day	÷	PY 2:	້ວ 2.	Air	Pr	نّ 5.	ပ်	30	eg 4.	_							+	_	3.0
			5	5	0	0	0	•	7	0	0	0								
	PIC/Solo day Instrument flight time	8. 0			3 5	2.		3	7. 0	4.	6.						ì			0.0
	Aeronautical knowledge examinations	_	DI	^ /	\ or	onc	auti	001	K n	0	0	lao		Van	ninc	otio	nc			
C2.2	Perform pre-flight inspection	O	FL		\CI	Ulle	auti	Jai	N	IOW	neu	ige	; [/	Naii	III IC	aliO	115	Т	Т	
	identify and secure equipment and documentation that is required for the flight	2	2			2	1	1												
(b)	complete an internal and external check of the aircraft	2	2			2	1	1												
(c)	identify all defects or damage to the aircraft	2	2			2	1	1												
	report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	2	2			2	1	1												
(e)	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	2	2			2	1	1												
	certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate	2	2			2	1	1												
	complete and certify the daily inspection (if authorised to do so)	2	2			2	1	1												
C2.3	Post-flight actions and procedures																			
(a)	shut down aircraft	2				2	1	1												
	conduct post-flight inspection and secure the aircraft (if applicable)	2				2	1	1												
	complete all required post-flight administration documentation	2				2	1	1												
	Operate aeronautical radio																			
	Operate radio equipment																			_
	confirm serviceability of radio equipment	2				2	1	1										+	+	\dashv
	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2				2	1	1												
	maintain a listening watch and respond appropriately to applicable transmissions	2				2	1	1												
	conduct appropriate emergency and urgency transmissions	2				2	1	1												
C3.2	Manage R/T equipment malfunctions																			
(a)	perform radio failure procedures						2		2	1	1									



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3.2 Planning Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	8	
Performance Standards																	T		
3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required																			
for qualification issue																			
2 = Demonstrates a developing level of proficiency, and is																			
deemed safe to conduct solo practice under direct supervision 1 = Achieves competency to the standard required for		ទ																	
qualification issue.		enve	ers		Phase	ation		Ħ	١										
quamication issue:	alling	Performance Maneuvers	Manuevers	그	H	۳.		Flight	Basic Instrument Orientation		ses								
*CDAY JESSON DUASE	Advance General Handling	ance	Mar	n, TOL	Progress Check for AGH	ht 0	jht	300 NM Cross Country	Orien		Upset Recovery Exercises								
*GRAY – LESSON PHASE *BLUE – PROGRESS CHECK	ieral	orma	Ground Reference	T-Pattern,	sck fo	y Flig	y Flic	s Co	ent (tion	ery E								<u>r</u>
BLUE - PROGRESS CHECK	Ger		Refer	, T-P	Che	ountr	ountr	Cros	strur	Radio Navigation	ecove								Total hours
	ance	Advance	pun	Airworks,	gress	SS-C	ss-C	$\frac{\mathbb{Z}}{\mathbb{Z}}$	ic In	N oi	et R								tal
	Adv	Adv	_	Air	Pro	_	Cro	300	Bas	_	-								2
Dual da	ıy	2. 5	2. 5			5. 0			4. 0	6. 0	3. 0							2	23.0
PIC/Solo da	y 8. 0			3 5	2. 0		3 8	7. 0										S	90.0
Instrument flight tim	е								4.	6. 0								1	10.0
Aeronautical knowledge examination	s C	PL	A A	\ \er	ona	l auti	l ical	l I Kr			dge	E	kam	nina	atio	ns			
(b) use fault finding procedures and perform corrective	Т					2		2	1	1							T	T	
actions																			
C3.3 Operate transponder																			
(a) operate a transponder during normal, abnormal and	2	2			2				1	1									
emergency operations	1																+	#	
(b) recall transponder emergency codes C4 Manage fuel	2	2			2				1	1								_	
C4.1 Plan fuel requirements					ŀ												+	+	
•	1	_			_	1											+	+	
(1)	2	2			2	1											+	+	
(b) determine the quantity of fuel required taking into account operational requirements and relevant abnorma	2	2			2	ľ													
or emergency conditions and contingencies																			
(c) determine the total fuel required for the flight	2	2			2	1													
C4.2 Manage fuel system																			
(a) verify fuel quantity on-board aircraft prior to flight using	2	2			2	1			1	1									
two independent methods																	_	4	
(b) ensure the fuel caps are secured	2	2			2	1			1	1							_	4	
(c) perform fuel quality check prior to flight	2	2			2	1			1	1							_	4	
(d) ensure fuel drain cocks are closed	2	2			2	1			1	1							4	4	
(e) monitor fuel usage during the flight		2			2	1			1	1							4	4	
(f) accurately maintain fuel log		2			2	1			1	1							4	4	
(g) calculate and state endurance at any point during flight	_	2			2	1			1	1						_	4	4	
(h) perform fuel tank changes correctly		2	-		2	1			1	1						_	\downarrow	4	_
(i) maintain fuel load within aircraft limits	_	2			2	1			1	1						_	\downarrow	4	_
(j) operate the fuel cross-feed system correctly (if fitted)		2	-		2	1			1	1						_	\downarrow	4	_
(k) operate fuel pumps and engine controls correctly	_	2			2	1			1	1						_	\downarrow	4	_
(l) configure the aircraft correctly to achieve best range						2		2	1	1									
performance and correctly calculate the revised range of operation																			
(m) configure the aircraft correctly to achieve best endurance	+					2	-	2	1	1						1	+	+	\dashv
performance and correctly calculate the revised						ľ				-									
operational endurance		1	1	1		1	1		l		1		Ì I						
C4.3 Refuel aircraft																	\bot	ᆚ	



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

6 7 3 4 5 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Exercises Check for AGH Airworks, T-Pattern, TOL **Cross-Country Flight** *GRAY - LESSON PHASE Radio Navigation **Total hours** Recovery *BLUE - PROGRESS CHECK Progress 2. 5 6. 0 2. 5 4. 0 23.0 Dual day 0 7. 0 PIC/Solo day 2. 3 3 5 90.0 8. 4. 6. 0 0 10.0 Instrument flight time Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (a) identify the correct type of fuel to be used ensure aircraft is earthed prior to refuelling and defueling 1 1 1 operations correctly load and unload fuel 1 1 1 (d) ensure required fuel quantity is loaded 1 1 1 (e) ensure fuel caps are closed and secured after fuelling 1 1 1 operations (f) perform fuel quality checks 2 1 1 1 Control aeroplane on the ground **A1** A1.1 Start and stop engine (a) perform engine start and after start actions 2 2 (b) perform engine shutdown and after shutdown actions 2 2 (c) manage engine start and shutdown malfunctions and 2 2 2 emergencies considers ground surface in relation to contamination and 2 propeller care during engine start and stop activities A1.2 Taxi aeroplane (a) use aerodrome or landing area charts to taxi aircraft 2 2 1 1 2 (b) comply with taxiway and other aerodrome markings, 2 1 1 right-of-way rules and ATC or marshalling instructions when applicable perform applicable taxi checks, including the following: 1 (i) brakes and steering function normally and take appropriate action in 2 2 1 1 the event of a malfunction (ii) instruments for correct readings 2 2 1 1 (iii) altimeter setting 2 2 1 1 2 (d) maintain safe taxi speed and control of the aircraft 2 1 1 maintain safe spacing from other aircraft, obstructions, 2 2 1 1 2 and persons taxi the aeroplane along the centre of the taxiway 2 2 2 1 1 2 1 avoid causing a hazard to other aircraft, objects or 2 2 1 persons

Issue No. 1 5



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 1	10	11	12	L31	41	51	61	718	3	
3 = Ha consis for qu 2 = D deem 1 = Ac qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required salification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	Cross-Country Flight Orie		300 NM Cross Country Flight	_	Radio Navigatior	Upset Recovery Exercises							_	Total hours
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0							2	3.0
	PIC/Solo day	8. 0			3 5	2. 0		3 8	7. 0							ĺ			9	0.0
	Instrument flight time									4. 0	6. 0								1	0.0
	Aeronautical knowledge examinations	С	PL	A A	erc	ona	auti	cal	Kn	iow	led	lge	Ex	am	ina	ior	าร		,	
	correct handling techniques are applied to take into account wind from all four quadrants	2	2			2				1	1									
	correctly manage the engine during taxi manoeuvres	2	2			2				1	1									
A2	Take-off aeroplane																			
A2.1	Carry out pre take-off procedures																			
	correctly identify critical airspeeds, configurations, and emergency and abnormal procedures for normal and crosswind take-offs	2	2			2														
	work out a plan of action, in advance, to ensure the safest outcome in the event of abnormal operations	2	2			2														
	verify and correctly apply correction for the existing wind component to the take-off performance	2	2			2														
	perform all pre take-off and line-up checks required by the aircraft checklist	2	2			2														
	ensure approach path is clear of conflicting traffic and other hazards before lining up for take-off	2	2			2														
	align the aeroplane on the runway centreline	2	2			2														
A2.2	Take off aeroplane																			
	apply the controls correctly to maintain longitudinal alignment on the centreline of the runway, if appropriate, prior to initiating and during the take-off	2	2			2														
	adjust the power controls taking into account the existing conditions	2	2			2														
	monitor power controls, settings, and instruments during take-off to ensure all predetermined parameters are achieved and maintained	2	2			2														
	adjust the controls to attain the desired pitch attitude at the predetermined airspeed to attain the desired performance	2	2			2														
	perform the take-off applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner	2	2			2														
(f)	trim the aeroplane accurately	2	2			2														



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	141	15	16	17	18	
	mance Standards																			
	as received training in the element, however is not able to stently demonstrate competency to the standard required																			
	ialification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision		S																	
	chieves competency to the standard required for ication issue.		Performance Maneuvers	LS		Phase	ıtion		t											
quaiii	ication issue.	ling	<i>l</i> lane	neve	٦	۲ Ph	ienta		Flight	ation		ses								
		land	∩ce N	Man	T-Pattern, TOI	- AG	ht Or	ht		rient		Exercises								
	Y – LESSON PHASE	ral F	ırmaı	ence	ittern	sk for	Fligi	Fligi	Cou	ant O	ion									ပ္
*BLU	E – PROGRESS CHECK	Gene	Perfc	efere	T-Pa	Che	untry	untry	ross	rume	vigat	cove								no
		Advance General Handling	nce	nd R	orks,	ress	s-Co	s-Co	MM	Basic Instrument Orientation	Radio Navigation	t Re								Total hours
		Adva	Advance	Ground Reference Manuevers	Airworks,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country Flight	300 NM Cross Country	Basi	Radi	Upset Recovery								Tot
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0								23.0
	PIC/Solo day	8.	3)	3	2.	U	3	7.	U	U	U								90.0
	Instrument flight time	0			5	0		8	0	4.	6.									10.0
		_								0	0									
(g)	Aeronautical knowledge examinations	_		A A	\er	ona	auti	cal	Kr	IOW	led	lge	Ex	am	iina	itio	ns	_	_	
	perform gear and flap retractions, power adjustments (as applicable) and other required pilot-related activities	2	2			2														
	maintain flight path along the runway extended	2	2			2													_	
	centreline	_	_																	
(i)	apply the applicable noise abatement and wake	2	2			2														
	turbulence avoidance procedures																			
	recognise take-off abnormalities and take appropriate	2	2			2														
	action to reject take-off (can be simulated)																	_		
	Take off aeroplane in a crosswind																			
	perform a take-off in an aeroplane making appropriate adjustments for the crosswind conditions	2	2			2				1	1									
	maintain the runway centreline and extended centreline	2	2			2				1	1								\dashv	
	Carry out after take-off procedures	4	_			4				_	_									
	perform after take-off checklist	2				2														
	maintain the appropriate climb segment at the nominated					2												_	\dashv	
	heading and airspeed	2				4														
	manoeuvre according to local and standard procedures	2				2														
	maintain traffic separation	2				2														
	Take off aeroplane from 'short field'																			
(a)	calculate take-off and landing performance in accordance		2			2	2			2										
	with the aeroplane's performance charts																			
(b)	perform take-off aeroplane to achieve the minimum		2			2	2			2										
	length take-off performance																			
	perform take-off aeroplane to achieve the obstacle		2			2	2			2										
	clearance parameters Control aeroplane in normal flight																			
	Climb aeroplane																			
		_	_			•														
	operate and monitor all aircraft systems when commencing, during, and completing a climbing flight	2	2			2														
	manoeuvre																			
(b)	adjust altimeter subscale according to applicable settings	2	2			2												\dashv	\dashv	\Box
	identify and avoid terrain and traffic	2	2			2										1	7	\dashv	\exists	
		_			1											1	1			



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

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3.2 Planning Matrix

3 4 5 6 7 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation Progress Check for AGH Phase **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Recovery Exercises Airworks, T-Pattern, TOL Cross-Country Flight *GRAY - LESSON PHASE Radio Navigation **Total hours** *BILIF - PROGRESS CHECK 2. 5 6. 0 Dual day 2. 5 4. 0 23.0 0 2. 7. 0 3 5 3 90.0 PIC/Solo day 8. 4. 0 10.0 6. Instrument flight time Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (c) for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre: (i) minimum approach speed with flaps retracted 2 2 2 (ii) minimum approach speed in approach configuration 2 2 2 observe audible and visual stall warnings and recover 2 2 2 aeroplane to controlled flight (e) recognise and respond positively to reduced effectiveness 2 2 2 of controls during slow flight manoeuvres (f) transition from slow speed configuration using take-off 2 2 2 power to achieve nominated speed in excess of 1.5 Vs without loss of height A3.6 Perform circuits and approaches operate and monitor all aircraft systems when operating 2 2 the aeroplane in the circuit (b) in accordance with specific local procedures, safely perform a full circuit pattern (5 legs) by balancing and trimming the aeroplane accurately while applying smooth, coordinated control inputs to achieve the required flight tolerances specified for the flight path flown during traffic pattern manoeuvres as follows: (i) track upwind along extended centreline to 500 ft 2 2 2 2 2 (ii) establish and maintain crosswind leg tracking 90° to the runway 2 2 2 2 2 2 (iii) establish and maintain downwind leg tracking parallel to, and at a 2 2 2 2 2 2 specified distance from, the runway at circuit height (iv) establish base leg tracking 90° to the runway at a specified distance 2 2 2 2 2 2 from the runway threshold 2 (c) perform checks as required throughout circuit 2 2 2 2 (d) establish the approach and landing configuration appropriate for the runway and meteorological conditions, and adjust the power plant controls as required for the following: (i) commence and control approach descent path



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

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8 9 101112131415161718 3 4 6 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation Progress Check for AGH Phase **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Upset Recovery Exercises Airworks, T-Pattern, TOL **Cross-Country Flight** *GRAY - LESSON PHASE Radio Navigation hours *BILIF - PROGRESS CHECK Total 2. 5 6. 0 Dual day 2. 5 4. 0 23.0 0 2. 7. 0 3 5 3 90.0 PIC/Solo day 8. 4. 0 10.0 6. Instrument flight time 0 Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (ii) adjust descent commencement point to take account of extended 2 downwind leg or traffic adjustments (iii) align and maintain aircraft on final approach flight path with specified 2 2 2 2 2 2 or appropriate runway (iv) set and maintain approach configuration not below 500 ft AGL 2 2 2 2 2 (v) identify and maintain the nominated aiming point 2 2 2 2 2 (vi) maintain a stabilised approach angle at the nominated airspeed not 2 2 2 2 2 2 less than 1.3Vs to the round-out height (vii) verify existing wind conditions, make proper correction for drift, and 2 2 2 2 2 2 maintain a precise ground track (viii) apply speed allowances for wind gusts 2 2 2 2 (ix) configure aeroplane for landing 2 2 2 2 (e) maintain aircraft separation and position in the circuit 2 2 2 2 2 with reference to other aircraft traffic in the circuit area A3.7 Local area airspace using an appropriate chart, for the local area and circuit (i) identify geographical features 2 2 1 (ii) identify geographical limits 2 2 1 (iii) identify restricted, controlled and uncontrolled airspace areas 2 2 1 (iv) state local airspace limits 2 2 1 (v) identify the transit route between the departure aerodrome and 2 2 1 training area (vi) identify the geographical limits of the training area 2 2 1 (vii) identify aerodromes and landing areas within the local area 2 2 1 (b) maintain orientation and pinpoint location by using 2 2 1 geographical features and a local area chart transit from the circuit area and transit to the designated 2 2 1 training area operate safely within a transit lane (if applicable) 2 2 1 remain clear of restricted, controlled and other 2 2 1 appropriately designated airspace operate safely in the vicinity of local aerodromes and 2 2 1 landing areas transit from the designated training area to the circuit 2 2 1 larea



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	L61	171	8	
	mance Standards as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required																			
	alification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision chieves competency to the standard required for		ន																	
	ication issue.		enve	ers		Phase	ation		μ	_										
900		alling	Man	neve	거	F P	rient		Flight	tation		ses								
*CD4	V JESSON BUASE	General Handling	Performance Maneuvers	Mai	n, TOL	or AG	ght C	Flight	Country	Orien		Exercises								
	Y – LESSON PHASE E – PROGRESS CHECK	eral	orma	ence	T-Pattern,	sck fo	y Fli	y Fli		ent (tion	əry E								<u>r</u> s
DLO	E - FROUNESS CHECK			Refe		Che	ounti	ounti	Cross	strum	avige	Recovery								hot
		Advance	Advance	Ground Reference Manuevers	Airworks,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country	N	Basic Instrument Orientation	Radio Navigation	et R								Total hours
		Ĥ		_	Air	Pro	_	S	300	=		Upset I						4	4	
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0							2	23.0
	PIC/Solo day	8. 0			3 5	2. 0		3 8	7. 0										5	90.0
	Instrument flight time									4. 0	6. 0								·	10.0
	Aeronautical knowledge examinations	С	PL	Α /	۱er	ona	auti	cal	Kr			lge	Ex	kam	nina	atio	ns			
(h)	set QNH appropriately		2	2							1									
	correctly determine which runway is to be used for		2	2							1									
	landing																	+	4	
1	ensure runway is serviceable and available		2	2							1							+	4	
	position aircraft for arrival into the circuit		2	2							1								╅	
A4	Land aeroplane Land aeroplane																	+	+	
			_			2													+	
	maintain a constant landing position aim point	2	2			2												+	+	
(5)	achieve a smooth, positively-controlled transition from final approach to touchdown, including the following:																			
	(i) control ballooning during flare	2	2			2												+	+	
	(ii) touchdown at a controlled rate of descent, in the specified touchdown	2	2			2												+	\dagger	_
	zone within tolerances (iii) control bouncing after touchdown																	+	+	
	(iv) touch down aligned with the centreline within tolerances	2	2			2												+	+	
(c)		2	2			2												+	+	
	ensure separation is maintained	2	2			2												+	+	
	maintain positive directional control and crosswind correction during the after-landing roll	2	2			2														
(e)	use drag and braking devices, as applicable, in such a	2	2			2													Ī	
	manner to bring the aeroplane to a safe stop																	\perp	_	
	complete the applicable after-landing checklist items in a timely manner	2	2			2														
	Land aeroplane in a crosswind																		T	
(a)	verify existing wind conditions, make proper correction	2				2				2	2								1	\dashv
	for drift, and maintain a precise ground track																		╛	
	configure the aeroplane for the crosswind conditions	2				2				2	2							\perp	┙	
	control the aeroplane during the transition from final	2				2				2	2									
	approach to touchdown and during after-landing roll to compensate for the crosswind conditions																			
A4.3	Conduct a missed approach																	+	+	
	recognise the conditions when a missed approach should	2	2			2				2	2							+	+	\dashv
(3)	be executed		4			2				_	۷									
<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>															



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	L4	151	L61	71	8	
	rmance Standards as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required																			
	ualification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision chieves competency to the standard required for		sıs				_													
	ication issue.		euve	ers		Phase	tatior		ht	L										
·		dling	Mar	nuev	7	SH P)rien		y Flight	ntatio		ises								
*GRA	Y – LESSON PHASE	Han	Performance Maneuvers	e Ma	T-Pattern, TOL	or A	ight (ight	ountr	Orie		Ξxerα								
	E – PROGRESS CHECK	nera	rform	erenc	Patte	eck 1	try FI	try FI	ss C	ment	ation	/ery l								urs
		e Ge		Ref	.s, T-	ss Ch	Coun	Coun	1 Cro	nstru	Vavig	Reco								Po
		Advance General Handling	Advance	Ground Reference Manuevers	Airworks,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country Flight	N OC	Basic Instrument Orientation	Radio Navigation	Upset Recovery Exercises								Total hours
	Dual day	H	2.	2.	Ā	4	ت 5.	Ō	3(<u>й</u>	₽ 6.								2	⊢ 23.0
	PIC/Solo day		5	5	3	2.	0	3	7.	0	0	0							ç	90.0
		0			3 5	0		8	0	4	6									
	Instrument flight time									4. 0	6. 0									10.0
(1-)	Aeronautical knowledge examinations	_		A A	۹er	ona	auti	cal	Kn			lge	Ex	kam	ina	atio	ns			
	make the decision to execute a missed approach when it is safe to do so	2	2			2				2	2									
(c)	make a smooth, positively-controlled transition from									2	2									
	approach to missed approach, including the following: (i) select power, attitude and configuration to safely control aeroplane	_	_							•	•								+	
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off	2	2			2				2	2								+	
	procedures	2	2			2				2	2								┙	
	(iii) make allowance for wind velocity during go-around	2	2			2				2	2								┙	
	(iv) avoid wake turbulence	2	2			2				2	2								┙	
	Perform recovery from missed landing																			
	recognise when a missed landing is occurring and when it is appropriate to take recovery action	2	2			2	2			2	2									
-	make the decision to execute recovery from a missed	2	2			2	2			2	2							1	T	
	landing only when it is safe to do so																			
(c)	make a smooth, positively-controlled transition from a																			
	missed landing to missed approach, including the following:																			
	(i) select power, attitude and configuration to safely control aeroplane	2	2			2	2			2	2							_	+	
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off	2	2			2	2			2	2							-	+	
	procedures (iii) make allowance for wind velocity during go-around																	_	+	
	(iv) avoid wake turbulence	2	2			2	2			2	2								+	
A4.5	Short landing	_	2			2	2			_	_									_
	land aeroplane at nominated touchdown point at	2	2			2	2		2	2	2							+	+	\dashv
	minimum speed		_			_			_		_									
(b)	control ballooning during flare	2	2			2	2		2	2	2									
(c)	control bouncing after touchdown	2	2			2	2		2	2	2								\int]
	maintain direction after touchdown	2	2			2	2		2	2	2							$\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	\downarrow	\Box
	apply maximum braking without locking up wheels	2	2			2	2		2	2	2							\perp	\perp	
	stops aircraft within landing distance available	2	2			2	2		2	2	2								_	
A5	Aeroplane advanced manoeuvres																	4		_
	Enter and recover from stall																	4	4	4
	perform pre-manoeuvre checks for stalling		2	2			2		2			2			_		_	\perp	+	\dashv
(b)	recognise stall signs and symptoms		2	2			2		2			2						\perp	\perp	



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

3 4 6 5 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation Progress Check for AGH Phase **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Upset Recovery Exercises Airworks, T-Pattern, TOL Cross-Country Flight *GRAY – LESSON PHASE Radio Navigation **Total hours** *BILIF - PROGRESS CHECK 2. 5 Dual day 2. 5 4. 0 6. 0 23.0 0 2. 7. 0 3 5 3 90.0 PIC/Solo day 8. 4. 0 10.0 Instrument flight time 6. 0 Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (c) control the aeroplane by applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner, trim aeroplane accurately to enter and recover from the following manoeuvres: (i) incipient stall 2 2 2 2 2 (ii) stall with full power applied 2 2 2 2 2 (iii) stall without power applied 2 2 2 2 (iv) stall under the following conditions: (A) straight and level flight 2 2 2 (B) climbing 2 2 2 (C) descending 2 2 2 2 (D) approach to land configuration 2 2 2 2 2 (E) turning 2 2 2 2 (d) perform stall recovery as follows: (i) positively reduce angle of attack 2 2 (ii) use power available and excess height to increase the aircraft energy 2 2 2 2 2 (iii) minimise height loss for simulated low altitude condition 2 2 2 2 (iv) re-establish desired flight path and aircraft control 2 2 2 2 2 2 (e) recover from stall in simulated partial and complete 2 engine failure configurations A5.2 Recover from incipient spin perform pre-manoeuvre checks for an incipient spin 2 2 2 2 2 2 (b) recognise an incipient spin 2 2 use the aeroplane's attitude and power controls to execute an incipient spin manoeuvre from the following flight conditions and, using correct recovery technique, regain straight and level flight with height loss commensurate with the available altitude (simulated ground base height may be set): (i) straight and level flight 2 2 2 2 (ii) climbing 2 2 2 2 (iii) turning 2 2



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	1	5	6	7	R	9	10	11	12	13	14	15	16	171	R	
	rmance Standards as received training in the element, however is not able to	_	_	J	_	,	U	,	0)	10		12	13		13	10.	. / .		
	stently demonstrate competency to the standard required palification issue																			
2 = D	emonstrates a developing level of proficiency, and is																			
	led safe to conduct solo practice under direct supervision chieves competency to the standard required for		ers				_													
	ication issue.	g	neuv	vers		Phase	ntatio		Flight	on										
		Advance General Handling	Performance Maneuvers	Reference Manuevers	TOL	Progress Check for AGH Phase	Cross-Country Flight Orientation		\geq	Basic Instrument Orientation		Exercises								
*GRA	Y – LESSON PHASE	ral Ha	rmano	nce N	T-Pattern, TOI	k for /	Flight	Flight	Country	nt Ori	uc									ဟွ
*BLU	E – PROGRESS CHECK	Gene	Perfo	efere	T-Pa	Chec	untry	untry	Sross	trume	vigati	Recovery								our
		ance	Advance	Ground R	Airworks,	gress	ss-Co	ss-Co	300 NM Cross Count	ic Ins	Radio Navigation	et Re								Total hours
		÷	÷		Air	Pro	-	S	300	-	=	Upset							1	
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0								23.0
	PIC/Solo day	8. 0			3 5	2. 0		3 8	7. 0										9	90.0
	Instrument flight time									4. 0	6. 0								Í	10.0
	Aeronautical knowledge examinations	С	PL	Α /	۹er	ona	auti	cal	Kr	ow	/lec	lge	E)	kan	nina	atio	ns			
	Turn aeroplane steeply																		4	
	pre-manoeuvre checks for steep turning	2	2			2	2			2	2								4	_
(b)	steep level turn using a nominated bank angle, ending on a nominated heading or geographical feature, without	2	2			2	2			2	2									
	altitude change																			
	steep descending turn using a nominated bank angle,	2	2			2	2			2	2									
	ending on a nominated heading or geographical feature ending on a nominated altitude																			
	aeroplane operating limits are not exceeded	2	2			2	2			2	2								+	
	Sideslip aeroplane (where flight manual permits)																		T	
(a)	straight sideslip:																			
	(i) induce slip to achieve increased rate of descent while maintaining track and airspeed	2	2			2	2													
	(ii) adjust rate of descent by coordinating angle of bank and applied rudder	2	2			2	2												T	
(b)	sideslipping turn by adjusting the bank angle to turn	2	2			2	2												1	
	through minimum heading change of 90° at constant																			
	airspeed using sideslip, and exiting the turn on a specified heading or geographical feature, within tolerance																			
(c)	recover from a sideslip and return the aeroplane to	2	2			2	2												1	
4.0	balanced flight																		_	
A6 1	Manage abnormal situations – single-engine aeroplanes Manage engine failure - take-off (simulated)				ì														+	
	correctly identify an engine failure after take-off						2		2										+	_
	apply the highest priority to taking action to control the						2		2										+	\dashv
	aeroplane																			
	maintain control of the aeroplane						2		2										_	
	perform recall actions						2		2										4	
-	perform emergency actions as far as time permits						2		2									1	4	_
	manoeuvre the aeroplane to achieve the safest possible outcome						2		2											
	ensure passengers adopt brace position						2		2										†	\exists
(h)	advise others such as ATS and other aircraft of intentions						2		2										†	
	if time permits																			



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

3 4 6 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation Progress Check for AGH Phase **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Upset Recovery Exercises Airworks, T-Pattern, TOL **Cross-Country Flight** *GRAY - LESSON PHASE Radio Navigation **Total hours** *BILIF - PROGRESS CHECK 2. 5 6. 0 Dual day 2. 5 4. 0 23.0 0 2. 7. 0 3 5 3 90.0 PIC/Solo day 8. 4. 6. 0 0 10.0 Instrument flight time Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations A6.2 Manage engine failure in the circuit area (simulated) (a) correctly identify an engine failure during flight 2 2 apply the highest priority to taking action to control the 2 2 2 2 aeroplane perform recall actions 2 2 2 2 2 2 select a suitable landing area within gliding distance, on the aerodrome or elsewhere 2 perform emergency procedures and land the aeroplane if 2 2 2 the engine cannot be restarted as time permits (f) advise ATS or other agencies capable of providing 2 2 2 2 assistance of situation and intentions re-brief passengers about flight situation, brace position 2 2 2 2 and harness security land the aeroplane ensuring safest outcome if an engine 2 2 2 2 restart is not achieved A6.3 Perform forced landing (simulated) (a) after a simulated complete engine failure has occurred, without prior indications, carry out the following: (i) identify complete power failure condition and control aeroplane 2 2 2 2 2 (ii) perform immediate actions 2 2 2 2 2 2 (iii) formulate and describe a recovery plan, including selecting the most 2 2 2 2 2 2 2 (iv) establish optimal gliding flight path to position the aeroplane for a 2 2 2 2 2 2 2 landing on the selected landing area (v) perform emergency procedures and land the aeroplane if the engine 2 2 2 2 2 2 2 cannot be restarted as time permits (vi) advise ATS or other agencies capable of providing assistance of 2 2 2 2 2 2 2 situation and intentions (vii) re-brief passengers about flight situation, brace position and harness 2 2 2 2 2 2 (viii) land the aeroplane ensuring safest outcome if an engine restart is 2 2 2 2 2 2 2 not achieved after a simulated partial engine failure has occurred, without prior indications, carry out the following: (i) identify partial power failure condition 2 2 2 2 2 2 (ii) perform recall actions



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	8	
-	mance Standards																			
	as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required																			
	alification issue emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision																			
	chieves competency to the standard required for		ers			a	ū													
	ication issue.	_	neu	/ers		Phase	tatio		ght	Ľ										
		dling	Mai	nue	占	품	Orien		y Flight	ntatic		ises								
*CDA	Y – LESSON PHASE	Han	Performance Maneuvers	e Ma	T-Pattern, TOL	or A(ght (ght	untr	Orie		xerc								
	F – PROGRESS CHECK	eral	orm	ence	atte	sck fe	y Fli	y Fli	s Co	ent	tion	ery E								ırs
BLUI	E - FROUNESS CHECK	Ger		Refer	ᆣ	S	ountr	ountr	Cros	trum	aviga	cov								100
		Advance General Handling	Advance	Ground Reference Manuevers	Airworks,	Progress Check for AGH	ss-Co	s-C	MN	Basic Instrument Orientation	Radio Navigation	Upset Recovery Exercises								Total hours
		Adva	Adva	Grou	Airw	Prog	Cross-Country Flight Orientation	Cross-Country Flight	300	Basi	Rad	Ups								Tol
	Dual day		2.	2.			5.			4.	6.									23.0
	PIC/Solo day	8.	5	5	3 5	2.	0	3 .	7.	0	0	0							!	90.0
	Instrument flight time	U			5	0		8	0		6.								1	10.0
	Aeronautical knowledge examinations		PI	A /	 Δer	On	auti	Cal	Kr	0 NOW	0 lec	lae	Fv	(am	nins	atio	ns			
	(iii) adjust flight controls to re-establish flight path that maximises		2	2	101	2110	2	Jai	2	2	2	.g0		1	10		. 13		T	
	performance for partial power condition and maintain a safe airspeed margin above stall speed		-							-	_									
	(iv) establish radio communications where possible		2	2			2		2	2	2									
	(v) perform partial engine failure actions		2	2			2		2	2	2									
	(vi) formulate a plan to recover aeroplane to a safe landing area or		2	2			2		2	2	2									
	aerodrome, taking into account that partial failure might lead to a full power failure at any time																			
	(vii) manoeuvre the aeroplane to a selected landing area or aerodrome using the remaining power to establish an optimal aircraft position for a		2	2			2		2	2	2									
	safe landing (viii) advise ATS or other agencies capable of providing assistance of		2	2			2		2	2	2								1	
	situation and intentions										_								_	
	(ix) re-brief passengers about flight situation, brace position and harness security		2	2			2		2	2	2									
	(x) maintain a contingency plan for coping with a full power failure throughout the manoeuvre		2	2			2		2	2	2									
	(xi) when a safe landing position is established, shut down and secure engine and aeroplane		2	2			2		2	2	2									
A6.4	Conduct precautionary search and landing (simulated condition)																			
(a)	assess flight circumstances and make an appropriate		2	2			2		2											
	decision when to perform precautionary landing																			
(b)	configure aeroplane for conditions		2	2			2		2											
(c)	perform precautionary search procedure		2	2			2		2											
(d)	select landing area, carry out an inspection and assess its																			
	suitability for landing, taking into account:																			
	(i) unobstructed approach and overshoot paths		2	2			2		2											
	(ii) landing area length adequate for landing		2	2			2		2											
	(iii) landing area surface is suitable for aeroplane type and clear of hazards		2	2			2		2							Ī	Ī	Ī		
(e)	maintain orientation and visual contact with the landing		2	2			2		2											
	area																			
	advise ATS or other agencies capable of providing		2	2			2		2											
	assistance of situation and intentions																		_	[
	re-brief passengers about flight situation, brace position and harness security		2	2			2		2											
	land and secure aircraft and manage passengers	\vdash	2	2	-		2		2									-	1	\dashv
	Manage other abnormal situations (simulated)		_	_			_		4											\dashv
70.5	manage other abhormal situations (simulated)																			



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

3 4 6 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Exercises Airworks, T-Pattern, TOL Check for AGH Cross-Country Flight *GRAY - LESSON PHASE Radio Navigation **Total hours** Recovery *BILIF - PROGRESS CHECK Progress 2. 5 6. 0 Dual day 2. 5 4. 0 23.0 0 2. 7. 0 3 5 3 90.0 PIC/Solo day 8. 4. 6. 0 0 10.0 Instrument flight time Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (a) correctly identify the situation and maintain safe control 2 of the aeroplane at all times (b) manage abnormal and emergency situations in 2 2 2 accordance with relevant emergency procedures and regulatory requirements (c) follow appropriate emergency procedures while 2 2 2 maintaining control of the aeroplane identify and conduct flight with an unreliable airspeed 2 2 2 indication correctly identify when an emergency evacuation of an 2 2 2 aeroplane is required execute a simulated emergency evacuation of an 2 2 2 aeroplane (g) advise ATS or other agencies capable of providing 2 2 2 assistance of situation and intentions A6.6 Recover from unusual flight attitudes 2 (a) |identify nose-high or nose-low unusual attitude flight 2 2 2 condition recover from nose-low or nose-high unusual attitudes by 2 2 2 2 2 adjusting pitch, bank and power to resume controlled and balanced flight (c) apply controlled corrective action while maintaining 2 2 2 aircraft performance within limits IFF Full instrument panel manoeuvres IFF.1 Determine and monitor the serviceability of flight instruments and instrument power sources determine serviceability of flight and navigational 2 2 2 instruments perform functional checks of flight and navigational 2 2 2 instruments where applicable prior to take-off monitor flight instrument and instrument power sources 2 2 2 and react to any warnings, unserviceability or erroneous indications IFF.2 Perform manoeuvres using full instrument panel



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	.61	718	3	
3 = Ha consist for qu 2 = D deem 1 = Ad qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required salification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	o Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	Orie	Cross-Country Flight	300 NM Cross Country Flight	_	ത Radio Navigation	ω Upset Recovery Exercises							Total hours	
	Dual day		2. 5	2. 5			5. 0			4. 0	0.	0							23	
	PIC/Solo day	8. 0			3 5	2. 0		3	7. 0										90	.0
	Instrument flight time									4. 0	6. 0								10	.0
	Aeronautical knowledge examinations	С	PL	A A	۱er	ona	auti	cal	Kn		led	lge	Ex	am	ina	tior	าร			
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel			2						2	2									
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:										2									
	(i) straight and level performance during normal cruise within the flight tolerances			2						2	2					Ì				
	(ii) nominated climb performance within the flight tolerances			2						2	2								1	_
	(iii) descent performance within the flight tolerances			2						2	2								1	
	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances			2						2	2									
IFF.3	Recover from upset situations and unusual attitudes																			
(a)	correctly identify upset situations and unusual attitudes under simulated IMC									2	2	2								
(b)	recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:																			
	(i) high and low-nose attitudes										2	2					\downarrow	\perp	_	
	(ii) varying angles of bank					•					2	2					4	\downarrow	╄	_
	(iii) various power settings (iv) various aircraft configurations									2	2	2					4	+	-	
	(v) unbalanced flight									2	2	2					_	+	-	
IFL	Limited instrument panel manoeuvres									2	2	2							┢	4
	Recognise failure of attitude indicator and stabilised																		╁	-
	heading indicator																			
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications											3								
	transition from a full instrument panel to a limited instrument panel											3								
IFL.2	Perform manoeuvres – limited panel																			
	interpret and respond appropriately to instrument indications											3								



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 [10	11	12	13	14	15[161	լ71	8	
3 = Hacconsister qualification of the second	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required palification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	_	Cross-Country Flight		_	_	Upset Recovery Exercises							_	Total hours
	Dual day		2. 5	2. 5			5. 0				6. 0	3. 0							2	3.0
	PIC/Solo day	8. 0			3 5	2.		3	7. 0										9	0.0
	Instrument flight time										6.						Ì		1	0.0
	Aeronautical knowledge examinations	С	PL	A A	\er	ona	auti	cal			0 led	ae	 Ex	am	nina	atio	ns		_	
(b)	apply power and attitude settings to achieve straight and]				Ī		T	T	
	level performance during:																		┸	
	(i) normal cruise											3							⊥	
	(ii) approach configuration with flaps (when fitted) and undercarriage down											3								
(c)	apply power and attitude settings to achieve:																			
	(i) nominated climb performance											3								
	(ii) nominated descent performance											3								
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading											3								
	trim (as applicable) and balance aircraft											3							┸	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight											3								
IFL.3	Recover from upset situations and unusual attitudes – limited panel																			
(a)	correctly identify upset situations and unusual attitudes under simulated IMC									2		3								
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:																			
	(i) high and low-nose attitudes									2		3							╽	
	(ii) varying angles of bank									2		3							╧	
	(iii) various power settings									2		3							╧	
	(iv) various aircraft configurations								=	2		3				ightharpoonup	ightharpoonup	\perp	1	
	(v) unbalanced flight									2		3				_	_		_	
	Re-establish visual flight																			
(a)	transition from visual flight conditions to instrument flight								2			3								
(b)	conditions while maintaining control of the aircraft perform a manoeuvre to re-establish visual flight	-							2		\dashv	3	\dashv			\dashv	\dashv	+	+	\dashv
	implement a plan that ensures the flight continues in VMC							1	2		-	3	\dashv			\dashv	\dashv	\dashv	+	=
	Non-technical skills 1								-			J							+	\dashv
	Maintain effective lookout																			\dashv
.1																				



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8 9) [01	11:	21.	3⊉4	ŀ 1 5	16	171	.8	
3 = Haconsistor qualification (1) 2 = Date of the deem of the de	mance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required stalification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	Cross-Country Flight Orientation	Cross-Country Flight	300 NM Cross Country Flight	Basic Instrument Orientation	Radio Navigation	Observecovery Exercises							Total hours
	Dual day		2. 5	2. 5		-	5. 0		4	1. 6 0 (3. 3 0 (2	23.0
	PIC/Solo day	8.			3 5	2.			7. 0									9	0.0
	Instrument flight time	0			3	0		0	4	1. 6								1	10.0
	Aeronautical knowledge examinations	С	PL	Α Α	\er	ona	autio	cal			o edc	le F	_ Exa	mir	 atio	ns			
(a)	maintain traffic separation using a systematic visual scan								1	T		T	Ī		Ī			T	
	technique at a rate determined by traffic density, visibility and terrain																		
	maintain radio listening watch and interpret transmissions to determine traffic location and intentions								1										
	perform airspace-cleared procedure before commencing any manoeuvre								1										
NTS1	Maintain situational awareness																		
(a)	monitor all aircraft systems using a systematic scan technique								2									Ť	
	collect information to facilitate ongoing system management								2										
	monitor flight environment for deviations from planned operations								2										
	collect flight environment information to update planned operations								2										
NTS1	Assess situations and make decisions																		
(a)	identify problems								2									T	
(b)	analyse problems						2		2										
(c)	identify solutions						2		2										
	assess solutions and risks						2		2								Ш	\perp	
	decide on a course of action						2	_	2									4	
	communicate plans of action (if appropriate)						2		2								oxed	┵	
	allocate tasks for action (if appropriate)						2	_	2	\downarrow		1	\downarrow				\dashv	4	
	take actions to achieve optimum outcomes for the operation						2		2										
	monitor progress against plan						2		2	+	+	+	+	+			\dashv	+	=
	re-evaluate plan to achieve optimum outcomes						2		2		-						\dashv	+	\dashv
NTS1	Set priorities and manage tasks																	\dagger	\dashv
. 4 (a)	organics workload and missition to assure settings.						1		2								\dashv	4	
	organise workload and priorities to ensure optimum outcome of the flight						2		2										



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 1	10	11	12	131	L41	151	16	171	8	
3 = Ha consist for qu 2 = D deem 1 = Ad qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required salification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers		Progress Check for AGH Phase	Flight Orientation	Flight	ť	Orientation		Upset Recovery Exercises	12:	131	L41	151	16:	L 71	8	Total hours
	Dual day		2. 5	2. 5			5. 0			4. 0		3. 0							2	23.0
	PIC/Solo day	8. 0			3 5	2.		3	7. 0										Ş	90.0
	Instrument flight time)							-		6. 0								ŀ	10.0
	Aeronautical knowledge examinations	С	PL.	A A	\erd	ona	uti	cal	 Kn	0 low		lge	Ex	am	ina	tio	ns			
(b)	plan events and tasks to occur sequentially						2		2									Т	Ī	\Box
	anticipate events and tasks to ensure sufficient opportunity for completion						2		2											
	use technology to reduce workload and improve cognitive and manipulative activities						2		2											
	Maintain effective communications and interpersonal relationships																			
	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight						2		2											
	define and explain objectives to stakeholders						2		2									_		
	demonstrate a level of assertiveness that ensures the optimum completion of the flight						2		2											
	Non-technical skills 2																			
N 1 S 2	Recognise and manage threats																			
	identify relevant environmental or operational threats that are likely to affect the safety of the flight						2		2											
	identify when competing priorities and demands may represent a threat to the safety of the flight						2		2											
	develop and implement countermeasures to manage threats						2		2											
	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured						2		2											
NTS2	Recognise and manage errors																			
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors						2		2											
	identify committed errors before safety is affected or the aircraft enters an undesired state						2		2									\uparrow		
	monitor the following to collect and analyse information to identify potential or actual errors: (i) aircraft systems using a systematic scan technique						2		2									+		



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	L41	15	16	171	8	
3 = Ha consist for qu 2 = D deem 1 = Ad qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required ralification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	Cross-Country Flight Orientation	Flight	ť	Orientation		Upset Recovery Exercises								Total hours
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0							2	23.0
	PIC/Solo day	8. 0			3 5	2. 0			7. 0										Ş	90.0
	Instrument flight time									4. 0	6. 0						Ì		1	10.0
	Aeronautical knowledge examinations	С	PL	A A	\er	ona	uti	cal	Kn		led	lge	Ex	am	ina	tio	ns			
	(ii) the flight environment						2		2											
	(iii) other crew						2		2										┙	
	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state						2		2											
NTS2	Recognise and manage undesired aircraft state															Ì				
1	recognise an undesired aircraft state						2		2										T	
	prioritise tasks to ensure an undesired aircraft state is managed effectively						2		2											
	apply corrective actions to recover an undesired aircraft state in a safe and timely manner						2		2											
NAV	Navigate aircraft																			
NAV. 1	Prepare documents and flight plan															Ì				
	select and prepare appropriate navigation charts for the intended flight						2		1										Ī	
	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas						2													
	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight						2													
	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times						2													
	calculate and document critical point (CP) and point of no return (PNR) locations									1	1									
	complete a flight plan to the planned destination and alternates						2													
	lodge suitable flight notification for search and rescue (SAR) purposes						2													
NAV. 2	Comply with airspace procedures while navigating																			
	identify airspace restrictions and dimensions applicable to the flight						2												1	



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	111	12	131	L41	151	161	171	8	
	mance Standards																			
	as received training in the element, however is not able to stently demonstrate competency to the standard required																			
	ialification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision		S																	
	chieves competency to the standard required for ication issue.		uver	LS		Phase	ition		ţ											
quaiii	ication issue.	ing	/ane	neve		4 Ph	ienta		Fligh	ation		ses								
		land	nce l	Man	, TO	- AGI	ht O	ŧ	Country Flight	rient		Exercises								
	Y – LESSON PHASE	ral F	ırmaı	nce	ıttern	iy Fo	Flig	Flight	Con	int O	on	ک آ								
*BLU	E – PROGRESS CHECK	General Handling	Performance Maneuvers	efere	T-Pattern, TOL	Chec	untry	untry	coss	rume	vigat	cove								no
				nd R	orks,	ress	s-Co	S-Co	M	lnst	o Na	t Re								alh
		Advance	Advance	Ground Reference Manuever	Airworks,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country	300 NM Cross	Basic Instrument Orientation	Radio Navigation	Upset Recovery								Total hours
	Dual day		2. 5	2. 5			5. 0			4. 0		3. 0							:	23.0
	PIC/Solo day	8. 0			3 5	2. 0		3 8	7. 0										9	90.0
	Instrument flight time									4. 0	6. 0				ĺ	Ì	Ì		ľ	10.0
	Aeronautical knowledge examinations	С	PL	A A	\er	ona	auti	cal	Kn	IOW	led	ge	Ex	am	ina	tio	ns			
	obtain and comply with air traffic clearances, if applicable						2											_		
	comply with airspace procedures applicable to the airspace classification throughout the flight						2													
NAV. 3	Conduct departure procedures																			
(a)	organise cockpit to ensure charts, documentation and						2													
	navigational calculator are accessible from the control																			
	comply with all departure procedures, clearances and						2					-		-				_	+	
()	noise abatement requirements						_													
(c)	establish planned track on departure within 5 nm of						2											+	İ	
	airfield or apply alternative procedure if required																			
	calculate estimated time of arrival (ETA) for first waypoint						2													
NAV.	Navigate aircraft enroute																			
(a)	maintain a navigation cycle that ensures accurate						2													
	tracking, and apply track correctional techniques to re-																			
	establish track prior to waypoint or destination																			
(b)	maintain heading to achieve a nominated track						2													
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination						2													
(d)	maintain track in accordance with published flight path						2											+	1	
()	tolerances in controlled airspace						_													
(e)	navigate using accepted map-reading techniques						2												Ī	
	maintain navigation and fuel log to monitor tracking, ETAs						2													
	and fuel status																			
(g)	use appropriate techniques to obtain a positive fix at suitable intervals						2													
(h)	maintain awareness of route, enroute terrain, enroute						2	Ī		Ī	Ī								Ī	
	and destination weather, and react appropriately to																			
(i)	changing weather conditions perform pre-descent and turning point checks						2	-		\dashv	-	-		-				+	+	
	maintain appropriate radio communication and listening						2	\dashv		\dashv		1		1	1			+	\dashv	
0/	watch with ATS and other aircraft if radio is fitted and						_													
	used																			



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8 !	9 1	01	112	213	14	15	16	171	8	
3 = Hacconsister of the consister of the	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required palification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue. Y – LESSON PHASE E – PROGRESS CHECK	General Handling	Performance Maneuvers	Ground Reference Manuevers		Progress Check for AGH Phase	Orientation		Country Flight	Orientation		Exercises	213	314	15	16.	1/1	8	ours
		Advance G	Advance P	Ground Re	Airworks, T	Progress C	Cross-Cou	Cross-Country Flight			Kadio Navigation	Upset Recovery							Total hours
	Dual day		2. 5	2. 5			5. 0					3. 0						2	23.0
	PIC/Solo day	8. 0			3 5	2.			7. 0									ę	90.0
	Instrument flight time	,									3. 0							ŀ	10.0
	Aeronautical knowledge examinations	С	PL	A A	\erd	ona	autio	cal	_			ge E	xaı	l nin	atio	ns		_!	
	configure the aircraft as required for the following environmental and operational conditions:																		
	(i) turbulence						2	-	2		+	-		-			_		
	(ii) holding						2		2										
	(iii) maximum range						2		2										
(I)	maintain awareness of search and rescue times (SARTIME) and revise as required						2												
	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives						2												
NAV. 5	Navigate at low level and in reduced visibility																		
	configure the aircraft as required for the following environmental and operational conditions:																		
	(i) reduced visibility						2		2	2	2								
	(ii) low cloud base						2		2	-+	2								
	navigate aeroplane at minimum heights (not below 500 ft AGL, clear of built-up areas) and remain in VMC						2		2	2	2								
	maintain separation from terrain, obstacles, allowing for wind and turbulence at low level						2		2	2	2								
	avoid noise sensitive areas						2		_	2	2								
	operate appropriately in the vicinity of aerodromes and landing areas						2		2	2	2								
NAV.	Perform lost procedure																		
(a)	acknowledge positional uncertainty in a timely manner						2		2										
	configure aircraft for range and endurance as required						2		2									_	
	apply recognised method to re-establish aircraft position						2	_	2	1	\perp						\downarrow	_	
	fix position						2		2	1	\downarrow	_					\perp	_	
	use radio to request assistance, if applicable						2		2	1	\downarrow			<u> </u>			\downarrow	1	
	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome						2		2										
NAV. 7	Perform diversion procedure																		



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	mance Standards																			
	as received training in the element, however is not able to stently demonstrate competency to the standard required																			
	ralification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision																			
	hieves competency to the standard required for		vers	(0		se	on													
qualif	ication issue.	g	Performance Maneuvers	evers		Phase	ntati		Flight	ion		S								
		ndlir	e M	lanue	TOL	F)	Orie		\geq	entat		rcise								
*GRA	Y – LESSON PHASE	I Ha	nanc	Se M	ern,	for /	light	Flight	Country	t Orie	_	Exe								
*BLU	E – PROGRESS CHECK	nera	rforn	eren	Patte	eck	try F	try F	ss C	ment	atior	very								nrs
		e Ge		Ref	s, T-	SCP	Soun	Soun	Cross	ıstru	Javiç	Seco								2
		Advance General Handling	Advance	Ground Reference Manuevers	Airworks, T-Pattern,	Progress Check for AGH	Cross-Country Flight Orientation	Cross-Country	300 NM	Basic Instrument Orientation	Radio Navigation	Upset Recovery Exercises								Total hours
		Ad		_	Air	Pro		ပ်	30										4	
	Dual day	_	2. 5	2. 5		_	5. 0	•	_	4. 0	6. 0	0								23.0
	PIC/Solo day	8. 0			3 5	2. 0		3 8	7. 0		_									90.0
	Instrument flight time									4. 0	6. 0									10.0
	Aeronautical knowledge examinations	С	PL	A A	۹er	ona	auti	cal	Kn	ow	led	lge	Ex	am	nina	atio	ns			
(a)	make timely decision to divert						2		2	2	2									
(b)	identify an acceptable alternate aerodrome						2		2	2	2									
(c)	select a suitable route and cruising level						2		2	2	2									
(d)	revise flight plan considering weather, terrain, airspace						2		2	2	2									
	and fuel available																			
	advise ATS of an intention to divert						2		2	2	2									
NAV. 8	Use instrument navigation systems																			
(a)	initialise navigation system (as applicable)									2	2									
(b)	conduct navigation system validity check (as applicable)									2	2						_	\exists	_	
-	conduct RAIM check if required									2	2						_	\exists	_	
	select, load, check and activate the flight plan (as						Н			2	2							\dashv	寸	\dashv
	applicable)																			
(e)	operate instrument navigation systems correctly									2	2									
(f)	use instrument navigation systems to assist with									2	2									
	navigation																			
	confirm waypoints and fixes using instrument navigation									2	2									
	systems																			
NAV. 9	Execute arrival procedures																			
(a)	obtain updated relevant aerodrome information						2													
(b)	determine landing direction and aerodrome suitability						2											Ħ		
	conduct arrival						2											\dashv	寸	\exists
(d)	identify and avoid all traffic						2											\dashv	寸	\exists
	observe local and published noise abatement						2										\dashv	\exists	7	\dashv
	requirements and curfews																			
RNE	Radio navigation – enroute																			
RNE.	Operate and monitor radio navigation aids and systems																			
(a)	select and operate navigation aids and systems									2	2								7	\dashv
	monitor and take appropriate action in relation to the									2	2							\dashv	\dashv	\dashv
	integrity of navigation aid systems information																			
_	Navigate the aircraft using navigation aids and systems																			\neg
2																				



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3.2 Planning Matrix

		1	2	3	1	5	6	7	Q	a	10	11	12	12	1 /1	15	16	L71	Ω	
Perfo	rmance Standards	_		3	4)	U	/	0	9	10	11	12	13.	L4	13.	10	L / JL	4	
	as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required ualification issue																			
	remonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision		(0																	
	chieves competency to the standard required for		uver	ည		ase	tion		ارا											
quaiii	ication issue.	ling	Performance Maneuvers	neve		4 Ph	ienta		Flight	ation		ses								
		land	nce N	Man	T-Pattern, TOI	AG	ht Or	ht	Intry	rient		Exercises								
	Y – LESSON PHASE	eral F	orma	ence	atterr	송	/ Flig	/ Flig	Cou	ent O	ion									ည
*BLU	E – PROGRESS CHECK	Gen	Perf	Refere	T-P	Che	untry	untry	Sross	trum	ıvigat	Recovery								חסנ
		Advance General Handling	Advance	Ground Reference Manuevers	Airworks,	Progress Check for AGH Phase	Cross-Country Flight Orientation	Cross-Country Flight	300 NM Cross Country	Basic Instrument Orientation	Radio Navigation	et Re								Total hours
		Adv	-	Gro	Air	Pro	-	Cro	300	_	_	Upset							ļ	_
	Dual day		2. 5	2. 5			5. 0			4. 0	6. 0	3. 0							2	23.0
	PIC/Solo day	8. 0			3 5	2.		8 8	7. 0										Ş	90.0
	Instrument flight time									4. 0	6. 0								·	10.0
	Aeronautical knowledge examinations	С	PL.	A A	l 4er	ona	auti	cal	Kn			lge	Ex	am	nina	atio	ns			
	determine aircraft position fix solely with reference to									2	2								T	
	navigation aids and systems																		4	
	intercept tracks to and from navigation aids and systems									2	2								4	
	maintain tracks within specified tolerances									2	2								4	
	record, assess and revise timings as required									2	2								+	
	recognise station passage Operate at non-towered aerodromes									2	2								+	
Α																				
ONT A.1	Non-towered aerodrome – pre-flight preparation																			
(a)	interpret the extracted information						2												╛	
-	identify all special aerodrome procedures						2												1	
	check current weather forecast and local observations						2												1	
	identify all relevant radio and navigation aid frequencies						2												4	
ONT A.2	Taxi aircraft at a non-towered aerodrome or landing area																			
(a)	refer to aerodrome or landing area chart (if available)						2												1	
(b)	set local QNH or area QNH						2												T	
(c)	broadcast intentions on appropriate frequency						2												Ì	
(d)	obtain and interpret traffic information						2													
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions						2													
(f)	recognise ground markings during taxi and take						2								\exists		\exists	1	†	ᅦ
	appropriate action																		4	_
	taxi aircraft to holding point						2											\downarrow	4	_
	use strobes when crossing any runway						2												4	
	Perform departure at a non-towered aerodrome or landing area																			
	check and ensure runway approach is clear prior to entering a runway						2								Ī	Ī	Ī			
	correctly set transponder code and mode prior to entering runway for take-off						2													
(c)	confirm runway approaches clear in all directions prior to entering runway						2													



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 1	101	11	.21	314	415	16	171	18	
3 = H. consi for qu 2 = D deem 1 = Ad qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required palification issue remonstrates a developing level of proficiency, and is need safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	N Advance Performance Maneuvers	o Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	റ Cross-Country Flight Orientation	Flight	300 NM Cross Country Flight	-	Radio Navigation	.ധ Upset Recovery Exercises							Total hours
	Dual day		2. 5	2. 5			0				-	0							
	PIC/Solo day	8. 0			3 5	2. 0		3	7. 0										90.0
	Instrument flight time										6. 0								10.0
	Aeronautical knowledge examinations	С	PL	A A	۱er	ona	auti	cal	Kn		led	ge	Exa	mii	natio	ons			
(d)	broadcast line up details						2												
(f)	transmit appropriate radio calls and maintain separation with other aircraft						2												
(g)	advise air service provider of departure details, if required						2												
(h)	conduct departure						2										Ш		
	Perform arrival and landing at a non-towered aerodrome or landing area																		
	set correct area or local QNH						2												
(b)	use correct radio frequency to transmit inbound calls as required						2												
(c)	maintain effective lookout						2												
(d)	maintain aircraft separation and avoid other traffic						2												
(e)	maintain tracking tolerances						2												
(f)	determine wind velocity						2												
(g)	determine landing direction						2												
(h)	confirm runway is serviceable for the operation						2												
(i)	determine circuit direction						2												
(j)	conduct landing area inspection (if applicable)						2										Ш		
(k)	position aircraft in the circuit in preparation for landing and maintain separation from traffic						2												
(I)	make all necessary circuit radio calls						2												
(m)	verify runway is clear of other traffic, wildlife and other obstructions						2												
(n)	land the aircraft						2												
(0)	vacate runway						2										Ц		
	cancel SARWATCH, if applicable						2												
	Operate in Class G airspace																		
	Operate aircraft in Class G airspace																	4	H
	maintain tracking and altitude tolerances to remain outside controlled airspace						2												
(b)	apply separation tolerances between IFR flights, and IFR and VFR flights						2												
(c)	when using an aircraft radio:																		



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3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 [10	111	121	L3 1	.41	L5/2	16	171	8	
3 = Ha consist for qu 2 = D deem 1 = Ac qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required palification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue. Y – LESSON PHASE E – PROGRESS CHECK	Advance General Handling	Advance Performance Maneuvers	Ground Reference Manuevers	Airworks, T-Pattern, TOL	Progress Check for AGH Phase	_	Cross-Country Flight		_	-	Upset Recovery Exercises								Total hours
	Dual day		2. 5	2. 5			5. 0				6. 0	3. 0							1	23.0
	PIC/Solo day	8. 0			3 5	2.		3 8	7. 0										9	90.0
	Instrument flight time										6. 0								1	10.0
	Aeronautical knowledge examinations	С	PL	A A	۱er	ona	auti	cal				lge	Ex	am	ina	tio	ns			
	(i) monitor appropriate radio frequency						2												Т	
	(ii) make appropriate radio calls						2												T	
	(iii) obtain operational information from air services provider and other aircraft						2													
	(iv) use information to ensure aircraft separation is maintained						2											-	+	
	(v) apply loss of radio communication procedures						2		2									-	\dagger	
(d)	using a suitable chart:																	-	\dagger	
	(i) operate clear of active aerodromes and landing areas in the vicinity of																		\dagger	
	the aircraft (ii) identify and remain clear of controlled and restricted airspace						2											\dashv	+	
	(iii) take appropriate action when operating in the vicinity of a danger						2											\dashv	+	
	area						_											_	4	
	perform actions in the event of abnormal operations and emergencies						2													
	recall transponder emergency code and communication						2											-	\dagger	
	failure code						_													
CTR	Operate at a controlled aerodrome																			
CTR.	Controlled aerodrome pre-flight preparation																			
(a)	interpret the extracted information								2										T	
	identify all special aerodrome procedures								2									-	\dagger	
	check current weather forecast and local observations								2										1	
(d)	identify all relevant radio and navigation aid frequencies								2						l				1	
_	Taxi aircraft at a controlled aerodrome																			
(a)	obtain and comply with ATC clearances								2					_	_			+	+	_
									2									\dashv	+	
	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions								2											
	recognise ground markings during taxi and take appropriate action								2										1	
(d)	recognise lighting signals and take appropriate action								2								1	\top	1	\neg
(e)	identify airport runway incursion hotspots								2								j		T	
(f)	manoeuvre aircraft to avoid jet blast hazard								2]	
(g)	request taxi guidance if unsure of position								2	Ī			Ī	Ī	Ī				Ī	



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.2 Planning Matrix

3 4 6 **Performance Standards** 3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue 2 = Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision Advance Performance Maneuvers 1 = Achieves competency to the standard required for Cross-Country Flight Orientation **Ground Reference Manuevers** qualification issue. 300 NM Cross Country Flight Basic Instrument Orientation Exercises Airworks, T-Pattern, TOL Check for AGH **Cross-Country Flight** *GRAY - LESSON PHASE Radio Navigation **Total hours** Recovery *BLUE - PROGRESS CHECK Progress 2. 5 6. 0 2. 5 4. 0 23.0 Dual day 0 PIC/Solo day 2. 7. 0 3 5 3 90.0 8. 4. 6. 0 0 10.0 Instrument flight time Aeronautical knowledge examinations CPLA Aeronautical Knowledge Examinations (h) use strobes when crossing any runway CTR. Perform departure from controlled aerodrome (a) receive and correctly read back an airways clearance 2 check and ensure runway approach is clear prior to 2 entering a runway 2 correctly set transponder code and mode prior to entering runway for take-off comply with ATC departure instructions 2 advise ATC as soon as possible if unable to comply with 2 clearance contact approach with airborne report or give departure 2 call to tower maintain lookout 2 (h) avoid wake turbulence 2 comply with airways clearances within tracking and 2 altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone CTR. Perform arrival and landing at controlled aerodrome (a) receive ATIS and correctly set the appropriate QNH 2 request and receive ATC clearance and set correct 2 transponder code prior to entering control area advise ATC as soon as possible if unable to comply with 2 clearance (d) maintain lookout at all times 2 update QNH as required 2 maintain tracking tolerances 2 establish aircraft on the correct leg of the circuit in 2 preparation for landing and maintain separation from traffic (h) confirm clearance to land 2 (i) vacate runway and obtain taxi clearance 2 CTA Operate in controlled airspace



${\bf 3}\ Commercial\ Pilot\ License\ Training}$ Course

3.2 Planning Matrix

		1	2	3	4	5	6	7	8	9 1	LO	111	۱2	13	L4	15	16	171	8	
Performance Standards																			١	
3 = Has received training in the element, however is not able to consistently demonstrate competency to the standard required																				
	for qualification issue																			
	emonstrates a developing level of proficiency, and is																			
	deemed safe to conduct solo practice under direct supervision																			
	chieves competency to the standard required for		uver	ည		Phase	tion													
quaiii	ication issue.	ing	/ane	neve		1 Ph	Flight Orientation		Country Flight	ation		es								
		andli	ice N	Man	T0	AGF	it Ori	=	ntry F	ienta		Exercises								
*GRAY – LESSON PHASE		General Handling	Performance Maneuvers	nce	T-Pattern, TOL	k for	Fligh		Cou	Į O	uc	y Ex								ဟ
*BLUE – PROGRESS CHECK		ene	erfo	efere	I-Pa	Shec	intry	ıntry	ross	nme.	igati	over								our
				nd Re	rks, ·	ess (Ç	Ş	S M	Inst	Nav	Rec								ᇤ
		Advance	Advance	Ground Reference Manuever	Airworks,	Progress Check for AGH	Cross-Country	Cross-Country	300 NM Cross	Basic Instrument Orientation	Radio Navigation	Upset Recovery								Total hours
	Dual day	/	2. 5	2. 5	'		5. 0	J	_	_		3.							:	23.0
	PIC/Solo day	8. 0	0		3 5	2.		3 8	7. 0										ç	90.0
	Instrument flight time									4. 0	6. 0								ľ	10.0
	Aeronautical knowledge examinations	С	PL	A A	erc	ona	autio	cal	Kn	ow	led	ge	Ex	am	ina	tio	ns			
CTA.	Operate aircraft in controlled airspace																			
	comply with airways clearance requirements for								2											
	operating in all classes of airspace, including lead time																			
	required for flight plan submission, contents, 'clearance void time', and 'readback' requirement																			
	apply airways clearance requirements for entering,								2											
	operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details																			
	to expect from ATC																			
	maintain control area protection tolerances								2										+	
(d)	maintain tracking and altitude tolerances when operating								2											
	on an airways clearance																	_	4	
	reconfirm any clearance items when doubt exists							_	2									_	\downarrow	
	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions								2											
	follow ATC requirements for a change of level in CTA,								2									\dashv	+	
	including in an emergency situation								2											
(h)	comply with departure, climb, transition to cruise								2										1	
	(levelling out), cruise, change of levels, descent and visual																			
	approach procedures in CTA and CTR instructions																	_	4	
	apply separation standards between IFR flights, and IFR								2											
	and VFR flights in the various classes of CTA								_		-		-					+	+	
	perform appropriate actions in the event of the loss of radio communication in CTA and CTR								2											
	perform appropriate actions in the event of abnormal								2									\top	+	
	operations and emergency procedures in CTA and CTR																			
	operate under radar vectoring procedures, including radio						Ī	Ī	2								Ī			
	procedures and phraseologies																	_	\downarrow	
	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded								2											
	perform appropriate actions in the event of abnormal	\vdash						-	2	1	\dashv	1	\dashv	1	\dashv	_		+	+	
	operations and emergencies																	4	\downarrow	
	recall transponder emergency code and communication failure code								2											
																		$\perp \perp$	1	



3 Commercial Pilot License Training Course

3.2 Planning Matrix



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

3 Commercial Pilot License Training Course

3.3 Training Course Syllabus

3.3 Training Course Syllabus

3.3.1 Training Curriculum

- A. Training Curriculum (incl. Time Scale and Scale in Weeks)
 - (110.0 hours Actual Flight Time & ** 5.0 hours Synthetic Flight Trainer Time / 19 weeks)
 - a. Commercial Pilot Ground Training (**170.0-hours, 8 weeks)
 - b. Commercial Pilot Flight Training (110.0 hours, 7 weeks)
 - 1. Advanced General Handling Phase (50.0 hours, 6 weeks)
 - 2. Advanced Cross-Country Phase (50.0 hours, 3-4 weeks)
 - 3. Basic Flight Instrument Phase (10.0 hours, 1 week)
 - 4. ** Synthetic Flight Trainer (5.0 hours, 3-5 Days)
 - c. CAAP Checkride (1.0-hour, 1 day)

3.3.2 Ground Training Subjects Covered

SUBJECT	**HOURS
Air Law	20.0
Aircraft General Knowledge	20.0
Flight Performance and Planning	36.0
Human Performance	10.0
Meteorology	14.0
Navigation	30.0
Operational Procedures	10.0
Principles of Flight	18.0
Threat and Error Management	4.0
UPRT	5.0
Radiotelephony	12.0
TOTAL HOURS	179.0

^{*}UPRT – Upset Prevention Recovery Training (See I.S. 2.3.3.3 Appendix C)

1. LESSON 1

LESSON NAME: AIR LAW (PCAR 2.3.3.3 (b)(2)(i))

GROUND SCHOOL 20.0 HOURS

LESSON DESCRIPTION:

(i) International Agreements and Organizations: The Convention of Chicago;

Other International agreements: IATA agreement; Tokyo and Warsaw Convention; PIC authority and responsibility regarding safety and security; Operators and pilots liabilities towards persons and goods on the ground, in case of damage and injury caused by the operation of the aircraft, Commercial practices and associated rules, dry and wet lease;

- (ii) Relevant parts of ICAO Annexes: 1, 2, 7, 8, 9, 11 (and Doc 4444), 12, 13, 14, 15, 17:
- (iii) Procedures for air navigation (PANS-OPS) Aircraft Operations Doc 8168;
- (iv) National law

LESSON OBJECTIVES:

^{**}Recommended hours only



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To provide a review of the international rules of the air and national regulations that govern airmen and Flights, with emphasis on licensing and operations. Also aims to provide the student with a knowledge of the VFR and IFR Flight environment.

2. LESSON 2

LESSON NAME: AIRCRAFT GENERAL KNOWLEDGE (PCAR 2.3.3.3 (b)(2)(iI)

GROUND SCHOOL 20.0 HOURS

LESSON DESCRIPTION:

- (i) Airframe and systems, electrics, powerplant, emergency equipment
 - (A) Airframe and systems: Fuselage, Cockpit and cabin windows, Wings, Stabilizing surfaces, Landing Gear, Flight Controls, Hydraulics, Air driven systems (piston engines only), Air driven systems (turbo-propeller and jet aircraft), Non-pneumatic operated de-ice and anti-ice systems, Fuel system;
 - (B) Electrics: Direct Current (DC), Alternating Current (AC), Semiconductors,
 - Basic knowledge of computers; Basic radio propagation theory
 - (C) Powerplant: Piston Engine, Turbine Engine, Engine construction, Engine systems, Auxiliary Power Unit (APU)
 - (D) Emergency equipment: Doors and emergency exits, Smoke detection, Fire detection, Fire-fighting equipment, Aircraft oxygen equipment, Emergency equipment

(ii) Instrumentation

- (A) Flight instruments: Air data instruments, Gyroscopic instruments, Magnetic Compass, Radio Altimeter, Electronic Flight Instrument System (EFIS),
- (B) Automatic flight control system: Flight director, Autopilot, Yaw damper/Stability augmentation system,
- (C) Warning and recording equipment: Warnings general; Stall warning,
- (D) Powerplant and system monitoring instruments: Pressure gauge, Temperature gauge, RPM indicator, Consumption gauge, Fuel gauge, Torque meter, Flight hour meter, Vibration motoring, Remote (signal) transmission system, Electronic Displays

LESSON OBJECTIVES:

Introduce the student the components of an airplane, powerplant, and other related systems and instruments.

3. LESSON 3

LESSON NAME: FLIGHT PERFORMANCE AND PLANNING (PCAR 2.3.3.3 (b)(2)(iii))

GROUND SCHOOL 36.0 HOURS

LESSON DESCRIPTION:

- (i) Mass and balance: Center of gravity, Mass and balance limits
- (ii) Loading: Terminology, Aircraft mass checks, Procedures for determining airplane mass and balance documentation; Effects of overloading;
- (iii) Center of gravity: Basis of cg calculations (load and balance documentation), Calculation of cg; Securing of loading; Area load, running load, supporting
- (iv) Performance of single-engine airplanes Performance class B: Definitions of terms and speeds;



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3 Commercial Pilot License Training Course

3.3 Training Course Syllabus

Take-off and landing performance, Climb and cruise performance

- (v) Performance of multi-engine airplanes: Definitions of terms and speeds; Importance of performance calculations; Elements of performance, Use of performance graphs and tabulated data (vi) Flight planning and flight monitoring:
- (vi) Flight planning and flight monitoring:
 - (A) Flight plan for cross country flights: Navigation plan, Fuel plan, Flight monitoring and inflight re-planning, Radio communication and navigation aids;
 - (B) ICAO ATC flight plan: Types of flight plan, Completing the flight plan, Filling the flight plan, Closing the flight plan, Adherence to flight plan
 - (C) Practical flight planning: Chart preparation; Navigation plans; Simple fuel plans, Radio planning practice
 - (D) Practical completion of a flight plan (flight plan, flight log, navigation log, ATC plan, etc.): Extraction of data

LESSON OBJECTIVES:

Providing students with an understanding of weight and balance, performance, loading, usage of tables, graphs and flight planning.

4. LESSON 4

LESSON NAME: HUMAN PERFORMANCE (PCAR 2.3.3.3 (b)(2)(iv)) (ICAO Doc. 9583 as per PCAR 3.2.2)

GROUND SCHOOL 10.0 HOURS

LESSON DESCRIPTION:

- (i) Human factors basic concepts: Human factors in aviation, Accident statistics, Flight safety concepts
- (ii) Basic aviation physiology: Basics of flight physiology, Man and environment: the sensory system; Health and Hygiene;
- (iii) Basic aviation psychology: Human information processing; Human error and reliability; Decision making; Avoiding and managing errors: cockpit management; Personality; Human overload and underload, Advanced cockpit automation

LESSON OBJECTIVES:

Providing students the awareness of human limitations, physiological and psychological demands.

5. LESSON 5

LESSON NAME: METEOROLOGY (PCAR 2.3.3.3 (b)(2)(v))
GROUND SCHOOL 14.0 HOURS

LESSON DESCRIPTION:

- (i) The atmosphere: Composition, extent, vertical division; Temperature; Atmospheric pressure; Atmospheric density; Altimetry;
- (ii) Wind: Definition and measurement; General circulation; Turbulence; Variation of wind with height; Local winds; Standing waves;

(iii) Thermodynamics: Humidity;



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- (iv) Clouds and Fog: Cloud formation and description; Fog, mist, haze
- (v) Precipitation
- (vi) Airmasses and fronts: Types of airmasses; Fronts;
- (vii) Pressure systems: Location of the principal pressure areas, Anticyclone, Non frontal depressions;
- (viii) Climatology: Typical weather situations in mid-latitudes; Local seasonal weather and wind
- (ix) Flight hazards: Icing, Turbulence; Wind-shear; Thunderstorms; Hazards in mountainous areas; Visibility reducing phenomena;
- (x) Meteorological information: Observation, Weather charts, Information for flight planning

LESSON OBJECTIVES:

Providing students with the knowledge on weather patterns, theory, atmospheric conditions, and hazards. Interpreting weather information, charts and forecasts.

6. <u>LESSON 6</u>

LESSON NAME: NAVIGATION (PCAR 2.3.3.3 (b)(2)(vi))

GROUND SCHOOL 30.0 HOURS

LESSON DESCRIPTION:

- (i) General Navigation: Basics of navigation: The solar system; The earth, Time and time conversions; Directions, Distance
- (ii) Magnetism and compasses: General Principles, Aircraft magnetism, Knowledge of the principles, standby and landing or main compasses and remote reading compasses
- (iii) Charts: General properties of miscellaneous types of projections; The representation of meridians; parallels; great circles and rhumb lines; The use of current aeronautical charts
- (iv) Dead reckoning navigation (DR): Basics of dead reckoning; Use of the navigational computer; The triangle of velocities; Determination of DR position; Measurement of DR elements; Resolution of current DR problems; Measurements of maximum range, radius of action and point-of-safe-return and point-of-equal-time
- (v) In-flight navigation: Use of visual observations and application to in-flight navigation; Navigation in climb and descent: Navigation in cruising flight, use of fixes to revise navigation data; Flight log (including navigation records);
- (vi) Radio Navigation: Radio aids: Ground D/F (including classification of bearings); ADF (including associated beacons and use of the radio magnetic indicator); VOR and Doppler-VOR (including the use of the radio magnetic indicator); DME (distance measuring equipment); Basic radar principles: SSR (secondary surveillance radar and transponder); Self-contained and external referenced navigation systems: Satellite assisted navigation: GPS/GLONASS/DGPS

LESSON OBJECTIVES:

Enabling students to learn more about the different methods of navigations and develop the skills in reading and using aeronautical charts, usage of flight computer and other navigational aids for cross-country flight planning and route navigation.

7. <u>LESSON 7</u>

LESSON NAME: OPERATIONAL PROCEDURES (PCAR 2.3.3.3 (b)(2)(vii)
GROUND SCHOOL 10.0 HOURS



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LESSON DESCRIPTION:

- (i) ICAO Annex 6 Parts I, II and III (as applicable)
- (ii) Special operational procedures and hazards: Minimum equipment list; Ground icing; Bird strike risk and avoidance; Noise abatement; Fire/smoke; Decompression of pressurized cabin; Windsshear, microburst; Wake turbulence; Security; Emergency and precautionary landings; Fuel jettisoning;

Transport of dangerous goods; Contaminated runways;

LESSON OBJECTIVES:

Informing students about operating procedures and special procedures.

8. LESSON 8

LESSON NAME: PRINCIPLES OF FLIGHT (PCAR 2.3.3.3 (b)(2)(viii) GROUND SCHOOL 18.0 HOURS

LESSON DESCRIPTION:

- (i) Basics; laws and definitions; The two-dimensional airflow about an aerofoil: The coefficients; The three-dimensional airflow about an airplane; The total drag; The ground effect; The relation between the lift coefficient and the speed for constant lift; The stall; Climax augmentation; Means to decrease the CLCD ratio, increasing drag; The boundary layer;
- (ii) Stability: Condition of equilibrium in stable horizontal flight; Methods of achieving balance; Longitudinal stability; Static directional stability; Static lateral stability; Dynamic lateral stability;
- (iii) Control: General; Pitch control; Yaw control; Roll control; Interaction in different planes (yaw/roll); Means to reduce control forces; Mass balance; Trimming;
- (iv) Limitations: Operating limitations; Maneuvering envelope; Gust envelope;
- (v) Propellers: Conversion of engine torque to thrust; Engine failure or engine stop; Design feature for power absorption; Moments and couples due to propeller operation;
- (vi) Flight mechanics: Forces acting on an airplane; Asymmetric thrust; Emergency descent; Wind-shear;

LESSON OBJECTIVES:

Provide students a review of the principles and theories of flight. Describing the reactions of aircraft to various control inputs.

9. <u>LESSON 9</u>

LESSON NAME: THREAT AND ERROR MANAGEMENT (Resource Booklet 8 Threat and Error Management, Australian Government: Civil Aviation Safety Authority)

GROUND SCHOOL 4.0 HOURS

LESSON OBJECTIVES:

Providing students the relevant limitations of human performance and adherence to correct procedures. Emphasizing the importance of situational awareness.

10. <u>LESSON 10</u>

Issue No. 1 5



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<u>LESSON NAME: UPSET PREVENTION AND RECOVERY TRAINING (UPRT) (PCAR 2.3.3.3(d)(2)(iii))</u>

GROUND SCHOOL 5.0 HOURS

LESSON DESCRIPTION:

Develop the necessary competence and resilience to be able to apply appropriate recovery techniques during upsets --- understanding how to cope with physiological and psychological aspects of dynamic upsets in aeroplanes.

- i) Aerodynamics
- ii) Causes of and Contributing factors to upsets
- iii) Safety review of accidents and incidents relating to aeroplane upsets
- iv) G-load management
- v) Energy Management
- vi) Flight path management
- vii) Recognition
- viii) System Malfunction (including immediate handling and subsequent operational considerations, as applicable)
- ix) Additional exercises, Flight path management, manual control

LESSON OBJECTIVES:

Acquiring the knowledge to recognize and how to avoid upset situations. Learning to take appropriate, timely and perform recoveries from upsets.

LESSON STANDARDS:

Be able to:

(1.a.i.1.a)	manage and stay within the defined aircraft limits during recovery
(1.a.i.1.b)	recognize and announce excessive control inputs
(1.a.i.1.c)	apply the correct recovery strategy timely and effectively
(1.a.i.1.d)	manage stress response during the maneuver.

11. LESSON 11

LESSON NAME: RADIOTELEPHONY (PCAR 2.3.3.3 (b)(2)(ix)) GROUND SCHOOL 12.0 HOURS

LESSON DESCRIPTION:

(i) VFR Communications: Definitions; General operating procedures; Relevant weather information terms (VFR); Action required to be taken in case of communication failure; distress and urgency procedures; General principles of VHF propagation and allocation of frequencies;

(ii) Morse code.

LESSON OBJECTIVES:

Enabling students to effectively communicate through knowledge of terminology, frequencies and communication facilities.



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3.3.3 Flight Time Breakdown

COMMERCIAL PILOT FLIGHT TIME BREAKDOWN										
TRAINING PHASE	LO	CAL	CROS	SS COUNTRY	TOTAL					
	DUAL	SOLO/	DUAL	SOLO/						
		PIC		PIC						
**FLIGHT SIMULATOR					(5+00)					
ADVANCED GENERAL	**05+00	**45+00			**50+00					
HANDLING PHASE	ING PHASE									
ADVANCED CROSS-			5+00 45+00		50+00					
COUNTRY PHASE										
BASIC INSTRUMENT	10+00				10+00					
PHASE										
UPSET PREVENTION	3+00									
RECOVERY TRAINING										
(UPRT)	RT)									
CAAP CHECKRIDE		1+00			1+00					
	GRAND	GRAND TOTAL								

^{**}Recommended only

3.3.4 Competency Based Syllabus

3.3.4.1 Part I Advanced General Handling Phase

LESSON NO.	EXERCISE	DUA	PIC	TOTA
		L	TIM	L
		TIM	E	TIME
		E		
1	Airworks, Traffic Pattern, Take-off and Landings		8.0	8.0
	(PPL Review)			
2	Airworks (Advanced Performance Maneuvers)	2.5		2.5
3	Airworks (Ground-Reference Maneuvers)	2.5		2.5
4	Airworks, Traffic Pattern, Take-off and Landings		35.0	35.0
5	Progress Check for Advanced General Handling		2.0	2.0
Phase				
	TOTAL	5.0	37.0	50.0

Phase Objective: After completion of this phase, the Student should be able to:

• Perform maneuvers within the required allowable limits for Commercial Pilots

LESSON 1

Airworks, Traffic Pattern, Take-off and Landings (IS 2.3.3.3)

A. Objective

The applicant should –

- 1. Be able to practice, gain additional experience and be proficient in the review of private pilot maneuvers assigned by the Flight Instructor.
- 2. Be able to demonstrate good situational awareness, cockpit management and decision



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making as pilot-in-command.

B. Completion Standards (AC 02-011)

This Lesson is complete when the applicant has -

- 1. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Touchdown on landing: First 1/3 of the runway
- 2. Competently demonstrated proficiency in performing Private Pilot maneuvers.
- Demonstrated good situational awareness, cockpit management and decision making as pilotin-command.

LESSON 2

Airworks (Advanced Performance Maneuvers) (IS 2.3.3.3(a)(5))

A. Objective

The applicant will —

- 1. Be introduced to asked to perform required commercial pilot performance maneuvers namely: Steep turns, Steep Spirals, Chandelles, and Lazy Eights and their related human factors.
- 2. Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-in-command.

B. Completion Standards (AC 02-011)

This Lesson is complete when the applicant has –

- 1. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Touchdown on landing: First 1/3 of the runway
- 2. Competently demonstrated proficiency in performing Commercial Pilot maneuvers and their corresponding human factors.

LESSON 3

Airworks (Ground-Reference Maneuvers) (IS 2.3.3.3(a)(6))

A. Objective

The applicant will —

- 1. Be introduced to asked to perform commercial pilot ground-reference maneuver of Eightson-Pylons and be introduced to spin awareness and their related human factors.
- 2. Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-in-command.

B. Completion Standards

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency commercial pilot the ground-reference maneuver of Eights-on-Pylons and its related human factors.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees



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3. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.

LESSON 4

Airworks, Traffic Pattern, Take-off and Landings (IS 2.3.3.3)

A. Objective

The applicant will —

- 1. Gain additional proficiency in Takeoffs and Landings, Go-around procedures, Steep Turns, Slow Flight, Stalls, Chandelles, Lazy Eights, Eights-on-Pylons, and the Power-Off 180 accuracy approach and landing and their related human factors.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision making as pilot-in-command

B. Completion Standards

This Lesson is complete when the applicant has —

- 1. Demonstrated proficiency in Takeoffs and Landings, Go-around procedures, Steep Turns, Slow Flight, Stalls, Chandelles, Lazy Eights, Eights-on-Pylons, and the Power-Off 180 accuracy approach and landing and their related human factors.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.

LESSON 5

Progress Check for Advanced General Handling Phase

A. Objective

The applicant will —

- 1. Review all commercial pilot maneuvers with emphasis on Takeoffs and Landings, Go-around procedures, Steep Turns, Slow Flight, Stalls, Chandelles, Lazy Eights, Eights-on-Pylons, and the Power-Off 180 accuracy approach and landing and their related human factors.
- 2. Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency and his general handling skills in the mentioned areas according to the completion standards.
- 3. Be able to demonstrate good situational awareness, cockpit management, and decision making as pilot-in-command.

B. Completion Standards

This Lesson is complete when the applicant has —

- 1. Reviewed all commercial pilot maneuvers with emphasis on Takeoffs and Landings, Goaround procedures, Steep Turns, Slow Flight, Stalls, Chandelles, Lazy Eights, Eights-on-Pylons, and the Power-Off 180 accuracy approach and landing and their related human factors.
- 2. Adequately demonstrated proficiency, general handling skills, and performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command



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3.3.4.2 Part II Advanced Cross-Country Phase

LESSON NO.	EXERCISE	DUA	PIC	TOTA
		L	TIM	${f L}$
		TIM	E	TIME
		E		
1	Cross-Country Flight Orientation	5.0		5.0
2	Cross-Country Flight		38.0	38.0
3	300 NM Cross Country Flight		7.0	7.0
	TOTAL	5.0	45.0	50.0

Phase Objective: After completion of this phase, the Student should be able to:

- Enhance navigation skills by flying as Pilot-in-Command (PIC) in cross country flights
- Perform one 300 NM distance cross country flight with full-stop landings at two different aerodromes

LESSON 1

Cross-Country Flight Orientation (IS 2.3.3.3 (a)(7))

A. Objective

The applicant will –

- 1. Be introduced to new cross-country VFR routes and learn necessary aeronautical knowledge and skills to fly as PIC in cross-country flights and their related human factors.
- 2. Gain experience in cross-country flight planning, pilotage and Dead Reckoning, radio navigation (GPS, VOR, and ADF) and radar services, diversion, and lost procedures.

B. Completion Standards

This Lesson is complete when the applicant has –

- 1. Demonstrated the knowledge and skills needed to fly as PIC in cross-country flights.
- 2. Adequately performed proficiency in navigation using pilotage, Dead Reckoning, and radio navigation.
- 3. Competently explained and demonstrated diversion and lost procedures and their related human factors.

LESSON 2

Cross-Country Flight (2.3.3.3(c)(2)(ii)))

A. Objective

The applicant will —

1. Gain additional experience and apply the aeronautical skills and knowledge need in flying as PIC in cross-country operations.

B. Completion Standards

This Lesson is complete when the applicant has -

- 1. Adequately presented the knowledge and skills needed in flying as PIC in cross-country operations.
- 2. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.



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3 Commercial Pilot License Training Course

3.3 Training Course Syllabus

LESSON 3

300 NM Cross-Country Flight (2.3.3.3(c)(2)(ii)))

A. Objective

The applicant will —

- **1.** Be able to fly as PIC in a 300NM Distance flight in which full-stop landings at two different aerodromes should be made (excluding departure aerodrome).
- 2. Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-in-command.

B. Completion Standards

This Lesson is complete when the applicant has —

1. Adequately performed the 300NM flight as PIC.

Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.

3.3.4.3 Part III Basic Instrument Phase

LESSON NO.	EXERCISE	DUA	PIC	TOTA
		L	TIM	L
		TIM	E	TIME
		E		
1	Orientation and Basic Flight Maneuvers	4.0		2.0
2	Radio Navigation	6.0		6.0
	TOTAL	10.0		10.0

Phase Objective: After completion of this phase, the Student should be able to:

- Learn basic maneuvers with reference to flight and navigational instruments only
- Learn and understand the principles of operation of radio navigational aids

LESSON 1

Orientation and Basic Flight Maneuvers

A. Objective

The applicant should –

- 1. Be able to learn basic maneuvers with reference to flight and navigational instruments only.
- 2. Be able to recover from unusual attitudes proficiently.

B. Completion Standards (AC 02-011)

This Lesson is complete when the applicant has -

- 1. Adequately performed maneuvers with reference to flight and navigational instruments only.
- 2. Competently demonstrated recovery from unusual attitudes.
- 3. Demonstrated maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees

LESSON 2

Radio Navigation

A. Objective

The applicant should –

1. Be able to perform maneuvers with reference to flight instruments only.



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2. Be able to learn the basic principles of operation of a radio navigational aid (VOR).

B. Completion Standards (AC 02-011)

This Lesson is complete when the applicant has -

- 1. Adequately performed maneuvers with reference to flight instruments only.
- 2. Competently demonstrated proficiency in the basic principles of operations of a radio navigational aid (VOR).
- 3. Demonstrated maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees

3.3.4.4 Part IV Upset Prevention and Recovery Training

LESSON NO.	EXERCISE	DUA	PIC	TOTA
		L	TIM	\mathbf{L}
		TIM	\mathbf{E}	TIME
		E		
1	Upset recovery exercises	3.0		3.0
	TOTAL	3.0		3.0

Phase Objective: After completion of this phase, the Student should be able to:

Recover from developed upsets and correspondingly build pilot resilience

LESSON 1

Upset Recovery exercises (IS 2.3.3.3 Appendix C (b))

C. Objective

The applicant should –

1. Be able to prevent airplane upsets in various configurations and scenarios

D. Completion Standards

This Lesson is complete when the applicant has -

- 1. Competently demonstrated proficiency in preventing airplane upsets.
- 2. Adequately presented good situational awareness, cockpit management and decision making in various scenarios.

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FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.1 Introduction

4 Instrument Rating Training Course

4.1 Introduction

4.1.1 Overview

This syllabus describes the flight training and assessment activities to be undertaken during the instrument rating training course.

The aim of the course is to provide the student with the required skills, knowledge and attitudes to safely exercise the Private Pilot License / Commercial Pilot License privileges in reference to instrument flight.

Flight training lessons include general handling and navigation exercises incorporating operations at controlled aerodromes and in controlled airspace, basic instrument flight and procedures in the event of abnormal situations and emergencies, instrument flight procedures (SID's, Approaches and Navigation), and IFR flight to other airports. Human factors and non-technical skills awareness and application are also included.

The privileges and limitations of the commercial pilot license – aeroplane category rating is defined in PCAR 2.3.3.6.

4.1.2 Competency Standards

4.1.2.1 Practical Flight Competency Standards

Synthetic and Flight training is provided to allow the student to meet the prescribed competency standards. Student performance is assessed against these flight competency standards. The standards required for the completion of this course and the issue of the license are captured by the following units of competency:

Unit of competency
Communicating in the aviation environment
Perform pre- and post-flight actions and procedures
Operate aeronautical radio
Instrument flight full panel
Limited instrument panel manoeuvres
Non-technical skills 1
Non-technical skills 2
Navigate aircraft
Control aeroplane on the ground
Radio navigation – enroute
Operate in controlled airspace
Conduct an IFR flight
Conduct an instrument approach 2D

4.1.2.2 Aeronautical Knowledge Standards

The knowledge required to meet the aeronautical knowledge standards prescribed by the PCAR 2.3.3.6 may be attained through student self-study and formal training. Theory topics and content are described in the following units of knowledge:

Unit of knowledge
IR Air Law
IR Aircraft General Knowledge



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.1 Introduction

IR Flight Performance and Planning
IR Human Performance
IR Meteorology
IR Navigation: Air Navigation
IR Operation Procedures
IR Principles of Flight
IR Radio Telephony
Threat and Error Management

4.1.3 Course prerequisites

This course has been developed for students who already hold at least a private pilot license and aeroplane category rating.

Students must be at least 18 years old to apply for an instrument rating.

4.1.4 Pre-Course Assessment Flight and Course duration

The course may be undertaken on a part-time or full-time basis.

The syllabus is based on a total flight and synthetic time of 42.0 hours inclusive of the IR aeroplane category skill test; however, the time required to achieve competency will vary from student to student.

Prior to commencing the course, students will undertake an assessment flight with the CFI or nominated senior instructor. A training plan will be tailored in order to meet the training needs of each student, as determined by their level of competency and prior experience. Adjustments to this syllabus will be made to meet the training plan, where required.

4.1.5 Course Resources

Flight training is usually undertaken in the C-172 and its appropriate Flight Synthetic Training Device; however any ATO approved training aircraft may also be used.

Other resources include a model aeroplane, cockpit cut-out, instrument flight hood, navigation charts and navigation equipment.

4.1.6 Syllabus Documentation

Syllabus documentation includes:

- a planning matrix
- a flight training and theory examination summary
- a lesson plan and training record for each flight

Refer to the ATO operations manual for a guide to the use of the syllabus documents.

4.1.7 Lesson Sequence and Allowable Variations

The Planning Matrix provides the sequence of flight training lessons.

Any variations to the lesson sequence are only to be made with the prior approval of the HOT or authorizing



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.1 Introduction

instructor.

4.1.8 Pilot in Command

The course prerequisite includes a minimum of 50 hours of cross-country Pilot-in-Command time in addition to the 40 hours instrument dual time (maximum of 30 hours instrument ground time).

4.1.9 Non-technical Skills

Non-technical skills do not appear in the 'lesson content' section of every lesson plan and training record, however apply to every flight lesson. Instructors are to continually monitor the student's application of these skills.

4.1.10 Aeronautical Knowledge Examinations

Successful completion of the following examination is required prior to or during the course:

Subject	Pass
	standard
	%
IR Examination	70

Aeronautical knowledge examinations are conducted in the ground examination facility. Refer to the ATO operations manual for further information regarding the conduct of these exams.

4.1.10.1 Knowledge Deficiency Report

If a student passes any of the IR(A) aeronautical knowledge examinations with a score of less than 100%, a report shall be prepared about the competency standards in which the student's knowledge is deficient (a knowledge deficiency report). Following further self-study, a senior instructor must orally assess the student's knowledge to ensure the deficiencies noted on the knowledge deficiency report have been addressed (i.e. knowledge corrected to 100%).

A copy of the knowledge deficiency report for each IR(A) examination must be provided to the flight examiner who is to conduct the flight test.

4.1.11 Flight Test

Upon successful completion of the course students must pass the IR aeroplane category flight test, prior to making an application for the Instrument Rating.

The test is conducted by a flight examiner and involves a ground component and a flight component of approximately 2.0 hours. An assessment of general handling competencies is included in the test.

Flight test standards are contained in PCAR IS 2.3.3.6 Appendix B and must be performed within the flight tolerances specified in the Advisory Circulars and ATO Training Manual.

4.1.12 Document Control and Access Information

This syllabus is a managed document and is uncontrolled if printed. Refer to the version number and date in the footer to ensure that the current syllabus is being referenced.



4 Instrument Rating Training Course

4.1 Introduction

It is available in electronic format. Paper copies are also provided for use by instructors and students.

Syllabus documentation is to be read in conjunction with the ATO's operations manual.



4 Instrument Rating Training Course

4.2 Planning Matrix

4.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	161	17	L8	
3 = Ha consist for qu 2 = Do deem 1 = Ad qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required ualification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue. E: Progress Check E: Lesson Phase	Sim. Familiarization & Basic Scanning (BS)	BS, Partial and Full Panel	Radio Navigation		Progress Check for Synthetic Phase	SIDs, STARs, and Approaches	IFR Flight to another airport	Progress Check for Inst. Phase											Total hours
	Dual (day)	0	2.	.0	.0	0	5. 0	2. 5	2. 5											40.0
	Synthetic time (day)	0	2. 0	.0	.0	2. 0														30.0
	Instrument flight time						5. 0	5	2. 5											10.0
	Aeronautical knowledge examinations	I	R(/	۸) <i>ا</i>	۱er	ona	auti	cal	Kr	ow	/lec	lge	E	kam	nina	atio	ns			
	s, Elements and Performance Criteria																			
C1	Communicating in the aviation environment																			
	Communicating face-to-face																			
	pronounces words clearly, using an accent that does not cause difficulties in understanding	2			1	1	1	1	1											
(b)	conveys information in clearly structured sentences without confusion or ambiguity	2			1	1	1	1	1											
(c)	uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	2			1	1	1	1	1											
(d)	speaks fluently without long pauses, repetition or excessive false starts	2			1	1	1	1	1											
(e)	responds to communications with actions that demonstrate that the information has been received and understood	2			1	1	1	1	1											
(f)	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	2			1	1	1	1	1											
(g)	uses appropriate techniques to validate communications	2			1	1	1	1	1										Î	
C1.2	Operational communication using an aeronautical radio																			
(a)	maintain effective communication with others on operational matters	2	2				1	1	1											
(b)	communicate effectively in unfamiliar, stressful or non- standard situations	2	2				1	1	1											
(c)	apply the phonetic alphabet	2	2				1	1	1									7	1	\dashv
	transmit numbers	2	2				1	1	1									1	1	
	make appropriate transmissions using standard aviation phraseology	2	2				1	1	1											
(f)	use plain English effectively when standard phraseology is inadequate	2	2				1	1	1											
(g)	receive appropriate responses to transmissions	2	2				1	1	1									1	1	\neg
	• • • •	-	1	-															1	



4 Instrument Rating Training Course

4.2 Planning Matrix

(i) recognise and manage communication errors and misunderstandings effectively (j) seek clarification in the time available if a message is unclear or uncertainty exists (k) react appropriately to a variety of regional accents (l) communicate effectively in unexpected, stressful or nonstandard situations using standard phraseology or plain English									 				 	
misunderstandings effectively 0 seek clarification in the time available if a message is unclear or uncertainty exists (9) react appropriately to a variety of regional accents 10 communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain gradient standard situations using standard phraseology or plain gradient standard situations using standard phraseology or plain gradient standard situations and procedures 2 Perform pre- and post-flight actions and procedures 2 Perform pre- and post-flight administration 3 Ormality of the standard phraseology or plain gradient standard standard phraseology or plain gradient standard		respond to transmissions and take appropriate action	2	2			1	1						
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No react appropriately to a variety of regional accents 2 2 1 1 1 1 1 1 1 1	(j)	_	2	2		1	1	1						
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determine the action required in relation to any identified defects or damage (e) ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely (f) certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate (g) complete and certify the daily inspection (if authorised to do so) (g) complete and certify the daily inspection (if authorised to do so) (g) shut down aircraft (a) shut down aircraft (b) conduct post-flight inspection and secure the aircraft (if 2	(c)	identify all defects or damage to the aircraft	2				1	1				İ	Ī	
(e) ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely (f) certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate (g) complete and certify the daily inspection (if authorised to do so) C2.3 Post-flight actions and procedures (a) shut down aircraft (b) conduct post-flight inspection and secure the aircraft (if 2	(d)	determine the action required in relation to any identified					1	1						
or endorsements to permissible unserviceabilities as appropriate (g) complete and certify the daily inspection (if authorised to do so) C2.3 Post-flight actions and procedures (a) shut down aircraft (b) conduct post-flight inspection and secure the aircraft (if 2	(e)	ensure all aircraft locking and securing devices, covers	2				1	1						
do so) C2.3 Post-flight actions and procedures (a) shut down aircraft (b) conduct post-flight inspection and secure the aircraft (if 2 1 1 1 1	(f)	or endorsements to permissible unserviceabilities as	2				1	1						
(a) shut down aircraft (b) conduct post-flight inspection and secure the aircraft (if 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			2				1	1						
(b) conduct post-flight inspection and secure the aircraft (if 2 1 1 1 1	C2.3	Post-flight actions and procedures												
	(a)	shut down aircraft	2			1	1	1						
	(b)	·	2			1	1	1			Ī	Ī		



4 Instrument Rating Training Course

4.2 Planning Matrix

(c)	complete all required post-flight administration	2					1	1	1						\exists		
	documentation																
C3	Operate aeronautical radio																
C3.1	Operate radio equipment																
(a)	confirm serviceability of radio equipment	2					1	1	1								
(b)	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2					1	1	1								
(c)	maintain a listening watch and respond appropriately to applicable transmissions	2					1	1	1								
	conduct appropriate emergency and urgency transmissions	2					1	1	1								
C3.2	Manage R/T equipment malfunctions																
(a)	perform radio failure procedures				1	1											
(b)	use fault finding procedures and perform corrective actions				1	1											
	Full instrument panel manoeuvres																
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources																
	determine serviceability of flight and navigational instruments	2	1	1	1	1	2	1	1								
	perform functional checks of flight and navigational instruments where applicable prior to take-off	2	1	1	1	1	2	1	1								
	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	2	1	1	1	1	2	1	1								
IFF.2	Perform manoeuvres using full instrument panel																
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	2	2	1	1	2	1	1			ı					
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:																
	(i) straight and level performance during normal cruise within the flight tolerances (ii) nominated climb performance within the flight tolerances	2	2	2	1			1	1						4	4	
	(iii) descent performance within the flight tolerances	2	2	2	-		<u> </u>	1	1						+	+	
(c)	set and maintain power and attitude by reference to the	2	2	2	-		-	1	1			\dashv	-	+	+	\dashv	
	full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	2	2	2	1	1	2	1	1								
IFF.3	Recover from upset situations and unusual attitudes																
(a)	correctly identify upset situations and unusual attitudes under simulated IMC		2		1		2		1								
(b)	recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:																
	(i) high and low-nose attitudes		2		1		2		1						\downarrow	_	
	(ii) varying angles of bank		2		1		2		1			_	_	_	\downarrow	ightharpoonup	
	(iii) various power settings		2		1		2		1			\downarrow			\downarrow	_	
	(iv) various aircraft configurations		2		1		2		1						\downarrow	_	
	(v) unbalanced flight		2		1		2		1								
IFL	Limited instrument panel manoeuvres																
IFL.1	Recognise failure of attitude indicator and stabilised heading indicator																



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4.2 Planning Matrix

				1					- 1			- 1	 	-	
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	3		2	1	1		1							
	transition from a full instrument panel to a limited instrument panel	3		2	1	1		1							
	Perform manoeuvres – limited panel														
	interpret and respond appropriately to instrument indications	3		2	1			1							
(b)	apply power and attitude settings to achieve straight and level performance during:														
	(i) normal cruise	3		2	1			1							
	(ii) approach configuration with flaps (when fitted) and undercarriage down	3		2	1			1							
(c)	apply power and attitude settings to achieve:														
	(i) nominated climb performance	3		2	1			1							
	(ii) nominated descent performance	3		2	1			1							
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	3		2	1			1							
(d)	trim (as applicable) and balance aircraft	3		2	1			1							
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	3		2	1			1							
IFL.3	Recover from upset situations and unusual attitudes – limited panel														
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	3		2	1			1							
	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:														
	(i) high and low-nose attitudes	3		2	1			1							
	(ii) varying angles of bank	3	_	2	1			1							
	(iii) various power settings	3	+	2	1			1							
	(iv) various aircraft configurations	3	-	2	1			1							
	(v) unbalanced flight	3		2	1			1							
IFL.4	Re-establish visual flight														
(a)	transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft	2			1	3									
(b)	perform a manoeuvre to re-establish visual flight	2			1	3									
(c)	implement a plan that ensures the flight continues in VMC	2			1	3									
NTS1	Non-technical skills 1														
NTS1 .1	Maintain effective lookout														
	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain					2	1	1							
	maintain radio listening watch and interpret transmissions to determine traffic location and intentions					2	1	1							
(c)	perform airspace-cleared procedure before commencing any manoeuvre					2	1	1							
NTS1	Maintain situational awareness														
(a)	monitor all aircraft systems using a systematic scan technique					2	1								
	collect information to facilitate ongoing system management					2	1								



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(c)	monitor flight environment for deviations from planned operations						2	1									
(d)	collect flight environment information to update planned						2	1									
	operations														_	_	
NTS1 .3	Assess situations and make decisions																
(a)	identify problems	П			2	1										T	
	analyse problems				2	1									T	1	
(c)	identify solutions				2	1									T	1	
(d)	assess solutions and risks				2	1										T	
(e)	decide on a course of action				2	1										1	
(f)	communicate plans of action (if appropriate)				2	1										1	
(g)	allocate tasks for action (if appropriate)															1	
(h)	take actions to achieve optimum outcomes for the				2	1								7	T	1	
	operation												1				
(i)	monitor progress against plan				2	1											
(j)	re-evaluate plan to achieve optimum outcomes				2	1											
NTS1	Set priorities and manage tasks																
(a)	organise workload and priorities to ensure optimum	H						2							-	\dashv	
	outcome of the flight							_					i				
(b)	plan events and tasks to occur sequentially							2									
(c)	anticipate events and tasks to ensure sufficient opportunity for completion							2									
(d)	use technology to reduce workload and improve cognitive				2			1								1	
	and manipulative activities																
	Maintain effective communications and interpersonal relationships																
(a)	establish and maintain effective and efficient				2			1	1				1				
	communications and interpersonal relationships with all																
(h)	stakeholders to ensure the optimum outcome of the flight				2			1	1						_	-	
(c)	define and explain objectives to stakeholders demonstrate a level of assertiveness that ensures the				2			1							_	-	
(0)	optimum completion of the flight				2			1	1								
NTS2	Non-technical skills 2																
NTS2	Recognise and manage threats																
.1																	
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight		2				2	1	1				ı				
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight		2				2	1	1								
(c)	develop and implement countermeasures to manage threats		2				2	1	1								
(d)	monitor and assess flight progress to ensure a safe		2				2	1	1							T	
	outcome, or modify actions when a safe outcome is not assured												1				
NTS2	Recognise and manage errors																
(a)	apply checklists and standard operating procedures to		2		2	1	1									1	
	prevent aircraft handling, procedural or communication																
	errors											$\vdash \vdash$	\dashv	\dashv	\dashv	4	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state		2		2	1	1										
(c)	monitor the following to collect and analyse information	\vdash	-	-								\dashv	\dashv	\dashv	\dashv	\dashv	=
(-)	to identify potential or actual errors:																
1	' '	<u> </u>														I	



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4.2 Planning Matrix

	(i) giroraft avotame using a systematic seem technique	1	_	-	_					1	J	- 1	J	ı	Ţ		1		<u> </u>	
	(i) aircraft systems using a systematic scan technique		2	_	2	1	1			_	_		_	_	_	_	_	_	_	
	(ii) the flight environment		2	_	2	1	1			_	_		_	_	_	_	_	_	-	_
	(iii) other crew		2		2	1	1												_	
(d)	implement countermeasures to prevent errors or take		2		2	1	1													
	action in the time available to correct errors before the aircraft enters an undesired state																			
NTS2	Recognise and manage undesired aircraft state																		1	_
.3																				
(a)	recognise an undesired aircraft state		2		2	1														
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively		2		2	1														
	apply corrective actions to recover an undesired aircraft state in a safe and timely manner		2		2	1														
NAV	Navigate aircraft																			
1	Prepare documents and flight plan																			
	select and prepare appropriate navigation charts for the intended flight			2	2	1		1	1											
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas			2	2	1		1	1											
	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight			2	2	1		1	1											
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times			2	2	1		1	1											
(e)	calculate and document critical point (CP) and point of no return (PNR) locations			2	2	1		1	1											
(f)	complete a flight plan to the planned destination and alternates			2	2	1		1	1											
(g)	lodge suitable flight notification for search and rescue (SAR) purposes			2	2	1		1	1											
NAV. 2	Comply with airspace procedures while navigating																			
	identify airspace restrictions and dimensions applicable to the flight			3	2		2	1	1											
(b)	obtain and comply with air traffic clearances, if applicable			3	2		2	1	1											
	comply with airspace procedures applicable to the airspace classification throughout the flight			3	2		2	1	1											
NAV.	Conduct departure procedures																			
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat			3	2	2	1	1	1											
(b)	comply with all departure procedures, clearances and noise abatement requirements			3	2	2	1	1	1											
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required																			
(d)	calculate estimated time of arrival (ETA) for first waypoint			3	2	2													Ţ	
NAV.	Navigate aircraft enroute																			
(a)	maintain a navigation evelothet encures accurate			3	2	2	2	1	1										+	_
	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to reestablish track prior to waypoint or destination			3	2	2	2	1	1											
(b)	maintain heading to achieve a nominated track			3	2	2	2	1	1		T		T		T				Ţ	
	maintain and revise ETAs (±2 minutes) for waypoint or				2	2	2	1			1		1		1				Ī	
	· · · · · · · · · · · · · · · · · · ·									1	1	ļ	1		1					



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4.2 Planning Matrix

	destination														\neg
	maintain track in accordance with published flight path tolerances in controlled airspace			2	2	2	1	1							
(e)	navigate using accepted map-reading techniques			2	2 2	2	1	1							-
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status			2	2 2	2	1								
	use appropriate techniques to obtain a positive fix at suitable intervals			2	2 2	2	1								
	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions			2	2 2	2	1	1							
(i)	perform pre-descent and turning point checks			2	2	2	1	1							
	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used		3	3 2	2 2	2	1	1							
	configure the aircraft as required for the following environmental and operational conditions:														
	(i) turbulence		3	+		2									
	(ii) holding	\downarrow	3	+		2					\downarrow	\downarrow			
	(iii) maximum range		3	}		2									
	maintain awareness of search and rescue times (SARTIME) and revise as required			2	2	2									
	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives		3	3 2	2	2	2								
NAV. 6	Perform lost procedure														
(a)	acknowledge positional uncertainty in a timely manner			2	1										
	configure aircraft for range and endurance as required			2	1										
	apply recognised method to re-establish aircraft position			2											
	fix position			2											
	use radio to request assistance, if applicable			2	_										
	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome			2	2 1										
NAV.	Perform diversion procedure														
(a)	make timely decision to divert			3	2	2	1	1							
(b)	identify an acceptable alternate aerodrome			3	2	2	1	1							
(c)	select a suitable route and cruising level			3	2	2	1	1							
	revise flight plan considering weather, terrain, airspace and fuel available			3	3 2	2	1	1							
	advise ATS of an intention to divert			3	2	2	1	1							
NAV. 8	Use instrument navigation systems														
(a)	initialise navigation system (as applicable)		3	2	2	2	2	1							
(b)	conduct navigation system validity check (as applicable)														
(c)	conduct RAIM check if required	J									J	J			
	select, load, check and activate the flight plan (as applicable)		3	2	2 2	2	2	1							
	operate instrument navigation systems correctly		3	2		_	 	1							
	use instrument navigation systems to assist with navigation		3	2	2 2	2	2	1							
(g)	confirm waypoints and fixes using instrument navigation systems		3	3 2	2 2	2	2	1							



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4.2 Planning Matrix

NAV.	Execute arrival procedures															
(a)	obtain updated relevant aerodrome information	2	2	2	1	1	1								Ì	
(b)	determine landing direction and aerodrome suitability	2	2	2	1	1	1									
(c)	conduct arrival	2	2	2	1	1	1									
(d)	identify and avoid all traffic	2	2	2	1	1	1									
(e)	observe local and published noise abatement	2	2	2	1	1	1									
	requirements and curfews															
	Radio navigation – enroute															
1	Operate and monitor radio navigation aids and systems															
-	select and operate navigation aids and systems	2	+-	_	1	_	1									
(b)	monitor and take appropriate action in relation to the integrity of navigation aid systems information	2	2	2	1	1	1									
RNE.	Navigate the aircraft using navigation aids and systems															
(a)	determine aircraft position fix solely with reference to navigation aids and systems	3	2	2	1	1	1									
(b)	intercept tracks to and from navigation aids and systems	3	2	2	1	1	1									
(c)	maintain tracks within specified tolerances	3	2	2	1	1	1									
(d)	record, assess and revise timings as required	3	2	2	1	1	1									
(e)	recognise station passage	3	2	2	1	1	1									
CTR	Operate at a controlled aerodrome															
CTR.	Controlled aerodrome pre-flight preparation															
(a)	interpret the extracted information	2			2	2										
(b)	identify all special aerodrome procedures	2			2	2										
(c)	check current weather forecast and local observations	2			2	2										
(d)	identify all relevant radio and navigation aid frequencies	2			2	2										
CTR. 2	Taxi aircraft at a controlled aerodrome															
(a)	obtain and comply with ATC clearances					2									1	
	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions					2										
(c)	recognise ground markings during taxi and take appropriate action					2										
(d)	recognise lighting signals and take appropriate action					2									ı	
(e)	identify airport runway incursion hotspots					2			1		İ		T	T	İ	
(f)	manoeuvre aircraft to avoid jet blast hazard					2									Ī	
(g)	request taxi guidance if unsure of position					2				İ		İ				
(h)	use strobes when crossing any runway					2										
3	Perform departure from controlled aerodrome															
	receive and correctly read back an airways clearance					2										
(b)	check and ensure runway approach is clear prior to entering a runway					2										
(c)	correctly set transponder code and mode prior to entering runway for take-off					2										
(d)	comply with ATC departure instructions					2									Ī	
(e)	advise ATC as soon as possible if unable to comply with clearance					2										
(f)	contact approach with airborne report or give departure call to tower					2										



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(g)	maintain lookout						2							
(h)	avoid wake turbulence						2							
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone						2							
CTR.	Perform arrival and landing at controlled aerodrome													
(a)	receive ATIS and correctly set the appropriate QNH						2							
-	request and receive ATC clearance and set correct						2						T	
	transponder code prior to entering control area													
(c)	advise ATC as soon as possible if unable to comply with clearance						2							
(d)	maintain lookout at all times						2							
(e)	update QNH as required						2							
(f)	maintain tracking tolerances						2							
(g)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic						2							
	confirm clearance to land						2							
	vacate runway and obtain taxi clearance						2							_
	Operate in controlled airspace													
CTA.	Operate aircraft in controlled airspace													
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement		3	2	2	2	1							
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC		3	2	2	2	1							
(c)	maintain control area protection tolerances													
(d)	maintain tracking and altitude tolerances when operating on an airways clearance		3	2	2	2	1							
(e)	reconfirm any clearance items when doubt exists		-+	2		2	1							
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions		3	2	2	2	1							
	follow ATC requirements for a change of level in CTA, including in an emergency situation													
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions		3	2	2	2	1							
	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA			2			1							
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR			2			1							
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR			2			1							
	procedures and phraseologies			2			1							
	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded			2		2								
(n)	perform appropriate actions in the event of abnormal operations and emergencies			2			1							
(0)	recall transponder emergency code and communication		3	2	2	2	1							



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	failure code														
CIR	Conduct an IFR flight														
CIR.1	Plan a flight under the IFR														
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	3	2	2	2	1	1								
(b)	possess and use all the required documentation that is current to plan an IFR flight;	3	2	2	2	1	1								
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	3	2	2	2	1	1								
(d)	make flight notification;	3	2	2	2	1	1								
(e)	check navigation system database is current;	3	2	2	2	1	1								
(f)	conduct RAIM check if required;														
CIR.2	Perform an instrument departure														
(a)	prepare aircraft and aircraft systems for departure;	3	2	2	2	1	1								
(b)	demonstrate consideration of and planning for non-	3	2	2	2	1	1								
(0)	normal and emergencies during departure;		Ļ						4	_	_	-	-	+	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	3	2	2	2	1	1								
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	3	2	2	2	1	1								
(e)	conduct instrument departure to comply with obstacle clearance requirements.	3	2	2	2	1	1								
CIR.	3 Conduct a published instrument departure (all engines)														
(a)	perform a SID or other published departure;		3	2	2	2	1								
(b)	maintain assigned SID, including all tracks, headings, altitudes and speeds;		3	2	2	2	1								
(c)	perform a cleared departure safely and maintain tracks, headings, altitudes and speeds within specified tolerances.		3	2	2	2	1								
CIR. inoper	4 Conduct a published instrument departure (one-engine ative)														
(a)	for single-engine aircraft instrument endorsements:		3	2	2	2	1								
	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;		3	2	2	2	1								
	(ii) time permitting conduct checklists and radio calls.		3	2	2	2	1								
CIR	6 Perform a descent and arrival under the IFR														
(a)	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome;		3	2	2	2	1								
(b)	perform a descent and published arrival procedure to an aerodrome.		3	2	2	2	1								
CIR	7 Perform a published holding procedure														
(a)	demonstrate adequate knowledge of a published holding procedure;	3	2	2	2	2	1								
	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely. 8 Perform an instrument approach 2D	3	2	2	2	2	1								
			~	~	_	1	1			+	+	+	+		
	demonstrate adequate knowledge of published procedures associated with an instrument approach;		3			2									
(b)	perform an instrument approach unique to the instrument approach type;		3	2	2	2	1								
(c)	maintain a stabilised flight path within specified		3	2	2	2	1								



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4.2 Planning Matrix

Circle 10 Perform visual approach operations (includes visual circling where applicable) (a) demonstrate adequate knowledge of published procedures for the conduct of a visual approach; (b) conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path. IAP2. Conduct an instrument approach 2D IAP2.1 Prepares for approach (a) review latest available information for destination; (b) conduct navigation system validity check (as applicable); (c) conduct RAIM check if required; (d) select and brief current approach chart for the approach to be flown; (e) check and confirm navigation aid required for the approach is serviceable IAP2.2 Conducts initial approach (a) set altimeter QNH correctly; (b) manoeuvre aircraft to the holding fix. IAP2.3 Conducts a holding pattern (a) from the holding fix enter and perform a holding pattern; (a) Iform the holding fix enter and perform a holding pattern; (b) approach performed correctly and within published tolerances; (c) navigation aid signal integrity monitored during approach; (d) from the final approach fix to minima aircraft is flown to a stabilised descent profile; (e) aircraft is manoeuvred to MAPt; (a) aircraft is manoeuvred to MAPt; (b) aircraft is manoeuvred to MAPt; (c) aircraft is manoeuvred in IMC or simulated IMC is maintained.		tolerances during the approach procedure.								T	T	l		Ī	
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with the IAL chart;	(b)	aircraft is manoeuvred to MAPt;		3	2	2	2	1							
(d) obstacle clearance in IMC or simulated IMC is maintained.	(c)	l · · · · · · · · · · · · · · · · · · ·		3	2	2	2	1							
	(d)	obstacle clearance in IMC or simulated IMC is maintained.		3	2	2	2	1						j	



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

4.3 Training Course Syllabus

4.3.1 Training Curriculum

A. Training Curriculum (incl. Time Scale and Scale in Weeks)

(10.0 hours Actual Flight Time & ** 30.0 hours Synthetic Flight Trainer Time / 10 weeks)

Pre-entry requirements: 50.0 hours cross-country PIC time;

- a. Instrument Rating Ground Training (**150.0-hours, 5 weeks)
- b. Instrument Rating Flight Training (40.0 hours, 5 weeks)
 - 1. Synthetic Flight Trainer Phase (30.0 hours, 3 weeks)
 - 2. Instrument Flying Phase (10.0 hours, 1-2 weeks)
- c. CAAP Checkride (2.0-hours, 1 day)

4.3.2 Ground Training Subjects Covered

SUBJECT	**HOURS
Air Law	20.0
Aircraft General Knowledge	16.0
Flight Performance and Planning	14.0
Human Performance	10.0
Meteorology	14.0
Navigation	48.0
Operational Procedures	8.0
Radiotelephony	16.0
Threat and Error Management	4.0
TOTAL HOURS	150.0

^{**}Recommended hours only

1. LESSON 1

LESSON NAME: AIR LAW (PCAR 2.3.3.6 (b)(1)(i))

GROUND SCHOOL 20.0 HOURS

LESSON DESCRIPTION:

(i) International Agreements and Organizations: The Convention of Chicago;

Other International agreements: IATA agreement, Tokyo and Warsaw Convention; PIC authority and responsibility regarding safety and security, Operators and pilots liabilities towards persons and goods on the ground, in case of damage and injury caused by the operation of the aircraft, Commercial practices and associated rules: dry and wet lease

- (ii) Relevant parts of ICAO Annexes: 1. 2. 7; 8, 9, 11 (and Doc 4444), 12, 13, 14,15;
- (iii) Procedures for air navigation (PANS-OPS) Aircraft Operations Doc 8168;
- (iv) National law

LESSON OBJECTIVES:

To inform students of the rules of the air and regulations relevant to flight under IFR: related air traffic services and procedures.

2. LESSON 2

LESSON NAME: AIRCRAFT GENERAL KNOWLEDGE PCAR 2.3.3.6 (b)(1)(ii))

GROUND SCHOOL 16.0 HOURS



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4 Instrument Rating Training Course

4.3 Training Course Syllabus

LESSON DESCRIPTION:

- (i) Airframe and systems, electrics, powerplant, emergency equipment
 - (A) Airframe and systems: Air driven systems (piston engines only), Air driven systems (turbo propeller and jet aircraft), Non-pneumatic operated de-ice and anti-ice systems, Fuel systems
 - (B) Electrics: Direct Current (DC), Basic radio propagation theory
 - (C) Flight instruments: Air data instruments, Gyroscopic instruments, Magnetic Compass, Radio Altimeter; Electronic Flight Instrument System (EFTS), Flight Management System (FMS)
 - (D) Automatic flight control system: Flight director; Autopilot; Yaw damper/Stability augmentation system;
 - (E) Warning and recording equipment: Warnings general; Stall warning;

LESSON OBJECTIVES:

To inform students of the use, limitation and serviceability of avionics and instruments necessary for the control and navigation of airplanes under IFR and in instrument meteorological conditions.

3. LESSON 3

LESSON NAME: FLIGHT PERFORMANCE AND PLANNING(PCAR 2.3.3.6 (b)(1)(iii))

GROUND SCHOOL 14.0 HOURS

LESSON DESCRIPTION:

- (i) Flight planning and flight monitoring:
 - (A) Flight plan for cross country flights: Navigation plan, Fuel plan, Flight monitoring and in-flight replanning, Radio communication and navigation aids;
 - (B) ICAO ATC flight plan: Types of flight plan, Completing the flight plan, Filling the flight plan, Closing the flight plan, Adherence to flight plan
 - (C) Practical flight planning: Chart preparation; Navigation plans; Simple fuel plans, Radio planning practice
 - (D) IFR (airways) flight planning: Meteorological considerations, Selection of routes to destination and alternates, General flight planning tasks,
 - (E) Practical completion of a flight plan (flight plan, flight log, nay log, ATC plan, etc.): Extraction of data

LESSON OBJECTIVES:

To inform students of the pre-flight preparations and checks appropriate to flight under IFR.

4. LESSON 4

LESSON NAME: HUMAN PERFORMANCE (PCAR 2.3.3.6 (b)(1)(iv))
GROUND SCHOOL 10.0 HOURS

LESSON DESCRIPTION:

- (i) Human factors basic concepts: Human factors in aviation, Accident statistics, Flight safety concepts
- (ii) Basic aviation physiology: Basics of flight physiology, Man and environment: the sensory system; Health and Hygiene;
- (iii) Basic aviation psychology: Human information processing; Human error and reliability; Decision making; Avoiding and managing errors: cockpit management; Personality; Human overload and underload, Advanced cockpit automation

LESSON OBJECTIVES:

To inform students of the human performance relevant to instrument flight in airplanes.

5. <u>LESSON 5</u>

LESSON NAME: METEOROLOGY (PCAR 2.3.3.6 (b)(2)(v))



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4 Instrument Rating Training Course

4.3 Training Course Syllabus

GROUND SCHOOL 14.0 HOURS LESSON DESCRIPTION:

- (i) The atmosphere: Composition, extent, vertical division; Temperature; Atmospheric pressure; Atmospheric density; Altimetry;
- (ii) Wind: Definition and measurement: General circulation; Turbulence: Variation of wind with height; Local winds; Standing waves;
- (iii) Thermodynamics: Humidity; Change of state of aggregation; Adiabatic processes
- (iv) Clouds and Fog: Cloud formation and description; Fog, mist, haze
- (v) Precipitation: Development and types of precipitation;
- (vi) Airmasses and fronts: Types of airmasses; Fronts;
- (vii) Pressure systems: Location of the principal pressure areas, Anticyclone, Non frontal depressions;
- (viii) Climatology: Typical weather situations in mid-latitudes; Local seasonal weather and wind
- (ix) Flight hazards: Icing, Turbulence; Wind-shear; Thunderstorms; Low and high level inversions; Hazards in mountainous areas;
- (x) Meteorological information: Observation, Weather charts, Information for flight planning

LESSON OBJECTIVES:

To inform students of the application of aeronautical meteorology related to IFR flight.

6. LESSON 6

LESSON NAME: NAVIGATION (PCAR 2.3.3.6 (b)(2)(vi))

GROUND SCHOOL 48.0 HOURS

LESSON DESCRIPTION:

- (i) General Navigation:
- (ii) Charts: The use of current aeronautical charts
- (iii) Radio Navigation: Radio aids: Ground D/F (including classification of bearings); ADF (including associated beacons and use of the radio magnetic indicator); VOR and Doppler-VOR (including the use of the radio magnetic indicator); DME (distance measuring equipment); ILS (instrument landing
- (iv) system); MLS (Microwave landing system);
- (v) Basic radar principles: Pulse techniques and associated terms; Ground radar; Airborne weather radar; SSR (secondary surveillance radar and transponder); Use of radar observations and application to in-flight navigation;
- (vi) Area navigation systems: General philosophy; Typical flight deck equipment and operation; Instrument indications; Types of area navigation system inputs; VOR/DME area navigation (RNAV);
- (vii) Self-contained and external-referenced navigation systems: Satellite assisted navigation: GPS/GLONASS/DGPS

LESSON OBJECTIVES:

To inform students of the use, accuracy, and reliability of navigation systems used in departure, enroute, approach and landing phases of flight relevant to IFR flight.

7. <u>LESSON 7</u>

LESSON NAME: OPERATIONAL PROCEDURES (PCAR 2.3.3.6 (b)(2)(vii) GROUND SCHOOL 8.0 HOURS

LESSON DESCRIPTION:

(i) General

(ii) Special operational procedures and hazards: General

LESSON OBJECTIVES:

To inform students of the interpretation and use of aeronautical documentation such as AIP, NOTAM, and



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

instrument procedure charts for departure, en-route, descent and approach relevant to IFR flight.

8. LESSON 8

LESSON NAME: RADIOTELEPHONY PCAR 2.3.3.6 (b)(1)(viii)) GROUND SCHOOL 16.0 HOURS

LESSON DESCRIPTION:

(i) IFR Communications: Definitions; General operating procedures; Action required to be taken in case of communication failure; distress and urgency procedures; General principles of VHF propagation and allocation of frequencies; Morse code.

LESSON OBJECTIVES:

To inform students of radiotelephony procedures and phraseology as applied to aircraft operations under IFR, action to be taken in case of communication failure.

9. LESSON 9

LESSON NAME: THREAT AND ERROR MANAGEMENT (Resource Booklet 8 Threat and Error Management, Australian Government: Civil Aviation Safety Authority)

GROUND SCHOOL 4.0 HOURS

LESSON OBJECTIVES:

To provide students the relevant limitations of human performance and adherence to correct procedures. Emphasizing the importance of situational awareness.

4.3.3 Flight Time Breakdown

INSTRUMENT RA	TING FLIGHT	TIME BR	EAKDOWN	V		
TRAINING	SYNTHETIC	LOCAL		CROSS		TOTAL
PHASE	TIME			COUNT	'RY	
		DUAL	SOLO/	DUAL	SOLO/	
			PIC		PIC	
SYNTHETIC	30+00					30+00
FLIGHT						
TRAINER						
PHASE						
INSTRUMENT	10+00**					10+00
FLIGHT PHASE						
CAAP	2+00		2+00			2+00
CHECKRIDE						
GRAND TOTAL			•	•		42+00

^{**}Recommended minimums only

4.3.4 Competency Based Syllabus

4.3.4.1 Part I Synthetic Flight Trainer Phase

LESSON NO.	EXERCISE	SYNTHETIC (DUAL) TIME	TOTAL TIME
1	Simulator Familiarization & Basic Scanning	2.0	2.0
2	Basic Scanning, Partial and Full Panel	2.0	2.0



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

3	Radio Navigation	12.0	12.0
4	SID's, Approaches, and Emergency Procedures	12.0	12.0
5	Progress Check for Synthetic Flight Trainer Phase	2.0	2.0
	TOTAL	30.0	30.0

Phase Objective: After completion of this phase, the Student should be able to:

- Learn and understand the principles of operation of different radio navigational aids.
- Perform Instrument Departures and Approaches, Emergency Procedures, and other elements of IFR Flight.

LESSON 1

Simulator Familiarization & Basic Scanning (IS 2.3.3.6)

A. Objective

The applicant should –

- 1. Be acquainted with the aircraft systems related to IFR operations.
- 2. Be able to perform basic maneuvers with reference to flight instruments.
- 3. Be able to demonstrate good situational awareness, cockpit management and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has -

- 1. Competently demonstrated proficiency in performing basic maneuvers with reference solely to flight instruments.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Adequately shown familiarity and understanding of the aircraft systems related to IFR operations.
- 4. Demonstrated good situational awareness, cockpit management and decision making.

LESSON 2

Basic Scanning, Partial and Full panel (IS 2.3.3.6(a)(7)(iv))

A. Objective

The applicant will —

- 1. Be introduced to partial panel flight and tasked to fly the airplane with inoperative flight instruments.
- 2. Be proficient in recovery from unusual flight attitudes and partial panel flight and its related human factors.
- 3. Be able to demonstrate good situational awareness, cockpit management and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has –

- 1. Competently demonstrated proficiency in flying partial panel and recovering from unusual attitudes and its related human factors.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
- 3. Demonstrated good situational awareness, cockpit management and decision making.

Issue No. 1 5



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

LESSON 3

Radio Navigation (IS 2.3.3.6)

A. Objective

The applicant will —

- 1. Be able to perform lessons/maneuvers with reference to flight instruments.
- 2. Be introduced to and demonstrate proficiency in ADF/NDB, VOR, and DME operations (homing, interception, navigation, tracking).
- 3. Be introduced to and demonstrate proficiency in cross-fixing, holding, and entry procedures.
- 4. Be able to demonstrate good situational awareness, cockpit management and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency ADF/NDB, VOR, and DME operations (homing, interception, navigation, tracking).
- 2. Adequately demonstrated cross-fixing, holding, and entry procedures.
- 3. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Tracks a course, radial, or bearing within 3/4 scale deflection of the CDI
- 4. Competently demonstrated good situational awareness, cockpit management and decision making.

LESSON 4

SID's, Approaches, and Emergency Procedures (IS 2.3.3.6)

A. Objective

The applicant will —

- 1. Be oriented to procedures required for IFR flight.
- 2. Be able to interpret and perform SID and Approach (Non-precision, Precision (ILS), Missed, Circling, and landing from a straight-in or circling) charts.
- 3. Be oriented and conduct IFR radio communications and procedures.
- 4. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has —

- 1. Competently interpreted and performed SID and Approach (Non-precision, Precision (ILS), Missed, Circling, and landing from a straight-in or circling) charts.
- 2. Adequately performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Tracks a course, radial or bearing within 3/4 scale deflection of the CDI
- 3. Proficiently conducted IFR radio communications and procedures.
- 4. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.

LESSON 5

Progress Check for Synthetic Flight Training Phase



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

A. Objective

The applicant will —

- 1. Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- 2. Performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Tracks a course, radial or bearing within 34 scale deflection of the CDI
- 3. Competently demonstrated good situational awareness, cockpit management and decision making.

4.3.4.2 Part II Actual Instrument Flight Phase

LESSON NO.	EXERCISE	SYNTHETIC (DUAL) TIME	SYNTHETIC (PIC) TIME	TOTAL TIME
1	SIDs, STARs, and Approaches	5.0		5.0
2	IFR flight to other airport	2.5		2.5
3	Progress Check for Instrument Flight Phase	2.5		2.5
4	CAAP Checkride		2.0	2.0
	TOTAL	10.0	2.0	12.0

Phase Objective: After completion of this phase, the Student should be able to:

- Demonstrate proficiency in ground operations, taxiing, take-offs, normal traffic pattern procedures, and landings at an airport with an operating control tower.
- Perform Instrument Departures and Approaches, Emergency Procedures, and other elements of IFR Flight.
- Conduct IFR radio communications and procedures.

LESSON 1

SIDs, STARs, and Approaches (IS 2.3.3.6 (a)(6))

A. Objective

The applicant will -

- 1. Perform lessons/maneuvers previously discussed with reference to flight instruments only.
- 2. Be re-oriented and should demonstrate understanding of normal and emergency procedures required for IFR flight.
- 3. Be oriented to and demonstrate proficiently knowledge on SIDs, STARs, and precision and non-precision approaches.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has –

1. Competently performed lessons/maneuvers previously discussed with reference to flight



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT
OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW
LICENSES AND RATINGS

4 Instrument Rating Training Course

4.3 Training Course Syllabus

instruments within the allowable limits of

- a. Altitude +/- 100 feet
- b. Airspeed +/- 10 knots
- c. Heading +/- 10 degrees
- d. Tracks a course, radial or bearing within 3/4 scale deflection of the CDI
- 2. Adequately performed proficiency in normal and emergency procedures required for IFR flight.
- 3. Competently demonstrated proficiency in knowledge and skill on SIDs, STARs, and precision and non-precision approaches.

LESSON 2

IFR flight to other airport

A. Objective

The applicant will —

- 1. Perform lessons/ maneuvers with reference to flight instruments.
- 2. Review instrument departure, approach, and radar vector procedures.
- 3. Be oriented to IFR flight to another airport.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has —

- 1. Competently performed lessons/maneuvers previously discussed with reference to flight instruments within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Tracks a course, radial or bearing within 3/4 scale deflection of the CDI
- 2. Adequately performed an IFR flight to another airport.
- 3. Demonstrated proficiency in instrument departure, approach, and radar vector procedures.
- 4. Competently demonstrated good situational awareness, cockpit management and decision making as pilot-in-command.

LESSON 3

Progress Check for Instrument flight phase

A. Objective

The applicant will —

- 1. Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- 2. Be able to demonstrate good situational awareness, cockpit management, and decision making.

B. Completion Standards (AC 02-010)

This Lesson is complete when the applicant has —

- 1. Demonstrated with proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- 2. Adequately demonstrated flight with reference to flight and navigational instruments only.
- 3. Performed maneuvers within the allowable limits of
 - a. Altitude +/- 100 feet
 - b. Airspeed +/- 10 knots
 - c. Heading +/- 10 degrees
 - d. Tracks a course, radial or bearing within 3/4 scale deflection of the CDI



4 Instrument Rating Training Course

4.3 Training Course Syllabus

4. Competently demonstrated good situational awareness, cockpit management and decision making.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

5 Flight Instructor License Training Course

5.1 Introduction

5 Flight Instructor License Training Course

5.1 Introduction

5.1.1 Overview

This syllabus provides guidance on flight instructor rating training and addresses the grant of flight instructor ratings. It also provides guidance on the training requirements for training endorsements. The documents will be of interest to the applicant for a flight instructor rating or a training endorsement, flight training operators who conduct training for flight instructor ratings and training endorsements, and flight instructors rating instructors who will deliver the training.

The syllabus consists of chapters and supporting annexes. Each chapter addresses a particular aspect of the training, training for the rating, or training for a training endorsement.

The privileges and limitations of the Flight Instructor license – aeroplane category rating is defined in PCAR 2.3.3.11

5.1.2 Competency Standards

5.1.2.1 Practical Flight Competency Standards

Flight training is provided to allow the student to meet the prescribed competency standards. Instructor performance is assessed against these flight competency standards. The standards required for the completion of this course and the issue of the license are captured by the following units of competency:

Unit of competency
Pre-Flight Procedures
Aerodrome Operations
Take-Off, Go-Around, Landing
Fundamentals of Flight
Performance Maneuvers
Ground Reference Maneuvers
Slow Flight, Stalls, and Spins
Basic Instrument Maneuvers
Emergency Operations

5.1.2.2 Aeronautical Knowledge Standards

The knowledge required to meet the aeronautical knowledge standards prescribed by the PCAR 2.3.3.11 may be attained through student self-study and formal training. Theory topics and content are described in the following units of knowledge:

Unit of knowledge
Theoretical Knowledge
Assessment of Student Performance
Learning Process
Teaching Process
Training Philosophies and Evaluation
Training Program Development
Lesson Planning
Teaching Methods



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

5 Flight Instructor License Training Course

5.1 Introduction

Use of Training Aids
Analysis and Correction of Student Errors
Human Performance
Threat and Error Management

5.1.3 Course prerequisites

This course has been developed for students who already hold a commercial pilot license and aeroplane category rating.

The applicant for a flight instructor rating (FI) shall not be less than 18 years of age and shall have met the knowledge requirements for the issue of a CPL as specified in Subparts 2.3.3.3 and 2.3.3.7, as applicable.

5.1.4 Pre-Course Assessment Flight and Course duration

The syllabus is based on a total flight time of 25.0 hours. The time required to achieve competency will vary from student to student.

Prior to commencing the course, students will undertake an assessment flight with the CFI or nominated senior instructor. A training plan will be tailored in order to meet the training needs of each student, as determined by their level of competency and prior experience. Adjustments to this syllabus will be made to meet the training plan, where required.

5.1.5 Course Resources

Flight training is usually undertaken in the C-172; however, any ATO-approved training aircraft may also be used.

Other resources include a model airplane, cockpit cut-out, instrument flight hood, navigation charts, and navigation equipment.

5.1.6 Syllabus Documentation

Syllabus documentation includes:

- a planning matrix
- a flight training and theory examination summary
- a lesson plan and training record for each flight

Refer to the ATO operations manual for a guide to the use of the syllabus documents.

5.1.7 Lesson Sequence and Allowable Variations

The Planning Matrix provides the sequence of flight training lessons.

Any variations to the lesson sequence are only to be made with the prior approval of the HOT or authorizing instructor.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS **5 Flight Instructor License Training Course**

5.1 Introduction

5.1.8 Pilot in Command

The student for an instructor rating holds the license and rating necessary to act as the pilot-in-command of the aircraft on which the instruction is given.

The applicant for an FI rating shall have completed not less than 200 hours of flight time on a single-pilot aircraft of the appropriate category.

5.1.9 Non-technical Skills

Non-technical skills do not appear in the 'lesson content' section of every lesson plan and training record, however, they apply to every flight lesson. Instructors are to continually monitor the student's application of these skills.

5.1.10 Aeronautical Knowledge Examinations

Successful completion of the following examinations is required prior to or during the course:

Subject	Pass
	standard
	%
Principles of Teaching	70
Principles of Flight	70

Aeronautical knowledge examinations are conducted in the ground examination facility. Refer to the ATO operations manual for further information regarding the conduct of these exams. Also, Take note of the Course Prerequisite.

5.1.10.1 Knowledge Deficiency Report

If a student passes the FI(A) aeronautical knowledge examinations with a score of less than 100%, a report shall be prepared about the competency standards in which the student's knowledge is deficient (a knowledge deficiency report). Following further self-study, a senior instructor must orally assess the student's knowledge to ensure the deficiencies noted on the knowledge deficiency report have been addressed (i.e. knowledge corrected to 100%).

A copy of the knowledge deficiency report for the FI (A) examination must be provided to the flight examiner who is to conduct the flight test.

5.1.11 Flight Test

Upon successful completion of the course, students must pass the FI aeroplane category flight test, prior to making an application for the Flight Instructor license.

The test is conducted by a flight examiner and involves a ground component and a flight component for an approximate minimum of 1 hour. An assessment of general handling competencies is included in the test.

Flight test standards are contained in PCAR IS 2.3.3.11 Appendix A or B and must be performed within the flight tolerances specified in the Advisory Circulars.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

5 Flight Instructor License Training Course

5.1 Introduction

5.1.12 Document Control and Access Information

This syllabus is a managed document and is uncontrolled if printed. Refer to the version number and date in the footer to ensure that the current syllabus is being referenced.

It is available in electronic format. Paper copies are also provided for use by instructors and students.

Syllabus documentation is to be read in conjunction with the ATO's operations manual.

Issue No. 1 4



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

5.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	8	
	rmance Standards																			
	as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required																			
	ualification issue emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision																			
	chieves competency to the standard required for			anding			/ers	ns	rs											
	ication issue.				.	SLS	neu	Spi	euve	SL										
		res	tions	Go-Around, L	-ligh	euve	Reference Maneuvers	, and	Mane	Operataions										
*TIN#	F DELECATIONS ARE RECOMMENDATORY	ced	pera	Arou	s of I	Man	ence	talls	ent I	pera										2
TIIVI	E DELEGATIONS ARE RECOMMENDATORY	t Pro	o er		ıntal	nce	Refer	ht, S	trum	cy C										٥
		-ligh	dron	JO-	lame	rma	nd F	Flig	sul c	rgen										a
		Pre-Flight Procedures	Aerodrome Operations	Take-Off,	Fundamentals of Flight	Performance Maneuvers	Ground I	Slow Flight, Stalls, and Spins	Basic Instrument Maneuvers	Emergency										Total hours
	Dual day	1. 5	1. 5	3. 0	3. 0	3. 0	3. 0	3. 0	3. 0	4. 0										25.0
	PIC/Solo day																			
	Instrument flight time												_							
11:4	Aeronautical knowledge examinations		PL	A A	\er	ona	auti	cal	Kr	IOW	/lec	dge	E)	kam	nina	atio	ns	_		
FIR	s, Elements and Performance Criteria Conduct aeronautical knowledge training and flight training															-				
	Plan training																	4		
1 TIK 1.	rian training																			
(a)	Confirm trainee readiness for proposed training through	2	2	2	2	2	2	2	2	2										
	review of training records to confirm their competency																			
/h)	status;				_			_										\dashv	4	
(b)	Identify training objectives based on performance criteria	2	2	2	2	2	2	2	2	2										
(a)	in the manual of standards and operator's training plans;	_	_	_	_	_	_	_										\dashv	\dashv	
(C)	Identify the knowledge for the units and elements	2	2	2	2	2	2	2	2	2										
(d)	relevant to the lesson and confirm trainee understanding	_	_	_	_	1	_	_		2								\dashv	4	
(u)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	2	2	2	2	2	2	2	2										
(e)	Apply threat and error management	2								2								\dashv	1	
	Identify potential threats and errors in a flight lesson,									2								+	T	
	including those associated with simulation of abnormal or																			
	emergency procedures or aircraft mishandling by trainee,																			
	and consider mitigators																	\downarrow		
(g)	Select appropriate training resources and confirm	2	2																	
	availability and serviceability of required facilities,																			
	equipment, training aids, reference material and the																			
FIR1	airworthiness of the training aircraft or device Conduct aeronautical knowledge training																	_	-	
2	Conduct del chadical knowledge training																			
(a)	Establish a learning environment and motivation that	2																		
	suits the trainee's needs																	\downarrow	_	
(b)	Clearly state training objectives that are relevant,	2			2					2										
(2)	practical and measurable	_			_												-	\dashv	\dashv	_
(c)	Conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge	2			2					2										
(d)	Present and link new knowledge to previous knowledge				2	2				2							1	\dashv	\dashv	\dashv
(e)	Use selected training aids to illustrate and enhance			2	2	2	2	2	2								\dashv	\dashv	+	=
	explanations			_	_	_	_	_	_											
	•			<u> </u>		_		l			l		l	ш						



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

		1	2	3	4	5	6	7	Ω	a	10	11	12	12	11	15	16	171	Q	
3 = Ha	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required	-					,								. T		- 0			
2 = D deem 1 = Ac	palification issue remonstrates a developing level of proficiency, and is sed safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue.	es	suc	id, Landing	ight	uvers	Maneuvers	and Spins	aneuvers	aions										
*TIM	E DELEGATIONS ARE RECOMMENDATORY	Pre-Flight Procedures	Aerodrome Operations	Take-Off, Go-Around,	Fundamentals of Flight	Performance Maneuvers	Ground Reference Maneuvers	Slow Flight, Stalls, a	Basic Instrument Maneuvers	Emergency Operataions										Total hours
	Dual day	1. Pr	₹ 1.	3.		_	ලි 3.		3.	山 4.									-	– 25.0
		5	5	0	0	0	0	0	0	0										
	PIC/Solo day Instrument flight time																		+	
	Aeronautical knowledge examinations	С	PL	A A	\er	ona	auti	cal	Kr	nov	vle	dge	E	xan	nina	atio	ns			
(f)	Apply appropriate instructional techniques; with instruction to the point using clear and deliberate speech	2	2																	
(g)	Deliver technical knowledge accurately and clearly to required standard	2	2	2	2	2	2	2	2	2										
	Provide opportunities for trainee participation and practice	2	2	2	2	2	2	2	2	2										
(i)	Discuss threat and error management issues and ensure application is understood by the trainee	2								2										
	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	1	1	1	1	1	1	1	1										
(k)	Provide feedback on trainee performance			2	2	2	2	2	2	2										
(1)	Develeop trainee self-assessment skills			2	2	2	2	2	2	2										
(m)	Complete training objectives in the time available			2	2	2	2	2	2	2										
(n)	Ensure all training is conducted effectively			1	1	1	1	1	1	1										
FIR1.	Conduct pre-flight briefing																			
(a)	Confirm the trainee is mentally and physically prepared for flight training			1	1	1	1	1	1	1										
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight			1	1	1	1	1	1	1										
(c)	Link previous training to the current exercises			2	2	2	2	2	2	2										-
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes			1	1	1	1	1	1	1										
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques			2	2	2	2	2	2	2										
	Discuss the environmental conditions and their suitability for the training exercises								2	2										\exists
(g)	Discuss threat and error management issues applicable to the proposed flight and confirm the trainee understands his or her responsibility for managing those issues(airmanship)									2										
FIR1.	Conduct airborne training																			
	Manage responsibilities as pilot in command for the safe operation of the aircraft			1	1	1	1	1	1	1										



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	.8	
	mance Standards																			
	as received training in the element, however is not able to																			
	stently demonstrate competency to the standard required lalification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision																			
1 = Ad	chieves competency to the standard required for			ding			ivers	sins	ers											
qualif	ication issue.		တ	Lan	ب	ers	aneu	d Sp	euve	suc										
		Pre-Flight Procedures	Aerodrome Operations	Go-Around, Landing	Fundamentals of Flight	Performance Maneuvers	Ground Reference Maneuvers	Slow Flight, Stalls, and Spins	Instrument Maneuvers	Operataions										
*TIM	E DELEGATIONS ARE RECOMMENDATORY	oce	ber	-Arc	ls of	Mai	renc	Stall	nent	Oper										ars
		nt Pr	me (enta	ance	Refe	ght, !	strun											Pol
		-Flig	odro	Take-Off,	dam	form	pun	v Fli	ic In	Emergency										Total hours
		Pre	Aer	Tak		_			_	Em										10
	Dual day	1. 5	1. 5	3. 0	3. 0	3. 0	3. 0	3. 0	3. 0	4. 0										25.0
	PIC/Solo day																			
	Instrument flight time						Ш													
(h)	Aeronautical knowledge examinations	С	PL	A /	т —	Ι_	auti	_			/led	ige	E	ar	nina	atio	ns		4	
	Apply flying techniques and procedures to the competency standards specified for the qualification			2	2	2	2	2	2	2										
	being trained for whilst occupying the instructor seat																			
(c)	Demonstrates the task:																	+	+	
	(i) Introduce tasks in manageable portions without trainee overload			3	3	2	3	3	3	3								+	+	
	(ii) Make clear, concise and systematic explanations	2	2	٥	3	٥	3	2	5	5								+	+	
	(iii) Coordinate demonstration with explanation of maneuver	_	2	_	_	_	_	1	_	2								_	-	
				2	2	2	2	2	2	2								4	4	
	(iv) Make coordinated control inputs without abrupt maneuvering, using accepted techniques					2	2		2											
	(v) Demonstrate the maneuver to the competency standards specidied in this manual for a commercial pilot			1	1	1	1	1	1	1										
(d)	Direct the task																			
	(i) Implement handover and takeover procedures for control of the aircraft			2	2	2	2	2	2	2										
	(ii) Provide direction appropriate to the trainee's progress			2	2	2	2	2	2	2										
	(iii) Provide instructions in a clear, concise and timely manner	2	2																	
	(iv) Provide sufficient practice for the trainee to achieve the task			2	2	2	2	2	2	2										
	(v) Intervene only to the extent necessary to assist the trainee's progress or to maintain safety.							2		2										
(e)	Monitor the task (unassisted practice):																		T	
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	2	2	2	2	2	2	2	2									1	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee			2	2	2	2	2	2	2										
	(iii) Ensure remedial training is effective such that errors are corrected			2	2	2	2	2	2	2								\top	1	ヿ
	(iv) Encourage the trainee to develop self-assessment skills			1	1	1	1	1	1	1								\top	7	ヿ
	(v) Note training events for debriefing and assessment	2	2	2	2	2	2	2	2	2									1	
(f)	Intervene to recover the aircraft if the trainee does not manage to undesired aircraft state							2		2										
(g)	Develop the trainee's responsibility through the							2		2							1	+	\dashv	\dashv
	application of human factors principles for threat and							_		_										
	error management																		4	_
FIR1.	Conduct post-fight briefing																			
(a)	Encourage the trainee to self-assess performance against			2	2	2	2	2	2	2									1	\neg
	the performance criteria																			



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	18	
3 = Ha	mance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required																			
	alification issue																			
	emonstrates a developing level of proficiency, and is																			
	ed safe to conduct solo practice under direct supervision			βι			LS	(A)												
	chieves competency to the standard required for ication issue.			anding		S	euve	Spin	avers	(O										
quam		res	ions	nd, L	light	uver	Man	and	lane	taion										
*******	F DELECATIONS ARE RECOMMENDATORY	npəo	perat	Go-Around, I	s of F	Mane	ence	talls,	ent N	pera										ร
· I IIVII	E DELEGATIONS ARE RECOMMENDATORY	ıt Prc	ne O		entals	ance	Refer	tht, S	trum	cy O										hou
		Pre-Flight Procedures	Aerodrome Operations	Take-Off,	Fundamentals of Flight	Performance Maneuvers	Ground Reference Maneuver	Slow Flight, Stalls, and Spins	sic Ins	erger										Total hours
		Pre		_	-		Gro	Slo	Bas	Em.								_	_	_
	Dual day	1. 5	1. 5	3. 0	3. 0	3. 0	3. 0	3. 0	3. 0	4. 0									ľ	25.0
	PIC/Solo day Instrument flight time																		\dashv	
	Aeronautical knowledge examinations	С	PL	<u> </u>	\er	ona	auti	cal	Kn	IOW	led	lge	Ex	am	nina	atio	ns			
	Describes clearly and accurately, significant details of the	2	2	2	2	2	2	2	2	2		J						П	T	
	trainee's performance and assess the trainee's																			
	achievement against the training outcomes for the lesson and associated performance citeria																			
	Identify any deficiencies in performance and suggest			2	2	2	2	2	2	2									1	
	remedial actions and training																			
	Discuss threat and error management issues encountered							2		2										
	during the flight	•	•	_		•	•	_	_	2								\dashv	-	
	Brief the trainee on the details of the next training exercises	2	2	2	2	2	2	2	2	2										
FIR1. 6	Complete post-training administrations																			
	Record achievement, or otherwise, of competency, any			2	2	2	2	2	2	2										
	remedial training required and identify content of the next training exercises																			
	Complete administration procedures required for issue of									2								\exists	1	
	an endorsement																			
	Inform relevant staff of the trainee's performance and									2										
	results where required									2								-	-	
	Review effectiveness of training and identify any adjustments to deliver, presentation and content for									2										
	improvement, and discuss with appropriate stakeholders																			
FIR2	Range of variables																			
	Activities are performed in accordance with published procedures	2	2	2	2	2	2	2	2	2										
	Flight training includes training for the issue of a flight	1	1	1	1	1	1	1	1	1										
	crew license, rating or endorsement using suitable																			
	training aircraft or approved flight simulation training device																			
	Flight training includes the units and elements authorised																		1	
	by the flight training endorsement(s) held by the																			
	instructor																	ightharpoonup	_	
	Aeronautical knowledge training, including pre-and psot- flight briefings, is provided to support the flight training																			
	units and elements																			
(e)	The training is delivered in accordance with appropriate	1	1	1	1	1	1	1	1	1								$ \top $	1	
	and documented lesson plan																			



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

		1	2	3	4	5	6	7	8	9	10	11	12	L3 1	L 4 [15	161	.718	4
3 = Ha consist for qu 2 = D deem 1 = Ac qualif	rmance Standards as received training in the element, however is not able to stently demonstrate competency to the standard required realification issue emonstrates a developing level of proficiency, and is ed safe to conduct solo practice under direct supervision chieves competency to the standard required for ication issue. E DELEGATIONS ARE RECOMMENDATORY	Pre-Flight Procedures	Aerodrome Operations	Take-Off, Go-Around, Landing	Fundamentals of Flight	Performance Maneuvers	_		_	Emergency Operataions									Total hours
	Dual day	1. 5	1. 5	3. 0	3. 0	3. 0	3. 0	3. 0	3. 0	4. 0									25.0
	PIC/Solo day																		
	Instrument flight time	_	<u> </u>	<u> </u>													4		
(f)	Aeronautical knowledge examinations	С	PL	A A	\er	ona	auti	cal	Kn	OW	led	lge	Ex	am	ina	tio	ns		
	Suitable learning resources may be used to assist the presentation, including audio visual aids, aircraft models, synthetic training devices, regulatory publications an aircraft and operations manual																		
FIR3	Foundation of knowledge																		
(a)	Relevant sections of Civil Aviation Safety Regulations																		
	Principles and methods of instruction																	+	
(c)	The process of making an objective assessment against a standard																	+	
(d)	Provision of evidence of competency in performing as a flight crew member																		
	Terms used in respect of the evidence used to determine an individual's competency against a standard																		
	The different forms of assessment and application in flight training																		
	The requirements of assessing consistency of performance of flight crew standards																		
	The difference in standards for consistency of performance at different license levels																		
	The application of the range of variables in making an assessment																		
	Performing and learning complex skills, including cognitive and development issues and observational learning																		
	The levels of situational awareness and methods of developing and monitoring trainee's situation awareness skills																		
	Rate of learning, enforced automatically and the foundation of expertise																		
	Instructor professionalism, including interpersonal skills, implications of being a role model, self,reflection and selfmanaged professional development																		
	Effective use of a course of training, curricula and syllabus and lesson plans																		
(0)	Training and assessment standards																		
(p)	Debriefing and feedback techniques																		



5 Flight Instructor Rating Training Course

5.2 Planning Matrix

Perfo	rmance Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	171	8	
3 = Haconsia for qu 2 = D deem 1 = Acqualif	as received training in the element, however is not able to stently demonstrate competency to the standard required palification issue remonstrates a developing level of proficiency, and is need safe to conduct solo practice under direct supervision chieves competency to the standard required for fication issue.	Pre-Flight Procedures	Aerodrome Operations	Take-Off, Go-Around, Landing	_	Performance Maneuvers	_	Slow Flight, Stalls, and Spins	_	Emergency Operataions										Total hours
	Dual day	1. 5	1. 5	3. 0		3. 0	3. 0	3. 0	3. 0	4. 0									-	25.0
	PIC/Solo day																		4	
	Instrument flight time			^ ^			4:	!	17:-		.1					4:-				
(q)	Aeronautical knowledge examinations Transfer of control		PL	4 /	\erd	ona	auu	cai	Kn	iow	iec	ige	EX	kan	IIM	alio	ns	T	T	
	Principles of flight																		1	
	Crew resource management (CRM) principles																		1	
(t)	Techniques for introducing task in manageable segments																	+	+	
	to avoid overloading a trainee and principles for integrating task segments																			
(u)	Appropriate use of scenario-based training in flight instruction																			
(v)	Application of risk management principles to emergency procedure simulations in flight																			
(w)	Checklists for single-engine operations as applicable																			
(x)	Common student errors and suggested suitable remedial instruction																			
(y)	Obstacles to learning associated wth flight training																			
(z)	Operational concept of threat and error management in relation to flight trainiing																			
(aa)	Procedures and strategies for developing trainee threat and error management skills																			
(bb)	Task prioritisation system to assist the development of trainee task management skills																			
(cc)	Suitable procedures for making decisions in-flight and for developing trainee decision-making skills																			
(dd)	Goal fixation effects on good decision making																			
(ee)	Stress management																		T	
(ff)	Completing relevant documentation requirements																		Ī	



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

5.3 Training Course Syllabus

5.3.1 Training Curriculum

- A. Training Curriculum (incl. Time Scale and Scale in Weeks) (**25.0 hours Actual Flight Time /5 weeks)
 - a. Flight Instructor Ground Training (**30.0-hours, 2 weeks)
 - b. Flight Instructor Flight Training (**25.0 hours, 2 weeks)
 - c. CAAP Check ride (1.0-hour, 1 day)

5.3.2 Ground Training Subjects Covered

Reference: PCAR 2.3.3.11; FAA FI Handbook

SUBJECT	**HOURS
Fundamentals of Instruction	
Theoretical Knowledge	2.0
Assessment of Student Performance	2.0
Learning Process	2.0
Teaching Process	2.0
Training Philosophies and Evaluation	4.0
Training Program Development	2.0
Lesson Planning	2.0
Teaching Methods	2.0
Use of Training Aids	2.0
Analysis and Correction of Student Errors	2.0
Human Performance	4
Threat and Error Management	4
TOTAL HOURS	30

^{**}Recommended hours only

1. LESSON 1

LESSON NAME: THEORETICAL KNOWLEDGE (PCAR 2.3.3.11 (b)(2)(ii)(A))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Techniques of applied instruction:

(1.a.i.1.a)	use of training aids
(1.a.i.1.b)	group lectures
(1.a.i.1.c)	individual briefings
(1.a.i.1.d)	student participation
(1.a.i.1.e)	flight environment

(1.a.i.1.f) in-flight judgment and decision making

LESSON STANDARDS:

Student shows adequate preparation Student understands all content



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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

Student retains sufficient knowledge

2. LESSON 2

LESSON NAME: ASSESSMENT OF STUDENT PERFORMANCE (PCAR 2.3.3.11 (b)(2)(ii)(B))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Student evaluation and testing:

(1.a.i.1.a)	recall of knowledge
(1.a.i.1.b)	translation of knowledge into understanding
(1.a.i.1.c)	development of understanding into actions
(1.a.i.1.d)	evaluate rate of progress
(1.a.i.1.e)	function of progress tests

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

3. LESSON 3

LESSON NAME: LEARNING PROCESS (PCAR 2.3.3.11 (b)(2)(ii)(C))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Student evaluation and testing:

(1.a.i.1.a)	learning methods/learning styles
(1.a.i.1.b)	perception and understanding
(1.a.i.1.c)	memory and its application
(1.a.i.1.d)	habits and transfer
(1.a.i.1.e)	motivation

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

4. <u>LESSON 4</u>

LESSON NAME: TEACHING PROCESS (PCAR 2.3.3.11 (b)(2)(ii)(D))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

The teaching process:

(1.a.i.1.a)	elements of effective teaching
(1.a.i.1.b)	teaching methods/approaches



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

(1.a.i.1.c) using lesson plans

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

5. LESSON 5

LESSON NAME: TRAINING PHILOSOPHIES AND EVALUATION (PCAR 2.3.3.11 (b)(2)(ii)(E))

GROUND SCHOOL 4.0 HOURS

LESSON DESCRIPTION:

The learning process:

- (1.a.i.1.a) value of structures course of training
- (1.a.i.1.b) importance of a planned syllabus
- (1.a.i.1.c) integration of theoretical knowledge and flight instruction

Familiarizes students in different types of program evaluation, including needs of assessment, formative research, process evaluation, monitoring of outputs and outcomes and impact assessment.

LESSON STANDARDS:

Explain the major concepts:

- (1.a.i.1.a) sources of data
- (1.a.i.1.b) study designs
- (1.a.i.1.c) types of evaluation and their purpose

6. LESSON 6

LESSON NAME: TRAINING PROGRAM DEVELOPMENT (PCAR 2.3.3.11 (b)(2)(ii)(F))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Human performance and limitations relevant to flight instruction:

- (1.a.i.1.a) lesson planning and preparation
- (1.a.i.1.b) classroom demonstration and observation

LESSON STANDARDS:

Student shows adequate preparation

Student understands all content

Student retains sufficient knowledge

7. <u>LESSON 7</u>

LESSON NAME: LESSON PLANNING (PCAR 2.3.3.11 (b)(2)(ii)(G))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

(1.a.i.1.a) method teaching



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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

(1.a.i.1.b) developing well-planned and organized aviation instruction

LESSON OBJECTIVES:

Apply the three domains of learning – cognitive (knowledge), affective (attitudes, beliefs, and values) and psychomotor (physical skills)

LESSON STANDARDS:

Student able to perform according to well-defined standards

8. LESSON 8

LESSON NAME: TEACHING METHODS (PCAR 2.3.3.11 (b)(2)(ii)(H))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Provide information and experiences that will help develop and deliver effective instructional program

LESSON STANDARDS:

Student demonstrates an understanding of the following:

(1.a.i.1.a)	theories and principles of classroom management
(1.a.i.1.b)	theories and principles of instructional methodologies
(1.a.i.1.c)	realities and structures of the teaching profession

9. LESSON 9

LESSON NAME: USE OF TRAINING AIDS (PCAR 2.3.3.11 (b)(2)(ii)(I))

GROUND SCHOOL 2.0 HOURS

LESSON DESCRIPTION:

Training administration:

(1.a.i.1.b) pilot's flying book (1.a.i.1.c) flight and ground curriculum (1.a.i.1.d) study material
(1.a.i.1.d) study material
•
(1 '1) (I' 1) I
(1.a.i.1.e) flight manual
(1.a.i.1.f) flight authorization papers
(1.a.i.1.g) aircraft documents

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

10. <u>LESSON 10</u>

LESSON NAME: ANALYSIS AND CORRECTION OF STUDENT ERRORS (PCAR 2.3.3.11 (b)(2)(ii)(J))

GROUND SCHOOL 2.0 HOURS



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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

LESSON DESCRIPTION:

Training program development:

- (1.a.i.1.a) reason for errors (1.a.i.1.b) student faults
- (1.a.i.1.c) correction to errors

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

11. **LESSON** 11

LESSON NAME: HUMAN PERFORMANCE (PCAR 2.3.3.11 (b)(2)(ii)(K), ICAO Doc 9583 as per PCAR 3.2.2

GROUND SCHOOL 4.0 HOURS

LESSON DESCRIPTION:

Human performance and limitations relevant to flight instruction:

-	<u> </u>
(1.a.i.1.a)	physiological and psychological factors
(1.a.i.1.b)	human behavior
(1.a.i.1.c)	human information processing relative to flight.
(1.a.i.1.d)	development of decision-making skills relative to flight.
(1.a.i.1.e)	development of judgment and human performance relative to flight.

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

12. LESSON 12

LESSON NAME: THREAT AND ERROR MANAGEMENT (PCAR 2.3.3.11 (b)(2)(ii)(L))

GROUND SCHOOL 4.0 HOURS

HOURS LESSON DESCRIPTION:

Human performance and limitations relevant to flight instruction:

(1.a.1.1.a)	situational awareness (TEM and human performance)
(1.a.i.1.b)	adherence to correct procedures

(1.a.i.1.c) hazards involved in simulating system failures and malfunctions

LESSON STANDARDS:

Student shows adequate preparation Student understands all content Student retains sufficient knowledge

5.3.3 Flight Time Breakdown

Reference: IS 2.3.3.11; ASA Handbook (The Pilot's Manual: FI Syllabus)

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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

AIR EXERCISES	DUAL TIME
Pre flight/Post Flight Procedures	**25+00
Aerodrome Operations	
Maneuver Analysis (Instructional)	
Take-off, Landing, and go-around	
Fundamentals of Flight	
Performance Maneuvers	
Ground reference maneuvers	
Slow Flight, Stalls and Spins (incl.	
Advanced Stalling)	
Basic Instrument Maneuvers	
Emergency Operations	
TOTAL TIME	**25+00

^{**}Recommended only

5.3.4 Competency Based Syllabus

1. **Pre-flight Procedures (IS 2.3.3.11(a)(5))**

a. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain radio communications, preflight inspections, cockpit management, engine starting, taxiing, and before takeoff check from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors. Be able to explain human performance (effective visual reference, etc) during flight.

b. Completion Standards

This lesson is complete when the applicant has –

- 1. Adequately presented preflight lesson plans for radio communications and light gun signals, preflight inspection, cockpit management.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated radio communications, preflight inspections, cockpit management, engine starting, taxiing, good look around cockpit management, situational awareness, decision making, interpersonal communication and before-takeoff checks from an instructional standpoint.

2. Aerodrome Operations (IS 2.3.3.11(a)(6))

a. Objective

The applicant will -

Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain runway/taxiway signs, markings, and lighting, engine starting, taxiing and before takeoff check from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has -

1. Adequately presented preflight lesson plans for airport runway/taxiway signs, markings, and



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5 Flight Instructor Rating Training Course

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lighting, engine starting, taxiing, and the before takeoff check.

- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated runway/taxiway signs, markings and lighting, engine starting, taxiing and before takeoff check from an instructional standpoint.

3. Take-off, go-around and landing (IS 2.3.3.11(a)(7))

Normal and Crosswind Take-off and Landing

A1. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- Become familiar with flight operations and visual perspectives from the right seat. Demonstrate
 and simultaneously explain traffic patterns, normal and crosswind takeoff, and landings, forward
 slip to a landing, and go-around procedures from an instructional standpoint. Apply the
 appropriate corrective action and response to simulated errors. Be able to demonstrate good
 situational awareness, cockpit management, and decision making in the right seat.

B1. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for traffic patterns, normal and crosswind takeoff and climb, normal and crosswind approach and landing, slip to a landing, and go-around/rejected landing.
- 2. Demonstrated positive aircraft control and situational awareness from the right seat
- 3. Competently explained and demonstrated traffic patterns, normal and crosswind takeoff, and climb, normal and crosswind approach and landing, slip to a landing, and go-around/rejected landing from an instructional standpoint.

Maximum Performance Take-off and Landing

A2. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations, human performance and visual perspectives from the right seat. Demonstrate and simultaneously explain short-field operations and soft-field operations from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

B2. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for short-field takeoff and maximum performance climb, soft-field takeoff and climb, short-field approach and landing, and soft-field approach and landing.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated, human performance, short-field and soft-field operations from an instructional standpoint.

4. Fundamentals of Flight (IS 2.3.3.11(a)(9))

a. Objective

The applicant will —

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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for straight-and-level flight, level turns, straight climbs and climbing turns, straight descents, and descending turns.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated fundamentals of flight from an instructional standpoint.

5. Performance Maneuvers (IS 2.3.3.11(a)(10))

a. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of human performance, knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain steep turns and steep spirals from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for steep turns and steep spirals.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated steep turns and steep spirals from an instructional standpoint

6. Ground Reference Maneuvers (IS 2.3.3.11(a)(12))

a. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain chandelles and lazy eights and human factors related to the manuevers from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for rectangular course, S-turns across a road, turns around a point, and eights on pylons. Demonstrated positive aircraft control from the right seat.
- 2. Competently explained and demonstrated ground reference maneuvers and related human factors from an instructional standpoint.

7. Slow Flight, Stalls, and Spins (IS 2.3.3.11(a)(13))



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5 Flight Instructor Rating Training Course

5.3 Training Course Syllabus

Slow Flight and Stalling (Proficiency)

A1. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat.
- 3. Demonstrate and simultaneously explain slow flight and power on/off stalls and related human factors from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

B1. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for slow flight, power-on stall, power-off stall.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated slow flight, power-on, and power-off stalls from an instructional standpoint.

Advanced Stalling (Demonstration)(IS 2.3.3.11(a)(13)(iv-vi))

A2. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain cross-controlled, elevator trim, secondary accelerated maneuver stalls and related human factors from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

B2. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for cross-controlled stalls, elevator trim stalls, secondary stalls, and accelerated maneuver stalls.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated advanced stalls and spin awareness from an instructional standpoint.

8. Basic Instrument Maneuvers

a. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with basic instrument maneuvers and visual perspectives from the right seat. Demonstrate and simultaneously explain basic instrument maneuvers and related human factors from an instructional stand point. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has —

1. Adequately presented preflight lesson plans for straight-and-level flight, constant airspeed climbs, constant airspeed descents, turns to a heading, and recovery from unusual attitudes,



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5.3 Training Course Syllabus

solely by reference to instruments.

- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated basic instrument maneuvers from an instructional standpoint.

9. Emergency Operations

a. Objective

The applicant will —

- 1. Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the preflight lesson.
- 2. Become familiar with flight operations and visual perspectives from the right seat. Demonstrate and simultaneously explain emergency approach and landings and power-off 180 accuracy approach and landing and related human factors from an instructional standpoint. Apply the appropriate corrective action and response to simulated errors.

b. Completion Standards

This Lesson is complete when the applicant has —

- 1. Adequately presented preflight lesson plans for emergency approach and landing, power-off 180° approach and landing, emergency equipment and survival gear.
- 2. Demonstrated positive aircraft control from the right seat.
- 3. Competently explained and demonstrated emergency approach and landing and power-off 180° accuracy approach and landing from an instructional standpoint.



FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

6 Threat and Error Management Training Course

6.1 Introduction

6 Threat and Error Management Training Course

6.1 Introduction

- 6.1.1 TEM is an operational concept applied to the conduct of a flight; it is broader than the traditional concept of airmanship as it provides pilots with a structured and pro-active approach to identifying and managing threats and errors that may affect the safety of the flight.
- 6.1.2 TEM has been generally accepted in the airline industry as an effective method of improving flight safety, and is now required by ICAO as an integral part of pilot training at all license levels through to air transport pilot. TEM has been incorporated into the Philippine licensing system at all levels and in all operational areas.
- 6.1.3 TEM uses many tools, including training, standard operating procedures (SOPs), checklists, briefings and single-pilot Human Factors principles.
- 6.1.4 There is some overlap between risk management, TEM and HF, particularly at the stage of developing and implementing plans to mitigate risks and in reviewing the conduct of a flight.
- 6.1.5 Generally, risk management is the process of deciding whether or not operations can be conducted to an acceptable 'level' of risk ('go' or 'no go') safely, whereas TEM is the process applied to managing and maintaining the safety of a particular flight.
- 6.1.6 The terms 'manage' and 'management' are used and defined in this part as—*plan, direct and control an operation or situation*.
- When assessing competency standards that involve management, evidence must be sought that a plan—however small—has been developed, implemented (direct) and re-evaluated (control) throughout the activity.
- Managing threats and errors involves developing a plan to identify the threat or error, and implementing counter-measures to reduce or eliminate them. Direction may, in the case of a single-pilot aircraft, require self-direction to ensure action is taken to mitigate hazards in accordance with a checklist, approved flight manual/pilot operating handbook procedures, SOP or other acceptable means. Control would involve monitoring the progress of events to ensure a safe outcome. This may require plans and actions to be amended.
- 6.1.9 Management also applies to correcting an undesired aircraft state.
- 6.1.10 The following sections provide a brief introduction to assist general aviation pilots and trainers to apply the principles of TEM to their own operations.

6.1.11 Threats

- 6.1.11.1 The TEM model, as originally developed by the University of Texas, defines threats as external events or errors that:
 - occur outside the influence of the flight crew
 - increase the operational complexity of the flight
 - require crew attention and management if safety margins are to be maintained.



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- 6.1.11.2 The threats may be anticipated, unexpected or latent within the operational system.
- 6.1.11.3 CAAP proposes an expanded definition that is equally applicable to general aviation: that a threat can be defined as a situation or event that has the potential to impact negatively on the safety of a flight, or as any influence that promotes opportunity for pilot errors. Generally, threats are considered to be external (e.g. bad weather) or internal, such as those the pilot or trainee brings to the operation (e.g. fatigue or complacency).
- 6.1.11.4 This concept expands on the original definition of threat and considers the psychological state of the pilot and the limitations they may bring to the aircraft operation on any given day.

For example, increased levels of fatigue could result from having a young child that is not sleeping well. The threat (in this case fatigue) has the potential to cause an increase in errors, degrade situation awareness and contribute to poor decision-making due to physiological and/or psychological impairment.

- 6.1.11.5 Pilots need good situation awareness to anticipate and recognize threats as they occur. Threats must be managed to maintain normal flight safety margins. Some typical external threats to operations might be:
 - adverse weather
 - weight and balance
 - density altitude
 - runway length
 - other traffic
 - high terrain or obstacles
 - the condition of the aircraft.
- 6.1.11.6 Some typical internal threats to general aviation operations include:
 - fatigue
 - complacency
 - over- or under-confidence
 - lack of flight discipline
 - lack of recency and proficiency
 - hazardous behavior, such as impulsiveness, machismo, invulnerability, resignation or antiauthority.

6.1.12 Errors

- 6.1.6.1 The TEM model accepts that it is inevitable that pilots, as human beings, will make errors. Errors are defined as flight crew actions or inactions that:
 - lead to a deviation from crew or organizational intentions or expectations
 - reduce safety margins
 - increase the probability of adverse operational events on the ground and during flight.
- 6.1.12.2 Threats can be classified as handling errors, procedural errors or communications errors.



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- 6.1.12.3 While errors may be inevitable, the requirement to maintain safety of flight means that errors must be identified and managed before flight safety margins are compromised. Typical errors in general aviation flight might include:
 - incorrect performance calculations
 - inaccurate flight planning
 - non-standard communications
 - aircraft mishandling
 - incorrect systems operation or management
 - checklist errors
 - failure to meet flight standards (e.g. poor airspeed control).

6.1.13 Undesired aircraft state

6.1.13.1 Threats and errors that are not detected and managed correctly can lead to an undesired aircraft state, which could be a deviation from flight path or aircraft configuration that reduces normal safety margins. The definition of undesired aircraft state is:

Pilot-induced aircraft position or speed deviations, misapplication of flight controls or incorrect systems configuration associated with a reduced margin of safety.

6.1.13.2 An undesired aircraft state can still be recovered to normal flight but, if not managed appropriately, may lead to an outcome such as an accident or incident. Safe flight in an aircraft requires recognition and recovery from an undesired aircraft state in a very short timeframe before an outcome eventuates (e.g. loss of control, failure to achieve optimum performance or uncontrolled flight into terrain).

Examples of errors and an associated undesired aircraft states in general aviation aircraft might be:

- Mismanagement of aircraft systems (error) resulting in aircraft anti-ice settings not turned on during icing conditions (state)
- Loss of directional control during a stall (error) resulting in an unusual aircraft attitude (state)
- Inappropriate scan of aircraft instruments (error) resulting in flight below VYSE (best single-engine rate of climb speed [blue line speed]) or VXSE (best single-engine angle of climb speed) (state)
- Flying a final approach below appropriate threshold speed (error) resulting in excessive deviations from specified performance (state).
- 6.1.13.3 Good TEM requires the pilot to plan and use appropriate countermeasures to prevent threats and errors from progressing to an undesired aircraft state. Countermeasures used in TEM include many standard aviation practices and may be categorized as follows:
 - planning countermeasures: flight planning, briefing and contingency planning
 - execution countermeasures: monitoring, cross-checking, workload and systems management
 - **review countermeasures**: evaluating and modifying plans as the flight proceeds, and inquiry and assertiveness to identify and address issues in a timely way.
- 6.1.13.4 Once an undesired aircraft state is recognized, it is important to manage the undesired state through correct remedial action and prioritize aircraft control for return to normal flight, rather than to fixate



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on the error that may have initiated the event.

6.1.14 TEM application

- 6.1.14.1 Threats and errors occur during every flight, as evidenced in the considerable database through the LOSA (Line Oriented Safety Assessment) built up from threats and errors in flight operations worldwide. One interesting fact revealed by this database is that around 45% of flight crew errors go undetected or are not responded to by crew members.
- 6.1.14.2 TEM must be integral to every flight and include anticipation of potential threats and errors as well as planning of countermeasures. It must include identification of potential threats, errors and countermeasures in the self-briefing process at each stage of flight, and avoiding becoming complacent about threats that are commonly encountered (e.g. weather, traffic and terrain)
- 6.1.14.3 Table 1 provides considerations that should assist pilots to apply TEM in general aviation operations.

Table 1: Considerations to assist pilots in applying TEM in general aviation operations

Table 1: Considerations to assist pilots in applying TEM in general aviation operations			
Stage	Considerations		
Pre-flight	 Just as pilots perform a number of tasks on a regular basis in preparation for flight (e.g. interpreting NOTAMs and MET information, checking fuel contents), they must include TEM as part of routine pre-flight planning and preparation. A few minutes (or more) on the ground spent anticipating possible threats and errors associated with each flight will provide the opportunity to plan and develop countermeasures (e.g. action in the event of unpredicted weather changes). A good starting point is to ask what actions, conditions or events are likely to promote errors, leading to the identification of internal and/or external threats applicable to that flight. This can reduce airborne workload as the pilot may then be partially prepared to deal with those threats and errors. 		
Flight	 Brief (self-brief and passengers) planned procedures before take-off and prior to commencing each significant flight sequence (e.g. approach to an unfamiliar aerodrome, low-level operations). Include anticipated threats and countermeasures in briefings. Continuously monitor and cross-check visual and instrument indications and energy state to maintain situational awareness. Prioritize tasks and manage workload to avoid being overloaded, and to maintain situation awareness. Identify and manage threats and errors When confronted by threats and errors, the priority is to ensure the aircraft is in an appropriate configuration to optimize the ability to maintain control of the aircraft and flight path. Monitor the progress of every sequence and abort if necessary. Do not fixate on threat or error management to the detriment of aircraft control. Identify and manage any undesired aircraft state. Recover to planned flight and normal safety margins before dealing with other problems. 		



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Post-flight

- Take a few minutes at the end of each flight to reconsider what threats, errors and/or undesired aircraft states were encountered during the flight. Ask yourself how well they were managed and what you would do differently to improve management of those threats and errors.
- Record threats, errors and/or undesired aircraft states and discuss them with more experienced pilots to assist with the development of improved TEM strategies.

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6.2 Teaching Threat Management

6.2 Teaching threat management

- 6.2.1 In the TEM model, threats can be defined as:
 - situations or events that have the potential to impact negatively on the safety of a flight

Or

- any influence that promotes opportunity for pilot errors.
- 6.2.2 Instructors should teach trainees that threats (and errors) are a part of everyday aviation operations and must be proactively managed.
- 6.2.3 Instructors should stress to trainees that threats can be categorized as either *anticipated* or *unexpected*. However, there is a third category, *latent* threats, that may not be observable by pilots involved in flight operations and may need to be uncovered through safety analysis.
- 6.2.4 Threats may also be categorized as either *environmental* or *organizational*.
- 6.2.5 It is incumbent upon instructors to show trainees how to detect all types of threats and explain the steps necessary to mitigate potential hazards.

Anticipated threats

- 6.2.6 Detection of anticipated threats relies mainly on the trainee's knowledge and experience. The instructor should inform new trainees about:
 - use of MET reports and means of avoiding unfavorable conditions
 - conduct in the vicinity of aircraft on the ground
 - perform pre-flight inspections
 - correct adjustment of flight controls and harness restraint
 - a clear handover/takeover procedure
 - ensuring propeller clearance before engine start
 - listening before transmitting on the radio.
- 6.2.7 During flight training, instructors should point out meteorological observations and effects, and question the trainee to determine his or her application of the information that is available.
- As pilots learn (and gain experience) they will be able to predict when and where threats may occur. Similarly, as pilots gain experience they should be expected to understand more about their own capabilities and limitations.
- 6.2.9 Prior to each flight, the instructor should discuss the proposed flight with the trainee and ask them to identify obvious threats to safety. During the early stages of training the instructor should not necessarily expect the pilot to identify a comprehensive set of threats but, as training progresses, the trainee's level of knowledge should improve.
- 6.2.10 In a very short time, instructors should expect a trainee to manage anticipated threats as a matter of course. As the trainee gains knowledge, experience and skills, they will learn to manage all threats that develop.

Unexpected threats



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6.2 Teaching Threat Management

- 6.2.11 Unexpected threats are most likely to occur during flight operations.
- 6.2.12 During flight training, the instructor should expect the trainee to identify unexpected threats such as incorrect ATC instructions, traffic hazards or adverse weather. The instructor should point these out if the trainee fails to identify them.
- As unexpected threats are identified, the instructor should question the trainee to understand what action they would take to mitigate threats and ensure the action is completed in the time available. Again, if the trainee makes errors during threat mitigation, the instructor should identify the error and provide advice to the pilot to minimize the effects.
- 6.2.14 Instructors may have to develop scenarios or 'what if' questions to further test the trainee. Typical scenarios include practice engine failure or simulated system failure.

Latent threats

- 6.2.15 The instructor should inform the trainee about latent threats, such as:
 - optical illusions (e.g. approaches to sloping runways)
 - poor manuals
 - equipment design faults (e.g. landing gear and flap levers located too close to each other)
 - unnecessary pressure to get a job done.

Environmental threats

- 6.2.16 Environmental threats occur outside the control of the aircraft operator. Such threats include:
 - weather: turbulence, ice, wind
 - aerodromes: congestion, complex surface navigation, poor signage/markings
 - ATC: non-standard phraseology, complex clearances, poor English language
 - terrain: mountains, valleys, built up areas.

Organizational threats

- 6.2.17 Organizational threats, which are often latent, include:
 - operational pressure: tight scheduling of training flights
 - aircraft: poor serviceability
 - maintenance: maintenance error or event
 - documentation error: incorrect or expired charts, incomplete or erroneous maintenance release.
- 6.2.18 Organizational threats can be controlled by the operator or mitigated by aviation organizations. Mitigating strategies include:
 - safety management systems
 - fatigue risk management systems
 - standard operating procedures
 - checklists
 - ground handling measures (marshalls)
 - operational health and safety procedures.

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6.3 Teaching Error Management

6.3 Teaching error management

- 6.3.1 Industry's acknowledgement that errors will occur has changed the emphasis in aviation operations from error prevention to error recognition and management. Rather than simply pointing out errors as they occur, instructors should show trainees how to reduce the risk of errors occurring and then, if they do happen, recognize the fact and implement strategies to manage the error.
- 6.3.2 The trainee should be taught the importance of ensuring that errors are recognized, acknowledged and corrective action taken. Error management could be something as simple as recognizing a forgotten task and completing it.
- 6.3.3 If time and safety permit, instructors must afford the trainee the opportunity to recognize a committed error, rather than intervening as soon as they see an error committed. If an error is not recognized, the instructor should then analyze why the error occurred, why the pilot did not recognize it and what steps should be taken to prevent future occurrences.

Errors

- 6.3.4 In the TEM model, errors must be observable. They are classified on the basis of 'primary interactions' as:
 - aircraft handling error: occurs when a pilot is interacting with an aircraft's controls, automation or systems
 - procedural error: when a pilot is using procedures such as checklists, SOPs or emergency actions
 - **communication error:** occurs when pilots are interacting with other people such as ATC, ground assistants or other crew members.
- 6.3.5 Instructors must be familiar with these classifications so they can identify a trainee's weaknesses and provide guidance to address the deficiencies.
- 6.3.6 Additionally, instructors should be mindful of their own role in introducing errors.

For example, instructors should ask themselves "is it a communications error if I fail to clearly communicate my message to a trainee during training?"

Mitigations

- 6.3.7 When teaching TEM, instructors must emphasize the application of HF skills. If the instructor identifies that the trainee is deficient in any of the HF skills, the deficiency must be rectified or general flying and TEM competency will be compromised.
- 6.3.8 The LOSA archive shows that 45% of observed errors that occur in multi-crew operations are not detected. CAAP considers that single-pilot general aviation operations are probably more susceptible to errors. Therefore, the trainee should be instructed that mitigations such as checklists, SOPs and aviation regulations must be complied with.
- Aviation regulations, SOPs, checklists and other authoritative documentation (e.g. flight manuals) are provided to enhance safety by helping reduce errors—instructors must continually stress the importance of using and adhering to the requirements and guidance provided. Instructors should not



6 Threat and Error Management Training Course

6.3 Teaching Error Management

permit the trainee to deviate from the application and terminology of such a document, whether it is used from memory or read each time.



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6.4 Teaching Undesired Aircraft State Management

6.4 Teaching Undesired Aircraft State Management

- During flight training, instructors will be dealing with many undesired aircraft states as trainees develop their flying skills. Ideally, pilots should be taught to manage threats and errors before an undesired aircraft state develops. In this context, instructors have the dual role of practicing TEM by ensuring that undesired aircraft states are managed and then teaching trainees how to do the same.
- 6.4.2 Because trainees may not have the manipulative and cognitive skills of a qualified pilot, they will often not meet specified flight tolerances or procedures.

Some typical examples of undesired aircraft state during training are:

- Taxiing too fast
- Too fast or slow on final approach
- Inability to maintain altitude or heading during straight and level flight.
- 6.4.3 Such examples would normally be classified as undesired aircraft states when committed by a qualified pilot; however, they are not unusual events during flight training. The difference is that the instructor should be aware of the threats and errors and should not let an undesired aircraft state develop into an undesired outcome (accident or incident). Highlighting undesired aircraft states as they occur, and providing guidance and advice on their prevention will enrich the trainee's learning experience.
- 6.4.4 Instructors should teach trainees the critical aspect of switching from error management to undesired aircraft state management. During the error management phase, a pilot can become fixated on determining the cause of an error and forget the requirement to *aviate*, *navigate and communicate*. It is essential that pilots recognize when an undesired state must be managed and take appropriate action.

For example, if a pilot becomes uncertain of his or her position on a navigation flight, a timely decision would need to be made to perform a 'lost procedure'. The pilot may be tempted to ascertain why they became lost and blunder on regardless (undesired aircraft state), rather than initiating a logical procedure to re-establish their position, seek assistance from other aircraft or ATC, or plan a precautionary landing.

Instructors should be on the alert for trainees becoming engrossed with error management to the detriment of control of the aircraft or situation (undesired aircraft state). During training, it is likely that most trainees will experience this problem; instructors must identify these situations and guide and direct the trainee when and how to switch to undesired aircraft state management.

For example, a trainee's lookout could be degraded due to distraction when fault-finding a simulated aircraft system malfunction.

6.4.6 Instructors may find the following formulae to be an effective tool for teaching TEM and debriefing after a flight:



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6.4 Teaching Undesired Aircraft State Management

Threat (T) – Pilot response (R) = Outcome (O)

Either inconsequential or consequential. Inconsequential means that there was no adverse outcome, i.e. there was not an error.

Error (E) – Pilot response (R) = Outcome (O)

Either inconsequential or consequential. This time a consequential outcome may be a further error, or an undesired state.

Undesired aircraft state (U) – Pilot response (R) = Outcome (O)

Either inconsequential or consequential. Once again, a consequential outcome may be a further error, or an undesired state.



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6.5 Assessing Threat and Error Management

6.5 Assessing Threat and Error Management

- 6.5.1 The basic concept for TEM is simple:
 - a. Identify the threat, error or undesired aircraft state
 - b. Manage the threat, error or undesired aircraft state.
- All elements and performance criteria specified in the standard must be met before the candidate can be assessed as competent.

Evidence-based assessment

- Assessors must obtain evidence to ensure that TEM is being practiced. Assessors cannot assume that just because a pilot completed a faultless trip, competent TEM was used. The assessor should question the trainee and observe their actions to ensure the evidence is valid, authentic, sufficient and current.
- 6.5.4 It is likely that an assessor will need to create scenarios on a flight test to allow proper assessment of TEM. A competent pilot is less likely to get into an undesired aircraft state, or would quickly correct an undesired aircraft state (e.g. low approach speed), and it may be necessary for the assessor to artificially create such a circumstance.

For example:

- When approaching a destination aerodrome, simulate a thunderstorm over the airfield to duplicate both a threat and an undesired aircraft state
- Simulate a radio failure approaching a non-controlled aerodrome with a CTAF), a VFR approach point or control zone
- Simulate precautionary search or forced landing
- Simulate instrument or display failure
- Use distraction during high workloads.

Formative assessment during flight training

- 6.5.5 Instructors are required to conduct formative assessments throughout flight training. Instructors will have many more opportunities than an assessor to observe the progress of a pilot's HF and TEM skills. Through the conduct of ab initio training, instructors will observe the trainee's skills improvement and would develop an understanding of the trainee's expected rate of learning.
- On the basis of formative assessments, the instructor may need to modify the training plan to ensure that the trainee achieves competence. Ultimately, it is the instructor who ensures the trainee meets the final competency standards.

Flight test assessment

6.5.7 Evaluation of competence is more difficult for an assessor as the HF and TEM assessment must typically be determined on the basis of a single test flight. By the time the candidate performs a test flight, they should be able to manage threats and errors—the assessor will need to develop scenarios to ensure adequate assessment.



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6.5 Assessing Threat and Error Management

- 6.5.8 TEM must be assessed throughout the flight test.
- 6.5.9 During pre-flight planning, the assessor should observe and question the pilot to gain insight into the countermeasures that the pilot applies to anticipated threats. Scrutiny of flight planning activities will also allow the assessor to monitor some aspects of error management.
- 6.5.10 Throughout general flying and navigation phases of the test, simulation of systems malfunctions and emergencies will afford the opportunity to evaluate threat, error and undesired state management competencies.
- 6.5.11 The assessor will evaluate HF competencies at the same time as appraising TEM competencies. Although a flight test involves assessment of a multitude of competencies, with proper planning and some thought, assessors will be able to successfully assess HF and TEM on license and rating tests. In addition, task-management, role and transfer skills can also be observed and assessed if relevant.

As an assessor, consider the list below when setting a scenario during the navigation phase that requires a precautionary search.

- Lookout: selection of suitable landing area, weather and terrain avoidance
- **Situation awareness**: perception of present situation and options, action plan, potential hazard awareness, aircraft configuration and performance
- **Decision-making**: decision to conduct precautionary search, assessment of landing area and decision to land
- Task prioritization: work management and prioritization
- Communications: communications with ATC, other aircraft
- Threat management: weather, low-level operations, aircraft handling
- Error management: recognition of any errors, countermeasures, checklist use
- **Undesired aircraft state**: taking appropriate action to prioritize management of an undesired aircraft state.



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ANNEX A

Private Pilot License Progress Checks and Grading Sheets

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

Flight no:	PPL(A)1	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

• Be introduced to and become familiarized with pre flight inspections and checklist operations, starting and taxi procedures, and the function and use of airplane controls.

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Ssafety aspects in conducting ground operations
- · Weather and NOTAMs
- · Aircraft technical knowledge
- Ground operations procedures and checklist
- Correct usage of checklist
- · Forms and documents
- Basic maneuver in Flight and on ground

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue		

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

	TRAINING sted flight time: 2.0 hours dual			
			Performance Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
ONTA.1	Non-towered aerodrome – pre-flight preparation			
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	3		
(b)	interpret the extracted information	3		
	identify all special aerodrome procedures	3		
	check current weather forecast and local observations	3		
(e)	identify all relevant radio and navigation aid frequencies	3		
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area			
(a)	refer to aerodrome or landing area chart (if available)	3		
(b)	set local QNH or area QNH	3		
(c)	broadcast intentions on appropriate frequency	3		
(d)	obtain and interpret traffic information	3		
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	3		
(f)	recognise ground markings during taxi and take appropriate action	3		
(h)	taxi aircraft to holding point	3		
(i)	use strobes when crossing any runway	3		
ONTA.3	Perform departure at a non-towered aerodrome or landing area			
(a)	check and ensure runway approach is clear prior to entering a runway	3		
(b)	correctly set transponder code and mode prior to entering runway for take-off	3		
(c)	confirm runway approaches clear in all directions prior to entering runway	3		
(d)	broadcast line up details	3		
(f)	transmit appropriate radio calls and maintain separation with other aircraft	3		
(g)	advise air service provider of departure details, if required	3		
(h)	conduct departure	3		
OGA	Operate aircraft in Class G airspace			
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	3		
(b)	when using an aircraft radio:			
	(i) monitor appropriate radio frequency	3		
	(ii) make appropriate radio calls	3		
	(iii) obtain operational information from air services provider and other aircraft	3		
	(iv) use information to ensure aircraft separation is maintained	3		
(c)	using a suitable chart:			
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	3		
	(ii) identify and remain clear of controlled and restricted airspace	3		
	(iii) take appropriate action when operating in the vicinity of a danger area	3		
ONTA.4	Perform arrival and landing at a non-towered aerodrome or landing area			
(a)	check NOTAM prior to entering circuit area	3		
(b)	set correct area or local QNH	3		
(c)	use correct radio frequency to transmit inbound calls as required	3		

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stand	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
. ,	maintain effective lookout	3	
	maintain aircraft separation and avoid other traffic	3	
	maintain tracking tolerances	3	
	determine wind velocity determine landing direction	3	
(i)	confirm runway is serviceable for the operation	3	
(i)	determine circuit direction	3	
	conduct landing area inspection (if applicable)	3	
` ,	position aircraft in the circuit in preparation for landing and maintain separation from traffic	3	
(m)	make all necessary circuit radio calls	3	
(n)	verify runway is clear of other traffic, wildlife and other obstructions	3	
(o)	land the aircraft	3	
(p)	vacate runway	3	
CTR.1	Controlled aerodrome pre-flight preparation		
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	3	
(b)	interpret the extracted information	3	
(c)	identify all special aerodrome procedures	3	
(d)	check current weather forecast and local observations	3	
(e)	identify all relevant radio and navigation aid frequencies	3	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	3	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	3	
(c)	recognise ground markings during taxi and take appropriate action	3	
(d)	recognise lighting signals and take appropriate action	3	
(e)	identify airport runway incursion hotspots	3	
(f)	request taxi guidance if unsure of position	3	
(g)	use strobes when crossing any runway	3	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	3	
(b)	check and ensure runway approach is clear prior to entering a runway	3	
(c)	correctly set transponder code and mode prior to entering runway for take-off	3	
(d)	comply with ATC departure instructions	3	

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(e)	advise ATC as soon as possible if unable to comply with clearance	3	
(f)	contact approach with airborne report or give departure call to tower	3	
(g)	maintain lookout	3	
(h)	avoid wake turbulence	3	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	3	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	3	
(b)	receive ATIS and correctly set the appropriate QNH	3	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	3	
(d)	advise ATC as soon as possible if unable to comply with clearance	3	
(e)	maintain lookout at all times	3	
(f)	update QNH as required	3	
(g)	maintain tracking tolerances	3	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	3	
(i)	confirm clearance to land	3	
(j)	vacate runway and obtain taxi clearance	3	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	3	
(b)	reconfirm any clearance items when doubt exists	3	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	3	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	3	
(e)	recall transponder emergency code and communication failure code	3	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	3	
	(vi) at maximum endurance	3	

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	3	
	(ii) nominated climb performance within the flight tolerances	3	
	(iii) descent performance within the flight tolerances	3	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	3	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	3	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	3	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	3	
(b)	collect information to facilitate ongoing system management	3	
(c)	monitor flight environment for deviations from planned operations	3	
(d)	collect flight environment information to update planned operations	3	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	3	
(b)	plan events and tasks to occur sequentially	3	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	3	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	3	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	3	
(b)	define and explain objectives to stakeholders	3	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	3	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	3	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	3	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	3	

LESSON PLAN AND TRAINING RECORD PPL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT

_	FLIGHT TRAINING Suggested flight time: 2.0 hours dual					
MOS Reference	Lesson Content (Elements & Performance Criteria)	Reduired Stand	Achieved*			
C1	Communicating in the aviation environment	3				
C2	Perform pre- and post-flight actions and procedures	3				
C3	Operate aeronautical radio	3				
C4	Manage fuel	3				
A2	Take-off aeroplane	3				
A3	Control aeroplane in normal flight	3				
A4	Land aeroplane					
A4.1	Land Aeroplane	3				
A4.5	Short landing	3				

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

nstructor's signature & date	Trainee's signature & date
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ESSON PLAN AND TRAINING RECORD PL(A) 1: GROUND OPERATIONS AND ORIENTATION FLIGHT				

LESSON PLAN AND TRAINING RECORD PPL(A) 2: AIRWORKS

Flight no:	PPL(A)2	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

• Become proficient with the four basics of flight: Straight and Level, Climbs, Turns, Descents, and collision avoidance procedures.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- · Safety aspects in conducting the Flight
- Forms and documents
- Review previous lesson
- New lessons

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

FLIGHT	TRAINING	
Sugges	ted flight time: 2.0 hours dual	
MO S Ref		Performance Standard

		red	*ed*
	Lesson Content (Elements & Performance Criteria)	Required	Achieved
ONTA 1	Non-towered aerodrome – pre-flight preparation	<u> </u>	<
	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	3	
(b)	interpret the extracted information	3	
(c)	identify all special aerodrome procedures	3	
(d)	check current weather forecast and local observations	3	
(e)	identify all relevant radio and navigation aid frequencies	3	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	3	
(b)	set local QNH or area QNH	3	
(c)	broadcast intentions on appropriate frequency	3	
(d)	obtain and interpret traffic information	3	
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	3	
(f)	recognise ground markings during taxi and take appropriate action	3	
(h)	taxi aircraft to holding point	3	
(i)	use strobes when crossing any runway	3	
ONTA.3	Perform departure at a non-towered aerodrome or landing area		
(a)	check and ensure runway approach is clear prior to entering a runway	3	
(b)	correctly set transponder code and mode prior to entering runway for take-off	3	
(c)	confirm runway approaches clear in all directions prior to entering runway	3	
(d)	broadcast line up details	3	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	3	
(g)	advise air service provider of departure details, if required	3	
(h)	conduct departure	3	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	3	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	3	
	(ii) make appropriate radio calls	3	
	(iii) obtain operational information from air services provider and other aircraft	3	
	(iv) use information to ensure aircraft separation is maintained	3	
(c)	using a suitable chart:		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	3	
	(ii) identify and remain clear of controlled and restricted airspace	3	
	(iii) take appropriate action when operating in the vicinity of a danger area	3	
ONTA.4	Perform arrival and landing at a non-towered aerodrome or landing area		
	Check NOTAM prior to entering circuit area	3	
(b)	set correct area or local QNH	3	
(c)	use correct radio frequency to transmit inbound calls as required	3	
(d)	maintain effective lookout	3	
(e)	maintain aircraft separation and avoid other traffic	3	
(f)	maintain tracking tolerances	3	
(g)	determine wind velocity	3	
(h)	determine landing direction	3	

	TRAINING sted flight time: 2.0 hours dual		
ence		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(i)	confirm runway is serviceable for the operation	3	
(j)	determine circuit direction	3	
(k)	conduct landing area inspection (if applicable)	3	
(1)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	3	
(m)	make all necessary circuit radio calls	3	
(n)	verify runway is clear of other traffic, wildlife and other obstructions	3	
	land the aircraft	3	
(p)	vacate runway	3	
CTR.1	Controlled aerodrome pre-flight preparation		
	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	3	
. ,	interpret the extracted information	3	
	identify all special aerodrome procedures	3	
. ,	check current weather forecast and local observations	3	
	identify all relevant radio and navigation aid frequencies	3	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	3	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	3	
(c)	recognise ground markings during taxi and take appropriate action	3	
(d)	recognise lighting signals and take appropriate action	3	
(e)	identify airport runway incursion hotspots	3	
(f)	request taxi guidance if unsure of position	3	
(g)	use strobes when crossing any runway	3	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	3	
(b)	check and ensure runway approach is clear prior to entering a runway	3	
(c)	correctly set transponder code and mode prior to entering runway for take-off	3	
(d)	comply with ATC departure instructions	3	
(e)	advise ATC as soon as possible if unable to comply with clearance	3	
(f)	contact approach with airborne report or give departure call to tower	3	
	maintain lookout	3	1

	TRAINING		
	ted flight time: 2.0 hours dual	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(h)	avoid wake turbulence	3	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	3	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	3	
(b)	receive ATIS and correctly set the appropriate QNH	3	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	3	
(d)	advise ATC as soon as possible if unable to comply with clearance	3	
(e)	maintain lookout at all times	3	
(f)	update QNH as required	3	
(g)	maintain tracking tolerances	3	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	3	
(i)	confirm clearance to land	3	
(j)	vacate runway and obtain taxi clearance	3	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	3	
(b)	reconfirm any clearance items when doubt exists	3	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	3	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	3	
(e)	recall transponder emergency code and communication failure code	3	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	3	
	(vi) at maximum endurance	3	
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	3	
	(ii) nominated climb performance within the flight tolerances	3	

	TRAINING sted flight time: 2.0 hours dual		
e		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(iii) descent performance within the flight tolerances	3	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	3	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	3	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	3	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	3	
(b)	collect information to facilitate ongoing system management	3	
(c)	monitor flight environment for deviations from planned operations	3	
(d)	collect flight environment information to update planned operations	3	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	3	
(b)	plan events and tasks to occur sequentially	3	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	3	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	3	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	3	
(b)	define and explain objectives to stakeholders	3	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	3	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	3	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	3	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	3	

	TRAINING sted flight time: 2.0 hours dual		
		Perfo	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment	3	
C2	Perform pre- and post-flight actions and procedures	3	
C3	Operate aeronautical radio	3	
C4	Manage fuel	3	
A2	Take-off aeroplane	3	
A3	Control aeroplane in normal flight	3	
A4	Land aeroplane		
A4.1	Land Aeroplane	3	
A4.2	Land Aeroplane in a crosswind	3	
A4.5	Short landing	3	
NTS1.3	Assess situations and make decisions		
(a)	identify problems	3	
(b)	analyse problems	3	
(c)	identify solutions	3	
(d)	assess solutions and risks	3	
(e)	decide on a course of action	3	
(f)	communicate plans of action (if appropriate)	3	
(g)	allocate tasks for action (if appropriate)	3	
(h)	take actions to achieve optimum outcomes for the operation	3	
(i)	monitor progress against plan	3	
(j)	re-evaluate plan to achieve optimum outcomes	3	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	3	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	3	
(c)	develop and implement countermeasures to manage threats	3	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	3	
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	3	

LESSON PLAN AND TRAINING RECORD PPL(A) 2: AIRWORKS

	FLIGHT TRAINING Suggested flight time: 2.0 hours dual					
nce		Performance Standard				
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*			
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	3				
(c)	monitor the following to collect and analyse information to identify potential or actual errors:	3				
	(i) aircraft systems using a systematic scan technique	3				
	(ii) the flight environment	3				
	(iii) other crew	3				
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	3				

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME					
Proceed to next training session?		Yes	No		
Instructor's signature & date	Trainee's signature	& date			

LESSON PLAN AND TRAINING RECORD PPL(A) 3: AIRWORKS

Flight no:	PPL(A)3	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Introduced to become proficient postflight and trimming procedures, slow flight
- Oriented with different training areas and demonstrate good situational awareness

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- · Safety aspects in conducting the Flight
- Forms and documents
- Review previous lesson
- New lessons

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue

_	TRAINING sted flight time: 2.0 hours dual	
MO S Ref		Performance Standard

		pe	*pe
		Required	Achieved
	Lesson Content (Elements & Performance Criteria)	Re	Acl
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	2	
(b)	interpret the extracted information	2	
(c)	identify all special aerodrome procedures	2	
(d)	check current weather forecast and local observations	2	
(e)	identify all relevant radio and navigation aid frequencies	2	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	2	
(b)	set local QNH or area QNH	2	
(c)	broadcast intentions on appropriate frequency	2	
(d)	obtain and interpret traffic information	2	
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	2	
(f)	recognise ground markings during taxi and take appropriate action	2	
(h)	taxi aircraft to holding point	2	
(i)	use strobes when crossing any runway	2	
ONTA.3	Perform departure at a non-towered aerodrome or landing area		
(a)	check and ensure runway approach is clear prior to entering a runway	2	
(b)	correctly set transponder code and mode prior to entering runway for take-off	2	
(c)	confirm runway approaches clear in all directions prior to entering runway	2	
(d)	broadcast line up details	2	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	2	
(g)	advise air service provider of departure details, if required	2	
(h)	conduct departure	2	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	2	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	2	
	(ii) make appropriate radio calls	2	
	(iii) obtain operational information from air services provider and other aircraft	2	
	(iv) use information to ensure aircraft separation is maintained	2	
(c)	using a suitable chart:		
· /	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	2	
	(ii) identify and remain clear of controlled and restricted airspace	2	
	(iii) take appropriate action when operating in the vicinity of a danger area	2	
ONTA 4	Perform arrival and landing at a non-towered aerodrome or landing area		
(a)	check NOTAM prior to entering circuit area	2	
(b)	set correct area or local QNH	2	
(c)	use correct radio frequency to transmit inbound calls as required	2	
(d)	maintain effective lookout	2	
(e)	maintain aircraft separation and avoid other traffic	2	
(f)	maintain tracking tolerances	2	
	determine wind velocity	2	
(g)	•		
(h)	determine landing direction	2	

	TRAINING sted flight time: 2.0 hours dual		
ence		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(i)	confirm runway is serviceable for the operation	2	
(j)	determine circuit direction	2	
(k)	conduct landing area inspection (if applicable)	2	
(I)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	2	
(m)	make all necessary circuit radio calls	2	
(n)	verify runway is clear of other traffic, wildlife and other obstructions	2	
· · · · ·	land the aircraft	2	
	vacate runway	2	
CTR.1	Controlled aerodrome pre-flight preparation		
	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	2	
	interpret the extracted information	2	
	identify all special aerodrome procedures	2	
. ,	check current weather forecast and local observations	2	
	identify all relevant radio and navigation aid frequencies	2	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	2	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	2	
(c)	recognise ground markings during taxi and take appropriate action	2	
(d)	recognise lighting signals and take appropriate action	2	
(e)	identify airport runway incursion hotspots	2	
(f)	request taxi guidance if unsure of position	2	
(g)	use strobes when crossing any runway	2	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	2	
(b)	check and ensure runway approach is clear prior to entering a runway	2	
(c)	correctly set transponder code and mode prior to entering runway for take-off	2	
(d)	comply with ATC departure instructions	2	
(e)	advise ATC as soon as possible if unable to comply with clearance	2	
(-/			
(f)	contact approach with airborne report or give departure call to tower	2	

	TRAINING		
	ted flight time: 2.0 hours dual		ormance
MOS Reference	Lesson Content (Elements & Performance Criteria)	Rednired Stan	Achieved*
(h)	avoid wake turbulence	2	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	2	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	2	
(b)	receive ATIS and correctly set the appropriate QNH	2	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	2	
(d)	advise ATC as soon as possible if unable to comply with clearance	2	
(e)	maintain lookout at all times	2	
(f)	update QNH as required	2	
(g)	maintain tracking tolerances	2	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	2	
(i)	confirm clearance to land	2	
(j)	vacate runway and obtain taxi clearance	2	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	
(b)	reconfirm any clearance items when doubt exists	2	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	2	
(e)	recall transponder emergency code and communication failure code	2	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	2	
	(vi) at maximum endurance	2	
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	2	
	(ii) nominated climb performance within the flight tolerances	2	

	TRAINING sted flight time: 2.0 hours dual		
eo		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(iii) descent performance within the flight tolerances	2	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	2	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	2	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	2	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	2	
(b)	collect information to facilitate ongoing system management	2	
(c)	monitor flight environment for deviations from planned operations	2	
(d)	collect flight environment information to update planned operations	2	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	2	
(b)	plan events and tasks to occur sequentially	2	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	2	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	2	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	2	
(b)	define and explain objectives to stakeholders	2	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	2	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	2	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2	

	sted flight time: 2.0 hours dual	Porfe	ormance
nce		Stan	
MOS Reference		0	*
လ ထ	Lesson Content (Elements & Performance Criteria)	Required	Achieved
Ö <u>S</u>	Lesson Content (Lienents & Fenomance Chiena)	Rec	Ach
C1	Communicating in the aviation environment	2	
C2	Perform pre- and post-flight actions and procedures	2	
C3	Operate aeronautical radio	2	
C4	Manage fuel	2	
A2	Take-off aeroplane	2	
A 3	Control aeroplane in normal flight	2	
A 4	Land aeroplane		
A4.1	Land Aeroplane	2	
A4.2	Land Aeroplane in a crosswind	2	
A4.5	Short landing	2	
NTS1.3	Assess situations and make decisions		
(a)	identify problems	2	
(b)	analyse problems	2	
(c)	identify solutions	2	
(d)	assess solutions and risks	2	
(e)	decide on a course of action	2	
(f)	communicate plans of action (if appropriate)	2	
(g)	allocate tasks for action (if appropriate)	2	
(h)	take actions to achieve optimum outcomes for the operation	2	
(i)	monitor progress against plan	2	
(j)	re-evaluate plan to achieve optimum outcomes	2	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	2	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	2	
(c)	develop and implement countermeasures to manage threats	2	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2	
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication	2	

LESSON PLAN AND TRAINING RECORD PPL(A) 3: AIRWORKS

	T TRAINING sted flight time: 2.0 hours dual		
ıce		Perfo Stand	rmance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2	
(c)	monitor the following to collect and analyse information to identify potential or actual errors:	2	
	(i) aircraft systems using a systematic scan technique	2	
	(ii) the flight environment	2	
	(iii) other crew	2	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

	oceed to next training session?	COMMENTS AND OUTCOME	
	oceed to next training session?		
	oceed to next training session?		

LESSON PLAN AND TRAINING RECORD PPL(A) 4: AIRWORKS & EMERGENCIES

Flight no:	PPL(A)4	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Introduce to Power-On, Power-Off stalls, Steep Turns and spin awareness
- Oriented to asked and perform on ground and in-flight emergencies
- Be able to demonstrate good situational awareness, cockpit management and decision-making

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Safety aspects in conducting ground/flight operations
- Weather and NOTAMs
- Forms and documents
- · Aircraft technical knowledge
- Review previous lesson
- New lessons

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue

FLIGHT TRAINING

Suggested flight time: 2.0 hours dual

LESSON PLAN AND TRAINING RECORD PPL(A) 4: AIRWORKS AND EMERGENCIES

nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	1	
(b)	set local QNH or area QNH	1	
(c)		1	
	obtain and interpret traffic information	1	
(e)		1	
(f)		1	
(h)		1	
(i)	use strobes when crossing any runway	1	
	Perform departure at a non-towered aerodrome or landing area	1	
(a)	check and ensure runway approach is clear prior to entering a runway correctly set transponder code and mode prior to entering runway for take-off	1	
(c)		1	
(d)		1	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	1	
(g)	advise air service provider of departure details, if required	1	
(h)	conduct departure	1	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	1	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	1	
	(ii) make appropriate radio calls	1	
	(iii) obtain operational information from air services provider and other aircraft	1	
	(iv) use information to ensure aircraft separation is maintained	1	
	(v) apply loss of radio communication procedures	2	
(c)	9		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	1	
	(ii) identify and remain clear of controlled and restricted airspace	1	
(4)	(iii) take appropriate action when operating in the vicinity of a danger area	1	
(d)		2	
(e)	Perform arrival and landing at a non-towered aerodrome or landing area		
(a)	check NOTAM prior to entering circuit area	1	
	set correct area or local QNH	1	
(c)		1	
(3)		'	

_	TRAINING sted flight time: 2.0 hours dual		
	Total Ingrit tillio. 2.0 flours dudi	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	maintain effective lookout	1	
. ,	maintain aircraft separation and avoid other traffic	1	
	maintain tracking tolerances	1	
(g)	determine wind velocity determine landing direction	1	
(i)	confirm runway is serviceable for the operation	1	
(i)	determine circuit direction	1	
(k)	conduct landing area inspection (if applicable)	1	
(1)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	1	
(m)	make all necessary circuit radio calls	1	
(n)	verify runway is clear of other traffic, wildlife and other obstructions	1	
	land the aircraft	1	
(p)	vacate runway	1	
CTR.1	Controlled aerodrome pre-flight preparation		
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	1	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	1	
(c)	recognise ground markings during taxi and take appropriate action	1	
(d)	recognise lighting signals and take appropriate action	1	
(e)	identify airport runway incursion hotspots	1	
(f)	request taxi guidance if unsure of position	1	
(g)	use strobes when crossing any runway	1	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	1	
(b)	check and ensure runway approach is clear prior to entering a runway	1	
(c)	correctly set transponder code and mode prior to entering runway for take-off	1	
(d)	comply with ATC departure instructions	1	

_	TRAINING sted flight time: 2.0 hours dual		
		Performa Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(e)	advise ATC as soon as possible if unable to comply with clearance	1	
(f)	contact approach with airborne report or give departure call to tower	1	
(g)	maintain lookout	1	
(h)	avoid wake turbulence	1	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	1	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	1	
(b)	receive ATIS and correctly set the appropriate QNH	1	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	1	
(d)	advise ATC as soon as possible if unable to comply with clearance	1	
(e)	maintain lookout at all times	1	
(f)	update QNH as required	1	
(g)	maintain tracking tolerances	1	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	1	
(i)	confirm clearance to land	1	
(j)	vacate runway and obtain taxi clearance	1	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	1	
(b)	reconfirm any clearance items when doubt exists	1	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	1	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	1	
(e)	recall transponder emergency code and communication failure code	1	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	1	
	(vi) at maximum endurance	1	

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	1	
(b)	collect information to facilitate ongoing system management	1	
(c)	monitor flight environment for deviations from planned operations	1	
(d)	collect flight environment information to update planned operations	1	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	2	
(b)	plan events and tasks to occur sequentially	2	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	2	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	2	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	1	
(b)	define and explain objectives to stakeholders	1	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	1	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	2	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2	

	TRAINING		
	ted flight time: 2.0 hours dual	_	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment	1	
C2	Perform pre- and post-flight actions and procedures	1	
C3	Operate aeronautical radio	1	
C4	Manage fuel	1	
A2	Take-off aeroplane	1	
А3	Control aeroplane in normal flight	1	
A4	Land aeroplane		
A4.1	Land Aeroplane	2	
A4.2	Land Aeroplane in a crosswind	2	
A4.3	Conduct a Go-Around	2	
S4.4	Perform recovery from missed landing	2	
A4.5	Short landing	2	
A5	Aeroplane advanced manoeuvres	2	
A6	Manage abnormal situations – single-engine aeroplanes	2	
IFF	Full instrument panel manoeuvres	2	ŀ
NTS1.3	Assess situations and make decisions		
(a)	identify problems	2	
(b)	analyse problems	2	
(c)	identify solutions	2	
(d)	assess solutions and risks	2	
(e)	decide on a course of action	2	
(f)	communicate plans of action (if appropriate)	2	
(g)	allocate tasks for action (if appropriate)	2	
(h)	take actions to achieve optimum outcomes for the operation	2	
(i)	monitor progress against plan	2	
(j)	re-evaluate plan to achieve optimum outcomes	2	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	2	

LESSON PLAN AND TRAINING RECORD PPL(A) 4: AIRWORKS AND EMERGENCIES

	T TRAINING sted flight time: 2.0 hours dual		
ээс		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	2	
(c)	develop and implement countermeasures to manage threats	2	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2	
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2	
(c)	monitor the following to collect and analyse information to identify potential or actual errors:	2	
	(i) aircraft systems using a systematic scan technique	2	
	(ii) the flight environment	2	
	(iii) other crew	2	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME		

LESSON PLAN AND TRAINING RECORD PPL(A) 4: AIRWORKS AND EMERGENCIES

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD PPL(A) 5: AIRWORKS, GROUND REF. MAN., TAKE-OFF AND LANDING

Flight no:	PPL(A)5	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Proficient in the previous maneuvers
- Introduced to S-Turns, Turn around a point
- Demonstrate good situational awareness, cockpit management and decision making

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Safety aspects in conducting ground/flight operations
- Weather and NOTAMs
- Forms and documents
- · Aircraft technical knowledge
- · Review previous lesson
- New lessons

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard			
3	2	1	
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue	

FLIGHT TRAINING

Suggested flight time: 2.0 hours dual

LESSON PLAN AND TRAINING RECORD PPL(A) 5: AIRWORKS, GROUND REF. MAN., TAKE-OFF AND LANDING

nce			ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
OGA	Operate aircraft in Class G airspace		
(a)	when using an aircraft radio:		
	(i) apply loss of radio communication procedures	1	
(b)	using a suitable chart:		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	1	
	(ii) identify and remain clear of controlled and restricted airspace	1	
	(iii) take appropriate action when operating in the vicinity of a danger area	1	
A4	Land aeroplane		
A4.1	Land Aeroplane	2	
A4.2	Land Aeroplane in a crosswind	2	
A4.3	Conduct a Go-Around	2	
S4.4	Perform recovery from missed landing	2	
A4.5	Short landing	2	
A5	Aeroplane advanced manoeuvres	2	
A6	Manage abnormal situations – single-engine aeroplanes	2	
IFF	Full instrument panel manoeuvres	2	
(a)	develop and implement countermeasures to manage threats	2	
(b)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME

LESSON PLAN AND TRAINING RECORD PPL(A) 5: AIRWORKS, GROUND REF. MAN., TAKE-OFF AND LANDING

COMMENTS AND OUTCOME			
		Г	1
Proceed to next training session?		Yes	No
Instructor's signature & date	Trainee's signature &	date	

LESSON PLAN AND TRAINING RECORD PPL(A) 6: TRAFFIC PATTERN, TAKE-OFF AND LANDING

Flight no:	PPL(A)6	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Introduced to Rectangular Course and traffic pattern operations, with normal and crosswind TOL
- Be able to demonstrate good situational awareness, cockpit management and decision-making

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Safety aspects in conducting ground/flight operations
- Weather and NOTAMs
- Forms and documents
- · Aircraft technical knowledge
- Review previous lesson

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING Suggested flight time: 2.0 hours dual	
S S S S S S S S S S S S S S S S S S S	Performance Standard

LESSON PLAN AND TRAINING RECORD PPL(A) 6: TRAFFIC PATTERN, TAKE-OFF AND LANDING

		pə	*ed*
		Required	Achieved*
	Lesson Content (Elements & Performance Criteria)	Re Re	Ac
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
	identify all relevant radio and navigation aid frequencies	1	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	1	
. ,	set local QNH or area QNH	1	
	broadcast intentions on appropriate frequency	1	
	obtain and interpret traffic information	1	
	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	1	
(f)	recognise ground markings during taxi and take appropriate action	1	
(i)	taxi aircraft to holding point use strobes when crossing any runway	1	
- ',	Perform departure at a non-towered aerodrome or landing area	'	
(a)	check and ensure runway approach is clear prior to entering a runway	1	
(b)		1	
(c)		1	
(d)		1	
(f)		1	
(g)	advise air service provider of departure details, if required	1	
(h)	conduct departure	1	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	1	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	1	
	(ii) make appropriate radio calls	1	
	(iii) obtain operational information from air services provider and other aircraft	1	
	(iv) use information to ensure aircraft separation is maintained	1	
	(v) apply loss of radio communication procedures	1	
(c)	using a suitable chart:		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	1	
	(ii) identify and remain clear of controlled and restricted airspace	1	
	(iii) take appropriate action when operating in the vicinity of a danger area	1	
	Perform arrival and landing at a non-towered aerodrome or landing area		
(a)	check NOTAM prior to entering circuit area	1	
	set correct area or local QNH	1	
(c)	use correct radio frequency to transmit inbound calls as required	1	
	maintain effective lookout maintain aircraft separation and avoid other traffic	1	
	maintain tracking tolerances	1	
	determine wind velocity	1	
(9)	determine while velocity	'	<u> </u>

	TRAINING sted flight time: 2.0 hours dual		
	nou mgm timo. 2.0 nouro duar	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	determine landing direction	1	
(i)	confirm runway is serviceable for the operation	1	
	determine circuit direction	1	
	conduct landing area inspection (if applicable) position aircraft in the circuit in preparation for landing and maintain separation from traffic	1	
	make all necessary circuit radio calls	1	
` ,	verify runway is clear of other traffic, wildlife and other obstructions	1	
(o)	land the aircraft	1	
(p)	vacate runway	1	
CTR.1	Controlled aerodrome pre-flight preparation		
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	1	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	1	
(c)	recognise ground markings during taxi and take appropriate action	1	
(d)	recognise lighting signals and take appropriate action	1	
(e)	identify airport runway incursion hotspots	1	
(f)	request taxi guidance if unsure of position	1	
(g)	use strobes when crossing any runway	1	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	1	
(b)	check and ensure runway approach is clear prior to entering a runway	1	
(c)	correctly set transponder code and mode prior to entering runway for take-off	1	
(d)	comply with ATC departure instructions	1	
(e)	advise ATC as soon as possible if unable to comply with clearance	1	
(f)	contact approach with airborne report or give departure call to tower	1	
(g)	maintain lookout	1	

	sted flight time: 2.0 hours dual	Perfo	rmanc
9 2 2		Performand Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(h)	avoid wake turbulence	1	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	1	
CTR.4	Perform arrival and landing at controlled aerodrome		Ì
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	1	
(b)	receive ATIS and correctly set the appropriate QNH	1	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	1	
(d)	advise ATC as soon as possible if unable to comply with clearance	1	
(e)	maintain lookout at all times	1	
(f)	update QNH as required	1	
(g)	maintain tracking tolerances	1	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	1	
(i)	confirm clearance to land	1	
(j)	vacate runway and obtain taxi clearance	1	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	1	
(b)	reconfirm any clearance items when doubt exists	1	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	1	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	1	
(e)	recall transponder emergency code and communication failure code	1	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	1	
	(vi) at maximum endurance	1	
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	

	TRAINING		
	ested flight time: 2.0 hours dual		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(iii) descent performance within the flight tolerances	1	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	2	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2	
A2	Take-off aeroplane	1	
A 3	Control aeroplane in normal flight	1	
A4	Land aeroplane		
A4.1	Land Aeroplane	1	
A4.2	Land Aeroplane in a crosswind	1	
A4.3	Conduct a Go-Around	1	
S4.4	Perform recovery from missed landing	1	
A4.5	Short landing	1	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	2	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	2	
(c)	develop and implement countermeasures to manage threats	2	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2	
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2	
(0)	monitor the following to collect and analyse information to identify potential or actual errors:	2	
(0)			

LESSON PLAN AND TRAINING RECORD PPL(A) 6: TRAFFIC PATTERN, TAKE-OFF AND LANDING

FLIGHT TRAINING Suggested flight time: 2.0 hours dual				
nce		Performance Standard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
	(ii) the flight environment	2		
	(iii) other crew	2		
(d	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2		

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

	ING

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No
		1

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD PPL(A) 7: TRAFFIC PATTERN, TAKE-OFF AND LANDING

Flight no:	PPL(A)7	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Introduce to Go-arounds, Aborted takeoff procedures, Power-off approaches, slips to landings
- Become proficient with normal and crosswind take-offs and landings
- Be able to demonstrate good situational awareness, cockpit management and decision-making

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Safety aspects in conducting ground/flight operations
- · Weather and NOTAMs
- Forms and documents
- · Aircraft technical knowledge
- Review previous lesson
- New lessons

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard					
3 2 1					
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue			

FLIGHT TRAINING

Suggested flight time: 2.0 hours dual

LESSON PLAN AND TRAINING RECORD PPL(A) 7: TRAFFIC PATTERN, TAKE-OFF AND LANDING

nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	1	
(b)	set local QNH or area QNH	1	
(c)		1	
	obtain and interpret traffic information	1	
(e)		1	
(f)		1	
(h)		1	
(i)	use strobes when crossing any runway	1	
	Perform departure at a non-towered aerodrome or landing area	1	
(a)	check and ensure runway approach is clear prior to entering a runway correctly set transponder code and mode prior to entering runway for take-off	1	
(c)		1	
(d)		1	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	1	
(g)	advise air service provider of departure details, if required	1	
(h)	conduct departure	1	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	1	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	1	
	(ii) make appropriate radio calls	1	
	(iii) obtain operational information from air services provider and other aircraft	1	
	(iv) use information to ensure aircraft separation is maintained	1	
	(v) apply loss of radio communication procedures		
(c)	9		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	1	
	(ii) identify and remain clear of controlled and restricted airspace	1	
(4)	(iii) take appropriate action when operating in the vicinity of a danger area	1	
(d)		1	
(e)		ı	
(a)	Perform arrival and landing at a non-towered aerodrome or landing area check NOTAM prior to entering circuit area	1	
	set correct area or local QNH	1	
(c)		1	
(C)	use correct ratio frequency to transmit inbound cans as required	-	

_	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stand	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
. ,	maintain effective lookout	1	
· · · ·	maintain aircraft separation and avoid other traffic	1	
	maintain tracking tolerances determine wind velocity	1	
	determine wind velocity determine landing direction	1	
(i)	confirm runway is serviceable for the operation	1	
(i)	determine circuit direction	1	
	conduct landing area inspection (if applicable)	1	
(1)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	1	
(m)	make all necessary circuit radio calls	1	
(n)	verify runway is clear of other traffic, wildlife and other obstructions	1	
(o)	land the aircraft	1	
(p)	vacate runway	1	
CTR.1	Controlled aerodrome pre-flight preparation		
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	1	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	1	
(c)	recognise ground markings during taxi and take appropriate action	1	
(d)	recognise lighting signals and take appropriate action	1	
(e)	identify airport runway incursion hotspots	1	
(f)	request taxi guidance if unsure of position	1	
(g)	use strobes when crossing any runway	1	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	1	
(b)	check and ensure runway approach is clear prior to entering a runway	1	
(c)	correctly set transponder code and mode prior to entering runway for take-off	1	
(d)	comply with ATC departure instructions	1	

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(e)	advise ATC as soon as possible if unable to comply with clearance	1	
(f)	contact approach with airborne report or give departure call to tower	1	
(g)	maintain lookout	1	
(h)	avoid wake turbulence	1	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	1	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	1	
(b)	receive ATIS and correctly set the appropriate QNH	1	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	1	
(d)	advise ATC as soon as possible if unable to comply with clearance	1	
(e)	maintain lookout at all times	1	
(f)	update QNH as required	1	
(g)	maintain tracking tolerances	1	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	1	
(i)	confirm clearance to land	1	
(j)	vacate runway and obtain taxi clearance	1	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	1	
(b)	reconfirm any clearance items when doubt exists	1	
(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	1	
(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	1	
(e)	recall transponder emergency code and communication failure code	1	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	1	
	(vi) at maximum endurance	1	

_	TRAINING sted flight time: 2.0 hours dual		
	neu mynt time. 2.0 nours duai	Perfo	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFF.2	Perform manoeuvres using full instrument panel		
	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	1	
(b)	collect information to facilitate ongoing system management	1	
(c)	monitor flight environment for deviations from planned operations	1	
(d)	collect flight environment information to update planned operations	1	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	1	
(b)	plan events and tasks to occur sequentially	1	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	1	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	1	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	1	
(b)	define and explain objectives to stakeholders	1	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	1	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	1	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	1	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	1	

	TRAINING sted flight time: 2.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A2	Take-off aeroplane	1	
А3	Control aeroplane in normal flight	1	
A4	Land aeroplane		
A4.1	Land Aeroplane	1	
A4.2	Land Aeroplane in a crosswind	1	
A4.3	Conduct a Go-Around	1	
S4.4	Perform recovery from missed landing	1	
A4.5	Short landing	1	
A6	Manage abnormal situations – single-engine aeroplanes	1	
NTS1.3	Assess situations and make decisions		
(a)	identify problems	1	
(b)	analyse problems	1	
(c)	identify solutions	1	
(d)	assess solutions and risks	1	
(e)	decide on a course of action	1	
(f)	communicate plans of action (if appropriate)	1	
(g)	allocate tasks for action (if appropriate)	1	
(h)	take actions to achieve optimum outcomes for the operation	1	
(i)	monitor progress against plan	1	
(j)	re-evaluate plan to achieve optimum outcomes	1	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	1	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	1	
(c)	develop and implement countermeasures to manage threats	1	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	1	
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	1	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	1	

LESSON PLAN AND TRAINING RECORD PPL(A) 7: TRAFFIC PATTERN, TAKE-OFF AND LANDING

FLIGHT TRAINING Suggested flight time: 2.0 hours dual					
nce		Perfo Stan	ormance dard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*		
(c)	monitor the following to collect and analyse information to identify potential or actual errors:	1			
	(i) aircraft systems using a systematic scan technique	1			
	(ii) the flight environment	1			
	(iii) other crew	1			
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	1			

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DE	ВΒ		
UE	DK	IIEE	IING

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

LESSON PLAN AND TRAINING RECORD PPL(A) 8: PROGRESS CHECK FOR FIRST SOLO

Flight no:	PPL(A)8	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Determine his/her ability to safely conduct his/her first solo
- Be able to demonstrate good situational awareness, cockpit management and decision-making

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Safety aspects in conducting ground/flight operations
- Weather and NOTAMs
- Forms and documents
- Aircraft technical knowledge
- Lesson necessary for First Solo Flight

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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Performance Standard						
3	2	1				
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue				

IGHT TRAINING	
ggested flight time: 1.0 hours dual	
	Performance Standard

LESSON PLAN AND TRAINING RECORD PPL(A) 8: PROGRESS CHECK FOR FIRST SOLO

		þ	*eq*
		Required	Achieved*
	Lesson Content (Elements & Performance Criteria)	Rec	Act
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	1	
(b)	set local QNH or area QNH	1	
(c)	broadcast intentions on appropriate frequency	1	
(d)	obtain and interpret traffic information	1	
(e)	maintain lookout for, and separation from, other aircraft, wildlife and other obstructions	1	
(f)	recognise ground markings during taxi and take appropriate action	1	
(h)	taxi aircraft to holding point	1	
(i)	use strobes when crossing any runway	1	
ONTA.3	Perform departure at a non-towered aerodrome or landing area		
(a)	check and ensure runway approach is clear prior to entering a runway	1	
(b)	correctly set transponder code and mode prior to entering runway for take-off	1	
(c)	confirm runway approaches clear in all directions prior to entering runway	1	
(d)	broadcast line up details	1	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	1	
(g)	advise air service provider of departure details, if required	1	
(h)	conduct departure	1	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	1	
(b)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	1	
	(ii) make appropriate radio calls	1	
	(iii) obtain operational information from air services provider and other aircraft	1	
	(iv) use information to ensure aircraft separation is maintained	1	
(c)	using a suitable chart:		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	1	
	(ii) identify and remain clear of controlled and restricted airspace	1	
	(iii) take appropriate action when operating in the vicinity of a danger area	1	
(d)	Perform actions in the event of abnormal operations and emergencies	1	
(e)	Recall transponder emergency code and communication failure code	1	
ONTA.4	Perform arrival and landing at a non-towered aerodrome or landing area		
(a)	check NOTAM prior to entering circuit area	1	
(b)	set correct area or local QNH	1	
(c)	use correct radio frequency to transmit inbound calls as required	1	
(d)	maintain effective lookout	1	
(e)	maintain aircraft separation and avoid other traffic	1	
(f)	maintain tracking tolerances	1	

_	TRAINING		
	sted flight time: 1.0 hours dual	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(g)	determine wind velocity	1	
(h)	determine landing direction	1	
(i)	confirm runway is serviceable for the operation	1	
(j)	determine circuit direction	1	
(k)	conduct landing area inspection (if applicable)	1	
	position aircraft in the circuit in preparation for landing and maintain separation from traffic	1	
	make all necessary circuit radio calls	1	
	verify runway is clear of other traffic, wildlife and other obstructions land the aircraft	1	
	vacate runway	1	
CTR.1	Controlled aerodrome pre-flight preparation	'	
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	1	
(b)	interpret the extracted information	1	
(c)	identify all special aerodrome procedures	1	
(d)	check current weather forecast and local observations	1	
(e)	identify all relevant radio and navigation aid frequencies	1	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	1	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	1	
(c)	recognise ground markings during taxi and take appropriate action	1	
(d)	recognise lighting signals and take appropriate action	1	
(e)	identify airport runway incursion hotspots	1	
(f)	request taxi guidance if unsure of position	1	
(g)	use strobes when crossing any runway	1	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	1	
(b)	check and ensure runway approach is clear prior to entering a runway	1	
(c)	correctly set transponder code and mode prior to entering runway for take-off	1	
(d)	comply with ATC departure instructions	1	
(e)	advise ATC as soon as possible if unable to comply with clearance	1	
(f)	contact approach with airborne report or give departure call to tower	1	

		TRAINING		
	ges	sted flight time: 1.0 hours dual	Perfo	ormance dard
MOS Reference		Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(g)	maintain lookout	1	
	(h)	avoid wake turbulence	1	
	(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	1	
CTR	.4	Perform arrival and landing at controlled aerodrome		
	(a)	check ERSA and NOTAM prior to entering control area and extract required operational information	1	
	(b)	receive ATIS and correctly set the appropriate QNH	1	
	(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	1	
	(d)	advise ATC as soon as possible if unable to comply with clearance	1	
	(e)	maintain lookout at all times	1	
	(f)	update QNH as required	1	
	(g)	maintain tracking tolerances	1	
	(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	1	
	(i)	confirm clearance to land	1	
	(j)	vacate runway and obtain taxi clearance	1	
СТА	.1	Operate aircraft in controlled airspace		
	(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	1	
	(b)	reconfirm any clearance items when doubt exists	1	
	(c)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	1	
	(d)	perform appropriate actions in the event of abnormal operations and emergency procedures	1	
	(e)	recall transponder emergency code and communication failure code	1	
A3.2		Maintain straight and level flight		
	(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
(v) at maximum range		(v) at maximum range	1	
	(vi) at maximum endurance		1	
IFF.2	2	Perform manoeuvres using full instrument panel		
		set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
		(i) straight and level performance during normal cruise within the flight tolerances	1	

_	TRAINING sted flight time: 1.0 hours dual		
			ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)		Achieved*
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
NTS1.1	Maintain effective lookout		
(a)	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
(b)	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	1	
(b)	collect information to facilitate ongoing system management	1	
(c)	monitor flight environment for deviations from planned operations	1	
(d)	collect flight environment information to update planned operations	1	
NTS1.4	Set priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	1	
(b)	plan events and tasks to occur sequentially	1	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	1	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	1	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	1	
(b)	b) define and explain objectives to stakeholders		
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	1	
NTS2.3	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	1	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	1	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	1	

	TRAINING sted flight time: 1.0 hours dual		
			ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
≥	Communicating in the aviation environment	1	<
C2	Perform pre- and post-flight actions and procedures	1	
C3	Operate aeronautical radio	1	
A2	Take-off aeroplane	1	
A3	Control aeroplane in normal flight	1	
A4	Land aeroplane		
A4.1	Land Aeroplane	1	
A4.2	Land Aeroplane in a crosswind	1	
A4.3	Conduct a Go-Around	1	
S4.4	Perform recovery from missed landing	1	
A4.5	Short landing	1	
A5	Aeroplane advanced manoeuvres	1	
A6	Manage abnormal situations – single-engine aeroplanes	1	
IFF	Full instrument panel manoeuvres	1	
NTS1.3	Assess situations and make decisions		
(a)	identify problems	1	
(b)	analyse problems	1	
(c)	identify solutions	1	
(d)	assess solutions and risks	1	
(e)	decide on a course of action	1	
(f)	communicate plans of action (if appropriate)	1	
(g)	allocate tasks for action (if appropriate)	1	
(h)	take actions to achieve optimum outcomes for the operation	1	
(i)	monitor progress against plan	1	
(j)	re-evaluate plan to achieve optimum outcomes	1	
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	1	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	1	

LESSON PLAN AND TRAINING RECORD PPL(A) 8: PROGRESS CHECK FOR FIRST SOLO

FLIGHT TRAINING Suggested flight time: 1.0 hours dual					
nce	Perfo Stand				
MOS Reference	Lesson Content (Elements & Performance Criteria)		Achieved*		
(c)	develop and implement countermeasures to manage threats	1			
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured				
NTS2.2	Recognise and manage errors				
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	1			
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	1			
(c)	monitor the following to collect and analyse information to identify potential or actual errors:	1			
	(i) aircraft systems using a systematic scan technique	1			
	(ii) the flight environment				
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	1			

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME		
	1	
Proceed to next training session?	Yes	No

LESSON PLAN AND TRAINING RECORD PPL(A) 8: PROGRESS CHECK FOR FIRST SOLO

Instructor's signature & date	Trainee's signature & date

Trainee name:

LESSON PLAN AND TRAINING RECORD PPL(A) 9: FIRST SOLO

Flight no:

Flight no:	PPL(A)9	Trainee name:					
Date:		Instructor:					
Aircraft registration:		Aircraft type:		Flight time:			
Lesson Overvie First solo Suggested f	ew flight time: .25 hours	i					
During solo fligh standard 2 or 1,	Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to performance standard 2 or 1, on a minimum of two separate flights. Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not operate						
COMMENTS A	ND OUTCOME						
Proceed to ne	xt training session	?		Yes	No		
Instructor's si	gnature & date	1	Γrainee's signature	& date			

Trainee name:

LESSON PLAN AND TRAINING RECORD PPL(A) 10: RE-SOLO FLIGHT

PPL(A)10

Flight no:

	` ´				
Date:		Instructor:			
Aircraft registration:		Aircraft type:		Flight time:	
Lesson Overvio Re-solo Fligh Suggested f					
Operational Li	mitations:				
	nt, trainees must only b		tise sequences that ha	ve been assessed	to performance
	on a minimum of two s ency or urgency situati		oto of maintaining cafo	h, the traines mus	et not operate
	imitations and guideling				и посорегате
COMMENTS A	AND OUTCOME				
Proceed to ne	xt training session	?		Yes	No
1 100004 to 110	At training 55551511	•		100	110
Instructor's si	gnature & date	1	rainee's signature	& date	

LESSON PLAN AND TRAINING RECORD PPL(A) 11: AIRWORKS, TRAFFIC PATTERN, TAKE-OFF AND LANDING

	T				
Flight no:	PPL(A)11	Trainee name:			
Date:		Instructor:			
Aircraft registration:		Aircraft type:		Flight time:	
training are v		are to be conducted	ilot License holders and	d be familiar with	a specific
Operational Li	mitations:				
	nt, trainees must only i on a minimum of two		ctise sequences that hav	/e been assessed	to performance
Except in emerg	ency or urgency situa	tions, or in the intere	sts of maintaining safet	y, the trainee mus	t not operate
contrary to the l	imitations and guideli	nes specified by the a	authorising flight instru	ctor.	
COMMENTS A	AND OUTCOME				
Proceed to ne	xt training session	n?		Yes	No
			Tuelin ede elevert		No
	xt training session		Trainee's signature		No

LESSON PLAN AND TRAINING RECORD PPL(A) 12: PROGRESS CHECK FOR GENERAL HANDLING PHASE

Trainee name:

Flight no:

PPL(A)12

Date:		Instructor:						
Aircraft registration:		Aircraft type:		Flight time:				
Student will u	Lesson Overview Student will undergo a Performance Checkride to test his/her General Handling skills Suggested flight time: 2.0 hours							
Operational Li	mitations:							
	During solo flight, trainees must only be authorised to practise sequences that have been assessed to performance standard 2 or 1, on a minimum of two separate flights.							
	Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not operate							
contrary to the limitations and guidelines specified by the authorising flight instructor.								
COMMENTS AND OUTCOME								
Proceed to next training session?								
Instructor's si	gnature & date	Т	rainee's signature	& date				

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LESSON PLAN AND TRAINING RECORD PPL(A) 13: SOLO AREA OUT

Flight no:	PPL(A)13	Trainee name:			
Date:		Instructor:			
Aircraft registration:		Aircraft type:		Flight time:	
station safely	fly Solo to an availa	uble training area of the	e aerodrome, perform r	maneuvers and la	nd back to
Operational Li	mitations:				
Description and a filtrat	.4 4	h . h	4i		4
	nt, trainees must oni on a minimum of tw	ly be authorised to prac o separate flights.	tise sequences that ha	ve been assessed	то регтогтансе
		uations, or in the intere			st not operate
COMMENTS A	AND OUTCOME				
Proceed to ne	ext training sessi	on?		Yes	No
	g 00001			1.00	
Instructor's si	gnature & date		Frainee's signature	& date	
	<u> </u>				
1					

PPL (A) 13 v1.1 June 2022 Page 1

LESSON PLAN AND TRAINING RECORD PPL(A) 14: CROSS COUNTRY ORIENTATION

Flight no:	PPL(A)14	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Navigation route: [Enter navigation route]
- · Cross country routes
- · Pilotage, dead reckoning
- Cross country procedures, radio communications and phraseologies, diversion to alternates and lost procedures.

PRE-FLIGHT KNOWLEDGE

Briefing: 0.5 hour

Content

Long briefing – Introduction to Flight Planning and Visual Navigation Techniques

- Navigation equipment
- Pre-flight briefing obtaining and analysing weather forecasts, weather reports and NOTAMs
- Route selection and preparation of navigation charts
- · Factors influencing choice of cruising levels
- Last light calculations and considerations
- Calculation of estimated fuel consumption, fuel reserves, operational requirements and preparation of fuel log
- Preparation and submission of flight plan
- Departure and arrival procedures/restrictions non-towered aerodrome or landing area
- Operations in Class G airspace, airspace restrictions (prohibited, restricted and danger areas)
- Visual navigation techniques (e.g. dead reckoning, 'time-to-map-to-ground', the 'one-in-sixty' rule)
- Navigation checklist procedures, maintenance of navigation log
- Engine handling considerations, fuel management and use of fuel log
- Radio communication procedures

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue

FLIGH1	TRAINING		
	sted flight time: 5.0 hours dual		
nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NAV.1	Prepare documents and flight plan		
(a)	select and prepare appropriate navigation charts for the intended flight	2	
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	2	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	2	
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times	2	
	complete a flight plan to the planned destination and alternates	2	
NAV.3	Conduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	2	
(b)	comply with all departure procedures, clearances and noise abatement requirements	2	
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required	2	
(d)	calculate estimated time of arrival (ETA) for first waypoint	2	
NAV.4	Navigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	2	
(b)	maintain heading to achieve a nominated track	2	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	2	
(d)	navigate using accepted map-reading techniques	2	
(e)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	2	
(f)	use appropriate techniques to obtain a positive fix at suitable intervals	2	
(g)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	2	
(h)	perform pre-descent and turning point checks	2	
(i)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	2	
(j)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2	
NAV.2	Comply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	2	
(b)	obtain and comply with air traffic clearances, if applicable	2	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	2	
NAV.9	Execute arrival procedures		
(a)	obtain updated relevant aerodrome information	2	
(b)	determine landing direction and aerodrome suitability	2	
(c)	conduct arrival	2	

LESSON PLAN AND TRAINING RECORD PPL(A) 14: CROSS COUNTRY ORIENTATION

	TRAINING sted flight time: 5.0 hours dual		
		_	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	identify and avoid all traffic	2	
NAV.5	Navigate at low level and in reduced visibility		
(a)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) reduced visibility	2	
	(ii) low cloud base	2	
(b)	navigate aeroplane at minimum heights (not below 500 ft AGL, clear of built-up areas) and remain in VMC	2	
(c)	maintain separation from terrain, obstacles, allowing for wind and turbulence at low level	2	
(d)	operate appropriately in the vicinity of aerodromes and landing areas	2	
NAV.6	Perform lost procedure		
(a)	acknowledge positional uncertainty in a timely manner	2	
(b)	configure aircraft for range and endurance as required	2	
(c)	apply recognised method to re-establish aircraft position	2	
(d)	fix position	2	
(e)	use radio to request assistance, if applicable	2	
(f)	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome	2	
NAV.7	Perform diversion procedure		
(a)	make timely decision to divert	2	
(b)	identify an acceptable alternate aerodrome	2	
(c)	select a suitable route and cruising level	2	
(d)	revise flight plan considering weather, terrain, airspace and fuel available	2	
(e)	advise ATS of an intention to divert	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the Part 61 MOS competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

LESSON PLAN AND TRAINING RECORD PPL(A) 14: CROSS COUNTRY ORIENTATION

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No
Proceed to next training session? nstructor's signature & date	I	No
Proceed to next training session? nstructor's signature & date	Trainee's signature & date	No

LESSON PLAN AND TRAINING RECORD PPL(A) 15: 150 NM CROSS COUNTRY FLIGHT

PPL(A)15 Trainee name: Instructor: Aircraft registration: Lesson Overview Student will undergo a Performance Checkride to test his/her readiness to fly Solo to a different assign aerodrome and to be released for solo cross country Navigation route: [Enter navigation route] Suggested flight time: 5.0 hours Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to performance of the immediate of the immediate of the immediate of the contrary to the limitations and guidelines specified by the authorising flight instructor. COMMENTS AND OUTCOME	ned
Aircraft registration: Lesson Overview Student will undergo a Performance Checkride to test his/her readiness to fly Solo to a different assign aerodrome and to be released for solo cross country Navigation route: [Enter navigation route] Suggested flight time: 5.0 hours Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to perforstandard 2 or 1, on a minimum of two separate flights. Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not oper contrary to the limitations and guidelines specified by the authorising flight instructor.	ned
Lesson Overview • Student will undergo a Performance Checkride to test his/her readiness to fly Solo to a different assign aerodrome and to be released for solo cross country • Navigation route: [Enter navigation route] • Suggested flight time: 5.0 hours Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to perform standard 2 or 1, on a minimum of two separate flights. Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not oper contrary to the limitations and guidelines specified by the authorising flight instructor.	ned
 Student will undergo a Performance Checkride to test his/her readiness to fly Solo to a different assign aerodrome and to be released for solo cross country Navigation route: [Enter navigation route] Suggested flight time: 5.0 hours Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to perforstandard 2 or 1, on a minimum of two separate flights. Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not operation of the limitations and guidelines specified by the authorising flight instructor.	ned
 Student will undergo a Performance Checkride to test his/her readiness to fly Solo to a different assign aerodrome and to be released for solo cross country Navigation route: [Enter navigation route] Suggested flight time: 5.0 hours Operational Limitations: During solo flight, trainees must only be authorised to practise sequences that have been assessed to perforstandard 2 or 1, on a minimum of two separate flights. Except in emergency or urgency situations, or in the interests of maintaining safety, the trainee must not operation of the limitations and guidelines specified by the authorising flight instructor.	ned
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contrary to the limitations and guidelines specified by the authorising flight instructor.	
	erate
COMMENTS AND OUTCOME	
COMMEN IS AND OUTCOME	
Proceed to next training session? Yes No	
1 100000 to noxt training 90001011.	
Instructor's signature & date Trainee's signature & date	



Civil Aviation Authority of the Philippines

FLYING SCHOOLS GUIDANCE MATERIAL FOR SINGLE PILOT OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

ANNEX B

Commercial Pilot License Progress Checks and Grading Sheets

LESSON PLAN AND TRAINING RECORD CPL (A) 1: ADVANCE GENERAL HANDLING

Flight no:	CPL (A) 1	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Be able to practice, gain additional experience and be proficient in the review of private pilot maneuvers assigned by the Flight Instructor.
- Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-incommand.

PRE-FLIG	HT K	NOWL	.ED	GE	
Briefing:	.5-1.0	hour	(As	requi	red)

Content

Briefing

- Professionalism and competent performance as a commercial pilot– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

Performance Standard						
3	2	1				
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue				

FLIGHT TRAINING	
Suggested flight time: 8.0 hours PIC	
O v	Performance Standard

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1.1	Communicating face-to-face		
. ,	pronounces words clearly, using an accent that does not cause difficulties in understanding	2	
(b)	conveys information in clearly structured sentences without confusion or ambiguity		
(c)	uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	2	
(d)	speaks fluently without long pauses, repetition or excessive false starts	2	
(e)	responds to communications with actions that demonstrate that the information has been received and understood	2	
. ,	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	2	
(g)	uses appropriate techniques to validate communications	2	
C2.1	Pre-flight actions and procedures		
(a)	complete all required pre-flight administration documentation	2	
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:		
	(i) minimum equipment list (MEL)	2	
	(ii) maintenance release	2	
	(iii) weather forecasts	2	
	(iv) local observations	2	
	(v) Notice to Airmen (NOTAM)	2	
	(vi) Aeronautical Information Package (AIP)	2	
(c)	identify special aerodrome procedures	2	
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	2	
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight	2	
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:		
	(i) weight and balance	2	
	(iii) take-off and landing performance	2	
	(iv) fuel requirements	2	
(g)	determine whether the aircraft is serviceable for the proposed flight	2	
C4.1	Plan fuel requirements		
(a)	determine the required fuel reserves	2	
(b)	determine the quantity of fuel required taking into account operational requirements and relevant abnormal or emergency conditions and contingencies	2	
(c)	determine the total fuel required for the flight	2	
C4.2	Manage fuel system		
(a)	verify fuel quantity on-board aircraft prior to flight using two independent methods	2	
(b)	ensure the fuel caps are secured	2	
(c)	perform fuel quality check prior to flight	2	
(d)	ensure fuel drain cocks are closed	2	
C2.2	Perform pre-flight inspection		
(a)	The same of the sa		
(b)	complete an internal and external check of the aircraft	2	
(c)	identify all defects or damage to the aircraft	2	
(d)	report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	2	
(e)	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	2	

FLIC	SHT TRAINING		
	gested flight time: 8.0 hours PIC		
eoue		Performa Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
Ž (f	certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as	2	Ă
`	appropriate		
(g	complete and certify the daily inspection (if authorised to do so)	2	
A1.1	Start and stop engine		
(a	perform engine start and after start actions	2	
(d	considers ground surface in relation to contamination and propeller care during engine start activities	2	
A1.2	Taxi aeroplane		
(a	use aerodrome or landing area charts to taxi aircraft	2	
(b	comply with taxiway and other aerodrome markings, right-of-way rules and ATC or marshalling instructions when applicable	2	
(0	perform applicable taxi checks, including the following:		
	(i) brakes and steering function normally and take appropriate action in the event of a malfunction	2	
	(ii) instruments for correct readings	2	
	(iii) altimeter setting	2	
(d	maintain safe taxi speed and control of the aircraft	2	
(е	maintain safe spacing from other aircraft, obstructions, and persons	2	
(1	taxi the aeroplane along the centre of the taxiway	2	
(g	avoid causing a hazard to other aircraft, objects or persons	2	
(h	correct handling techniques are applied to take into account wind from all four quadrants	2	
(i	correctly manage the engine during taxi manoeuvres	2	
A2.1	Carry out pre take-off procedures		
(a		2	
(b	work out a plan of action, in advance, to ensure the safest outcome in the event of abnormal operations	2	
(c	verify and correctly apply correction for the existing wind component to the take-off performance	2	
(d	perform all pre take-off and line-up checks required by the aircraft checklist	2	
(е	ensure approach path is clear of conflicting traffic and other hazards before lining up for take-off	2	
(1	align the aeroplane on the runway centreline	2	
A2.2	Take off aeroplane		
(a	apply the controls correctly to maintain longitudinal alignment on the centreline of the runway, if appropriate, prior to initiating and during the take-off	2	
(b	adjust the power controls taking into account the existing conditions	2	
(c	monitor power controls, settings, and instruments during take-off to ensure all predetermined parameters are achieved and maintained	2	
(d	adjust the controls to attain the desired pitch attitude at the predetermined airspeed to attain the desired performance	2	
(е	perform the take-off applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner		
(1	trim the aeroplane accurately	2	
(g	perform gear and flap retractions, power adjustments (as applicable) and other required pilot-related activities	2	
(h	maintain flight path along the runway extended centreline	2	
(i	apply the applicable noise abatement and wake turbulence avoidance procedures	2	
(i		2	

	HT TRAINING		
	ested flight time: 8.0 hours PIC	Perfo	ormance
MOS Reference	on Content (Elements & Performance Criteria)		Achieved*
A2.3	Take off aeroplane in a crosswind		
(a)	perform a take-off in an aeroplane making appropriate adjustments for the crosswind conditions	2	
(b)	maintain the runway centreline and extended centreline	2	
A2.5	Take off aeroplane from 'short field'		
(a)	calculate take-off and landing performance in accordance with the aeroplane's performance charts	2	
(b)	perform take-off aeroplane to achieve the minimum length take-off performance	2	
(c)	perform take-off aeroplane to achieve the obstacle clearance parameters	2	
A2.4	Carry out after take-off procedures		
(a)	•	2	
(b)	maintain the appropriate climb segment at the nominated heading and airspeed	2	
(c)	manoeuvre according to local and standard procedures	2	
(d)	maintain traffic separation	2	
C3.3	Operate transponder		
(a)	operate a transponder during normal, abnormal and emergency operations	2	
(b)	recall transponder emergency codes	2	
C3.1	Operate radio equipment		
	confirm serviceability of radio equipment	2	
	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2	
	maintain a listening watch and respond appropriately to applicable transmissions	2	
	conduct appropriate emergency and urgency transmissions	2	
C1.2	Operational communication using an aeronautical radio		
	maintain effective communication with others on operational matters	2	
	communicate effectively in unfamiliar, stressful or non-standard situations	2	
	apply the phonetic alphabet	2	
` '	transmit numbers	2	
. ,	make appropriate transmissions using standard aviation phraseology	2	
	use plain English effectively when standard phraseology is inadequate	2	
	receive appropriate responses to transmissions	2	
(0)	respond to transmissions and take appropriate action	2	
	recognise and manage communication errors and misunderstandings effectively	2	
(i)	seek clarification in the time available if a message is unclear or uncertainty exists	2	
0,	react appropriately to a variety of regional accents	2	
, ,	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	2	
A3.1	`		
(a)	operate and monitor all aircraft systems when commencing, during, and completing a climbing flight manoeuvre	2	
(b)	adjust altimeter subscale according to applicable settings	2	
	identify and avoid terrain and traffic	2	
(d)	for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		

FLIG	HT TRAINING		
	ested flight time: 8.0 hours PIC		
nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(i) cruise climb	2	
	(ii) best angle climb	2	
	(iii) best rate climb	2	
(e)	anticipate level-off altitude and achieve straight and level flight	2	
A3.2	Maintain straight and level flight		
(a)	operate and monitor all aircraft systems during straight and level flight manoeuvres	2	
(b)	adjust altimeter subscale according to applicable settings	2	
(c)	identify and avoid terrain and traffic	2	
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) at slow speed	2	
	(ii) at normal cruise	2	
	(iii) at high-speed cruise	2	
	(iv) during acceleration and deceleration	2	
	(vii) with flaps selected	2	
A3.4	Turn aeroplane		
(a)	operate and monitor all aircraft systems during turning flight manoeuvres	2	
(b)	for the following turning manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) level turns	2	
	(ii) climbing turns	2	
	(iii) powered descending turns	2	
	(iv) gliding descending turns	2	
(c)	complete turn manoeuvre on a nominated heading or geographical feature	2	
(d)	turn aeroplane at varying rates to achieve specified tracks	2	
(e)	manoeuvre aeroplane over specified tracks or geographical features	2	
A5.3	Turn aeroplane steeply		
(a)	pre-manoeuvre checks for steep turning	2	
	steep level turn using a nominated bank angle, ending on a nominated heading or geographical feature, without altitude change	2	
	steep descending turn using a nominated bank angle, ending on a nominated heading or geographical feature ending on a nominated altitude	2	
, ,	aeroplane operating limits are not exceeded	2	
A6.6	Recover from unusual flight attitudes Nose-low unusual attitudes		
(a)	identify nose-low unusual attitude flight condition	2	
(b)	(b) recover from nose-low unusual attitudes by adjusting pitch, bank and power to resume controlled and balanced flight		
(c)	apply controlled corrective action while maintaining aircraft performance within limits	2	
A5.4	Sideslip aeroplane (where flight manual permits)		
(a)	straight sideslip:		
	(i) induce slip to achieve increased rate of descent while maintaining track and airspeed	2	

_	HT TRAINING		
	ested flight time: 8.0 hours PIC	Performance Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(ii) adjust rate of descent by coordinating angle of bank and applied rudder	2	
(b)	sideslipping turn by adjusting the bank angle to turn through minimum heading change of 90° at constant airspeed using sideslip, and exiting the turn on a specified heading or geographical feature, within tolerance	2	
(c)	recover from a sideslip and return the aeroplane to balanced flight	2	
A6.3	Perform forced landing (simulated)		
(a)	after a simulated complete engine failure has occurred, without prior indications, carry out the following:		
	(i) identify complete power failure condition and control aeroplane	2	
	(ii) perform immediate actions	2	
	(iii) formulate and describe a recovery plan, including selecting the most suitable landing area	2	
	(iv) establish optimal gliding flight path to position the aeroplane for a landing on the selected landing area	2	
	(v) perform emergency procedures and land the aeroplane if the engine cannot be restarted as time permits	2	
	(vi) advise ATS or other agencies capable of providing assistance of situation and intentions	2	
	(vii) re-brief passengers about flight situation, brace position and harness security	2	
	(viii) land the aeroplane ensuring safest outcome if an engine restart is not achieved	2	
C4.2	Manage fuel system		
(e)	monitor fuel usage during the flight	2	
(f)	accurately maintain fuel log	2	
(g)	calculate and state endurance at any point during flight	2	
(h)	perform fuel tank changes correctly	2	
(i)	maintain fuel load within aircraft limits	2	
(j)	operate the fuel cross-feed system correctly (if fitted)	2	
(k)	operate fuel pumps and engine controls correctly	2	
A3.3	Descend aeroplane		
(a)	operate and monitor all aircraft systems during descending flight manoeuvres	2	
(b)	for the following descending manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) glide	2	
	(ii) powered	2	
	(iii) approach configuration descent (flap and undercarriage)	2	
(c)	anticipate level-off altitude and achieve straight and level flight	2	
A3.6	Perform circuits and approaches		
(a)	operate and monitor all aircraft systems when operating the aeroplane in the circuit	2	
(b)	in accordance with specific local procedures, safely perform a full circuit pattern (5 legs) by balancing and trimming the aeroplane accurately while applying smooth, coordinated control inputs to achieve the required flight tolerances specified for the flight path flown during traffic pattern manoeuvres as follows:		
	(i) track upwind along extended centreline to 500 ft	2	
	(ii) establish and maintain crosswind leg tracking 90° to the runway	2	
	(iii) establish and maintain downwind leg tracking parallel to, and at a specified distance from, the runway at circuit height	2	
	(iv) establish base leg tracking 90° to the runway at a specified distance from the runway threshold	2	
(c)	perform checks as required throughout circuit	2	

	ested flight time: 8.0 hours PIC			
euce.				
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
(d)	establish the approach and landing configuration appropriate for the runway and meteorological conditions, and adjust the power plant controls as required for the following:		ı	
	(i) commence and control approach descent path	2		
	(ii) adjust descent commencement point to take account of extended downwind leg or traffic adjustments	2		
	(iii) align and maintain aircraft on final approach flight path with specified or appropriate runway	2		
	(iv) set and maintain approach configuration not below 500 ft AGL	2		
	(v) identify and maintain the nominated aiming point	2		
	(vi) maintain a stabilised approach angle at the nominated airspeed not less than 1.3Vs to the round-out height	2		
	(vii) verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
	(viii) apply speed allowances for wind gusts	2		
	(ix) configure aeroplane for landing	2		
(e)	maintain aircraft separation and position in the circuit with reference to other aircraft traffic in the circuit area	2		
A4.3	Conduct a missed approach			
(a)	recognise the conditions when a missed approach should be executed	2		
(b)	make the decision to execute a missed approach when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from approach to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.4	Perform recovery from missed landing			
(a)	recognise when a missed landing is occurring and when it is appropriate to take recovery action	2		
(b)	make the decision to execute recovery from a missed landing only when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from a missed landing to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.2	Land aeroplane in a crosswind			
(a)	verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
(b)	configure the aeroplane for the crosswind conditions	2		
(c)	control the aeroplane during the transition from final approach to touchdown and during after-landing roll to compensate for the crosswind conditions	2		
A4.5	Short landing			
(a)	land aeroplane at nominated touchdown point at minimum speed	2		
(b)	control ballooning during flare			
(c)	control bouncing after touchdown			
(d)	maintain direction after touchdown	2		
(e)	apply maximum braking without locking up wheels	2		
	stops aircraft within landing distance available	2		

FLIGHT TRAINING Suggested flight time: 8.0 hours PIC						
	Perfor					
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*			
A4.1	Land aeroplane					
(a)	maintain a constant landing position aim point	2				
(b)	achieve a smooth, positively-controlled transition from final approach to touchdown, including the following:					
	(i) control ballooning during flare	2				
	(ii) touchdown at a controlled rate of descent, in the specified touchdown zone within tolerances	2				
	(iii) control bouncing after touchdown	2				
	(iv) touch down aligned with the centreline within tolerances	2				
(c)	ensure separation is maintained	2				
(d)	maintain positive directional control and crosswind correction during the after-landing roll	2				
(e)	use drag and braking devices, as applicable, in such a manner to bring the aeroplane to a safe stop	2				
(f)	complete the applicable after-landing checklist items in a timely manner	2				
A1.1	Start and stop engine					
(b)	perform engine shutdown and after shutdown actions	2				
(d)	considers ground surface in relation to contamination and propeller care during engine stop activities	2				
C2.3	Post-flight actions and procedures					
(a)	shut down aircraft	2				
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	2				
(c)	complete all required post-flight administration documentation	2				

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME

COMMENTS AND OUTCOME				
Proceed to next training session?		Yes	No	
Instructor's signature & date	Trainee's signature &	date		
				_

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 2: ADVANCE PERFORMANCE MANEUVERS

Flight no:	CPL (A) 2	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Be introduced to asked to perform required commercial pilot performance maneuvers namely: Steep turns, Steep Spirals, Chandelles, and Lazy Eights and their related human factors.
- Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-incommand

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a commercial pilot
 – expectations, flight tolerances applicable to the professional level
- General handling sequences and maneuver procedures

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete: In

Instructor's signature & date

Performance Standard					
3	2	1			
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue			

	HT TRAINING gested flight time: 2.5 hours Dual		
ece		Performance Standard	
AOS Reference	Lesson Content (Elements & Performance Criteria)	Required	\chieved*

LESSON PLAN AND TRAINING RECORD CPL (A) 2: ADVANCE PERFORMANCE MANEUVERS

FLIG	HT TRAINING			
Sugg	ested flight time: 2.5 hours Dual			
ence			erformance andard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
C1.1	Communicating face-to-face	<u> </u>		
(a)	pronounces words clearly, using an accent that does not cause difficulties in understanding	2		
. ,	conveys information in clearly structured sentences without confusion or ambiguity	2		
(c)	uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	2		
(d)	speaks fluently without long pauses, repetition or excessive false starts	2		
(e)	responds to communications with actions that demonstrate that the information has been received and understood	2		
(f)	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	2		
(g)	uses appropriate techniques to validate communications	2		
C2.1	Pre-flight actions and procedures			
(a)	complete all required pre-flight administration documentation	2		
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:			
	(i) minimum equipment list (MEL)	2		
	(ii) maintenance release	2		
	(iii) weather forecasts	2		
	(iv) local observations	2		
	(v) Notice to Airmen (NOTAM)	2		
	(vi) Aeronautical Information Package (AIP)	2		
(c)	identify special aerodrome procedures	2		
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	2		
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight	2		
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:			
	(i) weight and balance	2		
	(iii) take-off and landing performance	2		
	(iv) fuel requirements	2		
(g)	determine whether the aircraft is serviceable for the proposed flight	2		
C4.1	Plan fuel requirements			
(a)	determine the required fuel reserves	2		
(b)	determine the quantity of fuel required taking into account operational requirements and relevant abnormal or emergency conditions and contingencies	2		
(c)	determine the total fuel required for the flight	2		
C4.2	Manage fuel system			
(a)	verify fuel quantity on-board aircraft prior to flight using two independent methods	2		
(b)	ensure the fuel caps are secured	2		
(c)	perform fuel quality check prior to flight	2		
(d)	ensure fuel drain cocks are closed	2		
C2.2	Perform pre-flight inspection			
(a)	identify and secure equipment and documentation that is required for the flight	2		
(b)	complete an internal and external check of the aircraft	2		
(c)	identify all defects or damage to the aircraft	2		

	GI 3 <u>9</u>	ested flight time: 2.5 hours Dual		
ence			Performance Standard	
MOS Reference		Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(0		report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	2	
(6	e)	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	2	
(certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate	2	
(9	g)	complete and certify the daily inspection (if authorised to do so)	2	
A1.1	l	Start and stop engine		
(8	a)	perform engine start and after start actions	2	
(0	d)	considers ground surface in relation to contamination and propeller care during engine start activities	2	
A1.2	2	Taxi aeroplane		
(8	a)	use aerodrome or landing area charts to taxi aircraft	2	
(l		comply with taxiway and other aerodrome markings, right-of-way rules and ATC or marshalling instructions when applicable	2	
(c)	perform applicable taxi checks, including the following:		
		(i) brakes and steering function normally and take appropriate action in the event of a malfunction	2	
		(ii) instruments for correct readings	2	
		(iii) altimeter setting	2	
(0	d)	maintain safe taxi speed and control of the aircraft	2	
(6	e)	maintain safe spacing from other aircraft, obstructions, and persons	2	
((f)	taxi the aeroplane along the centre of the taxiway	2	
(9	g)	avoid causing a hazard to other aircraft, objects or persons	2	
(1	h)	correct handling techniques are applied to take into account wind from all four quadrants	2	
((i)	correctly manage the engine during taxi manoeuvres	2	
A2.1	1	Carry out pre take-off procedures		
(a		correctly identify critical airspeeds, configurations, and emergency and abnormal procedures for normal and crosswind take-offs	2	
(1	b)	work out a plan of action, in advance, to ensure the safest outcome in the event of abnormal operations	2	
(0	c)	verify and correctly apply correction for the existing wind component to the take-off performance	2	
(0	d)	perform all pre take-off and line-up checks required by the aircraft checklist	2	
(6	e)	ensure approach path is clear of conflicting traffic and other hazards before lining up for take-off	2	
((f)	align the aeroplane on the runway centreline	2	
A2.2	2	Take off aeroplane		
(6		apply the controls correctly to maintain longitudinal alignment on the centreline of the runway, if appropriate, prior to initiating and during the take-off	2	
(1	b)	adjust the power controls taking into account the existing conditions	2	
(-	monitor power controls, settings, and instruments during take-off to ensure all predetermined parameters are achieved and maintained	2	
(0	d)	adjust the controls to attain the desired pitch attitude at the predetermined airspeed to attain the desired performance	2	
(6	e)) perform the take-off applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner		
((f)	trim the aeroplane accurately	2	
(9	g)	perform gear and flap retractions, power adjustments (as applicable) and other required pilot-related activities	2	
(l	h)	maintain flight path along the runway extended centreline	2	
((i)	apply the applicable noise abatement and wake turbulence avoidance procedures	2	

	SHT TRAINING		
Sug	gested flight time: 2.5 hours Dual		
ce		Perfo Stan	ormance dard
MOS Reference			
Se fe		red	Achieved*
SS	Lesson Content (Elements & Performance Criteria)	Required	hie
Σ			Ac
(j)		2	
A2.3	Take off aeroplane in a crosswind		
(a)	perform a take-off in an aeroplane making appropriate adjustments for the crosswind conditions	2	
(b)	maintain the runway centreline and extended centreline	2	
A2.5	Take off aeroplane from 'short field'		
(a)	calculate take-off and landing performance in accordance with the aeroplane's performance charts	2	
(b)	perform take-off aeroplane to achieve the minimum length take-off performance	2	
(c)	perform take-off aeroplane to achieve the obstacle clearance parameters	2	
A2.4	Carry out after take-off procedures		
(a)	perform after take-off checklist	2	
(b)	maintain the appropriate climb segment at the nominated heading and airspeed	2	
(c)	manoeuvre according to local and standard procedures	2	
(d)	maintain traffic separation	2	
C3.3	Operate transponder		
(a)	operate a transponder during normal, abnormal and emergency operations	2	
(b)	recall transponder emergency codes	2	
C3.1	Operate radio equipment		
(a)	confirm serviceability of radio equipment	2	
(b)	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2	
(c)	maintain a listening watch and respond appropriately to applicable transmissions	2	
(d)	conduct appropriate emergency and urgency transmissions	2	
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	2	
(b)	communicate effectively in unfamiliar, stressful or non-standard situations	2	
(c)	apply the phonetic alphabet	2	
(d)	transmit numbers	2	
(e)	make appropriate transmissions using standard aviation phraseology	2	
(f)	use plain English effectively when standard phraseology is inadequate	2	
(g)		2	
(h)	respond to transmissions and take appropriate action	2	
(i)	recognise and manage communication errors and misunderstandings effectively	2	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	2	
(k)	react appropriately to a variety of regional accents	2	
(1)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	2	
A3.1	Climb aeroplane		
(a)	operate and monitor all aircraft systems when commencing, during, and completing a climbing flight manoeuvre	2	
(b)	adjust altimeter subscale according to applicable settings	2	
(c)	identify and avoid terrain and traffic	2	

FLIG	HT TRAINING		
	ested flight time: 2.5 hours Dual		
ence		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) cruise climb	2	
	(ii) best angle climb	2	
	(iii) best rate climb	2	
(e)	anticipate level-off altitude and achieve straight and level flight	2	
A3.2	Maintain straight and level flight		
(a)	operate and monitor all aircraft systems during straight and level flight manoeuvres	2	
(b)	adjust altimeter subscale according to applicable settings	2	
(c)	identify and avoid terrain and traffic	2	
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) at slow speed	2	
	(ii) at normal cruise	2	
	(iii) at high-speed cruise	2	
	(iv) during acceleration and deceleration	2	
	(vii) with flaps selected	2	
A3.4	Turn aeroplane		
(a)	operate and monitor all aircraft systems during turning flight manoeuvres	2	
(b)	for the following turning manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) level turns	2	
	(ii) climbing turns	2	
	(iii) powered descending turns	2	
	(iv) gliding descending turns	2	
(c)	complete turn manoeuvre on a nominated heading or geographical feature	2	
(d)	turn aeroplane at varying rates to achieve specified tracks	2	
(e)	manoeuvre aeroplane over specified tracks or geographical features	2	
A5.3	Turn aeroplane steeply		
(a)	pre-manoeuvre checks for steep turning	2	
(b)	steep level turn using a nominated bank angle, ending on a nominated heading or geographical feature, without altitude change	2	
	steep descending turn using a nominated bank angle, ending on a nominated heading or geographical feature ending on a nominated altitude	2	
	aeroplane operating limits are not exceeded	2	
A6.6	Recover from unusual flight attitudes Nose-low unusual attitudes		
	identify nose-low unusual attitude flight condition	2	
	recover from nose-low unusual attitudes by adjusting pitch, bank and power to resume controlled and balanced flight	2	
(c)	apply controlled corrective action while maintaining aircraft performance within limits	2	

_	HT TRAINING			
Sugg	ested flight time: 2.5 hours Dual			
eoue			Performance Standard	
Refere		red	*be/	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
A5.4	Sideslip aeroplane (where flight manual permits)			
(a)	straight sideslip:			
	(i) induce slip to achieve increased rate of descent while maintaining track and airspeed	2		
	(ii) adjust rate of descent by coordinating angle of bank and applied rudder	2		
(b)	sideslipping turn by adjusting the bank angle to turn through minimum heading change of 90° at constant airspeed using sideslip, and exiting the turn on a specified heading or geographical feature, within tolerance	2		
(c)	recover from a sideslip and return the aeroplane to balanced flight	2		
A6.3	Perform forced landing (simulated)			
(a)	after a simulated complete engine failure has occurred, without prior indications, carry out the following:			
	(i) identify complete power failure condition and control aeroplane	2		
	(ii) perform immediate actions	2		
	(iii) formulate and describe a recovery plan, including selecting the most suitable landing area	2		
	(iv) establish optimal gliding flight path to position the aeroplane for a landing on the selected landing area	2		
	(v) perform emergency procedures and land the aeroplane if the engine cannot be restarted as time permits	2		
	(vi) advise ATS or other agencies capable of providing assistance of situation and intentions	2		
	(vii) re-brief passengers about flight situation, brace position and harness security	2		
	(viii) land the aeroplane ensuring safest outcome if an engine restart is not achieved	2		
C4.2	Manage fuel system			
(e)	monitor fuel usage during the flight	2		
	accurately maintain fuel log	2		
(g)	calculate and state endurance at any point during flight	2		
(h)	perform fuel tank changes correctly	2		
(i)	maintain fuel load within aircraft limits	2		
(j)	operate the fuel cross-feed system correctly (if fitted)	2		
(k)	operate fuel pumps and engine controls correctly	2		
A3.3	Descend aeroplane			
(a)	operate and monitor all aircraft systems during descending flight manoeuvres	2		
(b)	for the following descending manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:			
	(i) glide	2		
	(ii) powered	2		
	(iii) approach configuration descent (flap and undercarriage)	2		
(c)	anticipate level-off altitude and achieve straight and level flight	2		
A3.6	Perform circuits and approaches			
(a)				
(b)	in accordance with specific local procedures, safely perform a full circuit pattern (5 legs) by balancing and trimming the aeroplane accurately while applying smooth, coordinated control inputs to achieve the required flight tolerances specified for the flight path flown during traffic pattern manoeuvres as follows:			
	(i) track upwind along extended centreline to 500 ft	2		
	(ii) establish and maintain crosswind leg tracking 90° to the runway	2		

	HT TRAINING			
	ested flight time: 2.5 hours Dual		Performance Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
	(iii) establish and maintain downwind leg tracking parallel to, and at a specified distance from, the runway at circuit height	2		
	(iv) establish base leg tracking 90° to the runway at a specified distance from the runway threshold	2		
(c)	perform checks as required throughout circuit	2		
(d)	(d) establish the approach and landing configuration appropriate for the runway and meteorological conditions, and adjust the power plant controls as required for the following:			
	(i) commence and control approach descent path	2		
	(ii) adjust descent commencement point to take account of extended downwind leg or traffic adjustments	2		
	(iii) align and maintain aircraft on final approach flight path with specified or appropriate runway	2		
	(iv) set and maintain approach configuration not below 500 ft AGL	2		
	(v) identify and maintain the nominated aiming point	2		
	(vii) verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
	(viii) apply speed allowances for wind gusts	2		
	(ix) configure aeroplane for landing	2		
	e) maintain aircraft separation and position in the circuit with reference to other aircraft traffic in the circuit area			
A4.3	Conduct a missed approach			
(a)	recognise the conditions when a missed approach should be executed	2		
	make the decision to execute a missed approach when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from approach to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.4	Perform recovery from missed landing			
(a)	recognise when a missed landing is occurring and when it is appropriate to take recovery action	2		
. ,	make the decision to execute recovery from a missed landing only when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from a missed landing to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.2	Land aeroplane in a crosswind			
(a)	verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
(b)	configure the aeroplane for the crosswind conditions	2		
(c)	compensate for the crosswind conditions			
A4.5	Short landing			
(a)	land aeroplane at nominated touchdown point at minimum speed	2		
` '				
(c)	control bouncing after touchdown	2		

_	HT TRAINING gested flight time: 2.5 hours Dual		
nce	Perfo Stand		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	maintain direction after touchdown	2	
(e)	apply maximum braking without locking up wheels	2	
(f)	stops aircraft within landing distance available	2	
A4.1	Land aeroplane		
(a)	maintain a constant landing position aim point	2	
(b)	achieve a smooth, positively-controlled transition from final approach to touchdown, including the following:		
	(i) control ballooning during flare	2	
	(ii) touchdown at a controlled rate of descent, in the specified touchdown zone within tolerances	2	
	(iii) control bouncing after touchdown	2	
	(iv) touch down aligned with the centreline within tolerances	2	
(c)	ensure separation is maintained	2	
(d)	maintain positive directional control and crosswind correction during the after-landing roll	2	
(e)	use drag and braking devices, as applicable, in such a manner to bring the aeroplane to a safe stop	2	
(f)	complete the applicable after-landing checklist items in a timely manner	2	
A1.1	Start and stop engine		
(b)	perform engine shutdown and after shutdown actions	2	
(d)	considers ground surface in relation to contamination and propeller care during engine stop activities	2	
C2.3	Post-flight actions and procedures		
(a)	shut down aircraft	2	
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	2	
(c)	complete all required post-flight administration documentation	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME

COMMENTS AND OUTCOME			
Proceed to next training session?		Yes	No
1			·
Instructor's signature & date	Trainee's signature &	date	

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 3: GROUND REFERENCE MANEUVERS

Flight no:	CPL (A) 3	Trainee name		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Be introduced to asked to perform commercial ground-reference maneuver of Eight-on-Pylons and be introduced to spin awareness and their related human factors.
- Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-in-command.

PRE-FLIGHT KNOWLEDGE Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference maneuver and their related human factors.
- Precautionary search and landing

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING	
Suggested flight time: 2.5 hours dual	
	Performance Standard

LESSON PLAN AND TRAINING RECORD CPL (A) 3: GROUND REFERENCE MANEUVERS

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A3.5	Control aeroplane at slow speeds		
(a)	complete pre-manoeuvre checks	2	
(b)	operate and monitor all aircraft systems when operating the aeroplane at slow speed	2	
(c)	for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) minimum approach speed with flaps retracted	2	
	(ii) minimum approach speed in approach configuration	2	
(d)	observe audible and visual stall warnings and recover aeroplane to controlled flight	2	
(e)	recognise and respond positively to reduced effectiveness of controls during slow flight manoeuvres	2	
(f)	transition from slow speed configuration using take-off power to achieve nominated speed in excess of 1.5 Vs without loss of height	2	
A5.1	Enter and recover from stall		
(a)	perform pre-manoeuvre checks for stalling	2	
(b)	recognise stall signs and symptoms	2	
(c)	control the aeroplane by applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner, trim aeroplane accurately to enter and recover from the following manoeuvres:		
	(i) incipient stall	2	
	(ii) stall with full power applied	2	
	(iii) stall without power applied	2	
	(iv) stall under the following conditions:		
	(A) straight and level flight	2	
	(B) climbing	2	
	(C) descending	2	
	(D) approach to land configuration	2	
	(E) turning	2	
(d)	perform stall recovery as follows:		
	(i) positively reduce angle of attack	2	
	(ii) use power available and excess height to increase the aircraft energy state	2	
	(iii) minimise height loss for simulated low altitude condition	2	
	(iv) re-establish desired flight path and aircraft control	2	
(e)	recover from stall in simulated partial and complete engine failure configurations	2	
A5.2	Recover from incipient spin		
(a)	perform pre-manoeuvre checks for an incipient spin	2	
(b)	recognise an incipient spin	2	
(c)	use the aeroplane's attitude and power controls to execute an incipient spin manoeuvre from the following flight conditions and, using correct recovery technique, regain straight and level flight with height loss commensurate with the available altitude (simulated ground base height may be set):		
	(i) straight and level flight	2	
	(ii) climbing	2	
	(iii) turning	2	
A6.6	Recover from unusual flight attitudes Nose-high unusual attitudes		
(a)	identify nose-high unusual attitude flight condition	2	
(b)	recover from nose-high unusual attitudes by adjusting pitch, bank and power to resume controlled and balanced flight	2	
(c)	apply controlled corrective action while maintaining aircraft performance within limits	2	

FLIGH	T TRAINING		
	sted flight time: 2.5 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A6.3	Perform forced landing (simulated)		
(b)	after a simulated partial engine failure has occurred, without prior indications, carry out the following:		
	(i) identify partial power failure condition	2	
	(ii) perform recall actions	2	
	(iii) adjust flight controls to re-establish flight path that maximises performance for partial power condition and maintain a safe airspeed margin above stall speed	2	
	(iv) establish radio communications where possible	2	
	(v) perform partial engine failure actions	2	
	(vi) formulate a plan to recover aeroplane to a safe landing area or aerodrome, taking into account that partial failure might lead to a full power failure at any time	2	
	(vii) manoeuvre the aeroplane to a selected landing area or aerodrome using the remaining power to establish an optimal aircraft position for a safe landing	2	
	(viii) advise ATS or other agencies capable of providing assistance of situation and intentions	2	
	(ix) re-brief passengers about flight situation, brace position and harness security	2	
	(x) maintain a contingency plan for coping with a full power failure throughout the manoeuvre	2	
	(xi) when a safe landing position is established, shut down and secure engine and aeroplane	2	
A6.4	Conduct precautionary search and landing (simulated condition)		
(a)	assess flight circumstances and make an appropriate decision when to perform precautionary landing	2	
(b)	configure aeroplane for conditions	2	
(c)	perform precautionary search procedure	2	
(d)	select landing area, carry out an inspection and assess its suitability for landing, taking into account:		
	(i) unobstructed approach and overshoot paths	2	
	(ii) landing area length adequate for landing	2	
	(iii) landing area surface is suitable for aeroplane type and clear of hazards	2	
(e)	maintain orientation and visual contact with the landing area	2	
(f)	advise ATS or other agencies capable of providing assistance of situation and intentions	2	
(g)	re-brief passengers about flight situation, brace position and harness security	2	
(h)	land and secure aircraft and manage passengers	2	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(c)	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	2	
IFF.2	Perform manoeuvres using full instrument panel		
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	2	
	(ii) nominated climb performance within the flight tolerances	2	
	(iii) descent performance within the flight tolerances	2	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	2	
A3.7	Local area airspace		
(a)	using an appropriate chart, for the local area and circuit area:		
	(i) identify geographical features	2	

LESSON PLAN AND TRAINING RECORD CPL (A) 3: GROUND REFERENCE MANEUVERS

	T TRAINING sted flight time: 2.5 hours dual		
nce		Performand Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(ii) identify geographical limits	2	
	(iii) identify restricted, controlled and uncontrolled airspace areas	2	
	(iv) state local airspace limits	2	
	(v) identify the transit route between the departure aerodrome and training area	2	
	(vi) identify the geographical limits of the training area	2	
	(vii) identify aerodromes and landing areas within the local area	2	
(b)	maintain orientation and pinpoint location by using geographical features and a local area chart	2	
(c)	transit from the circuit area and transit to the designated training area	2	
(d)	operate safely within a transit lane (if applicable)	2	
(e)	remain clear of restricted, controlled and other appropriately designated airspace	2	
(f)	operate safely in the vicinity of local aerodromes and landing areas	2	
(g)	transit from the designated training area to the circuit area	2	
(h)	set QNH appropriately	2	
(i)	correctly determine which runway is to be used for landing	2	
(j)	ensure runway is serviceable and available	2	
(k)	position aircraft for arrival into the circuit	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING		
uce		Performance Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

DEBRIEFING

LESSON PLAN AND TRAINING RECORD CPL (A) 3: GROUND REFERENCE MANEUVERS

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME			
Proceed to next training session?		Yes	No
Instructor's signature & date	Trainee's signature &	date	

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 4: AIRWORKS, TRAFFIC PATTERN, TAKE-OFF AND LANDING

Flight no:	CPL(A)4	I rainee name			
Date:		Instructor:			
Aircraft registration:		Aircraft type:		Flight time:	
Lesson Overvie General hand Suggested f					
Operational Li	mitations:				
Except in emerge	ency or urgency situat	ions, or in the intere	ests of maintaining safet authorising flight instruc	y, the trainee mus	t not operate
contrary to the in	milations and guidenii	es specified by the	authorishig hight histrat	NOT.	
COMMENTS A	ND OUTCOME				
COMMENTS	IND OUTCOME				
Proceed to ne	xt training session			Yes	No
	•				
Instructor's si	gnature & date		Trainee's signature	& date	
L					

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 5: PROGRESS CHECK FOR ADVANCE GENERAL HANDLING PHASE

Flight no:	CPL (A) 5	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Review all commercial pilot maneuvers with emphasis on Take-offs and Landings, Go-around procedures, Steep Turns, Slow Flight, Stalls, Chandelles, Lazy Eights, Eight-on-Pylons, and the Power-off 180 accuracy approach and landing and their related human factors.
- Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency and his general handling skills in the mentioned areas according to the completion standards.
- Be able to demonstrate good situational awareness, cockpit management and decision making as pilot-incommand

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a commercial pilot
 – expectations, flight tolerances applicable to the professional level
- General handling sequences and maneuver procedures, situational awareness, decision-making

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue

FLIGHT TRAINING	
Suggested flight time: 2.0 hours PIC/Solo	
	Performance Standard

		Required	Achieved*
	Lesson Content (Elements & Performance Criteria)	Sedu	chic
C1.1	Communicating face-to-face		Q
(a)	pronounces words clearly, using an accent that does not cause difficulties in understanding	2	
	conveys information in clearly structured sentences without confusion or ambiguity	2	
(c)	uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	2	
(d)	speaks fluently without long pauses, repetition or excessive false starts	2	
(e)	responds to communications with actions that demonstrate that the information has been received and understood	2	
(f)	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	2	
(g)	uses appropriate techniques to validate communications	2	
C2.1	Pre-flight actions and procedures		
(a)	complete all required pre-flight administration documentation	2	
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:		
	(i) minimum equipment list (MEL)	2	
	(ii) maintenance release	2	
	(iii) weather forecasts	2	
	(iv) local observations	2	
	(v) Notice to Airmen (NOTAM)	2	
	(vi) Aeronautical Information Package (AIP)	2	
(c)	identify special aerodrome procedures	2	
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	2	
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight	2	
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:	7.	
	(i) weight and balance	2	
	(iii) take-off and landing performance	2	
	(iv) fuel requirements	2	
(g)	determine whether the aircraft is serviceable for the proposed flight	2	
C4.1	Plan fuel requirements		
(a)	determine the required fuel reserves	2	
(b)	determine the quantity of fuel required taking into account operational requirements and relevant abnormal or emergency conditions and contingencies	2	
(c)	determine the total fuel required for the flight	2	
C4.2	Manage fuel system		
(a)	verify fuel quantity on-board aircraft prior to flight using two independent methods	2	
(b)	ensure the fuel caps are secured	2	
(c)	perform fuel quality check prior to flight	2	
(d)	ensure fuel drain cocks are closed	2	
C2.2	Perform pre-flight inspection		
(a)	identify and secure equipment and documentation that is required for the flight	2	
(b)	complete an internal and external check of the aircraft	2	
(c)	identify all defects or damage to the aircraft	2	
(d)	report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	2	
(e)	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	2	

	HT TRAINING pested flight time: 2.0 hours PIC/Solo		
		Perfo	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(f)	certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate	2	
(g)	complete and certify the daily inspection (if authorised to do so)	2	
A1.1	Start and stop engine		
(a)	perform engine start and after start actions	2	
(d)	considers ground surface in relation to contamination and propeller care during engine start activities	2	
A1.2	Taxi aeroplane		
(a)	use aerodrome or landing area charts to taxi aircraft	2	
(b)	comply with taxiway and other aerodrome markings, right-of-way rules and ATC or marshalling instructions when applicable	2	
(c)	perform applicable taxi checks, including the following:		
	(i) brakes and steering function normally and take appropriate action in the event of a malfunction	2	
	(ii) instruments for correct readings	2	
	(iii) altimeter setting	2	
(d)	maintain safe taxi speed and control of the aircraft	2	
(e)	maintain safe spacing from other aircraft, obstructions, and persons	2	
(f)	taxi the aeroplane along the centre of the taxiway	2	
(g)	avoid causing a hazard to other aircraft, objects or persons	2	
(h)	correct handling techniques are applied to take into account wind from all four quadrants	2	
(i)	correctly manage the engine during taxi manoeuvres	2	
A2.1	Carry out pre take-off procedures		
(a)	correctly identify critical airspeeds, configurations, and emergency and abnormal procedures for normal and crosswind take-offs	2	
(b)	work out a plan of action, in advance, to ensure the safest outcome in the event of abnormal operations	2	
(c)	verify and correctly apply correction for the existing wind component to the take-off performance	2	
(d)	perform all pre take-off and line-up checks required by the aircraft checklist	2	
(e)	ensure approach path is clear of conflicting traffic and other hazards before lining up for take-off	2	
(f)	align the aeroplane on the runway centreline	2	
A2.2	Take off aeroplane		
(a)	apply the controls correctly to maintain longitudinal alignment on the centreline of the runway, if appropriate, prior to initiating and during the take-off	2	
(b)		2	
(c)	monitor power controls, settings, and instruments during take-off to ensure all predetermined parameters are achieved and maintained	2	
(d)	adjust the controls to attain the desired pitch attitude at the predetermined airspeed to attain the desired performance	2	
(e)	perform the take-off applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner	2	
(f)	trim the aeroplane accurately	2	
(g)	perform gear and flap retractions, power adjustments (as applicable) and other required pilot-related activities	2	
(h)	maintain flight path along the runway extended centreline	2	
(i)	apply the applicable noise abatement and wake turbulence avoidance procedures	2	
(j)	recognise take-off abnormalities and take appropriate action to reject take-off (can be simulated)	2	

	HT TRAINING ested flight time: 2.0 hours PIC/Solo		
	ested flight time. 2.0 hours P10/3010	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A2.3	Take off aeroplane in a crosswind		
(a)	perform a take-off in an aeroplane making appropriate adjustments for the crosswind conditions	2	
(b)	maintain the runway centreline and extended centreline	2	
A2.5	Take off aeroplane from 'short field'		
(a)	calculate take-off and landing performance in accordance with the aeroplane's performance charts	2	
(b)	perform take-off aeroplane to achieve the minimum length take-off performance	2	
(c)	perform take-off aeroplane to achieve the obstacle clearance parameters	2	
A2.4	Carry out after take-off procedures		
(a)	perform after take-off checklist	2	
(b)	maintain the appropriate climb segment at the nominated heading and airspeed	2	
(c)	manoeuvre according to local and standard procedures	2	
(d)	maintain traffic separation	2	
C3.3	Operate transponder		
(a)	operate a transponder during normal, abnormal and emergency operations	2	
(b)	recall transponder emergency codes	2	
C3.1	Operate radio equipment		
(a)	confirm serviceability of radio equipment	2	
(b)	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2	
(c)	maintain a listening watch and respond appropriately to applicable transmissions	2	
(d)	conduct appropriate emergency and urgency transmissions	2	
C1.2	Operational communication using an aeronautical radio	_	
(a)	maintain effective communication with others on operational matters	2	
(b)	communicate effectively in unfamiliar, stressful or non-standard situations	2	
(c)	apply the phonetic alphabet	2	
(d)	transmit numbers	2	
(e)	make appropriate transmissions using standard aviation phraseology	2	
(f)	use plain English effectively when standard phraseology is inadequate	2	
	receive appropriate responses to transmissions	2	
(g)	respond to transmissions and take appropriate action	2	
(h)		2	
(i)	recognise and manage communication errors and misunderstandings effectively		
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	2	
(k)	react appropriately to a variety of regional accents	2	
(I)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	2	
A3.1	Climb aeroplane		
(a)	operate and monitor all aircraft systems when commencing, during, and completing a climbing flight manoeuvre	2	
(b)	adjust altimeter subscale according to applicable settings	2	
(c)	identify and avoid terrain and traffic	2	
(d)	for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		

Cugg	ested flight time: 2.0 hours PIC/Solo		
ce		Perfo	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(i) cruise climb	2	
	(ii) best angle climb	2	
	(iii) best rate climb	2	
(e)	anticipate level-off altitude and achieve straight and level flight	2	
A3.2	Maintain straight and level flight		
(a)	operate and monitor all aircraft systems during straight and level flight manoeuvres	2	
(b)	adjust altimeter subscale according to applicable settings	2	
(c)	identify and avoid terrain and traffic	2	
(d)	balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) at slow speed	2	
	(ii) at normal cruise	2	
	(iii) at high-speed cruise	2	
	(iv) during acceleration and deceleration	2	
	(vii) with flaps selected	2	
A3.4	Turn aeroplane		
(a)	operate and monitor all aircraft systems during turning flight manoeuvres	2	
(b)	for the following turning manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) level turns	2	
	(ii) climbing turns	2	
	(iii) powered descending turns	2	
	(iv) gliding descending turns	2	
(c)	complete turn manoeuvre on a nominated heading or geographical feature	2	
(d)	turn aeroplane at varying rates to achieve specified tracks	2	
(e)	manoeuvre aeroplane over specified tracks or geographical features	2	
A5.3	Turn aeroplane steeply		
(a)	pre-manoeuvre checks for steep turning	2	
(b)	altitude change	2	
(c)	steep descending turn using a nominated bank angle, ending on a nominated heading or geographical feature ending on a nominated altitude	2	
(d)		2	
A6.6	Recover from unusual flight attitudes Nose-low unusual attitudes		
(a)	The state of the s	2	
(b)	recover from nose-low unusual attitudes by adjusting pitch, bank and power to resume controlled and balanced flight	2	
(c)	apply controlled corrective action while maintaining aircraft performance within limits	2	
A5.4	Sideslip aeroplane (where flight manual permits)		
(a)	straight sideslip:		
. /	(i) induce slip to achieve increased rate of descent while maintaining track and airspeed	2	

eoue		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(ii) adjust rate of descent by coordinating angle of bank and applied rudder	2	
(b)	sideslipping turn by adjusting the bank angle to turn through minimum heading change of 90° at constant airspeed using sideslip, and exiting the turn on a specified heading or geographical feature, within tolerance	2	
(c)	recover from a sideslip and return the aeroplane to balanced flight	2	
A6.3	Perform forced landing (simulated)		
(a)	after a simulated complete engine failure has occurred, without prior indications, carry out the following:		
	(i) identify complete power failure condition and control aeroplane	2	
	(ii) perform immediate actions	2	
	(iii) formulate and describe a recovery plan, including selecting the most suitable landing area	2	
	(iv) establish optimal gliding flight path to position the aeroplane for a landing on the selected landing area	2	
	(v) perform emergency procedures and land the aeroplane if the engine cannot be restarted as time permits	2	
	(vi) advise ATS or other agencies capable of providing assistance of situation and intentions	2	
	(vii) re-brief passengers about flight situation, brace position and harness security	2	
	(viii) land the aeroplane ensuring safest outcome if an engine restart is not achieved	2	
C4.2	Manage fuel system		
(e)	monitor fuel usage during the flight	2	
(f)	accurately maintain fuel log	2	
(g)	calculate and state endurance at any point during flight	2	
(h)	perform fuel tank changes correctly	2	
(i)	maintain fuel load within aircraft limits	2	
(j)	operate the fuel cross-feed system correctly (if fitted)	2	
(k)	operate fuel pumps and engine controls correctly	2	
A3.3	Descend aeroplane		
(a)		2	
(b)			
	(i) glide	2	
	(ii) powered	2	
	(iii) approach configuration descent (flap and undercarriage)	2	
(c)	anticipate level-off altitude and achieve straight and level flight	2	
A3.6	Perform circuits and approaches		
(a)	operate and monitor all aircraft systems when operating the aeroplane in the circuit	2	
(b)	in accordance with specific local procedures, safely perform a full circuit pattern (5 legs) by balancing and trimming the aeroplane accurately while applying smooth, coordinated control inputs to achieve the required flight tolerances specified for the flight path flown during traffic pattern manoeuvres as follows:		
	(i) track upwind along extended centreline to 500 ft	2	
	(ii) establish and maintain crosswind leg tracking 90° to the runway	2	
	(iii) establish and maintain downwind leg tracking parallel to, and at a specified distance from, the runway at circuit height	2	
	(iv) establish base leg tracking 90° to the runway at a specified distance from the runway threshold	2	
(c)	perform checks as required throughout circuit	2	

	HT TRAINING lested flight time: 2.0 hours PIC/Solo			
eoue		Performance Standard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
(d)	establish the approach and landing configuration appropriate for the runway and meteorological conditions, and adjust the power plant controls as required for the following:			
	(i) commence and control approach descent path	2		
	(ii) adjust descent commencement point to take account of extended downwind leg or traffic adjustments	2		
	(iii) align and maintain aircraft on final approach flight path with specified or appropriate runway	2		
	(iv) set and maintain approach configuration not below 500 ft AGL	2		
	(v) identify and maintain the nominated aiming point	2		
	(vi) maintain a stabilised approach angle at the nominated airspeed not less than 1.3Vs to the round-out height	2		
	(vii) verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
	(viii) apply speed allowances for wind gusts	2		
	(ix) configure aeroplane for landing	2		
(e)	maintain aircraft separation and position in the circuit with reference to other aircraft traffic in the circuit area	2		
A4.3	Conduct a missed approach			
(a)	recognise the conditions when a missed approach should be executed	2		
(b)	make the decision to execute a missed approach when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from approach to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.4	Perform recovery from missed landing			
(a)	recognise when a missed landing is occurring and when it is appropriate to take recovery action	2		
(b)	make the decision to execute recovery from a missed landing only when it is safe to do so	2		
(c)	make a smooth, positively-controlled transition from a missed landing to missed approach, including the following:			
	(i) select power, attitude and configuration to safely control aeroplane	2		
	(ii) manoeuvre aeroplane clear of the ground and conduct after take-off procedures	2		
	(iii) make allowance for wind velocity during go-around	2		
	(iv) avoid wake turbulence	2		
A4.2	Land aeroplane in a crosswind			
(a)	verify existing wind conditions, make proper correction for drift, and maintain a precise ground track	2		
(b)	configure the aeroplane for the crosswind conditions	2		
(c)	control the aeroplane during the transition from final approach to touchdown and during after-landing roll to compensate for the crosswind conditions	2		
A4.5	Short landing			
(a)	land aeroplane at nominated touchdown point at minimum speed	2		
(b)	control ballooning during flare	2		
(c)	control bouncing after touchdown	2		
(d)	maintain direction after touchdown	2		
(e)	apply maximum braking without locking up wheels	2		
(f)	stops aircraft within landing distance available	2		

FLIGHT TRAINING Suggested flight time: 2.0 hours PIC/Solo						
eo						
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*			
A4.1	Land aeroplane					
(a)	maintain a constant landing position aim point	2				
(b)	achieve a smooth, positively-controlled transition from final approach to touchdown, including the following:					
	(i) control ballooning during flare	2				
	(ii) touchdown at a controlled rate of descent, in the specified touchdown zone within tolerances	2				
	(iii) control bouncing after touchdown	2				
	(iv) touch down aligned with the centreline within tolerances	2				
(c)	ensure separation is maintained	2				
(d)	maintain positive directional control and crosswind correction during the after-landing roll	2				
(e)	use drag and braking devices, as applicable, in such a manner to bring the aeroplane to a safe stop	2				
(f)	complete the applicable after-landing checklist items in a timely manner	2				
A1.1	Start and stop engine					
(b)	perform engine shutdown and after shutdown actions	2				
(d)	considers ground surface in relation to contamination and propeller care during engine stop activities	2				
C2.3	Post-flight actions and procedures					
(a)	shut down aircraft	2				
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	2				
(c)	complete all required post-flight administration documentation	2				

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME

COMMENTS AND OUTCOME			
Proceed to next training session?			
Trocod to noxt training coccion.	Y	es	No
			No
Instructor's signature & date	Trainee's signature & d		No

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPLA (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

Flight no:	CPL (A) 6	Trainee name		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- CPL Navigation Exercise Navigation route: [Enter navigation route*]
- Introduction to simulated commercial operations
 - expected level of proficiency, flight tolerances applicable to the professional level
 - flight planning, payload and fuel scenarios
- Simulated engine failure on take-off, simulated engine failure in the circuit
- General handling steep turns, sideslipping, practice forced landing simulated complete engine failure
- · Navigation using navigation aids and systems
- Non-technical skills monitor

PRE-FLIGHT KNOWLEDGE Briefing: .5-1.0 hour as required

Content

Briefing

- Flight planning and flight notification
- Fuel planning (including for maximum payload and minimum fuel scenarios)
- · Weight and balance calculations
- Take-off and landing distance calculations
- Navigation cycles, track correction techniques, fuel logs (under planned scenario and actual fuel status)
- · Position fixing

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard							
3	2	1					
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue					

FLIGHT TRAINING

Suggested flight time: 5.0 hours dual

LESSON PLAN AND TRAINING RECORD CPL (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NAV.1	Prepare documents and flight plan		
(a)		2	
	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	2	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	2	
(d)	beginning and end of daylight times	2	
(f)	complete a flight plan to the planned destination and alternates	2	
(g)	lodge suitable flight notification for search and rescue (SAR) purposes	2	
ONTA.1	Non-towered aerodrome – pre-flight preparation		
(a)	using a current ERSA and NOTAM, for the non-towered aerodrome or landing area, extract all of the relevant operational information	2	
(b)	interpret the extracted information	2	
(c)	identify all special aerodrome procedures	2	
(d)	check current weather forecast and local observations	2	
(e)	identify all relevant radio and navigation aid frequencies	2	
ONTA.2	Taxi aircraft at a non-towered aerodrome or landing area		
(a)	refer to aerodrome or landing area chart (if available)	2	
()	set local QNH or area QNH	2	
	broadcast intentions on appropriate frequency	2	
(d)		2	
(e)		2	
(f)	recognise ground markings during taxi and take appropriate action taxi aircraft to holding point	2	
(i)	use strobes when crossing any runway	2	
A6.1			
	Manage engine failure - take-off (simulated) correctly identify an engine failure after take-off	2	
	apply the highest priority to taking action to control the aeroplane	2	
` '	maintain control of the aeroplane	2	
(d)	perform recall actions	2	
(e)	perform emergency actions as far as time permits	2	
(f)	manoeuvre the aeroplane to achieve the safest possible outcome	2	
()	ensure passengers adopt brace position	2	
(h)	advise others such as ATS and other aircraft of intentions if time permits	2	
ONTA.3	Perform departure at a non-towered aerodrome or landing area		
(a)	check and ensure runway approach is clear prior to entering a runway	2	
(b)	correctly set transponder code and mode prior to entering runway for take-off	2	
(c)	confirm runway approaches clear in all directions prior to entering runway	2	
(d)	broadcast line up details	2	
(f)	transmit appropriate radio calls and maintain separation with other aircraft	2	
(g)	advise air service provider of departure details, if required	2	
(h)	conduct departure	2	
NAV.3	Conduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	2	

LESSON PLAN AND TRAINING RECORD CPL (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

	TRAINING		
	ted flight time: 5.0 hours dual	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	comply with all departure procedures, clearances and noise abatement requirements	2	
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required	2	
(d)	calculate estimated time of arrival (ETA) for first waypoint	2	
NAV.2	Comply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	2	
(b)	obtain and comply with air traffic clearances, if applicable	2	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	2	
NAV.4	Navigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	2	
(b)	maintain heading to achieve a nominated track	2	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	2	
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	2	
(e)	navigate using accepted map-reading techniques	2	
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	2	
(g)	use appropriate techniques to obtain a positive fix at suitable intervals	2	
(h)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	2	
(i)	perform pre-descent and turning point checks	2	
(j)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	2	
(1)	maintain awareness of search and rescue times (SARTIME) and revise as required	2	
(m)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2	
OGA	Operate aircraft in Class G airspace		
(a)	maintain tracking and altitude tolerances to remain outside controlled airspace	2	
(b)	apply separation tolerances between IFR flights, and IFR and VFR flights	2	
(c)	when using an aircraft radio:		
	(i) monitor appropriate radio frequency	2	
	(ii) make appropriate radio calls	2	
	(iii) obtain operational information from air services provider and other aircraft	2	
	(iv) use information to ensure aircraft separation is maintained	2	
(d)	using a suitable chart:		
	(i) operate clear of active aerodromes and landing areas in the vicinity of the aircraft	2	
	(ii) identify and remain clear of controlled and restricted airspace	2	
	(iii) take appropriate action when operating in the vicinity of a danger area	2	
(e)	perform actions in the event of abnormal operations and emergencies	2	
(f)	recall transponder emergency code and communication failure code	2	

LESSON PLAN AND TRAINING RECORD CPL (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

	TRAINING ted flight time: 5.0 hours dual		
		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A5.3	Turn aeroplane steeply (steep level turns)	2	
A5.4	Sideslip aeroplane (where flight manual permits) (straight sideslip)	2	
A6.3	Perform forced landing (simulated) (simulated complete engine failure)	2	
NAV.9	Execute arrival procedures		
(a)	obtain updated relevant aerodrome information	2	
(b)	determine landing direction and aerodrome suitability	2	
(c)	conduct arrival	2	
(d)	identify and avoid all traffic	2	
(e)	observe local and published noise abatement requirements and curfews	2	
ONTA.4	Perform arrival and landing at a non-towered aerodrome or landing area		
(a)	check NOTAM prior to entering circuit area	2	
(b)	set correct area or local QNH	2	
(c)	use correct radio frequency to transmit inbound calls as required	2	
(d)	maintain effective lookout	2	
(e)	maintain aircraft separation and avoid other traffic	2	
(f)	maintain tracking tolerances	2	
(g)	determine wind velocity	2	
(h)	determine landing direction	2	
(i)	confirm runway is serviceable for the operation	2	
(j)	determine circuit direction	2	
(k)	conduct landing area inspection (if applicable)	2	
(I)	position aircraft in the circuit in preparation for landing and maintain separation from traffic	2	
(m)	make all necessary circuit radio calls	2	
A6.2	Manage engine failure in the circuit area (simulated)		
(a)	correctly identify an engine failure during flight	2	
(b)	apply the highest priority to taking action to control the aeroplane	2	
(c)	perform recall actions	2	
(d)	select a suitable landing area within gliding distance, on the aerodrome or elsewhere	2	
(e)	perform emergency procedures and land the aeroplane if the engine cannot be restarted as time permits	2	
(f)	advise ATS or other agencies capable of providing assistance of situation and intentions	2	
(g)	re-brief passengers about flight situation, brace position and harness security	2	
(h)	land the aeroplane ensuring safest outcome if an engine restart is not achieved	2	
ONTA.4	Perform arrival and landing at a non-towered aerodrome or landing area		
(n)	verify runway is clear of other traffic, wildlife and other obstructions	2	
(o)	land the aircraft	2	
(p)	vacate runway	2	

^{*}Enter the performance standard achieved if it is different to that required

LESSON PLAN AND TRAINING RECORD CPL (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONSOLIDATION AND/OR REMEDIAL TRAINING						
ээс		Perfo Stan	ormance dard			
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved			

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	8	N	43	IN	J

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME						
Proceed to next training session?	Yes	5	No			

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD CPL (A) 6: CROSS-COUNTRY FLIGHT ORIENTATION

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 7: CROSS-COUNTRY FLIGHT

Flight no:	CPL(A)	Trainee name			
Date:		Instructor:			
Aircraft registration:		Aircraft type:		Flight time:	
 Navigation 	view ation Exercise – s route: [Enter navi d flight time: 38 h	gation route]			
Operational 1	Limitations:				
		situations, or in the inter uidelines specified by the			nust not operate
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COMMENTS	Ilimitations and gu	eidelines specified by the			No
COMMENTS	AND OUTCOM	eidelines specified by the		structor.	
COMMENTS Proceed to r	AND OUTCOM	Ession?		Yes	
COMMENTS Proceed to r	AND OUTCOM	Ession?	authorising flight in	Yes	

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Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 8: 300 NM CROSS COUNTRY FLIGHT

Flight no:	CPL (A) 8	Trainee name		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- CPL Navigation Exercise Navigation route: [Enter navigation route*]
- · Simulated commercial exercise, including simulated passenger and cargo management and loading
- Controlled airspace and controlled aerodrome operations
- Critical point and point of no return calculations
- Refuelling
- Engine start and shutdown simulated emergencies
- Simulated engine failure on take-off
- Simulated R/T equipment malfunction
- Navigation at low level, best range and best endurance performance, turbulence penetration configuration
- Basic instrument flight –simulated inadvertent IMC entry and return to visual flight
- · Perform lost procedure
- Perform diversion procedure
- General handling stalling, incipient spin
- Practice forced landing simulated partial engine failure, simulated engine failure in circuit area
- Precautionary search and landing
- Other abnormal situations simulated electrical failure
- Short landing
- · Monitor application of non-technical skills
- Assess:
 - non-technical skills maintain effective lookout

PRE-FLIGHT KNOWLEDGE Briefing: as required

Content

Briefing

- Preparation for and overview of exercise
- Use of navigation aids and systems
- 300NM Navlog
- · Revision as required

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

LESSON PLAN AND TRAINING RECORD CPL (A) 8: 300 NM CROSS COUNTRY FLIGHT

PRE-FLIGHT KNOWLEDGE Briefing: as required

Content

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard			
3	2	1	
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue	

	TRAINING		
	ted flight time: 7.0 hoursPIC/Solo	Perf	ormance
ence		Stan	dard
efer		pa	* eq
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NAV.1	Prepare documents and flight plan		
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	1	
CTR.1	Controlled aerodrome pre-flight preparation		
(a)	using a current NOTAM, for the controlled aerodrome, extract all the relevant operational information	2	
(b)	interpret the extracted information	2	
(c)	identify all special aerodrome procedures	2	
(d)	check current weather forecast and local observations	2	
(e)	identify all relevant radio and navigation aid frequencies	2	
C4.3	Refuel aircraft		
(a)	identify the correct type of fuel to be used	1	
(b)	ensure aircraft is earthed prior to refuelling and defueling operations	1	
(c)	correctly load and unload fuel	1	
(d)	ensure required fuel quantity is loaded	1	
(e)	ensure fuel caps are closed and secured after fuelling operations	1	
(f)	perform fuel quality checks	1	
41.1	Start and stop engine		
(c)	manage engine start malfunctions and emergencies (e.g. flooded start, inoperative magneto after start)	2	
46.1	Manage engine failure - take-off (simulated)	2	
C3.2	Manage R/T equipment malfunctions (scenario outbound, scenario inbound to operating base)		
(a)	perform radio failure procedures	2	
(b)	use fault finding procedures and perform corrective actions	2	
OGA	Operate aircraft in Class G airspace		
	(v) apply loss of radio communication procedures	2	
NAV.4	Navigate aircraft enroute		
(k)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) turbulence	2	
	(ii) holding	2	
	(iii) maximum range	2	
A3.2	Maintain straight and level flight		
(d)	for the following straight and level manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(v) at maximum range	2	
	(vi) at maximum endurance	2	
C4.2	Manage fuel system		
(1)	configure the aircraft correctly to achieve best range performance and correctly calculate the revised range of operation	2	
(m)	configure the aircraft correctly to achieve best endurance performance and correctly calculate the revised	2	

	TRAINING		
Sugges	ted flight time: 7.0 hoursPIC/Solo		
e			ormance dard
eren			*
Ref		ired	vec
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NAV.5	Navigate at low level and in reduced visibility	_	
(a)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) reduced visibility	2	
	(ii) low cloud base	2	
(b)	navigate aeroplane at minimum heights (not below 500 ft AGL, clear of built-up areas) and remain in VMC	2	
(c)	maintain separation from terrain, obstacles, allowing for wind and turbulence at low level	2	
(d)	avoid noise sensitive areas	2	
(e)	operate appropriately in the vicinity of aerodromes and landing areas	2	
NAV.7	Perform diversion procedure	_	
(a)	make timely decision to divert	2	
(b)	identify an acceptable alternate aerodrome	2	
(c)	select a suitable route and cruising level	2	
(d)	revise flight plan considering weather, terrain, airspace and fuel available	2	
(e)	advise ATS of an intention to divert	2	
A5.1	Enter and recover from stall (revise incipient stall, stalls from straight & level flight and during climb)	2	
A5.2	Recover from incipient spin (revise incipient spin from straight and level flight)	2	
A6.3	Perform forced landing (simulated) (revise simulated partial engine failure)	2	
A6.4	Conduct precautionary search and landing (simulated condition)	2	
A6.5	Manage other abnormal situations (simulated) (simulated electrical failure)		
(a)	correctly identify the situation and maintain safe control of the aeroplane at all times	2	
(b)	manage abnormal and emergency situations in accordance with relevant emergency procedures and regulatory requirements	2	
(c)	follow appropriate emergency procedures while maintaining control of the aeroplane	2	
(e)	correctly identify when an emergency evacuation of an aeroplane is required	2	
, ,	execute a simulated emergency evacuation of an aeroplane	2	
(g)	advise ATS or other agencies capable of providing assistance of situation and intentions	2	
IFL.4	Re-establish visual flight (simulated inadvertent IMC entry – limited panel)	3	
NAV.6	Perform lost procedure		
(a)	acknowledge positional uncertainty in a timely manner	2	
(b)	configure aircraft for range and endurance as required	2	
(c)	apply recognised method to re-establish aircraft position	2	
(d)	fix position	2	
(e)	use radio to request assistance, if applicable	2	
(f)	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome	2	
CTA.1	Operate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	

	TRAINING		
	ted flight time: 7.0 hoursPIC/Solo		ormance
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	2	
(c)	maintain control area protection tolerances	2	
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	2	
(e)	reconfirm any clearance items when doubt exists	2	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation	2	
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	2	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	2	
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	2	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	2	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	2	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	2	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	2	
(o)	recall transponder emergency code and communication failure code	2	
CTR.4	Perform arrival and landing at controlled aerodrome		
(a)	check NOTAM prior to entering control area and extract required operational information	2	
(b)	receive ATIS and correctly set the appropriate QNH	2	
(c)	request and receive ATC clearance and set correct transponder code prior to entering control area	2	
(d)	advise ATC as soon as possible if unable to comply with clearance	2	
(e)	maintain lookout at all times	2	
(f)	update QNH as required	2	
(g)	maintain tracking tolerances	2	
(h)	establish aircraft on the correct leg of the circuit in preparation for landing and maintain separation from traffic	2	
(i)	confirm clearance to land	2	
(j)	vacate runway and obtain taxi clearance	2	
CTR.2	Taxi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	2	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	2	
(c)	recognise ground markings during taxi and take appropriate action	2	
(d)	recognise lighting signals and take appropriate action	2	
(e)	identify airport runway incursion hotspots	2	
(f)	manoeuvre aircraft to avoid jet blast hazard	2	
(g)	request taxi guidance if unsure of position	2	
(h)	use strobes when crossing any runway	2	
CTR.3	Perform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	2	
(b)	check and ensure runway approach is clear prior to entering a runway	2	
(c)	correctly set transponder code and mode prior to entering runway for take-off	2	

FLIGHT	TRAINING		
	ted flight time: 7.0 hoursPIC/Solo		
	inght timo. The flourer 10/0010	Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	comply with ATC departure instructions	2	
(e)	advise ATC as soon as possible if unable to comply with clearance	2	
(f)	contact approach with airborne report or give departure call to tower	2	
(g)	maintain lookout	2	
(h)	avoid wake turbulence	2	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	2	
NTS1.1	Maintain effective lookout		
	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
` ,	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS1.2	Maintain situational awareness		
	monitor all aircraft systems using a systematic scan technique	2	
	collect information to facilitate ongoing system management	2	
	monitor flight environment for deviations from planned operations	2	
	collect flight environment information to update planned operations	2	
NTS1.3	Assess situations and make decisions	_	
	identify problems	2	
	analyse problems	2	
, ,	identify solutions	2	
` ,	assess solutions and risks	2	
(e)	decide on a course of action	2	
(f)	communicate plans of action (if appropriate)	2	
(0)	allocate tasks for action (if appropriate)	2	
	take actions to achieve optimum outcomes for the operation	2	
.,	monitor progress against plan	2	
• • • • • • • • • • • • • • • • • • • •	re-evaluate plan to achieve optimum outcomes	2	
NTS1.4	Set priorities and manage tasks		
	organise workload and priorities to ensure optimum outcome of the flight	2	
` ,	plan events and tasks to occur sequentially	2	
	anticipate events and tasks to ensure sufficient opportunity for completion	2	
	use technology to reduce workload and improve cognitive and manipulative activities Maintain offective communications and interportunal relationships	2	
NTS1.5	Maintain effective communications and interpersonal relationships	2	
	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight		
	define and explain objectives to stakeholders	2	
	demonstrate a level of assertiveness that ensures the optimum completion of the flight	2	
NTS2.1	Recognise and manage threats		
. ,	identify relevant environmental or operational threats that are likely to affect the safety of the flight	2	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	2	

LESSON PLAN AND TRAINING RECORD CPL (A) 8: 300 NM CROSS COUNTRY FLIGHT

	TRAINING ted flight time: 7.0 hoursPIC/Solo				
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*		
(c)	develop and implement countermeasures to manage threats	2			
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2			
NTS2.2	Recognise and manage errors				
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2			
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2			
(c)	monitor the following to collect and analyse information to identify potential or actual errors:				
	(i) aircraft systems using a systematic scan technique	2			
	(ii) the flight environment	2			
	(iii) other crew	2			
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2			
NTS2.3	Recognise and manage undesired aircraft state				
(a)	recognise an undesired aircraft state	2			
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2			
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2			
A6.2	Manage engine failure in the circuit area (simulated)	2			
A4.5	Short landing	2			
A1.1	Start and stop engine				
(c)	manage engine shutdown malfunctions and emergencies (e.g. inoperative magneto or live magneto on shutdown)	2			

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

LESSON PLAN AND TRAINING RECORD CPL (A) 8: 300 NM CROSS COUNTRY FLIGHT

CONS	OLIDATION AND/OR REMEDIAL TRAINING		
eo		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

_	$\overline{}$				v
I)	FВ	ΚI	EFI	NG	1

Content

- Training review and outcomes achieved against lesson objectives and the Part 61 MOS competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 9: BASIC INSTRUMENT ORIENTATION

Flight no:	CPL (A) 9	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Be able to learn basic maneuvers with reference to flight and navigational instruments only.
- Be able to recover form unusual attitudes proficiently.

PRE-FLIGHT KNOWLEDGE Briefing: as required

Content

Briefing

- Preparation for and overview of exercise
- · Revision as required

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING Suggested flight time: 4.0 hours dual Performance Standard

LESSON PLAN AND TRAINING RECORD CPL (A) 9: BASIC INSTRUMENT ORIENTATION

		Required	Achieved*
	Lesson Content (Elements & Performance Criteria)	Re	Acl
NAV.1	Prepare documents and flight plan		
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	1	
A2.3	Take off aeroplane in a crosswind	1	
C4.2	Manage fuel system Configure for best range performance and best endurance performance, calculate revised endurance for each	1	
NAV.5	Navigate at low level and in reduced visibility	2	
NAV.7	Perform diversion procedure	2	
NAV.8	Use instrument navigation systems	2	
RNE.1	Operate and monitor radio navigation aids and systems	2	
RNE.2	Navigate the aircraft using navigation aids and systems	2	
A5.3	Turn aeroplane steeply Steep level turns, steep descending turns	2	
A6.3	Perform forced landing (simulated) (simulated complete engine failure)	2	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources	2	
IFF.2	Perform manoeuvres using full instrument panel	2	
IFF.3	Recover from upset situations and unusual attitudes	2	
A6.5	Manage other abnormal situations (simulated)	2	
A3.6	Perform circuits and approaches	2	
A4.3	Conduct a missed approach	2	
A4.4	Perform recovery from missed landing	2	
A6.2	Manage engine failure in the circuit area (simulated)	2	
A4.2	Land aeroplane in a crosswind	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING				
эс		Perforr Standa			
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

LESSON PLAN AND TRAINING RECORD CPL (A) 9: BASIC INSTRUMENT ORIENTATION

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

LESSON PLAN AND TRAINING RECORD CPL (A) 9: BASIC INSTRUMENT ORIENTATION

COMMENTS AND OUTCOME			
D 14 44 1. 1		· ·	
Proceed to next training session?		Yes	No
Instructor's signature & date	Trainee's signature &	date	

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 10: RADIO NAVIGATION

Flight no:	CPL (A) 10	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Be able to learn basic maneuvers with reference to flight and navigational instruments only.
- Be able to learn the basic principles of operation of a radio navigational aid (VOR).

PRE-FLIGHT KNOWLEDGE Briefing: as required

Content

Briefing

- Preparation for and overview of exercise
- · Revision as required

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING Suggested flight time: 6.0 hours dual Performance Standard

		Required	Achieved*
	Lesson Content (Elements & Performance Criteria)	Re	Acl
NAV.1	Prepare documents and flight plan		
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	1	
A2.3	Take off aeroplane in a crosswind	1	
C4.2	Manage fuel system Configure for best range performance and best endurance performance, calculate revised endurance for each	1	
NAV.5	Navigate at low level and in reduced visibility	2	
NAV.7	Perform diversion procedure	2	
NAV.8	Use instrument navigation systems	2	
RNE.1	Operate and monitor radio navigation aids and systems	2	
RNE.2	Navigate the aircraft using navigation aids and systems	2	
A5.3	Turn aeroplane steeply Steep level turns, steep descending turns	2	
A6.3	Perform forced landing (simulated) (simulated complete engine failure)	2	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources	2	
IFF.2	Perform manoeuvres using full instrument panel	2	
IFF.3	Recover from upset situations and unusual attitudes	2	
A6.5	Manage other abnormal situations (simulated)	2	
A3.6	Dowform pirouite and approaches	1 2	I
	Perform circuits and approaches	2	
A4.3	Conduct a missed approach	2	
A4.4	Perform recovery from missed landing		
A6.2	Manage engine failure in the circuit area (simulated)	2	
A4.2	Land aeroplane in a crosswind	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONSOLIDATION AND/OR REMEDIAL TRAINING					
эс		Performance Standard			
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

Commercial Pilot Licence – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD CPL (A) 11: UPSET RECOVERY EXERCISES

Flight no:	CPL (A) 11	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

• To be able to prevent airplane upsets in various configurations and scenarios

PRE-FLIGHT KNOWLEDGE Briefing: 1.0 hour as required

Content

Briefing

- Scan technique appropriate to fitted flight instruments and phase of flight, attitude and power requirements to achieve specified flight profiles, instrument failure and warning systems fitted to the aeroplane
- Situational awareness, Human Factors and recovery to unusual attitudes

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight I	nowledge components complete:	ı
		4

Instructor's signature & date

Performance Standard						
3	2	1				
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue				

FLIGHT TRAINING Suggested flight time: 3.0 hours dual	
N N N N N N N N N N N N N N N N N N N	Performance Standard

LESSON PLAN AND TRAINING RECORD CPL (A) 11: UPSET RECOVERY EXERCISES

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	2	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	2	
A3.5	Control aeroplane at slow speeds		
(a)	complete pre-manoeuvre checks	2	
(b)	operate and monitor all aircraft systems when operating the aeroplane at slow speed	2	
(c)	for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre:		
	(i) minimum approach speed with flaps retracted	2	
	(ii) minimum approach speed in approach configuration	2	
(d)	observe audible and visual stall warnings and recover aeroplane to controlled flight	2	
(e)	recognise and respond positively to reduced effectiveness of controls during slow flight manoeuvres	2	
(f)	transition from slow speed configuration using take-off power to achieve nominated speed in excess of 1.5 Vs without loss of height	2	
A5.1	Enter and recover from stall		
(a)	perform pre-manoeuvre checks for stalling	2	
(b)	recognise stall signs and symptoms	2	
(c)	control the aeroplane by applying the required pitch, roll and yaw inputs as appropriate in a smooth, coordinated manner, trim aeroplane accurately to enter and recover from the following manoeuvres:		
	(i) incipient stall	2	
	(ii) stall with full power applied	2	
	(iii) stall without power applied	2	
	(iv) stall under the following conditions:		
	(A) straight and level flight	2	
	(B) climbing	2	
	(C) descending	2	
	(D) approach to land configuration	2	
	(E) turning	2	
(d)	perform stall recovery as follows:		
	(i) positively reduce angle of attack	2	
	(ii) use power available and excess height to increase the aircraft energy state	2	
	(iii) minimise height loss for simulated low altitude condition	2	
	(iv) re-establish desired flight path and aircraft control	2	
(e)	recover from stall in simulated partial and complete engine failure configurations	2	
A5.2	Recover from incipient spin		
(a)	perform pre-manoeuvre checks for an incipient spin	2	
(b)	recognise an incipient spin	2	
(c)	use the aeroplane's attitude and power controls to execute an incipient spin manoeuvre from the following flight conditions and, using correct recovery technique, regain straight and level flight with height loss commensurate with the available altitude (simulated ground base height may be set):		
	(i) straight and level flight	2	
	(ii) climbing	2	
	(iii) turning	2	

FLIGH'	T TRAINING		
	sted flight time: 3.0 hours dual		
ence		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
A6.6	Recover from unusual flight attitudes Nose-high unusual attitudes		
(a)	identify nose-high unusual attitude flight condition	2	
(b)	recover from nose-high unusual attitudes by adjusting pitch, bank and power to resume controlled and balanced flight	2	
(c)	apply controlled corrective action while maintaining aircraft performance within limits	2	
IFF.3	Recover from upset situations and unusual attitudes		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	2	
(b)	recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	2	
	(ii) varying angles of bank	2	
	(iii) various power settings	2	
	(iv) various aircraft configurations	2	
	(v) unbalanced flight	2	
IFL.1	Recognise failure of attitude indicator and stabilised heading indicator		
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	3	
(b)	transition from a full instrument panel to a limited instrument panel	3	
IFL.2	Perform manoeuvres – limited panel		
(a)	interpret and respond appropriately to instrument indications	3	
(b)	apply power and attitude settings to achieve straight and level performance during:		
	(i) normal cruise	3	
	(ii) approach configuration with flaps (when fitted) and undercarriage down	3	
(c)	apply power and attitude settings to achieve:		
	(i) nominated climb performance	3	
	(ii) nominated descent performance	3	
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	3	
(d)	trim (as applicable) and balance aircraft	3	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	3	
IFL.3	Recover from upset situations and unusual attitudes – limited panel		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	3	
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	3	
	(ii) varying angles of bank	3	
	(iii) various power settings	3	
	(iv) various aircraft configurations	3	
	(v) unbalanced flight	3	
IFL.4	Re-establish visual flight		
(a)	transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft	3	
(b)	perform a manoeuvre to re-establish visual flight	3	

LESSON PLAN AND TRAINING RECORD CPL (A) 11: UPSET RECOVERY EXERCISES

FLIGHT TRAINING Suggested flight time: 3.0 hours dual					
Reference			Stan	*	
MOS Ref		Lesson Content (Elements & Performance Criteria)	Required	Achieved	
	(c)	implement a plan that ensures the flight continues in VMC	3		

*Enter the performance standard achieved if it is different to that required

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CONSOLIDATION AND/OR REMEDIAL TRAINING					
eor			Performance Standard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the Part 61 MOS competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME

LESSON PLAN AND TRAINING RECORD CPL (A) 11: UPSET RECOVERY EXERCISES

COMMENTS AND OUTCOME				
Dropped to payt training appaign?		Vac	No	
Proceed to next training session?		Yes	No	
Instructor's signature & date	Trainee's signature &	date		



Civil Aviation Authority of the Philippines flying schools guidance material for single pilot OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

ANNEX C

Instrument Rating Progress Checks and Grading Sheets

LESSON PLAN AND TRAINING RECORD IR (A) 1: SIMULATOR FAMILIARIZATION & BASIC SCANNING

Flight no:	IR (A) 1	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Be acquainted with the aircraft systems related to IFR operations
- Be able to perform basic manoeuvres with reference to flight instruments.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT K	NOWLEDGE	
Long Briefing:	.5-1.0 hour (As	required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

LESSON PLAN AND TRAINING RECORD

IR (A) 1: SIMULATOR FAMILIARIZATION AND BASIC SCANNING

	sted Simulator time: 2.0 hours dual		ormance
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment		
C1.1	Communicating face-to-face	2	
(a)	pronounces words clearly, using an accent that does not cause difficulties in understanding	2	
(a)	conveys information in clearly structured sentences without confusion or ambiguity		
	(i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	2	
	(ii) speaks fluently without long pauses, repetition or excessive false starts	2	
(b)	responds to communications with actions that demonstrate that the information has been received and understood	2	
(c)	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	2	
(d)		2	
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	2	
(b)	communicate effectively in unfamiliar, stressful or non-standard situations	2	
(c)	apply the phonetic alphabet		
(d)	transmit numbers	2	
(e)	make appropriate transmissions using standard aviation phraseology	2	
(f)	use plain English effectively when standard phraseology is inadequate	2	
(g)	receive appropriate responses to transmissions		
(h)	respond to transmissions and take appropriate action	2	
(i)	recognise and manage communication errors and misunderstandings effectively	2	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	2	
(k) (l)	react appropriately to a variety of regional accents communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	2	
C2	Perform pre- and post-flight actions and procedures		
C2.1	Pre-flight actions and procedures	2	
(a)	complete all required pre-flight administration documentation	2	
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:		
	(i) minimum equipment list (MEL)	2	
	(ii) maintenance release	2	
	(iii) weather forecasts	2	
	(iv) local observations		
	(v) Notice to Airmen (NOTAM)	2	
	(vi) Aeronautical Information Package (AIP)	2	
(c)	identify special aerodrome procedures	2	
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)		
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight		
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:	2	
	(i) Weight and balance	2	
	(ii) Take-off and landing performance	2	

LESSON PLAN AND TRAINING RECORD

IR (A) 1: SIMULATOR FAMILIARIZATION AND BASIC SCANNING

	T TRAINING sted Simulator time: 2.0 hours dual		
		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(iii) Fuel requirements	2	
C2.2 Per	form pre-flight inspection		
(a)	identify and secure equipment and documentation that is required for the flight	2	
(b)	complete an internal and external check of the aircraft	2	
	identify all defects or damage to the aircraft	2	
	report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	2	
	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	2	
	certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate	2	
(g)	Complete and certify the daily inspection	2	
C2.3 Pos	t-flight actions and procedures		
(a)	shut down aircraft	2	
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	2	
(c)	complete all required post-flight administration documentation	2	
C3	Operate aeronautical radio		
C3.1 Ope	erate Radio equipment		
(a)	confirm serviceability of radio equipment	2	
(b)	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	2	
(c)	maintain a listening watch and respond appropriately to applicable transmissions	2	
(d)	conduct appropriate emergency and urgency transmissions	2	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	2	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	2	
(c)	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	2	
IFF.2	Perform manoeuvres using full instrument panel		
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	2	
	(ii) nominated climb performance within the flight tolerances	2	
	(iii) descent performance within the flight tolerances	2	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONSOLIDATION AND/OR REMEDIAL TRAINING

LESSON PLAN AND TRAINING RECORD IR (A) 1: SIMULATOR FAMILIARIZATION AND BASIC SCANNING

nce		Perfo Stan	ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

	FFI	

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
	Т	
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

IR (A) v1.0 September 2022 Page 4

Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 2: BASIC SCANNING, PARTIAL AND FULL PANEL

Flight no:	IR (A) 2	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Be introduced to partial panel flight and tasked to fly the airplane with inoperative flight instruments.
- Be proficient in recovery from unusual flight attitudes and partial panel flight and its related human factors.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete: Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

_	T TRAINING sted Simulator time: 2.0 hours dual	
		Performance Standard

LESSON PLAN AND TRAINING RECORD IR (A) 2: BASIC SCANNING, PARTIAL AND FULL PANEL

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment		
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	2	
(b)		2	
(c)	apply the phonetic alphabet	2	
(d)	transmit numbers	2	
(e)	make appropriate transmissions using standard aviation phraseology	2	
(f)	use plain English effectively when standard phraseology is inadequate	2	
(g)	receive appropriate responses to transmissions	2	
(h)	respond to transmissions and take appropriate action	2	
(i)	recognise and manage communication errors and misunderstandings effectively	2	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	2	
(k)	react appropriately to a variety of regional accents	2	
(1)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	2	
IFF	Full Instrument panel manoeuvres		
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	1	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	1	
	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	1	
IFF.2	Perform manoeuvres using full instrument panel		
	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	2	
	(ii) nominated climb performance within the flight tolerances	2	
	(iii) descent performance within the flight tolerances	2	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	2	
IFF.3	Recover from upset situations and unusual attitudes		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	2	
(b)	recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) High and low-nose attitudes	2	
	(ii) varying angles of bank	2	
	(iii) various power settings	2	
	(iv) various aircraft configurations	2	
	(v) unbalanced flight	2	
IFL	Limited instrument panel manoeuvres		
IFL.1 Re	cognise failure of attitude indicator and stabilised heading indicator		
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	3	
(b)	transition from a full instrument panel to a limited instrument panel	3	
IFL.2 Pe	rform manoeuvres – limited panel		
(a)	interpret and respond appropriately to instrument indications	3	

LESSON PLAN AND TRAINING RECORD IR (A) 2: BASIC SCANNING, PARTIAL AND FULL PANEL

		Perfo Stan	ormanc dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	apply power and attitude settings to achieve straight and level performance during:		
	(i) normal cruise	3	
	(ii) approach configuration with flaps (when fitted) and undercarriage down	3	
(c)	apply power and attitude settings to achieve:		
	(i) nominated climb performance	3	
	(ii) nominated descent performance	3	
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	3	
(d)	trim (as applicable) and balance aircraft	3	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	3	
FL.3 Red	over from upset situations and unusual attitudes – limited panel		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	3	
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	3	
	(ii) varying angles of bank	3	
	(iii) various power settings	3	
	(iv) various aircraft configurations	3	
	(v) unbalanced flight	3	
FL.4 R	e-establish visual flight		
(a)	transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft	2	
(b)	perform a manoeuvre to re-establish visual flight	2	
(c)	implement a plan that ensures the flight continues in VMC	2	
ITS2	Non-technical skills 2		
ITS2.1 I	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	2	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	2	
(c)	develop and implement countermeasures to manage threats	2	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	2	
. ,	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2	
(c)	monitor the following to collect and analyse information to identify potential or actual errors:		
(-)	(i) aircraft systems using a systematic scan technique	2	
	(ii) the flight environment	2	
	(iii) other crew	2	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2	
ITS2.3 F	ecognise and manage undesired aircraft state		
	recognise an undesired aircraft state	2	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2	

LESSON PLAN AND TRAINING RECORD IR (A) 2: BASIC SCANNING, PARTIAL AND FULL PANEL

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING					
nce			Performance Standard			
MOS Reference	Lesson Content (Elements & Performance Criteria)		Achieved			

	: D I			
UE	:01	RIE	ПП	VG

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME		
Duran de mandenim manada 20	V	lu-
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD R (A) 2: BASIC SCANNING, PARTIAL AND FULL PANEL			

Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 3: RADIO NAVIGATION

Flight no:	IR (A) 3	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Be able to perform lessons / manoeuvres with reference to flight instruments.
- Be introduced to and demonstrate proficiency in cross-fixing, holding, and entry procedures.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

Performance Standard			
3	2	1	
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue	

_	T TRAINING sted Simulator time: 2.0 hours dual	
		Performance Standard

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	1	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	1	
(c)	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	1	
IFF.2	Perform manoeuvres using full instrument panel		
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	2	
	(ii) nominated climb performance within the flight tolerances	2	
	(iii) descent performance within the flight tolerances	2	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	2	
NAV I	Navigate aircraft		
NAV.1 Pr	epare documents and flight plan		
(a)	select and prepare appropriate navigation charts for the intended flight	2	
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	2	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	2	
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times		
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	2	
(f)	complete a flight plan to the planned destination and alternates	2	
(g)	lodge suitable flight notification for search and rescue (SAR) purposes	2	
NAV.2 Co	omply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	3	
(b)	obtain and comply with air traffic clearances, if applicable	3	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	3	
NAV.3 Co	onduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	3	
(b)	comply with all departure procedures, clearances and noise abatement requirements	3	
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required		
(d)	calculate estimated time of arrival (ETA) for first waypoint	3	
NAV.4 Na	avigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	3	
(b)	maintain heading to achieve a nominated track	3	
(c)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	3	
(d)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) turbulence	3	
	(ii) holding	3	
	(iii) maximum range	3	
(e)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	3	
NAV.8	Use instrument navigation systems		
(a)	initialise navigation system (as applicable)	3	
(b)	conduct navigation system validity check (as applicable)		
(b)	conduct navigation system validity check (as applicable)		

_	T TRAINING		
Sugge	sted Simulator time: 2.0 hours dual		
		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(c)	conduct RAIM check if required		
(d)	select, load, check and activate the flight plan (as applicable)	3	
(e)	operate instrument navigation systems correctly	3	
(f)	use instrument navigation systems to assist with navigation	3	
(g)	confirm waypoints and fixes using instrument navigation systems	3	
NAV.9 E	xecute arrival procedures		
(a)	obtain updated relevant aerodrome information	2	
(b)	determine landing direction and aerodrome suitability	2	
(c)	conduct arrival	2	
(d)	identify and avoid all traffic	2	
(e)	observe local and published noise abatement requirements and curfews	2	
` '	Radio navigation - enroute	2	
	perate and monitor radio navigation aids and systems		
	select and operate navigation aids and systems	2	
	monitor and take appropriate action in relation to the integrity of navigation aid systems information	2	
	lavigate the aircraft using navigation aids and systems	_	
	determine aircraft position fix solely with reference to navigation aids and systems	3	
	intercept tracks to and from navigation aids and systems	3	
(b)	maintain tracks within specified tolerances	3	
(c)		3	
	record, assess and revise timings as required		
` ,	recognise station passage	3	
	perate at a controlled aerodrome		
	ontrolled aerodrome pre-flight preparation		
(a)	interpret the extracted information	2	
(b)	identify all special aerodrome procedures	2	
(c)	check current weather forecast and local observations	2	
. ,	identify all relevant radio and navigation aid frequencies	2	
CTA (Operate in controlled airspace		
CTA.1 Op	perate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	3	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	3	
(c)	maintain control area protection tolerances	3	
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	3	
(e)	reconfirm any clearance items when doubt exists	3	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	3	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation		
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	3	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	3	

	T TRAINING sted Simulator time: 2.0 hours dual		
		Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	3	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	3	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	3	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	3	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	3	
(o)	recall transponder emergency code and communication failure code	3	
CIR C	conduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	3	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	3	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	3	
(d)	make flight notification;	3	
(e)	check navigation system database is current;	3	
CIR.2 Pe	rform an instrument departure		
(a)	prepare aircraft and aircraft systems for departure;	3	
(b)	demonstrate consideration of and planning for non-normal and emergencies during departure;	3	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	3	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	3	
(e)	conduct instrument departure to comply with obstacle clearance requirements.	3	
CIR.7 P	erform a published holding procedure		
(a)	demonstrate adequate knowledge of a published holding procedure;	3	
(b)	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	3	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	SOLIDATION AND/OR REMEDIAL TRAINING		
ance		Performance Standard	
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

DEBRIEFING

Proceed to next training session?

Content

CONS	OLIDATION AND/OR REMEDIAL TRAINING		
)ce			ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

 Training review and outcomes achieved against lesson objectives and the competency standards Recommendations for next lesson (including any carryover/remedial training) Trainee preparation for next lesson Training record completion and sign off
COMMENTS AND OUTCOME

Instructor's signature & date	Trainee's signature & date

No

Yes

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Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 4: SID'S, APPROACHES, AND EMERGENCY PROCEDURES

Flight no:	IR (A) 4	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Be oriented to procedures required for IFR flight.
- Be able to interpret and perform SID and Approach (Non-precision, Precision (ILS), Missed, Circling, and landing from a straight-in or circling) charts.
- Be oriented and conduct IFR radio communications and procedures.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING

Suggested Simulator time: 2.0 hours dual

			ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment		
C1.1	Communicating face-to-face	1	
(a	pronounces words clearly, using an accent that does not cause difficulties in understanding	1	
(a	conveys information in clearly structured sentences without confusion or ambiguity		
	(i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	1	
	(ii) speaks fluently without long pauses, repetition or excessive false starts	1	
(b	responds to communications with actions that demonstrate that the information has been received and understood	1	
`	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	1	
(d	uses appropriate techniques to validate communications	1	
C3.2 M	anage R/T equipment malfunctions		
(a	perform radio failure procedures	1	
(b	use fault finding procedures and perform corrective actions	1	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a	determine serviceability of flight and navigational instruments	1	
(b	perform functional checks of flight and navigational instruments where applicable prior to take-off	1	
(c	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	1	
IFF.2	Perform manoeuvres using full instrument panel		
(a	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	1	
(b	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
(c	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	1	
IFF.3	Recover from upset situations and unusual attitudes		
(a	correctly identify upset situations and unusual attitudes under simulated IMC	1	
(b	recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) High and low-nose attitudes	1	
	(ii) varying angles of bank	1	
	(iii) various power settings	1	
	(iv) various aircraft configurations	1	
	(v) unbalanced flight	1	
IFL	Limited instrument panel manoeuvres		
IFL.1	Recognise failure of attitude indicator and stabilised heading indicator		
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	2	
(b)	transition from a full instrument panel to a limited instrument panel	2	
IFL.2	Perform manoeuvres – limited panel		
(a)	interpret and respond appropriately to instrument indications	2	
(b)	apply power and attitude settings to achieve straight and level performance during:		

		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(i) normal cruise	2	
	(ii) approach configuration with flaps (when fitted) and undercarriage down	2	
(c)	apply power and attitude settings to achieve:		
	(i) nominated climb performance	2	
	(ii) nominated descent performance	2	
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	2	
(d)	trim (as applicable) and balance aircraft	2	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	2	
FL.3 Red	over from upset situations and unusual attitudes – limited panel		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	2	
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	2	
	(ii) varying angles of bank	2	
	(iii) various power settings	2	
	(iv) various aircraft configurations	2	
	(v) unbalanced flight	2	
FL.4 R	e-establish visual flight		
(a)	transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft		
(b)	perform a manoeuvre to re-establish visual flight		
(c)	implement a plan that ensures the flight continues in VMC		
ITS1	Non-technical skills 1		
TS1.3	Assess situations and make decisions		
(a)	identify problems	2	
(b)	analyse problems	2	
(c)	identify solutions	2	
(d)	assess solutions and risks	2	
(e)	decide on a course of action	2	
(f)	communicate plans of action (if appropriate)	2	
(g)	allocate tasks for action (if appropriate)	2	
(h)	take actions to achieve optimum outcomes for the operation	2	
(i)	monitor progress against plan	2	
(j)	re-evaluate plan to achieve optimum outcomes	2	
TS1.4 S	et priorities and manage tasks		
(k)	use technology to reduce workload and improve cognitive and manipulative activities	2	
ITS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	2	
(b)	define and explain objectives to stakeholders	2	

_	T TRAINING sted Simulator time: 2.0 hours dual		
		Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	2	
(c)	monitor the following to collect and analyse information to identify potential or actual errors:		
	(i) aircraft systems using a systematic scan technique	2	
	(ii) the flight environment	2	
	(iii) other crew	2	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	2	
	ecognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	2	
(b)	prioritise tasks to ensure an undesired aircraft state is managed effectively	2	
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	2	
NAV I	Navigate aircraft		
NAV.1 Pr	epare documents and flight plan		
(a)	select and prepare appropriate navigation charts for the intended flight	2	
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	2	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	2	
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times	2	
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	2	
(f)	complete a flight plan to the planned destination and alternates	2	
(g)	lodge suitable flight notification for search and rescue (SAR) purposes	2	
NAV.2 Co	omply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	2	
(b)	obtain and comply with air traffic clearances, if applicable	2	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	2	
NAV.3 Co	onduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	2	
(b)	comply with all departure procedures, clearances and noise abatement requirements	2	
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required		
(d)	calculate estimated time of arrival (ETA) for first waypoint	2	
NAV.4 Na	vigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	2	
(b)	maintain heading to achieve a nominated track	2	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	2	
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	2	
(e)	navigate using accepted map-reading techniques		
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	2	
(g)	use appropriate techniques to obtain a positive fix at suitable intervals	2	

			Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
(h)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	2		
(i)	perform pre-descent and turning point checks	2		
(j)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	2		
(k)	maintain awareness of search and rescue times (SARTIME) and revise as required	2		
(I)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2		
IAV.6 Pe	erform lost procedure			
(a)	acknowledge positional uncertainty in a timely manner	2		
(b)	configure aircraft for range and endurance as required	2		
(c)	apply recognised method to re-establish aircraft position	2		
(d)	fix position	2		
(e)	use radio to request assistance, if applicable	2		
(f)	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome	2		
IAV.7	Perform diversion procedure			
(a)	make timely decision to divert	3		
(b)	identify an acceptable alternate aerodrome	3		
(c)	select a suitable route and cruising level	3		
(d)	revise flight plan considering weather, terrain, airspace and fuel available	3		
(e)	advise ATS of an intention to divert	3		
NAV.8	Use instrument navigation systems			
(a)	initialise navigation system (as applicable)	2		
(b)	conduct navigation system validity check (as applicable)			
(c)	conduct RAIM check if required			
(d)	select, load, check and activate the flight plan (as applicable)	2		
(e)	operate instrument navigation systems correctly	2		
(f)	use instrument navigation systems to assist with navigation	2		
(g)	confirm waypoints and fixes using instrument navigation systems	2		
IAV.9 E	xecute arrival procedures			
(a)	obtain updated relevant aerodrome information	2		
(b)	determine landing direction and aerodrome suitability	2		
(c)	conduct arrival	2		
(d)	identify and avoid all traffic	2		
(e)	observe local and published noise abatement requirements and curfews	2		
RNE	Radio navigation - enroute			
RNE.1 O	perate and monitor radio navigation aids and systems			
(a)	select and operate navigation aids and systems	2		
(b)	monitor and take appropriate action in relation to the integrity of navigation aid systems information	2		
NE.2	lavigate the aircraft using navigation aids and systems			
(a)	determine aircraft position fix solely with reference to navigation aids and systems	2		
(b)	intercept tracks to and from navigation aids and systems	2		

Sugge	sted Simulator time: 2.0 hours dual		
		Performanc Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(c)	maintain tracks within specified tolerances	2	
(d)	record, assess and revise timings as required	2	
(e)	recognise station passage	2	
CTA	Operate in controlled airspace		
CTA.1 O _l	perate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	2	
(c)	maintain control area protection tolerances		
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	2	
(e)	reconfirm any clearance items when doubt exists	2	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation		
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	2	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	2	
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	2	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	2	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	2	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	2	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	2	
(o)	recall transponder emergency code and communication failure code	2	
CIR C	onduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	2	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	2	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	2	
(d)	make flight notification;	2	
(e)	check navigation system database is current;	2	
CIR.2 Pe	rform an instrument departure		
(a)	prepare aircraft and aircraft systems for departure;	2	
(b)		2	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	2	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	2	
(e)		2	
CIR.3 Co	nduct a published instrument procedure (all engines)		
(a)	perform a SID or other published departure;	3	
(b)	maintain assigned SID, including all tracks, headings, altitudes and speeds;	3	
		-	

			Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
CIR.4 Co	nduct a published instrument procedure (one-engine inoperative)			
(a)	for single-engine aircraft instrument endorsements:	3		
	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;	3		
	(ii) time permitting conduct checklists and radio calls.	3		
CIR.6 P	erform a descent and arrival under the IFR			
(a)	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome;	3		
(b)	perform a descent and published arrival procedure to an aerodrome.	3		
CIR.7 P	erform a published holding procedure			
(a)	demonstrate adequate knowledge of a published holding procedure;	2		
(b)	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	2		
CIR.8 P	erform an instrument approach 2D			
(a)	demonstrate adequate knowledge of published procedures associated with an instrument approach;	3		
(b)	perform an instrument approach unique to the instrument approach type;	3		
(c)	maintain a stabilised flight path within specified tolerances during the approach procedure.	3		
CIR.10	Perform visual approach operations (includes visual circling where applicable)			
(a)	demonstrate adequate knowledge of published procedures for the conduct of a visual approach;	3		
(b)	conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path.	3		
IAP2	Conduct an instrument approach 2D			
IAP2.1 F	Prepares for approach			
(a)	review latest available information for destination;	3		
(b)	conduct navigation system validity check (as applicable);	3		
(c)	conduct RAIM check if required;			
(d)	select and brief current approach chart for the approach to be flown;	3		
(e)	check and confirm navigation aid required for the approach is serviceable	3		
AP2.2 (Conducts initial approach			
(a)	set altimeter QNH correctly;	3		
(b)	manoeuvre aircraft to the holding fix.	3		
AP2.3 (Conducts a holding pattern			
(a)	from the holding fix enter and perform a holding pattern;	3		
	fly aircraft in accordance with procedure.	3		
AP2.4 (Conducts an approach			
(a)	update and set Altimeter QNH;	3		
(b)	approach performed correctly and within published tolerances;	3		
(c)	navigation aid signal integrity monitored during approach;	3		
. ,		3		
(u)				
(e)	after establishing visual reference, a visual circling or runway approach is conducted for a landing on the selected runway.	3		

FLIGHT TRAINING Suggested Simulator time: 2.0 hours dual				
I.		Performance Standard		
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
(b)	aircraft is manoeuvred to MAPt;	3		
(c)	missed approach procedure is conducted in accordance with the IAL chart;	3		
(d)	obstacle clearance in IMC or simulated IMC is maintained.	3		

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONSOLIDATION AND/OR REMEDIAL TRAINING				
eor		Performance Standard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved	

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME

LESSON PLAN AND TRAINING RECORD IR (A) 4: SID'S, APPROACHES, AND EMERGENCY PROCEDURES

COMMENTS AND OUTCOME			
Proceed to next training session?		Yes	No
Instructor's signature & date	Trainee's signature &	date	

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Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 5: PROGRESS CHECK FOR SYNTHETIC FLIGHT TRAINER PHASE

Flight no:	IR (A) 5	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE

Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue

_	HT TRAINING ested Simulator time: 2.0 hours dual	
		Performance Standard

LESSON PLAN AND TRAINING RECORD IR (A) 5: PROGRESS CHECK FOR SYNTHETIC FLIGHT TRAINER PHASE

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment		
C1.1	Communicating face-to-face	1	
	pronounces words clearly, using an accent that does not cause difficulties in understanding	1	
(a)	conveys information in clearly structured sentences without confusion or ambiguity		
	(i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	1	
4.	(ii) speaks fluently without long pauses, repetition or excessive false starts	1	
	responds to communications with actions that demonstrate that the information has been received and understood	1	
	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	1	
	uses appropriate techniques to validate communications	1	
	nage R/T equipment malfunctions		
. ,	perform radio failure procedures	1	
	use fault finding procedures and perform corrective actions	1	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	1	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	1	
(c)	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	1	
IFF.2	Perform manoeuvres using full instrument panel		
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	1	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	1	
IFL	Limited instrument panel manoeuvres		
IFL.1 Re	ecognise failure of attitude indicator and stabilised heading indicator		
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	1	
(b)	transition from a full instrument panel to a limited instrument panel	1	
IFL.2 Pe	erform manoeuvres – limited panel		
(a)	interpret and respond appropriately to instrument indications	1	
(b)	apply power and attitude settings to achieve straight and level performance during:		
	(i) normal cruise	1	
	(ii) approach configuration with flaps (when fitted) and undercarriage down	1	
(c)	apply power and attitude settings to achieve:		
	(ii) nominated climb performance	1	
	(ii) nominated descent performance	1	
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	1	
(d)	trim (as applicable) and balance aircraft	1	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	1	
IFL.3 Red	cover from upset situations and unusual attitudes – limited panel		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	1	

	T TRAINING sted Simulator time: 2.0 hours dual		
Ougge	Stea Officiation time. 2.0 flours addi	Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	1	
	(ii) varying angles of bank	1	
	(iii) various power settings	1	
	(iv) various aircraft configurations	1	
	(v) unbalanced flight	1	
FL.4 R	e-establish visual flight		
	transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft	1	
. ,	perform a manoeuvre to re-establish visual flight	1	
. ,	implement a plan that ensures the flight continues in VMC	1	
NTS1	Non-technical skills 1		
	Assess situations and make decisions		
	identify problems	1	
	analyse problems	1	
	identify solutions	1	
	assess solutions and risks	1	
. ,	decide on a course of action	1	
(f)		1	
. ,	allocate tasks for action (if appropriate)	1	
	take actions to achieve optimum outcomes for the operation	1	
	monitor progress against plan	1	
	re-evaluate plan to achieve optimum outcomes	1	
	Maintain effective communications and interpersonal relationships	•	
	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight		
(b)	define and explain objectives to stakeholders		
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight		
NTS2	Non-technical skills 2		
NTS2.2	Recognise and manage errors		
(a)	apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	1	
(b)	identify committed errors before safety is affected or the aircraft enters an undesired state	1	
(c)	monitor the following to collect and analyse information to identify potential or actual errors:		
	(i) aircraft systems using a systematic scan technique	1	
	(ii) the flight environment	1	
	(iii) other crew	1	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	1	
NTS2.3 F	Recognise and manage undesired aircraft state		
(a)	recognise an undesired aircraft state	1	
(h)	prioritise tasks to ensure an undesired aircraft state is managed effectively	1	

	sted Simulator time: 2.0 hours dual		ormano
		Stan	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(c)	apply corrective actions to recover an undesired aircraft state in a safe and timely manner	1	
IAV	Navigate aircraft		
IAV.1 Pi	repare documents and flight plan		
(a)	select and prepare appropriate navigation charts for the intended flight	1	
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	1	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	1	
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times	1	
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	1	
(f)	complete a flight plan to the planned destination and alternates	1	
(g)	lodge suitable flight notification for search and rescue (SAR) purposes	1	
IAV.3 C	onduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	2	
(b)	comply with all departure procedures, clearances and noise abatement requirements	2	
(c)	establish planned track on departure within 5 nm of airfield or apply alternative procedure if required		
(d)	calculate estimated time of arrival (ETA) for first waypoint	2	•
AV.4 N	avigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	2	
(b)	maintain heading to achieve a nominated track	2	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	2	
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	2	
(e)	navigate using accepted map-reading techniques	2	
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	2	
(g)	use appropriate techniques to obtain a positive fix at suitable intervals	2	
(h)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	2	
(i)	perform pre-descent and turning point checks	2	
(j)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	2	
(k)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2	
IAV.6 P	erform lost procedure		
(a)	acknowledge positional uncertainty in a timely manner	1	
(b)	configure aircraft for range and endurance as required	1	
(c)	apply recognised method to re-establish aircraft position	1	
(d)	fix position	1	
(e)	use radio to request assistance, if applicable	1	
(f)	plan a timely precautionary search and landing if unable to complete flight safely to suitable aerodrome	1	
IAV.7	Perform diversion procedure		
(a)	make timely decision to divert	2	
(b)	identify an acceptable alternate aerodrome	2	
(c)	select a suitable route and cruising level	2	

FLIGH	T TRAINING		
Sugge	sted Simulator time: 2.0 hours dual		
		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	revise flight plan considering weather, terrain, airspace and fuel available	2	
(e)	advise ATS of an intention to divert	2	
NAV.8	Jse instrument navigation systems		
(a)	initialise navigation system (as applicable)	2	
(b)	conduct navigation system validity check (as applicable)		
(c)	conduct RAIM check if required		
(d)	select, load, check and activate the flight plan (as applicable)	2	
(e)	operate instrument navigation systems correctly	2	
(f)	use instrument navigation systems to assist with navigation	2	
(g)	confirm waypoints and fixes using instrument navigation systems	2	
(0)	xecute arrival procedures	_	
(a)	obtain updated relevant aerodrome information	2	
(b)	determine landing direction and aerodrome suitability	2	
(c)	conduct arrival	2	
()	identify and avoid all traffic	2	
(e)	observe local and published noise abatement requirements and curfews	2	
()	Radio navigation - enroute		
	perate and monitor radio navigation aids and systems		
		2	
. ,	select and operate navigation aids and systems	2	
	monitor and take appropriate action in relation to the integrity of navigation aid systems information	2	
	lavigate the aircraft using navigation aids and systems		
	determine aircraft position fix solely with reference to navigation aids and systems	2	
()	intercept tracks to and from navigation aids and systems	2	
. ,	maintain tracks within specified tolerances	2	
(d)	record, assess and revise timings as required	2	
` '	recognise station passage	2	
	Operate in controlled airspace		
	perate aircraft in controlled airspace		
. ,	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	2	
(c)	maintain control area protection tolerances	2	
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	2	
(e)	reconfirm any clearance items when doubt exists	2	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation	2	
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	2	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	2	

		Perfo	ormand
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	2	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	2	
	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	2	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	2	
(o)	recall transponder emergency code and communication failure code	2	
CIR C	Conduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	2	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	2	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	2	
(d)	make flight notification;	2	
(e)	check navigation system database is current;	2	
CIR.2 Pe	rform an instrument departure		
(a)	prepare aircraft and aircraft systems for departure;	2	
(b)	demonstrate consideration of and planning for non-normal and emergencies during departure;	2	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	2	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	2	
(e)	conduct instrument departure to comply with obstacle clearance requirements.	2	
CIR.3 Co	nduct a published instrument procedure (all engines)		
(a)	perform a SID or other published departure;	2	
(b)	maintain assigned SID, including all tracks, headings, altitudes and speeds;	2	
(c)	perform a cleared departure safely and maintain tracks, headings, altitudes and speeds within specified tolerances.	2	
CIR.4 Co	nduct a published instrument procedure (one-engine inoperative)		
(a)	for single-engine aircraft instrument endorsements:	2	
()	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;	2	
	(ii) time permitting conduct checklists and radio calls.	2	
CIR.6 F	Perform a descent and arrival under the IFR		
(a)	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome;	2	
(b)	perform a descent and published arrival procedure to an aerodrome.	2	
IR.7 F	Perform a published holding procedure		
(a)	demonstrate adequate knowledge of a published holding procedure;	2	
(b)	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	2	
	Perform an instrument approach 2D		
	demonstrate adequate knowledge of published procedures associated with an instrument approach;	2	
	perform an instrument approach unique to the instrument approach type;	2	
	maintain a stabilised flight path within specified tolerances during the approach procedure.	2	
	Perform visual approach operations (includes visual circling where applicable)	_	
	demonstrate adequate knowledge of published procedures for the conduct of a visual approach;	2	

IR (A) 5: PROGRESS CHECK FOR SYNTHETIC FLIGHT TRAINER PHASE

	T TRAINING sted Simulator time: 2.0 hours dual		
		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path.	2	
IAP2	Conduct an instrument approach 2D		
IAP2.1	Prepares for approach		
(a)	review latest available information for destination;	2	
(b)	conduct navigation system validity check (as applicable);	2	
(c)	select and brief current approach chart for the approach to be flown;	2	
(d)	check and confirm navigation aid required for the approach is serviceable	2	
IAP2.2	Conducts initial approach		
(a)	set altimeter QNH correctly;	2	
(b)	manoeuvre aircraft to the holding fix.	2	
IAP2.3	Conducts a holding pattern		
(a)	from the holding fix enter and perform a holding pattern;	2	
(b)	fly aircraft in accordance with procedure.	2	
IAP2.4 (Conducts an approach		
(a)	update and set Altimeter QNH;	2	
(b)	approach performed correctly and within published tolerances;	2	
(c)	navigation aid signal integrity monitored during approach;	2	
(d)	from the final approach fix to minima aircraft is flown to a stabilised descent profile;	2	
(e)	after establishing visual reference, a visual circling or runway approach is conducted for a landing on the selected runway.	22	
IAP2.5	Conducts a missed approach		
(a)	conditions requiring a missed approach are recognised and missed approach is initiated;	2	
(b)	aircraft is manoeuvred to MAPt;	2	
(c)	missed approach procedure is conducted in accordance with the IAL chart;	2	
(d)	obstacle clearance in IMC or simulated IMC is maintained.	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING				
eoue	e De Caración de C		ormance dard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

LESSON PLAN AND TRAINING RECORD IR (A) 5: PROGRESS CHECK FOR SYNTHETIC FLIGHT TRAINER PHASE

CONS	OLIDATION AND/OR REMEDIAL TRAINING		
nce			ormance dard
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved

DEBRIEFING	
Content	
 Training review and outcomes achieved against lesson objectives and the competency standards Recommendations for next lesson (including any carryover/remedial training) Trainee preparation for next lesson Training record completion and sign off 	
COMMENTS AND OUTCOME	

Instructor's signature & date	Trainee's signature & date

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Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 6: SID'S, STARS, AND APPROACHES

Flight no:	IR (A) 6	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Perform lessons/manoeuvers previously discussed with reference to flight instruments only.
- Be re-oriented and demonstrate understanding of normal and emergency procedures required for IFR flight.
- Be oriented to and demonstrate proficiently knowledge on SID's, STARs, and precision and non-precision approaches.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE

Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- Knowledge on SIDs, STARs, and precision and non-precision approaches

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date

	Performance Standard	
3	2	1
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue

FLIGHT TRAINING

Suggested Flight time: 2.5 hours dual

		Perfo Stan	ormance dard
04	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1 C1.1	Communicating in the aviation environment		
	Communicating face-to-face	4	
	pronounces words clearly, using an accent that does not cause difficulties in understanding	1	
(a)	conveys information in clearly structured sentences without confusion or ambiguity (i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use	1	
	of jargon, slang or colloquial language (ii) speaks fluently without long pauses, repetition or excessive false starts	1	
(h)	responds to communications with actions that demonstrate that the information has been received and understood	1	
. ,	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	1	
(d)	uses appropriate techniques to validate communications	1	
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	1	
` '	communicate effectively in unfamiliar, stressful or non-standard situations	1	
(c)	apply the phonetic alphabet	1	
(d)	transmit numbers	1	
(e)	make appropriate transmissions using standard aviation phraseology	1	
(f)	use plain English effectively when standard phraseology is inadequate	1	
(g)	receive appropriate responses to transmissions	1	
(h)	respond to transmissions and take appropriate action	1	
(i)	recognise and manage communication errors and misunderstandings effectively	1	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	1	
(k)	react appropriately to a variety of regional accents	1	
(1)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	1	
C2	Perform pre- and post-flight actions and procedures		
C2.3 Post	-flight actions and procedures		
(a)	shut down aircraft	1	
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	1	
(c)	complete all required post-flight administration documentation	1	
C3	Operate aeronautical radio		
C3.1 Ope	rate Radio equipment		
(a)	confirm serviceability of radio equipment	1	
(b)	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	1	
(c)	maintain a listening watch and respond appropriately to applicable transmissions	1	
(d)	conduct appropriate emergency and urgency transmissions	1	
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources		
(a)	determine serviceability of flight and navigational instruments	2	
(b)	perform functional checks of flight and navigational instruments where applicable prior to take-off	2	
(c)	monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	2	
IFF.2	Perform manoeuvres using full instrument panel		
(a)	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	2	

Lesson Content (Elements & Performance Criteria) (b) set and maintain power and attitude by reference to the full instrument panel to achieve the following: (ii) nominated climb performance during normal cruise within the flight tolerances (iii) odescent performance within the flight tolerances (iii) descent performance within the flight tolerances (c) set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances (a) correctly identify upset situations and unusual attitudes (a) correctly identify upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states: (i) High and low-nose attitudes (ii) varying angles of bank (iii) various power settings (iv) various aircraft configurations (v) unbalanced flight (vi) various power settings (vi) various power settings (vi) various power settings (vi) various power settings (vi) various power settings (vi) various power settings (vi) unbalanced flight (a) transition from visual flight conditions to instrument flight conditions while maintaining control of the aircraft object of the aircraft between the full to the properties of the aircraft power and an an an analysis of the aircraft power and an an an analysis of the aircraft power and an an an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an analysis of the safety of the aircraft power and the properties of the aircraft power and an analysis of the aircraft power and an analysis of the aircraft power and an an an analysis of the safety of the flight of the dentity relevant environmental or operational threats that are likely to affect the safety of the flight identify	Perfo Stan	ormano dard
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Recognise and manage errors (a) apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
(a) apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors	2	
	1	
(b) identify committed errors before safety is affected or the aircraft enters an undesired state	1	

	T TRAINING sted Flight time: 2.5 hours dual		
ouggo		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(i) aircraft systems using a systematic scan technique	1	
	(ii) the flight environment	1	
	(iii) other crew	1	
(d)	implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state	1	
NAV	Navigate aircraft		
NAV.2 Co	omply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	2	
(b)	obtain and comply with air traffic clearances, if applicable	2	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	2	
NAV.3 Co	onduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	1	
(b)	comply with all departure procedures, clearances and noise abatement requirements	1	
NAV.4 Na	avigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	2	
(b)	maintain heading to achieve a nominated track	2	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	2	
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	2	
(e)	navigate using accepted map-reading techniques	2	
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	2	
(g)	use appropriate techniques to obtain a positive fix at suitable intervals	2	
(h)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	2	
(i)	perform pre-descent and turning point checks	2	
(j)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	2	
(k)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) turbulence	2	
	(ii) holding	2	
	(iii) maximum range	2	
(I)	maintain awareness of search and rescue times (SARTIME) and revise as required	2	
(m)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2	
NAV.7	Perform diversion procedure		
(a)	make timely decision to divert	2	
(b)	identify an acceptable alternate aerodrome	2	
(c)	select a suitable route and cruising level	2	
(d)	revise flight plan considering weather, terrain, airspace and fuel available	2	
(e)	advise ATS of an intention to divert	2	
NAV.8	Use instrument navigation systems		
(a)	initialise navigation system (as applicable)	2	
(b)	conduct navigation system validity check (as applicable)		

	T TRAINING		
Sugge	sted Flight time: 2.5 hours dual		
		Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(c)	conduct RAIM check if required		
(d)	select, load, check and activate the flight plan (as applicable)	2	
(e)	operate instrument navigation systems correctly	2	
(f)	use instrument navigation systems to assist with navigation	2	
(g)	confirm waypoints and fixes using instrument navigation systems	2	
NAV.9 E	xecute arrival procedures		
(a)	obtain updated relevant aerodrome information	1	
(b)	determine landing direction and aerodrome suitability	1	
(c)	conduct arrival	1	
(d)	identify and avoid all traffic	1	
(e)	observe local and published noise abatement requirements and curfews	1	
RNE I	Radio navigation - enroute		
RNE.1 O	perate and monitor radio navigation aids and systems		
(a)	select and operate navigation aids and systems	1	
(b)	monitor and take appropriate action in relation to the integrity of navigation aid systems information	1	
RNE.2 N	lavigate the aircraft using navigation aids and systems		
(a)	determine aircraft position fix solely with reference to navigation aids and systems	1	
(b)	intercept tracks to and from navigation aids and systems	1	
(c)	maintain tracks within specified tolerances	1	
(d)	record, assess and revise timings as required	1	
(e)	recognise station passage	1	
CTR C	perate at a controlled aerodrome		
CTR.1	ontrolled aerodrome pre-flight preparation		
	interpret the extracted information	2	
(b)	identify all special aerodrome procedures	2	
(c)	check current weather forecast and local observations	2	
(d)	identify all relevant radio and navigation aid frequencies	2	
. ,	Operate in controlled airspace		
	perate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	2	
(c)	maintain control area protection tolerances	2	
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	2	
(e)	reconfirm any clearance items when doubt exists	2	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation	2	
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	2	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	2	

	T TRAINING sted Flight time: 2.5 hours dual		
<u> </u>		_	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	2	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	2	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	2	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	2	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	2	
(o)	recall transponder emergency code and communication failure code	2	
CIR C	Conduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	2	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	2	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	2	
(d)	make flight notification;	2	
(e)	check navigation system database is current;	2	
	rform an instrument departure		
	prepare aircraft and aircraft systems for departure;	2	
	demonstrate consideration of and planning for non-normal and emergencies during departure;	2	
	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	2	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	2	
(e)	conduct instrument departure to comply with obstacle clearance requirements.	2	
IR.3 Co	nduct a published instrument procedure (all engines)		
(a)	perform a SID or other published departure;	2	
(b)	maintain assigned SID, including all tracks, headings, altitudes and speeds;	2	
(c)	perform a cleared departure safely and maintain tracks, headings, altitudes and speeds within specified tolerances.	2	
CIR.4 Co	nduct a published instrument procedure (one-engine inoperative)		
(a)	for single-engine aircraft instrument endorsements:	2	
	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;	2	
	(ii) time permitting conduct checklists and radio calls.	2	
CIR.6 F	erform a descent and arrival under the IFR		
(a)	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome;	2	
(b)	perform a descent and published arrival procedure to an aerodrome.	2	
CIR.7 F	Perform a published holding procedure		
(a)	demonstrate adequate knowledge of a published holding procedure;	2	
(b)	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	2	
CIR.8 F	Perform an instrument approach 2D		
(a)	demonstrate adequate knowledge of published procedures associated with an instrument approach;	2	
(b)	perform an instrument approach unique to the instrument approach type;	2	
	maintain a stabilised flight path within specified tolerances during the approach procedure.	2	
	Perform visual approach operations (includes visual circling where applicable)	_	

	T TRAINING sted Flight time: 2.5 hours dual		
			ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(a)	demonstrate adequate knowledge of published procedures for the conduct of a visual approach;	2	
(b)	conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path.	2	
IAP2	Conduct an instrument approach 2D		
IAP2.1 F	Prepares for approach		
(a)	review latest available information for destination;	2	
(b)	conduct navigation system validity check (as applicable);	2	
(c)	conduct RAIM check if required;		
(d)	select and brief current approach chart for the approach to be flown;	2	
(e)	check and confirm navigation aid required for the approach is serviceable	2	
IAP2.2 (Conducts initial approach		
(a)	set altimeter QNH correctly;	2	
(b)	manoeuvre aircraft to the holding fix.	2	
IAP2.3 (Conducts a holding pattern		
(a)	from the holding fix enter and perform a holding pattern;	2	
(b)	fly aircraft in accordance with procedure.	2	
IAP2.4 (Conducts an approach		
(a)	update and set Altimeter QNH;	2	
(b)	approach performed correctly and within published tolerances;	2	
(c)	navigation aid signal integrity monitored during approach;	2	
(d)	from the final approach fix to minima aircraft is flown to a stabilised descent profile;	2	
(e)	after establishing visual reference, a visual circling or runway approach is conducted for a landing on the selected runway.	2	
IAP2.5	Conducts a missed approach		
(a)	conditions requiring a missed approach are recognised and missed approach is initiated;	2	
(b)	aircraft is manoeuvred to MAPt;	2	
(c)	missed approach procedure is conducted in accordance with the IAL chart;	2	
(d)	obstacle clearance in IMC or simulated IMC is maintained.	2	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING					
nce						
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved			
_						

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING				
ICe		Perfo Stan	ormance dard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

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Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 7: IFR FLIGHT TO ANOTHER AIRPORT

Flight no:	IR (A) 7	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Perform lessons/manoeuvers previously discussed with reference to flight instruments.
- Review instrument departures, approaches, and radar vector procedures.
- Be oriented to IFR flight to another airport
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete	:
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Instructor's signature & date

	Performance Standard				
3	2	1			
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue			

FL	.IGH	T TRAINING	
Su	ıgge	sted Flight time: 2.5 hours dual	
			Performance Standard

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment		
C1.1	Communicating face-to-face		
(a)	pronounces words clearly, using an accent that does not cause difficulties in understanding	1	
(a)	conveys information in clearly structured sentences without confusion or ambiguity		
	(i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	1	
	(ii) speaks fluently without long pauses, repetition or excessive false starts	1	
(b)	responds to communications with actions that demonstrate that the information has been received and understood	1	
	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	1	
(d)	uses appropriate techniques to validate communications	1	
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	1	
(b)	communicate effectively in unfamiliar, stressful or non-standard situations	1	
(c)	apply the phonetic alphabet	1	
(d)	transmit numbers	1	
(e)	make appropriate transmissions using standard aviation phraseology	1	
(f)	use plain English effectively when standard phraseology is inadequate	1	
(g)	receive appropriate responses to transmissions	1	
(h)	respond to transmissions and take appropriate action	1	
(i)	recognise and manage communication errors and misunderstandings effectively	1	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	1	
(k)	react appropriately to a variety of regional accents	1	
(1)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	1	
C2	Perform pre- and post-flight actions and procedures		
C2.1	Pre-flight actions and procedures		
(a)	complete all required pre-flight administration documentation	1	
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:		
	(i) minimum equipment list (MEL)	1	
	(ii) maintenance release	1	
	(iii) weather forecasts	1	
	(iv) local observations	1	
	(v) Notice to Airmen (NOTAM)	1	
	(vi) Aeronautical Information Package (AIP)	1	
(c)	identify special aerodrome procedures	1	
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	1	
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight	1	
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:		
	(i) Weight and balance	1	
	(ii) Take-off and landing performance	1	
	(iii) Fuel requirements	1	
	Determine whether the aircraft is serviceable for the proposed flight	1	
C2.2 Per	form pre-flight inspection		

	T TRAINING		
Sugge	ested Flight time: 2.5 hours dual	Perfe Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(a)	identify and secure equipment and documentation that is required for the flight	1	
(b)	complete an internal and external check of the aircraft	1	
	identify all defects or damage to the aircraft	1	
	report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage	1	
	ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely	1	
	certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate	1	
(g)	Complete and certify the daily inspection	1	
	st-flight actions and procedures		
(a)	shut down aircraft	1	
(b)	conduct post-flight inspection and secure the aircraft (if applicable)	1	
. ,	complete all required post-flight administration documentation	1	
C3	Operate aeronautical radio		
	erate Radio equipment		
	confirm serviceability of radio equipment	1	
	conduct transmission and receipt of radio communications using appropriate procedures and phraseology	1	
	maintain a listening watch and respond appropriately to applicable transmissions	1	
. ,	conduct appropriate emergency and urgency transmissions	1	
	use fault finding procedures and perform corrective actions		
IFF.1	Determine and monitor the serviceability of flight instruments and instrument power sources	4	
	determine serviceability of flight and navigational instruments	1	
` '	perform functional checks of flight and navigational instruments where applicable prior to take-off monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications	1	
IFF.2	Perform manoeuvres using full instrument panel		
	interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel	1	
(b)	set and maintain power and attitude by reference to the full instrument panel to achieve the following:		
	(i) straight and level performance during normal cruise within the flight tolerances	1	
	(ii) nominated climb performance within the flight tolerances	1	
	(iii) descent performance within the flight tolerances	1	
(c)	set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances	1	
NTS1	Non-technical skills 1		
NTS1.1 I	Maintain effective lookout		
	maintain traffic separation using a systematic visual scan technique at a rate determined by traffic density, visibility and terrain	1	
. ,	maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
	perform airspace-cleared procedure before commencing any manoeuvre	1	
NTS1.2	Maintain situational awareness		
(a)	monitor all aircraft systems using a systematic scan technique	1	
(b)	collect information to facilitate ongoing system management	1	

	T TRAINING sted Flight time: 2.5 hours dual		
		Perfo Stand	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(c)	monitor flight environment for deviations from planned operations	1	
(d)	collect flight environment information to update planned operations	1	
NTS1.4 S	et priorities and manage tasks		
(a)	organise workload and priorities to ensure optimum outcome of the flight	2	
(b)	plan events and tasks to occur sequentially	2	
(c)	anticipate events and tasks to ensure sufficient opportunity for completion	2	
(d)	use technology to reduce workload and improve cognitive and manipulative activities	1	
NTS1.5	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	1	
(b)	define and explain objectives to stakeholders	1	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	1	
NTS2	Non-technical skills 2		
NTS2.1 I	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	1	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	1	
(c)	develop and implement countermeasures to manage threats	1	
(d)	monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured	1	
NAV	Navigate aircraft		
NAV.1 Pr	epare documents and flight plan	1	
(a)	select and prepare appropriate navigation charts for the intended flight	1	
(b)	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	1	
(c)	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight	1	
(d)	determine whether the planned flight can be conducted under the applicable flight rules and taking account of the beginning and end of daylight times	1	
(e)	calculate and document critical point (CP) and point of no return (PNR) locations	1	
(f)	complete a flight plan to the planned destination and alternates	1	
(g)	lodge suitable flight notification for search and rescue (SAR) purposes	1	
NAV.2 Co	omply with airspace procedures while navigating		
(a)	identify airspace restrictions and dimensions applicable to the flight	1	
(b)	obtain and comply with air traffic clearances, if applicable	1	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	1	
NAV.3 Co	onduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	1	
(b)	comply with all departure procedures, clearances and noise abatement requirements	1	
(c)	calculate estimated time of arrival (ETA) for first waypoint	1	
NAV.4 Na	avigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	1	
(b)	maintain heading to achieve a nominated track	1	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination	1	

		-	rmance
		Stan	dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	1	
(e)	navigate using accepted map-reading techniques	1	
(f)	maintain navigation and fuel log to monitor tracking, ETAs and fuel status	1	
(g)	use appropriate techniques to obtain a positive fix at suitable intervals	1	
(h)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	1	
(i)	perform pre-descent and turning point checks	1	
(j)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	1	
(k)	configure the aircraft as required for the following environmental and operational conditions:		
	(i) turbulence		
	(ii) holding		
	(iii) maximum range		
(I)	maintain awareness of search and rescue times (SARTIME) and revise as required		
(m)	monitor aircraft systems, manage fuel and engine to ensure aircraft is operated to achieve flight plan objectives	2	
NAV.7	Perform diversion procedure		
(a)	make timely decision to divert	1	
(b)	identify an acceptable alternate aerodrome	1	
(c)	select a suitable route and cruising level	1	
(d)	revise flight plan considering weather, terrain, airspace and fuel available	1	
(e)	advise ATS of an intention to divert	1	
8.VAV	Use instrument navigation systems		
(a)	initialise navigation system (as applicable)	2	
(b)	conduct navigation system validity check (as applicable)	2	
(c)	conduct RAIM check if required		
(d)	select, load, check and activate the flight plan (as applicable)	2	
(e)	operate instrument navigation systems correctly	2	
(f)	use instrument navigation systems to assist with navigation	2	
(g)	confirm waypoints and fixes using instrument navigation systems	2	
NAV.9	xecute arrival procedures		
(a)	obtain updated relevant aerodrome information	1	
(b)	determine landing direction and aerodrome suitability	1	
(c)	conduct arrival	1	
(d)	identify and avoid all traffic	1	
(e)	observe local and published noise abatement requirements and curfews	1	
RNE	Radio navigation - enroute		
RNE.1 O	perate and monitor radio navigation aids and systems		
(a)	select and operate navigation aids and systems	1	
(b)	monitor and take appropriate action in relation to the integrity of navigation aid systems information	1	
	Navigate the aircraft using navigation aids and systems		

	T TRAINING sted Flight time: 2.5 hours dual		
Sugge	Steu i light tille. 2.3 hours dual	Perfo	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(b)	intercept tracks to and from navigation aids and systems	1	
(c)	maintain tracks within specified tolerances	1	
(d)	record, assess and revise timings as required	1	
(e)	recognise station passage	1	
CTR C	perate at a controlled aerodrome		
CTR.1	controlled aerodrome pre-flight preparation		
(a)	interpret the extracted information	2	
(b)	identify all special aerodrome procedures	2	
(c)	check current weather forecast and local observations	2	
(d)	identify all relevant radio and navigation aid frequencies	2	
CTR.2 T	axi aircraft at a controlled aerodrome		
(a)	obtain and comply with ATC clearances	2	
(b)	manoeuvre aircraft to holding point as instructed and take appropriate action to avoid other aircraft and obstructions	2	
(c)	recognise ground markings during taxi and take appropriate action	2	
(d)	recognise lighting signals and take appropriate action	2	
(e)	identify airport runway incursion hotspots	2	
(f)	manoeuvre aircraft to avoid jet blast hazard	2	
(g)	request taxi guidance if unsure of position	2	
(h)	use strobes when crossing any runway	2	
CTR.3 P	erform departure from controlled aerodrome		
(a)	receive and correctly read back an airways clearance	2	
(b)	check and ensure runway approach is clear prior to entering a runway	2	
(c)		2	
(d)	comply with ATC departure instructions	2	
. ,	advise ATC as soon as possible if unable to comply with clearance	2	
(f)	contact approach with airborne report or give departure call to tower	2	
(g)	maintain lookout	2	
(h)	avoid wake turbulence	2	
(i)	comply with airways clearances within tracking and altitude tolerances and maintain traffic lookout until clear of the aerodrome control zone	2	
CTR.4 P	erform arrival and landing at a controlled aerodrome		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	2	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	2	
(c)	maintain control area protection tolerances	2	
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	2	
(e)	reconfirm any clearance items when doubt exists	2	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	2	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation	2	
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	2	

	T TRAINING		
Sugge	sted Flight time: 2.5 hours dual		
		Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	2	
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	2	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR	2	
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	2	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	2	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	2	
(o)	recall transponder emergency code and communication failure code	2	
CTA (Operate in controlled airspace		
CTA.1 O	perate aircraft in controlled airspace		
(a)	comply with airways clearance requirements for operating in all classes of airspace, including lead time required for flight plan submission, contents, 'clearance void time', and 'readback' requirement	1	
(b)	apply airways clearance requirements for entering, operating in and departing from CTA and CTR, including details that need to be provided to ATC, and what details to expect from ATC	1	
(c)	maintain control area protection tolerances		
(d)	maintain tracking and altitude tolerances when operating on an airways clearance	1	
(e)	reconfirm any clearance items when doubt exists	1	
(f)	advise ATC as soon as possible if unable to maintain clearance due to adverse weather conditions	1	
(g)	follow ATC requirements for a change of level in CTA, including in an emergency situation	1	
(h)	comply with departure, climb, transition to cruise (levelling out), cruise, change of levels, descent and visual approach procedures in CTA and CTR instructions	1	
(i)	apply separation standards between IFR flights, and IFR and VFR flights in the various classes of CTA	1	
(j)	perform appropriate actions in the event of the loss of radio communication in CTA and CTR	1	
(k)	perform appropriate actions in the event of abnormal operations and emergency procedures in CTA and CTR		
(I)	operate under radar vectoring procedures, including radio procedures and phraseologies	1	
(m)	maximum permissible time interval between ATC transmissions during radar vectoring are not exceeded	1	
(n)	perform appropriate actions in the event of abnormal operations and emergencies	1	
(0)	recall transponder emergency code and communication failure code	1	
	onduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	1	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	1	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	1	
(d)	make flight notification;	1	
(e)	check navigation system database is current;	1	
IR.2 Pe	form an instrument departure		
(a)	prepare aircraft and aircraft systems for departure;	1	
(b)	demonstrate consideration of and planning for non-normal and emergencies during departure;	1	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	1	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	1	
(e)	conduct instrument departure to comply with obstacle clearance requirements.	1	

FLIGHT	TRAINING		
	sted Flight time: 2.5 hours dual		
Jugge		Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
CIR.3 Con	duct a published instrument procedure (all engines)		
(a)	perform a SID or other published departure;	2	
(b) I	maintain assigned SID, including all tracks, headings, altitudes and speeds;	2	
(c) I	perform a cleared departure safely and maintain tracks, headings, altitudes and speeds within specified tolerances.	2	
CIR.4 Con	duct a published instrument procedure (one-engine inoperative)		
(a) 1	for single-engine aircraft instrument endorsements:	2	
	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;	2	
	(ii) time permitting conduct checklists and radio calls.	2	
CIR.6 Pe	erform a descent and arrival under the IFR		
	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome;	2	
(b) I	perform a descent and published arrival procedure to an aerodrome.	2	
CIR.7 Pe	erform a published holding procedure		
(a) (demonstrate adequate knowledge of a published holding procedure;	2	
(b) 1	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	2	
CIR.8 Pe	erform an instrument approach 2D		
(a)	demonstrate adequate knowledge of published procedures associated with an instrument approach;	2	
(b)	perform an instrument approach unique to the instrument approach type;	2	
(c) I	maintain a stabilised flight path within specified tolerances during the approach procedure.	2	
CIR.10 P	Perform visual approach operations (includes visual circling where applicable)		
(a)	demonstrate adequate knowledge of published procedures for the conduct of a visual approach;	2	
	conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path.	2	
IAP2 C	Conduct an instrument approach 2D		
IAP2.1 P	repares for approach		
(a) ı	review latest available information for destination;	2	
(b)	conduct navigation system validity check (as applicable);	2	
(c) (conduct RAIM check if required;		
(d)	select and brief current approach chart for the approach to be flown;	2	
(e)	check and confirm navigation aid required for the approach is serviceable	2	
IAP2.2 C	onducts initial approach		
(a)	set altimeter QNH correctly;	2	
(b) I	manoeuvre aircraft to the holding fix.	2	
IAP2.3 C	onducts a holding pattern		
(a) 1	from the holding fix enter and perform a holding pattern;	2	
(b) 1	fly aircraft in accordance with procedure.	2	
IAP2.4 C	onducts an approach		
(a) I	update and set Altimeter QNH;	2	
(b) a	approach performed correctly and within published tolerances;	2	
(c) I	navigation aid signal integrity monitored during approach;	2	

FLIGHT TRAINING Suggested Flight time: 2.5 hours dual					
		Performance Standard			
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*		
(d)	from the final approach fix to minima aircraft is flown to a stabilised descent profile;	2			
(e)	after establishing visual reference, a visual circling or runway approach is conducted for a landing on the selected runway.	2			
IAP2.5	Conducts a missed approach				
(a)	conditions requiring a missed approach are recognised and missed approach is initiated;	2			
(b)	aircraft is manoeuvred to MAPt;	2			
(c)	missed approach procedure is conducted in accordance with the IAL chart;	2			
(d)	obstacle clearance in IMC or simulated IMC is maintained.	2			

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONSOLIDATION AND/OR REMEDIAL TRAINING					
nce		Perfo Stan	ormance dard		
MOS Reference	Lesson Content (Elements & Performance Criteria)		Achieved		

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME

COMMENTS AND OUTCOME				
		1		
Proceed to next training session?		Yes	No	
Instructor's signature & date	Trainee's signature &	date		

Instrument Rating – Aeroplane Category Rating

LESSON PLAN AND TRAINING RECORD IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

Flight no:	IR (A) 8	Trainee name		
Date:		Instructor:		
Simulator Type:		Aircraft type:	Flight time:	

Lesson Objective

- Undergo a Progress Check with the CFI (or a designated FI) to demonstrate proficiency in IFR operations (Radio navigation, SIDs, Approaches, and Emergency Procedures) in the mentioned areas according to the completion standards.
- Be able to demonstrate good situational awareness, cockpit management and decision making.

PRE-FLIGHT KNOWLEDGE

Long Briefing: .5-1.0 hour (As required)

Content

Briefing

- Reference manoeuvres and their related human factors.
- · Aircraft systems related to IFR operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- · Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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Performance Standard						
3	2	1				
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue				

	T TRAINING sted Flight time: 2.5 hours dual	
		Performance Standard

LESSON PLAN AND TRAINING RECORD IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

		_	*
		ired) Sec
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
C1	Communicating in the aviation environment	2	<
C1.1	Communicating face-to-face	1	
	pronounces words clearly, using an accent that does not cause difficulties in understanding	1	
` '	conveys information in clearly structured sentences without confusion or ambiguity	•	
()	(i) uses an extensive vocabulary to accurately communicate on general and technical topics, without excessive use of jargon, slang or colloquial language	1	
	(ii) speaks fluently without long pauses, repetition or excessive false starts	1	
(b)	responds to communications with actions that demonstrate that the information has been received and understood	1	
(c)	exchanges information clearly in a variety of situations with both expert and non-expert English speakers while giving and receiving timely and appropriate responses	1	
(d)	uses appropriate techniques to validate communications	1	
C1.2	Operational communication using an aeronautical radio		
(a)	maintain effective communication with others on operational matters	1	
(b)	communicate effectively in unfamiliar, stressful or non-standard situations	1	
(c)	apply the phonetic alphabet	1	
(d)	transmit numbers	1	
(e)	make appropriate transmissions using standard aviation phraseology	1	
(f)	use plain English effectively when standard phraseology is inadequate	1	
(g)	receive appropriate responses to transmissions	1	
(h)	respond to transmissions and take appropriate action	1	
(i)	recognise and manage communication errors and misunderstandings effectively	1	
(j)	seek clarification in the time available if a message is unclear or uncertainty exists	1	
(k)	react appropriately to a variety of regional accents	1	
(1)	communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English	1	
C2	Perform pre- and post-flight actions and procedures		
C2.1	Pre-flight actions and procedures		
(a)	complete all required pre-flight administration documentation	1	
(b)	obtain, interpret and apply information contained in the required pre-flight operational documentation, including the following:		
	(i) minimum equipment list (MEL)	1	
	(ii) maintenance release	1	
	(iii) weather forecasts	1	
	(iv) local observations	1	
	(v) Notice to Airmen (NOTAM)	1	
	(vi) Aeronautical Information Package (AIP)	1	
(c)	identify special aerodrome procedures	1	
(d)	identify all relevant radio and navigation aid facilities to be used during the flight (if applicable)	1	
(e)	determine the suitability of the current and forecast weather conditions for the proposed flight	1	
(f)	using the aircraft documents, calculate the following for a given set of environmental and operational conditions:		
	(i) Weight and balance	1	
	(ii) Take-off and landing performance	1	
	(iii) Fuel requirements	1	
	Determine whether the aircraft is serviceable for the proposed flight	1	
C2.2 Per	form pre-flight inspection		

LESSON PLAN AND TRAINING RECORD IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

FLIGHT TRAINING Suggested Flight time: 2.5 hours dual Performance Standard \chieved* Lesson Content (Elements & Performance Criteria) identify and secure equipment and documentation that is required for the flight (a) 1 complete an internal and external check of the aircraft 1 identify all defects or damage to the aircraft report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage 1 ensure all aircraft locking and securing devices, covers and bungs are removed and stowed securely certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as 1 Complete and certify the daily inspection C2.3 Post-flight actions and procedures (a) shut down aircraft 1 1 conduct post-flight inspection and secure the aircraft (if applicable) (b) complete all required post-flight administration documentation 1 Operate aeronautical radio C3.1 Operate Radio equipment (a) confirm serviceability of radio equipment 1 (b) conduct transmission and receipt of radio communications using appropriate procedures and phraseology 1 (c) maintain a listening watch and respond appropriately to applicable transmissions 1 conduct appropriate emergency and urgency transmissions 1 IFF.1 Determine and monitor the serviceability of flight instruments and instrument power sources (a) determine serviceability of flight and navigational instruments 1 perform functional checks of flight and navigational instruments where applicable prior to take-off 1 monitor flight instrument and instrument power sources and react to any warnings, unserviceability or erroneous indications IFF.2 Perform manoeuvres using full instrument panel (a) Interpret flight instrument indications and apply procedures and techniques to achieve and maintain a specified flight path using the aircraft's full instrument panel set and maintain power and attitude by reference to the full instrument panel to achieve the following: (i) straight and level performance during normal cruise within the flight tolerances 1 1 (ii) nominated climb performance within the flight tolerances (iii) descent performance within the flight tolerances 1 set and maintain power and attitude by reference to the full instrument panel to establish a rate 1 turn onto a nominated heading within the flight tolerances IFF.3 Recover from upset situations and unusual attitudes (a) correctly identify upset situations and unusual attitudes under simulated IMC 1 recover to controlled flight from upset situations and unusual attitudes under simulated IMC from any combination of (b) the following aircraft states: 1 (i) High and low-nose attitudes (ii) varying angles of bank 1 1 (iii) various power settings

(iv) various aircraft configurations

Limited instrument panel manoeuvres

(v) unbalanced flight

IFL

1

1

IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

	T TRAINING sted Flight time: 2.5 hours dual		
Sugge	ested Flight time: 2.5 hours dual		ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
IFL.1 Re	ecognise failure of attitude indicator and stabilised heading indicator		
(a)	monitor flight instruments and instrument power sources and recognise warning indicators or erroneous instrument indications	1	
(b)	transition from a full instrument panel to a limited instrument panel	1	
FL.2 Pe	erform manoeuvres – limited panel		
(a)	interpret and respond appropriately to instrument indications	1	
(b)	apply power and attitude settings to achieve straight and level performance during:		
	(i) normal cruise	1	
	(ii) approach configuration with flaps (when fitted) and undercarriage down	1	
(c)	apply power and attitude settings to achieve:		
	(i) nominated climb performance	1	
	(ii) nominated descent performance	1	
	(iii) during climb, descent and straight and level flight, rate 1 turns onto a nominated heading	1	
(d)	trim (as applicable) and balance aircraft	1	
(e)	establish level flight at a nominated altitude, from a climb or descent during straight or turning flight	1	
FL.3 Red	cover from upset situations and unusual attitudes – limited panel		
(a)	correctly identify upset situations and unusual attitudes under simulated IMC	1	
(b)	recover to stabilised straight and level flight using approved techniques from upset situations and unusual attitudes under simulated IMC from any combination of the following aircraft states:		
	(i) high and low-nose attitudes	1	
	(ii) varying angles of bank	1	
	(iii) various power settings	1	
	(iv) various aircraft configurations	1	
	(v) unbalanced flight	1	
NTS1	Non-technical skills 1		
(a)		1	
(h)	and terrain maintain radio listening watch and interpret transmissions to determine traffic location and intentions	1	
(c)	perform airspace-cleared procedure before commencing any manoeuvre	1	
. ,	Maintain effective communications and interpersonal relationships		
(a)	establish and maintain effective and efficient communications and interpersonal relationships with all stakeholders to ensure the optimum outcome of the flight	1	
(b)	define and explain objectives to stakeholders	1	
(c)	demonstrate a level of assertiveness that ensures the optimum completion of the flight	1	
NTS2	Non-technical skills 2		
NTS2.1	Recognise and manage threats		
(a)	identify relevant environmental or operational threats that are likely to affect the safety of the flight	1	
(b)	identify when competing priorities and demands may represent a threat to the safety of the flight	1	
	develop and includes at accordance accordance to the same at	4	
(c)	develop and implement countermeasures to manage threats	1	

IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

_	T TRAINING		
Sugge	sted Flight time: 2.5 hours dual	Perfo Stan	ormance dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
1	epare documents and flight plan		
· · · ·	select and prepare appropriate navigation charts for the intended flight	1	
	select a suitable route and altitude considering weather, terrain, airspace, NOTAMs and alternate landing areas	1	
· · · · ·	obtain and interpret meteorological forecasts, NOTAMs and operational information applicable to the planned flight determine whether the planned flight can be conducted under the applicable flight rules and taking account of the	1	
	beginning and end of daylight times		
	calculate and document critical point (CP) and point of no return (PNR) locations		
	complete a flight plan to the planned destination and alternates	1	
-	lodge suitable flight notification for search and rescue (SAR) purposes		
	emply with airspace procedures while navigating		
` , ,	identify airspace restrictions and dimensions applicable to the flight	1	
(b)	obtain and comply with air traffic clearances, if applicable	1	
(c)	comply with airspace procedures applicable to the airspace classification throughout the flight	1	
NAV.3 Co	enduct departure procedures		
(a)	organise cockpit to ensure charts, documentation and navigational calculator are accessible from the control seat	1	
(b)	comply with all departure procedures, clearances and noise abatement requirements	1	
NAV.4 Na	vigate aircraft enroute		
(a)	maintain a navigation cycle that ensures accurate tracking, and apply track correctional techniques to re-establish track prior to waypoint or destination	1	
(b)	maintain heading to achieve a nominated track	1	
(c)	maintain and revise ETAs (±2 minutes) for waypoint or destination		
(d)	maintain track in accordance with published flight path tolerances in controlled airspace	1	
(e)	navigate using accepted map-reading techniques	1	
(f)	maintain awareness of route, enroute terrain, enroute and destination weather, and react appropriately to changing weather conditions	1	
(g)	perform pre-descent and turning point checks	1	
(h)	maintain appropriate radio communication and listening watch with ATS and other aircraft if radio is fitted and used	1	
NAV.7	Perform diversion procedure		
(a)	make timely decision to divert	1	
(b)	identify an acceptable alternate aerodrome	1	
(c)	select a suitable route and cruising level	1	
(d)	revise flight plan considering weather, terrain, airspace and fuel available	1	
(e)	advise ATS of an intention to divert	1	
NAV.8	Jse instrument navigation systems		
(a)	initialise navigation system (as applicable)	1	
(b)	conduct navigation system validity check (as applicable)		
(c)	conduct RAIM check if required		
(d)	select, load, check and activate the flight plan (as applicable)	1	
(e)	operate instrument navigation systems correctly	1	
` '	use instrument navigation systems to assist with navigation	1	
	confirm waypoints and fixes using instrument navigation systems	1	

IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

	sted Flight time: 2.5 hours dual	Perf	ormance
			dard
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
NAV.9	Execute arrival procedures		
(a)	obtain updated relevant aerodrome information	1	
(b)	determine landing direction and aerodrome suitability	1	
(c)	conduct arrival	1	
(d)	identify and avoid all traffic	1	
(e)	observe local and published noise abatement requirements and curfews	1	
RNE	Radio navigation - enroute		
RNE.1 O	perate and monitor radio navigation aids and systems		
(a)	select and operate navigation aids and systems	1	
(b)	monitor and take appropriate action in relation to the integrity of navigation aid systems information	1	
RNE.2	lavigate the aircraft using navigation aids and systems		
(a)	determine aircraft position fix solely with reference to navigation aids and systems	1	
(b)	intercept tracks to and from navigation aids and systems	1	
(c)	maintain tracks within specified tolerances	1	
(d)	record, assess and revise timings as required	1	
(e)	recognise station passage	1	
CIR (Conduct an IFR flight		
CIR.1 Pla	n a flight under the IFR		
(a)	determine aircraft is properly equipped and serviceable for IFR flight;	1	
(b)	possess and use all the required documentation that is current to plan an IFR flight;	1	
(c)	prepare an accurate flight plan that ensures all applicable operational requirements are met;	1	
(d)	make flight notification;	1	
(e)	check navigation system database is current;	1	
	rform an instrument departure		
(a)	prepare aircraft and aircraft systems for departure;	1	
(b)	demonstrate consideration of and planning for non-normal and emergencies during departure;	1	
(c)	demonstrate adequate knowledge of both of published and cleared and non-published and non-cleared instrument departures;	1	
(d)	establish lowest take-off minima required considering aircraft performance, aerodrome, available instrument approaches and environmental conditions;	1	
(e)	L 'Y	1	
IR.3 Co	nduct a published instrument procedure (all engines)		
(a)	perform a SID or other published departure;	1	
(b)	maintain assigned SID, including all tracks, headings, altitudes and speeds;	1	
(c)	perform a cleared departure safely and maintain tracks, headings, altitudes and speeds within specified tolerances.	1	
CIR.4 Co	nduct a published instrument procedure (one-engine inoperative)		
(a)	for single-engine aircraft instrument endorsements:	1	
(4)			
(α)	(i) following engine failure establish optimum flight path and manoeuvres aircraft towards most suitable terrain considering conditions;(ii) time permitting conduct checklists and radio calls.	1	

IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

Sugge	T TRAINING sted Flight time: 2.5 hours dual		
		Performance Standard	
	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(a)	demonstrate adequate knowledge of the published procedures for the conduct of a descent and arrival to an aerodrome:	1	
(b)	perform a descent and published arrival procedure to an aerodrome.	1	
CIR.7 P	erform a published holding procedure		
(a)	demonstrate adequate knowledge of a published holding procedure;	1	
(b)	track aircraft to the holding fix and performs holding procedure (entry, full holding pattern and exit) safely.	1	
CIR.8 P	erform an instrument approach 2D		
(a)	demonstrate adequate knowledge of published procedures associated with an instrument approach;	1	
(b)	perform an instrument approach unique to the instrument approach type;	1	
(c)	maintain a stabilised flight path within specified tolerances during the approach procedure.	1	
CIR.10	Perform visual approach operations (includes visual circling where applicable)		
(a)	demonstrate adequate knowledge of published procedures for the conduct of a visual approach;	1	
(b)	conduct a visual circling approach requiring at least a 90° change of heading to establish the aircraft onto the final approach leg to the specified runway whilst maintaining a stabilised flight path.	1	
IAP2	Conduct an instrument approach 2D		
IAP2.1 F	Prepares for approach		
(a)	review latest available information for destination;	1	
(b)	conduct navigation system validity check (as applicable);		
(c)	conduct RAIM check if required;		
(d)	select and brief current approach chart for the approach to be flown;	1	
(e)	check and confirm navigation aid required for the approach is serviceable	1	
IAP2.2 (Conducts initial approach		
(a)	set altimeter QNH correctly;	1	
(b)	manoeuvre aircraft to the holding fix.	1	
IAP2.3 (Conducts a holding pattern		
(a)	from the holding fix enter and perform a holding pattern;	1	
(b)	fly aircraft in accordance with procedure.	1	
IAP2.4 (Conducts an approach		
(a)	update and set Altimeter QNH;	1	
(b)	approach performed correctly and within published tolerances;	1	
(c)	navigation aid signal integrity monitored during approach;	1	
(d)	from the final approach fix to minima aircraft is flown to a stabilised descent profile;	1	
(e)	after establishing visual reference, a visual circling or runway approach is conducted for a landing on the selected runway.	1	
IAP2.5	Conducts a missed approach		
(a)	conditions requiring a missed approach are recognised and missed approach is initiated;	1	
(b)	aircraft is manoeuvred to MAPt;	1	
(c)	missed approach procedure is conducted in accordance with the IAL chart;	1	
(d)	obstacle clearance in IMC or simulated IMC is maintained.	1	

*Enter the performance standard achieved if it is different to that required

LESSON PLAN AND TRAINING RECORD IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

CONS	CONSOLIDATION AND/OR REMEDIAL TRAINING				
eou			Performance Standard		
MOS Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved		

\neg	ВΕ		_	NG
ᇆ	ВΓ	KIE	ГΙ	NG

Content

- Training review and outcomes achieved against lesson objectives and the competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

	COMMENTS AND OUTCOME		
Proceed to next training session?	Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD IR (A) 8: PROGRESS CHECK FOR INSTRUMENT FLIGHT PHASE



Civil Aviation Authority of the Philippines flying schools guidance material for single pilot OPERATIONS UNDER PCAR 3.2: TRAINING FOR FLIGHT CREW LICENSES AND RATINGS

ANNEX D

Flight Instructor Rating Progress **Checks and Grading Sheets**

LESSON PLAN AND TRAINING RECORD FI (A) 1: PRE-FLIGHT PROCEDURES

Flight no:	FI (A) 1	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors related to each of the elements for the pre-flight lesson.
- Be able to demonstrate good situational awareness, cockpit management and as pilot-in-command.

PRE-FLIG	HT K	NOWL	.EDC	GE
Briefing:	5-1.0	hour (Δςι	required)

Content

Briefing

- Professionalism and competent performance as a commercial pilot- expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- · Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING Suggested flight time: 1.5 hours DUAL	
Ref ere nce	Performance Standard

LESSON PLAN AND TRAINING RECORD FI (A) 1: PRE-FLIGHT PROCEDURES

	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
FIR1.1	Plan training	<u> </u>	4
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
(e)	Apply threat and error management	2	
(f)	Select appropriate training resources and confirm availability and serviceability of required facilities, equipment, training aids, reference material and the airworthiness of the training aircraft or device	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Establish a learning environment and motivation that suits the trainee's needs	2	
(b)	Clearly state training objectives that are relevant, practical and measurable	2	
(c)	Conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge	2	
(d)	Apply appropriate instructional techniques; with instruction to the point using clear and deliberate speech	2	
(e)	Deliver technical knowledge accurately and clearly to required standard	2	
(f)	Provide opportunities for trainee participation and practice	2	
(g)	Discuss threat and error management issues and ensure application is understood by the trainee	2	
(h)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
FIR1.4	Conduct airborne training		
(a)	Demonstrates the task:		
	Make clear, concise and systematic explanations	2	
(b)	Direct the task		
	Provide instructions in a clear, concise and timely manner	2	
(c)	Monitor the task (unassisted practice):		
	Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	Note training events for debriefing and assessment	2	
FIR1.5	Conduct post-fight briefing		
	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2	
(b)	Brief the trainee on the details of the next training exercises	2	
FIR2	Range of variables		
(a)	Activities are performed in accordance with published procedures	2	
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1	
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING	
Content	

LESSON PLAN AND TRAINING RECORD FI (A) 1: PRE-FLIGHT PROCEDURES

DEBRIEFING

Content

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME				
		T		
Proceed to next training session?		Yes	No	
Instructor's signature 9 date	Trainas's signature 9	data		
Instructor's signature & date	Trainee's signature 8	uale		

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LESSON PLAN AND TRAINING RECORD FI (A) 2: AERODROME OPERATIONS

Flight no:	FI (A) 2	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain runway/taxiway signs, markings, and lighting, engine starting, taxiing, and before take-off check from an instructional standpoint
- Apply corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- · General handling sequences and circuit operations

Pre-flight briefing

- · Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- · Reinforce significant airmanship points

Pre-flight knowledge components complete: In

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

	IT TRAINING ested flight time: 1.5 hours DUAL		
		Perfo Stand	rmance lard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*

	IT TRAINING ested flight time: 1.5 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
(e)	Select appropriate training resources and confirm availability and serviceability of required facilities, equipment, training aids, reference material and the airworthiness of the training aircraft or device	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Apply appropriate instructional techniques; with instruction to the point using clear and deliberate speech	2	
(b)	Deliver technical knowledge accurately and clearly to required standard	2	
(c)	Provide opportunities for trainee participation and practice	2	
(d)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
FIR1.4	Conduct airborne training		
(a)	Demonstrates the task:		
	Make clear, concise and systematic explanations	2	
(b)	Direct the task		
	Provide instructions in a clear, concise and timely manner	2	
(c)	Monitor the task (unassisted practice):		
	Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	Note training events for debriefing and assessment	2	
FIR1.5	Conduct post-fight briefing		
(a)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2	
(b)	Brief the trainee on the details of the next training exercises	2	
FIR2	Range of variables		
(a)	Activities are performed in accordance with published procedures	2	
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1	
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

LESSON PLAN AND TRAINING RECORD FI (A) 2: AERODROME OPERATIONS

COMMENTS AND OUTCOME			
Proceed to next training session?		Yes	No
		1.00	
Instructor's signature & date	Trainee's signature &	date	

LESSON PLAN AND TRAINING RECORD FI (A) 3: TAKE-OFF, GO-AROUND, LANDING

Flight no:	FI (A) 3	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain traffic patterns, normal and crosswind take-off, and landings, forwards slip to a landing, and go-around procedures from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors
- Be able to demonstrate good situational awareness, cockpit management, and decision making in the right seat.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- · General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

	T TRAINING sted flight time: 3.0 hours DUAL	
Ref ere nce		Performance Standard

LESSON PLAN AND TRAINING RECORD FI (A) 3: TAKE-OFF, GO-AROUND, LANDING

		red	*ed*
	Lacasa Contant (5)	Required	Achieved
FID4.4	Lesson Content (Elements & Performance Criteria)	Ä	Ă
	Plan training	_	
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Use selected training aids to illustrate and enhance explanations	2	
(b)	Deliver technical knowledge accurately and clearly to required standard	2	
(c)	Provide opportunities for trainee participation and practice	2	
(d)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(e)	Provide feedback on trainee performance	2	
(f)	Develop trainee self-assessment skills	2	
(g)	Complete training objectives in the time available	2	
(h)	Ensure all training is conducted effectively	1	
FIR1.3	Conduct pre-flight briefing		
(a)	Confirm the trainee is mentally and physically prepared for flight training	1	
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight	1	
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
FIR1.4	Conduct airborne training		
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	
(b)	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task		
	(i) Implement handover and takeover procedures for control of the aircraft	2	
	(ii) Provide direction appropriate to the trainee's progress	2	
	(iii) Provide sufficient practice for the trainee to achieve the task	2	
(e)	Monitor the task (unassisted practice):		
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2	
	(iii) Ensure remedial training is effective such that errors are corrected	2	
	(iv) Encourage the trainee to develop self-assessment skills	1	
	(v) Note training events for debriefing and assessment	2	
FIR1.5	Conduct post-fight briefing		
(a)	Encourage the trainee to self-assess performance against the performance criteria	2	
(b)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2	
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2	

LESSON PLAN AND TRAINING RECORD FI (A) 3: TAKE-OFF, GO-AROUND, LANDING

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
(d)	Brief the trainee on the details of the next training exercises	2	
FIR1.6	Complete post-training administrations		
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2	
FIR2	Range of variables		
(a)	Activities are performed in accordance with published procedures	2	
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1	
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

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1	4-1	IFF	12

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME			
Proceed to next training session?		Yes	No
	ı		

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD FI (A) 4: FUNDAMENTALS OF FLIGHT

Flight no:	FI (A) 4	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- · General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- Check essential knowledge
- Reinforce threat & error management
- · Reinforce significant airmanship points

Pre-flight knowledge components complete:	Instructor's signature & date
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Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Performance Standard	
Reference	Lesson Content (Elements & Performance Criteria)	Required	

	IT TRAINING		
Sugge	ested flight time: 3.0 hours DUAL	Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Clearly state training objectives that are relevant, practical and measurable	2	
(b)	Conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge	2	
(c)	Present and link new knowledge to previous knowledge	2	
(d)	Use selected training aids to illustrate and enhance explanations	2	
(e)	Deliver technical knowledge accurately and clearly to required standard	2	
(f)	Provide opportunities for trainee participation and practice	2	
(g)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(h)	Provide feedback on trainee performance	2	
(i)	Develop trainee self-assessment skills	2	
(j)	Complete training objectives in the time available	2	
(k)	Ensure all training is conducted effectively	1	
	Conduct pre-flight briefing		
(a)	Confirm the trainee is mentally and physically prepared for flight training	1	
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight	1	
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
FIR1.4	Conduct airborne training		
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	
	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task		
	(i) Implement handover and takeover procedures for control of the aircraft	2	
	(ii) Provide direction appropriate to the trainee's progress	2	
	(iii) Provide sufficient practice for the trainee to achieve the task	2	
(e)	Monitor the task (unassisted practice):		
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2	
	(iii) Ensure remedial training is effective such that errors are corrected	2	

LESSON PLAN AND TRAINING RECORD FI (A) 4: FUNDAMENTALS OF FLIGHT

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(iv) Encourage the trainee to develop self-assessment skills	1	
	(v) Note training events for debriefing and assessment	2	
FIR1.5	Conduct post-fight briefing		
(a)	Encourage the trainee to self-assess performance against the performance criteria	2	
(b)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2	
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2	
(d)	Brief the trainee on the details of the next training exercises	2	
FIR1.6	Complete post-training administrations		
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2	
FIR2	Range of variables		
(a)	Activities are performed in accordance with published procedures	2	
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1	
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Due and to want training a sociou?	V	No
Proceed to next training session?	Yes	No

LESSON PLAN AND TRAINING RECORD FI (A) 4: FUNDAMENTALS OF FLIGHT

Instructor's signature & date	Trainee's signature & date

LESSON PLAN AND TRAINING RECORD FI (A) 5: PERFORMANCE MANEUVERS

Flight no:	FI (A) 5	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard					
3	2	1			
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue			

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*

			ormance
Reference	Lesson Content (Elements & Performance Criteria)	Rednired Stan	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
IR1.2	Conduct aeronautical knowledge training		
(a)	Present and link new knowledge to previous knowledge	2	
(b)	Use selected training aids to illustrate and enhance explanations	2	
(c)	Deliver technical knowledge accurately and clearly to required standard	2	
(d)	Provide opportunities for trainee participation and practice	2	
(e)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(f)	Provide feedback on trainee performance	2	
(g)	Develop trainee self-assessment skills	2	
(h)	Complete training objectives in the time available	2	
(i)	Ensure all training is conducted effectively	1	
IR1.3	Conduct pre-flight briefing		
(a)	Confirm the trainee is mentally and physically prepared for flight training	1	
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight	1	
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
IR1.4	Conduct airborne training		
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	
(b)	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Make coordinated control inputs without abrupt maneuvering, using accepted techniques	2	
	(iv) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task		
	(i) Implement handover and takeover procedures for control of the aircraft	2	
	(ii) Provide direction appropriate to the trainee's progress	2	<u> </u>
	(iii) Provide sufficient practice for the trainee to achieve the task	2	
(e)	Monitor the task (unassisted practice):		
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2	

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	(v) Note training events for debriefing and assessment	2	
FIR1.5	Conduct post-fight briefing		
(a)	Encourage the trainee to self-assess performance against the performance criteria	2	
(b)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2	
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2	
(d)	Brief the trainee on the details of the next training exercises	2	
FIR1.6	Complete post-training administrations		
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2	
FIR2	Range of variables		
(a)	Activities are performed in accordance with published procedures	2	
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1	
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1	

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

Yes	No
	Yes

Instructor's signature & date	Trainee's signature & date
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LESSON PLAN AND TRAINING RECORD FI (A) 5: PERFORMANCE MANEUVERS		

LESSON PLAN AND TRAINING RECORD FI (A) 6: GROUND REFERENCE MANEUVERS

Flight no:	FI (A) 6	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*

			ormance
Reference	Lesson Content (Elements & Performance Criteria)	Required Stand	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Use selected training aids to illustrate and enhance explanations	2	
(b)	Deliver technical knowledge accurately and clearly to required standard	2	
(c)	Provide opportunities for trainee participation and practice	2	
(d)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(e)	Provide feedback on trainee performance	2	
(f)	Develop trainee self-assessment skills	2	
(g)	Complete training objectives in the time available	2	
(h)	Ensure all training is conducted effectively	1	
FIR1.3	Conduct pre-flight briefing		
(a)	Confirm the trainee is mentally and physically prepared for flight training	1	
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight	1	
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
	Conduct airborne training		
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	
(b)	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Make coordinated control inputs without abrupt maneuvering, using accepted techniques	2	
	(iv) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task	_	
	(i) Implement handover and takeover procedures for control of the aircraft	2	
	(ii) Provide direction appropriate to the trainee's progress	2	
()	(iii) Provide sufficient practice for the trainee to achieve the task	2	
(e)	Monitor the task (unassisted practice):	_	
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2	
	(iii) Ensure remedial training is effective such that errors are corrected	2	
	(iv) Encourage the trainee to develop self-assessment skills	1	1

LESSON PLAN AND TRAINING RECORD FI (A) 6: GROUND REFERENCE MANEUVERS

	IT TRAINING ested flight time: 3.0 hours DUAL			
			Performance Standard	
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
FIR1.5	Conduct post-fight briefing			
(a)	Encourage the trainee to self-assess performance against the performance criteria	2		
(b)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2		
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2		
(d)	Brief the trainee on the details of the next training exercises	2		
FIR1.6	Complete post-training administrations			
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2		
FIR2	Range of variables			
(a)	Activities are performed in accordance with published procedures	2		
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1		
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1		

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

COMMENTS AND OUTCOME		
	Γ	
Proceed to next training session?	Yes	No

LESSON PLAN AND TRAINING RECORD FI (A) 6: GROUND REFERENCE MANEUVERS	
Г	Т

LESSON PLAN AND TRAINING RECORD FI (A) 7: SLOW FLIGHT, STALLS, AND SPINS

Flight no:	FI (A) 7	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard				
3	2	1		
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue		

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*

	IT TRAINING ested flight time: 3.0 hours DUAL		
		Perfo Stand	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Use selected training aids to illustrate and enhance explanations	2	
(b)	Deliver technical knowledge accurately and clearly to required standard	2	
(c)	Provide opportunities for trainee participation and practice	2	
(d)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(e)	Provide feedback on trainee performance	2	
(f)	Develop trainee self-assessment skills	2	
(g)	Complete training objectives in the time available	2	
	Ensure all training is conducted effectively	1	
	Conduct pre-flight briefing		
(a) (b)	Confirm the trainee is mentally and physically prepared for flight training Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee	1	
. ,	during the flight		
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
	Conduct airborne training Manage reasonabilities as pilet in command for the sefe engaging of the girareft.	1	
	Manage responsibilities as pilot in command for the safe operation of the aircraft Apply flying techniques and procedures to the competency standards appointed for the qualification being trained for	2	
(b)	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat		
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task		
	(i) Implement handover and takeover procedures for control of the aircraft	2	
	(ii) Provide direction appropriate to the trainee's progress	2	
	(iii) Provide sufficient practice for the trainee to achieve the task	2	
	(iv) Intervene only to the extent necessary to assist the trainee's progress or to maintain safety.	2	
(e)	Monitor the task (unassisted practice):		
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2	
	(iii) Ensure remedial training is effective such that errors are corrected	2	
	(iv) Encourage the trainee to develop self-assessment skills	1	
	(v) Note training events for debriefing and assessment	2	

LESSON PLAN AND TRAINING RECORD FI (A) 7: SLOW FLIGHT, STALLS, AND SPINS

FLIGHT TRAINING Suggested flight time: 3.0 hours DUAL				
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
(f)	Intervene to recover the aircraft if the trainee does not manage to undesired aircraft state	2		
(g)	Develop the trainee's responsibility through the application of human factors principles for threat and error management	2		
FIR1.5	Conduct post-fight briefing			
(a)	(a) Encourage the trainee to self-assess performance against the performance criteria			
(b)	(b) Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria			
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2		
(d)	Discuss threat and error management issues encountered during the flight	2		
(e)	Brief the trainee on the details of the next training exercises	2		
FIR1.6	Complete post-training administrations			
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2		
FIR2	Range of variables			
(a)	(a) Activities are performed in accordance with published procedures			
(b)	(b) Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device			
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1		

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No
Proceed to next training session?	Yes	NO

LESSON PLAN AND TRAINING RECORD FI (A) 7: SLOW FLIGHT, STALLS, AND SPINS

Instructor's signature & date	Trainee's signature & date		

LESSON PLAN AND TRAINING RECORD FI (A) 8: BASIC INSTRUMENT MANEUVERS

Flight no:	FI (A) 8	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard				
3	1			
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue	Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision	Achieves competency to the standard required for qualification issue		

FLIGHT TRAINING Suggested flight time: 3.0 hours DUAL					
		Perfo Stan	ormance dard		
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*		

	IT TRAINING ested flight time: 3.0 hours DUAL		
Sugge	sted hight time. 3.0 hours DOAL	Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
FIR1.2	Conduct aeronautical knowledge training		
(a)	Use selected training aids to illustrate and enhance explanations	2	
(b)	Deliver technical knowledge accurately and clearly to required standard	2	
(c)	Provide opportunities for trainee participation and practice	2	
(d)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(e)	Provide feedback on trainee performance	2	
(f)	Develop trainee self-assessment skills	2	
(g)	Complete training objectives in the time available	2	
(h)	Ensure all training is conducted effectively	1	
FIR1.3	Conduct pre-flight briefing		
(a)	Confirm the trainee is mentally and physically prepared for flight training	1	
(b)	Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight	1	
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
(f)	Discuss the environmental conditions and their suitability for the training exercises	2	
	Conduct airborne training		
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	
	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:	2	
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Make coordinated control inputs without abrupt maneuvering, using accepted techniques	1	
(4)	(iv) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot Direct the task	'	
(d)		2	
	(i) Implement handover and takeover procedures for control of the aircraft (ii) Provide direction appropriate to the trainee's progress	2	
	(ii) Provide direction appropriate to the trainee's progress (iii) Provide sufficient practice for the trainee to achieve the task	2	
(0)	Monitor the task (unassisted practice):		
(e)	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2	
		2	
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee (iii) Ensure remedial training is effective such that errors are corrected	2	
	(iii) Ensure remedial training is effective such that errors are corrected (iv) Encourage the trainee to develop self-assessment skills	1	

LESSON PLAN AND TRAINING RECORD FI (A) 8: BASIC INSTRUMENT MANEUVERS

_	FLIGHT TRAINING Suggested flight time: 3.0 hours DUAL				
Reference	Lesson Content (Elements & Performance Criteria)		Achieved*		
	(v) Note training events for debriefing and assessment	2			
FIR1.5	Conduct post-fight briefing				
(a)	Encourage the trainee to self-assess performance against the performance criteria	2			
(b)	(b) Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria				
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2			
(d)	Brief the trainee on the details of the next training exercises	2			
FIR1.6	Complete post-training administrations				
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2			
FIR2 Range of variables					
(a)	(a) Activities are performed in accordance with published procedures				
(b)	(b) Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device				
(c)					

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- Training record completion and sign off

COMMENTS AND OUTCOME		
Proceed to next training session?	Yes	No

Instructor's signature & date	Trainee's signature & date
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1	LESSON PLAN AND TRAINING RECORD FI (A) 8: BASIC INSTRUMENT MANEUVERS	

LESSON PLAN AND TRAINING RECORD FI (A) 9: EMERGENCY OPERATIONS

Flight no:	FI (A) 9	Trainee name:		
Date:		Instructor:		
Aircraft registration:		Aircraft type:	Flight time:	

Lesson Objective

- Gain proficiency in the practical instruction of the knowledge and common errors to each of the elements for the pre-flight lesson.
- Become familiar with flight operations and visual perspective from the right seat.
- Demonstrate and simultaneously explain the fundamentals of flight from an instructional standpoint.
- Apply the appropriate corrective action and response to simulated errors.

PRE-FLIGHT KNOWLEDGE

Briefing: .5-1.0 hour (As required)

Content

Briefing

- Professionalism and competent performance as a flight instructor– expectations, flight tolerances applicable to the professional level
- General handling sequences and circuit operations

Pre-flight briefing

- Review flight sequences, what to expect, see & do
- · Check essential knowledge
- Reinforce threat & error management
- · Reinforce significant airmanship points

Pre-flight knowledge components complete:

Performance Standard					
3	2	1			
Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue		Achieves competency to the standard required for qualification issue			

	IT TRAINING ested flight time: 4.0 hours DUAL		
		Perfo Stan	ormance dard
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*

		Perfo	ormance
		Stan	
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*
FIR1.1	Plan training		
(a)	Confirm trainee readiness for proposed training through review of training records to confirm their competency status;	2	
(b)	Identify training objectives based on performance criteria in the manual of standards and operator's training plans;	2	
(c)	Identify the knowledge for the units and elements relevant to the lesson and confirm trainee understanding	2	
(d)	Select appropriate training methods to facilitate training objectives and knowledge transfer	2	
(e)	Apply threat and error management		
(f)	Identify potential threats and errors in a flight lesson, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and consider mitigators		
FIR1.2	Conduct aeronautical knowledge training		
(a)	Clearly state training objectives that are relevant, practical and measurable		
(b)	Conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge	2	
(c)	Present and link new knowledge to previous knowledge	2	
(d)	Deliver technical knowledge accurately and clearly to required standard	2	
(e)	Provide opportunities for trainee participation and practice	2	
(f)	Discuss threat and error management issues and ensure application is understood by the trainee	2	
(g)	Confirm training objectives have been achieved by questioning, review and other suitable methods	1	
(h)	Provide feedback on trainee performance	2	
(i)	Develop trainee self-assessment skills	2	
(j)	Complete training objectives in the time available	2	
(k)	Ensure all training is conducted effectively	1	
	Conduct pre-flight briefing Confirm the trainer is montally and physically proposed for flight training	1	
(a) (b)	Confirm the trainee is mentally and physically prepared for flight training Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee	1	
(5)	during the flight		
(c)	Link previous training to the current exercise	2	
(d)	Brief the trainee on how the flight will be conducted to meet the training outcomes	1	
(e)	Confirm the trainee's ability to recall the training outcomes, knowledge, handling techniques	2	
(f)	Discuss the environmental conditions and their suitability for the training exercises	2	-
(g)	Discuss threat and error management issues applicable to the proposed flight and confirm the trainee understands his or her responsibility for managing those issues(airmanship)	2	
, ,	Conduct airborne training	_	
(a)	Manage responsibilities as pilot in command for the safe operation of the aircraft	1	-
(b)	Apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat	2	
(c)	Demonstrates the task:		
	(i) Introduce tasks in manageable portions without trainee overload	3	
	(ii) Coordinate demonstration with explanation of maneuver	2	
	(iii) Demonstrate the maneuver to the competency standards specified in this manual for a commercial pilot	1	
(d)	Direct the task		
	(i) Implement handover and takeover procedures for control of the aircraft	2	1

	IT TRAINING ested flight time: 4.0 hours DUAL			
			Performance Standard	
Reference	Lesson Content (Elements & Performance Criteria)	Required	Achieved*	
	(iii) Provide sufficient practice for the trainee to achieve the task	2		
	(iv) Intervene only to the extent necessary to assist the trainee's progress or to maintain safety.	2		
(e)	Monitor the task (unassisted practice):			
	(i) Identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard	2		
	(ii) Provide and vary additional instruction and demonstration as necessary to assist trainee	2		
	(iii) Ensure remedial training is effective such that errors are corrected	2		
	(iv) Encourage the trainee to develop self-assessment skills	1		
	(v) Note training events for debriefing and assessment	2		
(f)	Intervene to recover the aircraft if the trainee does not manage to undesired aircraft state	2		
(g)	Develop the trainee's responsibility through the application of human factors principles for threat and error management	2		
FIR1.5	Conduct post-fight briefing			
(a)	Encourage the trainee to self-assess performance against the performance criteria	2		
(b)	Describes clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance citeria	2		
(c)	Identify any deficiencies in performance and suggest remedial actions and training	2		
(d)	Discuss threat and error management issues encountered during the flight	2		
(e)	Brief the trainee on the details of the next training exercises	2		
FIR1.6	Complete post-training administrations			
(a)	Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercises	2		
(b)	Complete administration procedures required for issue of an endorsement	2		
(c)	Inform relevant staff of the trainee's performance and results where required	2		
(d)	Review effectiveness of training and identify any adjustments to deliver, presentation and content for improvement, and discuss with appropriate stakeholders	2		
FIR2	Range of variables			
(a)	Activities are performed in accordance with published procedures	2		
(b)	Flight training includes training for the issue of a flight crew license, rating or endorsement using suitable training aircraft or approved flight simulation training device	1		
(c)	The training is delivered in accordance with appropriate and documented lesson plan	1		

*Enter the performance standard achieved if it is different to that required

Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson.

DEBRIEFING

- Training review and outcomes achieved against lesson objectives and competency standards
- Recommendations for next lesson (including any carryover/remedial training)
- Trainee preparation for next lesson
- · Training record completion and sign off

LESSON PLAN AND TRAINING RECORD FI (A) 9: EMERGENCY OPERATIONS

COMMENTS AND OUTCOME				
Proceed to next training session?		Yes	No	
		1	<u>'</u>	
Instructor's signature & date	Trainee's signature & date			