



## **Andrewsfield Aviation Ltd & Naples Air Centre Training Manual – LAPL & PPL**

- The Training Plan
- Briefings and Air Exercises
- Theoretical Knowledge

## 1 The Training Plan

### 1.1 The Aim of the Course

The aim of the LAPL(A) course is to train the student pilot to act as PIC under the Visual Flight Rules in single-engine piston aeroplanes (land) or TMGs with a maximum certificated mass of 2000kg or less and a maximum of three passengers such that there are never more than four persons on board the aircraft.

The aim of the PPL course is to train the student pilot to act as PIC or co-pilot under the Visual Flight Rules.

### 1.2 Pre-entry Requirements

There are no pre-entry requirements for either the LAPL course or the PPL course. However, before flying solo in an ATO aircraft, a student pilot must:

- It is strongly advised that students pass Air Law prior to first solo.
- Be at least 16 years of age
- Hold a valid medical certificate issued in accordance with Part-MED
- Have completed at least 10 hours of dual flight training
- Have completed the relevant emergency drill training detailed at paragraph 1.7.2 below
- Demonstrate evidence of English language proficiency equivalent to at least ICAO Level 4

### 1.3 Credits for Previous Experience

#### 1.3.1 LAPL

Applicants for a LAPL who have prior experience as PIC may be credited towards the requirements for licence issue on the basis of a pre-entry flight test. Credit awarded shall not:

- exceed the total flight time requirement as PIC
- exceed 50% of the total hours required for licence issue
- include the requirements of *(FCL.110.A or 110.H)(a)(2)*

#### 1.3.2 PPL

- 1.3.2.1 The holder of a pilot licence on another category of aircraft (except balloons) may, at the discretion of the Head of Training, be credited with 10% of their total flight time up to maximum of *10 hours (aeroplanes)/6 hours (helicopters)* towards the flight time requirement for licence issue. The amount of credit given in this case shall not include the requirements of *(FCL.210.A or 210.H)(a)(2)*
- 1.3.2.2 Applicants for a PPL holding a LAPL shall complete the training course at paragraph 1.4.5 below
- 1.3.2.3 Applicants for a PPL (A) holding an LAPL(S) with a TMG extension shall complete the training course at paragraph 1.4.6 below
- 1.3.2.4 Further credits for Qualified Military Pilots may be available in accordance with CAA/22Gp policy as detailed in the current issue of CAP 804.

### 1.4 Training Syllabi

The following syllabi are for the Light Aircraft Pilot Licence (LAPL) and The Private Pilot's Licence (PPL)

#### 1.4.1 Flight Training – LAPL (A)

The LAPL (A) course comprises a minimum of 30 hours of flight instruction, including 15 hours of dual flight instruction and 6 hours of supervised solo flight time, including 3 hours of solo cross-country flight time, with at least 1 cross-country flight of at least 150 km (80 NM), during which 1 full stop landing at an aerodrome different from the aerodrome of departure shall be made.

#### 1.4.3 Flight Training – PPL (A)

The PPL (A) course comprises 45 hours of flight instruction including at least 25 hours of dual flight instruction and 10 hours of supervised solo flight time, including 5 hours of solo cross country flight time.

Flt	Sortie	Flight Time		Total	Remarks
		Dual	Solo		
1	Effects of Controls 1	1.2		1.2	Ex.4(i)
2	Straight and Level 1	1.2		2.4	Ex.6(i); 5a
3	Effects of Controls 2/Straight and Level 2	1.3		3.7	Ex.4(ii); 6(ii); 5b
4	Climbing/Descending	1.2		4.9	Ex.7; 8(i)
5	Turning/Descending 2	1.2		6.1	Ex.8(ii); 9
6	Slow Flight/Stalling 1	1.3		7.4	Ex.10a
7	Stalling 2/Revision	1.2		8.6	Ex.10b; 10c
8	Circuits	1.0		9.6	Ex.12; 13
9	Circuits	1.0		10.6	Ex.12; 13; 12/13E
10	Circuits	1.0		11.6	Ex.12; 13; 12/13E
11	Circuits Dual to First Solo	0.8		12.4	Ex.12; 13; 12/13E
12	First Solo		0.3	12.7	Ex.14
13	Circuit Consolidation 1	0.5	0.5	13.7	Ex.12; 13; 12/13E
14	Circuit Consolidation 2	0.3	0.7	14.7	Ex.12; 13; 12/13E
15	Circuit Consolidation Solo		1.0	15.7	Ex.12; 13; 12/13E
16	Circuit Consolidation Solo		1.0	16.7	Ex.12; 13; 12/13E
17	Circuit Consolidation Solo		1.0	17.7	Ex.12; 13; 12/13E
18	Advanced turning/GH Revision	1.0		18.7	Ex.5-13; 15
19	PFL's/Circuits	1.0		19.7	Ex.5-13; 15; 16
20	Solo GH		1.0	20.7	Ex.5-13; 15
21	Precautionary Landings/GH Revision	1.0		21.7	Ex.5-13; 15-17
22	Solo GH		1.0	22.7	Ex.5-13; 15; 16
23	Dual GH	1.0		23.7	Ex.5-13; 15-17
24	Solo GH		1.0	24.7	Ex.5-13; 15; 16
25	Dual IF	1.0		25.7	Ex.19
26	Solo GH		1.0	26.7	Ex.5-13; 15; 16
27	Dual IF	1.0		27.7	Ex.19
28	Nav 1; Intro	1.5		29.2	Ex.18a
29	Nav 2	1.5		30.7	Ex.18a
30	Nav 3 Solo Nav		1.5	32.2	Ex.18a
31	Nav 4 VFR Diversion	1.5		33.7	Ex.18a; 18b
32	Nav 5 L/A	1.5		35.2	Ex.18a; 18b
33	Nav 6 L/A	1.5		36.7	Ex.18a; 18b
34	Solo Nav		1.5	38.2	Ex.18a
35	Radio Nav	1.5		39.7	Ex.18c
36a	PPL Cross country 1 (Qualify X Country leg)		1.0	40.7	Ex.18a
36b	PPL Cross country 2 (Qualify X Country leg)		1.0	41.7	Ex.18a
36c	PPL Cross country 3 (Qualify X Country leg)		1.0	42.7	Ex.18a
37	GH Skills Test Rev	1.3		44.0	Ex.5-13; 15-17
38	Solo GH Skills test Rev		1.0	45.0	Ex.5-13; 15; 16

**1.4.4 Flight Training – LAPL to PPL**

Applicants for a PPL (A) holding an LAPL(A) shall have completed at least 15 hours of flight time on aeroplanes after the issue of the LAPL (A), of which at least 10 shall be flight instruction completed in a training course at an ATO. This training course shall include at least 4 hours of supervised solo flight time, including at least 2 hours of solo cross-country flight time with at least 1 cross-country flight of at least 270 km (150 NM), during which full stop landings at 2 aerodromes different from the aerodrome of departure shall be made

**1.4.5 Flight Training – PPL(S) to PPL (A)**

*Specific requirements for applicants holding an LAPL(S) with a TMG extension.*

Applicants for a PPL (A) holding an LAPL(S) with a TMG extension shall have completed:

- (1) at least 24 hours of flight time on TMG after the endorsement of the TMG extension; and
- (2) 15 hours of flight instruction in aeroplanes in a training course at an ATO, including at least the requirements of (a)(2).

**1.4.6 Theoretical Knowledge Training**

Applicants for an LAPL (A) shall demonstrate a level of theoretical knowledge appropriate to the privileges granted, through examinations on the following:

- (a) Common subjects:
  - Air law,
  - Human performance,
  - Meteorology, and
  - Communications;
- (b) Specific subjects concerning the different aircraft categories:
  - Principles of flight,
  - Operational procedures,
  - Flight performance and planning,
  - Aircraft general knowledge, and
  - Navigation.

**1.5 Time Scale**

A full-time course of flight training for either licence is expected to take at least four weeks to complete. However, in most cases, course length will be dictated by the student's availability and will take considerably longer.

The flight training syllabi detailed above show the minimum training required. As detailed in Part 2 of this Manual, each exercise has a completion standard that is to be achieved before moving on to the next exercise. In the event that the required standard is not achieved in the minimum time allocated, it will be necessary to repeat all or part of the exercise, which is likely to result in the course being extended beyond the minimum hours.

**1.6 Training Programme****1.6.1 General Arrangements**

Booking :

Bookings for lessons are made direct through the Operations Office or on occasions, direct with the Instructor.

Allocation of aircraft:

Only the Operations Staff will allocate aircraft for lessons however students and Instructors may request individual aircraft

First take-off and last landing times:

Times will be recorded "Brakes Off" to "Brake On"

Training slots:

Training slots will be Single Slot 1.30hr Double Slot 3.00hrs

Programming of theoretical knowledge lessons:

Guidance for programing the theoretical lessons will be given by the individual instructor but will

follow the guidelines laid down in the CATS distance learning PPL & AAL Syllabus.

### 1.6.2 **Bad Weather Constraints**

Flying training will not take place if the cloud base is below 1000ft QFE and/or the visibility is below 1800m . Demonstrated cross wind limits for the aeroplane will also apply. Flight into known icing conditions is prohibited (also see OPS Manual for weather minima)

During periods of bad weather when flight exercises cannot take place, students will have the use of a quiet study area with appropriate study material available.

Directed private study, when necessary will be given by the course instructor or the Head of Training

### 1.6.3 **Maximum Student Training Times**

No student will fly more than three exercises in any one day. This normally amounts to a maximum of four hours of actual flying. There is a rest period of at least one hour between exercises.

Therefore it is not recommended that students fly more than 20hrs a week.

### 1.6.4 **Training Records**

All training records will be maintained in individual files and will be retained in a secure place only available to the Head of Training/Chief Flying Instructor and course instructors. Individual records will be made available to representatives of the CAA and to the student on request.

Attendance Records are documented in the Daily Diary and continuous nonattendance will be annotated in the Students Record File.

Details of flying training will be recorded on individual assessment sheets .These records will also constitute attendance records.

### 1.6.5 **Form of Training Records**

- Student personal details and evidence that the pre-requisites for first solo were met.
- At least the minimum amount of theoretical knowledge training was completed, all items in the syllabus were covered and the candidate reached a satisfactory standard before being recommended for test
- Relevant emergencies training was completed to an adequate standard
- Details of each flight including, duration, exercises completed and a narrative report of the student's performance and progress
- That all appropriate elements of the training were completed prior to the student being recommended for the theoretical knowledge examinations and the skill test
- That the requirements of FCL.025(b)(3) regarding attempts/sittings were met
- Comments relating to student performance
- Recommendation for next exercise

### 1.6.6 **Checking of Records and Logbooks**

The student is expected to complete his/her logbook as soon as practicable after flights recording the date, flying times, the exercise carried out, and the name of the Flight Instructor.

Upon completion of the course the Head of Training / Chief Flying Instructor will examine and certify the correctness of log book entries. All approved course flying is to be clearly identified as such and include details of the exercises carried out

### 1.6.7 **Standardisation of Entries**

Log books must be kept in accordance with the UK Air Navigation Order currently in force and must conform to Part FCL:

- The student is responsible for the completion of each record
- Any company Instructor may sign the recommendation for examination/skill test
- The Instructor must ensure all necessary training has been done before the recommendation may be signed (e.g. training record and logbook checked, all training completed, all progress tests completed)
- Legibility of training record entries (name of instructor, aircraft registration, etc.)
- Requirement for student to countersign progress reports
- Content/form of narrative report

**1.6.8 Log Book Entries**

Students’ logbooks are to be completed in accordance with Article 79 of the Air Navigation Order 2009, as amended and AMC1 FCL.050.

**1.7 Safety Training**

**1.7.1 Individual Responsibilities**

All instructors are responsible for ensuring that students are trained to the highest standards (This refers solely to flight safety (frequency of emergency drill practice, requirements for dual checks, requirements before first solo, etc.). It does not include Health & Safety considerations or the SMS). The Head of Training has overall responsibility for the maintenance of high standards and for the appointment and standardisation of instructors

1.7.1.1 The Chief Flying Instructor has overall responsibility for safety training on all courses.

1.7.1.2 Individual flight instructors are responsible for ensuring that their students complete safety training in accordance with the following instructions.

**1.7.2 Emergency Drills**

Emergency drills will be conducted at regular intervals throughout the training course and will be recorded in the student training records.

Exercise 1(b) will be practiced in the aircraft, on the ground, prior to commencing any flying training. The practice will be carried out using check lists approved for the training aircraft and “touch checks”.

The emergencies covered will be :-

- Engine fire on the ground / in the air.
- Cabin and electrical system fires
- Systems failures e.g. flaps, vacuum pump, pitot /static failures etc
- Escape drills
- Location and use of emergency equipment

The following emergency drills will be regularly practiced during the flying exercises listed below :-

<b>Exercise Number</b>	<b>Emergency</b>
Exercise 5	Brake failure
Exercise 6	Radio failure, engine icing, low oil pressure, high oil temperature, Trim control failure, Alternator failure
Exercise 9	Vacuum pump failure
Exercise 10b	Flap failure (flap down 20°)
Exercise 12 /13	Engine failure, Flap failure (0°), Radio failure, ASI failure
Exercise 16	High and low level PFL’s
Exercise 17	Precautionary Landing
Exercise 18	Practice PAN / Training Fix, Lost procedure, Vacuum pump failure

The student carrying out the flying details shown below must be proficient in handling the following Systems Failures and Abnormal Situations

First Solo – EFATO; ASI failure; Flap failure-Engine Failure in circuit

First Night Solo- EFATO; Failures of :-Landing Light, PAPI  
Interior light, alternator; electrical sub-systems.

Navigation- Lost procedure- Failures of DI; Radio; Engine; vacuum pump; alternator.

**1.7.3 Dual Checks**

Students on the PPL (LAPL) course may not be authorised to complete more than two solo flights without a dual check with an instructor. For the purposes of this paragraph the 100nm (80nm)/150nm (80nm) cross-country is to be considered as one flight.

**1.7.4 Requirements before First Solo**

Before being permitted to fly solo for the first time, a student must:

- (a) Have satisfactorily completed Exercises 1-13 of the PPL(A) syllabus (*or appropriate exercise numbers for other syllabi*)
- (b) Have completed at least 10 hours of dual flight training
- (c) Have satisfactorily completed the emergency drill training detailed at para 1.7.2 above
- (d) Have passed the pre-solo Progress Test

**1.7.5 Requirements before First Solo Cross-country**

Before being authorised to undertake a first solo cross-country flight, a student must:

- (a) Fulfil the requirements for first solo in paragraph 1.7.4 above
- (b) Have satisfactorily completed Exercises 1-19 of the PPL(A) syllabus (or appropriate exercise numbers for other courses)
- (c) Have passed the pre-solo cross-country Progress Test

**1.8 Tests and Examinations****1.8.1 Flying****(a) Progress Tests**

Flight Progress Tests are conducted during the course:

- Prior to first solo
- Prior to first solo cross-country
- Prior to the PPL (LAPL) Skill Test

Details of the Progress Tests are at paragraph 2.5 below

**(b) Skill Test**

The PPL (LAPL) Skill Test is taken when all training is complete and the candidate has passed Progress Test 3. The test is conducted by an examiner designated by the competent authority and in accordance with Standards Document 19(A)

Prior to signing the Course Completion Certificate, the students Instructor and the CFI or Deputy CFI will check and sign confirming the appropriate hours have been completed and accurately recorded.

Both Instructor and CFI/Deputy CFI will sign the course completion certificate

**1.8.2 Theoretical Knowledge****(a) Progress Tests**

Progress checks will be monitored by the flight instructor to ensure that the student is progressing in line with the flight training progress.

Students **must** pass all the exams within 18 months, counted from the last day of the month in which the first attempt (pass or fail) was made. Students can make 3 attempts per subject at Andrewsfield, and a 4<sup>th</sup> attempt (after additional training) at the CAA Gatwick. Students **must** pass all the exams in 6 sittings and within the 18 month period mentioned above. If not, they have to re-take all the exams. A sitting is defined as a period of up to ten consecutive days. You can do more than 1 exam in a sitting but cannot re-take a failed exam the same sitting. Applicants must be recommended by their training organisation as ready for the exam, after completing the necessary training. In addition to the 9 theory exams, an RT practical exam is required. It does not have to be completed within the 18 months

**Theoretical Knowledge Examinations**

We **strongly recommend** that students schedule exams over 4 sittings, so that there are sittings to spare in case of failing any exams

Students **should** carry out at least 100 hours of Theoretical Knowledge training (See Paragraph

2.10) and demonstrate a satisfactory level of knowledge in each subject in order to secure instructor sign-off on the 'Ready for Test' certificate.

Should a student be unsuccessful in either flight test or theoretical test they will be advised by the examiner as to whether any further training and how much training might be required before a re test. However another ready for test certificate will not be required.

All test reports will be kept separate with the CFI and records of tests will be kept with the students' records or with the CFI

The student will be debriefed after each written exam, passed or failed, and will be advised on any areas of weakness.:

- i. The theoretical knowledge examinations will be set when all relevant theoretical knowledge instruction has been completed.
- ii. The examination will be completed under the supervision of a Ground Examiner approved by the competent authority for the purpose. Candidates are to be supervised in the examination room whilst the examination is in progress.
- iii. Examination papers are kept in a lockable cabinet which can be accessed only by the nominated custodian at both Andrewsfield and Naples.
- iv. Prior to the papers being removed from the cabinet, a room will be prepared for the exam. The trainee will not be permitted to take any mobile phones, text books or unallowable aids into the examination room.
- v. Once the invigilator is satisfied that the room and candidate are ready then he will issue the paper and blank answer sheet. The instructions to candidates will be read through and, following the candidate being satisfied, the start and finish times will be noted and the exam will commence with the invigilator in the room.
- vi. Should a candidate have any issues during the exam then they are to gain the invigilator's attention and discuss the problem in a manner that does not affect any other candidates.
- vii. Should a candidate have to leave the room (to use the toilet, fetch an overlooked piece of equipment etc) then they must be accompanied so far as is practical by the invigilator or a person deemed suitable by the invigilator.
- viii. When the finish time is reached, the invigilator will remove all paperwork associated with the exam and mark it in a safe office.
- ix. The examination is 'closed book' and no reference material of any kind is to be used other than that provided with the examination paper.

### 1.8.3 Authorisation for Test

#### (a) PPL Skill Test

In accordance with FCL.030(b) it is the responsibility of the ATO to recommend a candidate for the PPL (LAPL) Skill Test. Formal recommendation is made on Form SRG 1105 by the Head of Training or other authorised person. This certificate may not be signed until:

- All training is complete
- The candidate has signed the final progress test
- The candidate has passed all of the theoretical knowledge examinations

#### (b) Theoretical Knowledge Examinations

Once a student has completed his self study and CBT training and has achieved at least a 75% pass mark on the CATS exam the student will have at least 1 hour formal tuition and assessment for test with an instructor. If the instructor believes the student is fit for test then a recommendation for test is to be completed and signed by the instructor.

### 1.8.4 Test Reports & Records

All test reports will be kept separate with the CFI and records of tests will be kept with the students' records or with the CFI



The student will be debriefed after each written exam, passed or failed, and will be advised on any areas of weakness

#### **1.8.5 Examination Re-sit Procedures**

Should a student be unsuccessful in either flight test or theoretical test they will be advised by the examiner as to whether any further training and how much training might be required before a re test. However another ready for test certificate will not be required.

#### **1.9 Training Effectiveness**

##### **1.9.1 Identification of Unsatisfactory Progress**

If an instructor feels that a student is not making satisfactory progress the matter is to be referred to the Head of Training who will arrange for an assessment of progress to be made.

##### **1.9.2 Actions to Correct Unsatisfactory Progress**

If it is felt that a student is not making satisfactory progress by achieving the stated training objectives, the matter will be discussed with the student and instructor and appropriate action will be taken which may consist of further theoretical or flying training or a change of instructor. Should this be necessary, the action taken will be noted in the student records and progress will be monitored by the Head of Training

##### **1.9.3 Reporting & Documentation**

All student and staff training records will be kept for a period of 5 years

A detailed and signed written record of disciplinary action will be logged in the student record file

##### **1.9.4 Restricted FI Supervision**

All restricted instructors are to complete their daily Restricted Instructor Form prior to operations with the days lesson plans and then have their supervising instructor sign and brief as necessary. The supervising instructor should oversee occasional briefings and lesson plans to ensure continuing standardisation and training methods. If there are any uncertainties then they must be brought to the attention of the CFI. The supervising instructor must be able to be contactable whilst supervising. All sorties must adhere to the procedures laid down in the Ops Manual and the Training Manual at all time

## 2 Briefings and Air Exercises

### 2.1 Air Exercise

The air exercises shown are for aeroplanes and are taken from AMC1 FCL.110.A and FCL.210.A.

Ex 1a	Familiarisation with the Aeroplane
<b>Aim:</b>	To learn the characteristics of the aeroplane used on the course.
<b>Briefing</b>	The characteristics of the aeroplane Cockpit layout Airframe and engine systems Use of the check list(s) and drills Aircraft controls
<b>Air Exercise</b>	N/A
<b>Completion Standard</b>	Demonstrate an understanding of the aircraft characteristics

Ex 1b	Emergency Procedures
<b>Aim:</b>	To learn essential emergency procedures
<b>Briefing</b>	Emergency Drills Action in the event of a fire on the ground or in the air: Engine fire Cockpit/cabin fire Electrical fire System failure drills as applicable to type Escape exits Escape drills including use of emergency equipment
<b>Air Exercise</b>	N/A
<b>Completion Standard</b>	Demonstrate an understanding of emergency procedures

Ex 2	Preparation for and Action After Flight
<b>Aim:</b>	To learn the actions required before flight and how to secure the aircraft after flight.
<b>Briefing</b>	Flight authorisation and aircraft acceptance Serviceability documents Equipment required for flight (maps, etc.) External & internal checks Harness, seat and rudder pedal adjustment, (student comfort) Starting and after starting checks System/power/serviceability checks (as applicable) Closing down/shutting down the aircraft (including system checks) Parking, leaving the aircraft (including safety/security as applicable) Completion of the authorisation sheet and aircraft serviceability documents
<b>Air Exercise</b>	N/A
<b>Completion Standard</b>	Demonstrate an understanding of the actions required prior to flight and after flight

Ex 3	Familiarisation
<b>Aim:</b>	To gain air experience and familiarisation with the airborne environment
<b>Briefing</b>	N/A
<b>Air Exercise:</b>	Local area familiarisation Familiarisation with the cockpit layout, ergonomics, controls Demonstrate cockpit procedures Demonstrate stability and control
<b>Completion Standard</b>	Demonstrate familiarisation of the air experience and airborne environment

Ex 4	Effect of Controls
<b>Aim:</b>	To learn the effects of the cockpit controls and the functions of the instruments
<b>Air Exercise:</b>	Primary effects when laterally level and when banked Further effects of aileron and rudder Effects of: airspeed & slipstream power trimming controls flaps other controls, as applicable Operation of: mixture control carburettor heat and/or other controls cabin heating/ventilation
<b>Completion Standard</b>	Demonstrate an understanding of the effects of the cockpit controls and the functions of the instruments

Ex 5	Taxiing
<b>Aim:</b>	To learn to manoeuvre the aircraft on the ground
<b>Ground Exercise:</b>	Pre-taxi checks Starting, control of speed and stopping Engine handling Control of direction and turning Turning in confined spaces Parking area procedure and precautions Effects of wind and use of flying controls Effects of ground surface Freedom of rudder movement Marshalling signals Instrument checks Air traffic control procedures
<b>Completion Standard</b>	Demonstrate the ability to manoeuvre the aircraft safely on the ground

Ex 5b	Taxiing Emergencies
<b>Aim:</b>	To learn the correct actions in the event of emergencies during taxi
<b>Ground Exercise:</b>	Brake failure Steering failure
<b>Completion Standard</b>	Demonstrate the correct actions in the event of an emergency during taxi

Ex 6	Straight & Level Flight
<b>Aim:</b>	To learn to fly the aircraft in a constant direction, at a constant level and in balance, at selected power settings, with and without flap
<b>Air Exercise:</b>	At normal Cruising Power: Attaining and Maintaining Straight and Level Flight Demonstration of Inherent Stability Control in Pitch, including use of Elevator Trim control Lateral Level, Direction and Balance, use of Rudder Trim controls as applicable At Selected Airspeeds (Use of Power): Effect of Drag and use of Power (Two Airspeeds for one Power Setting) Straight and Level in Different Aeroplane Configurations (Flaps, Landing Gear) Use of Instruments to achieve Precision Flight Airmanship
<b>Completion Standard</b>	Achieve and maintain straight & level flight, in balance, within: Height - $\pm 150$ ft, Heading - $\pm 10^\circ$ , Speed - $\pm 15$ kts

Ex 7	Climbing
<b>Aim:</b>	To learn to enter and maintain a climb in a constant direction and to level off at selected altitudes/heights
<b>Air Exercise:</b>	Entry and maintaining the normal Maximum Rate Climb Levelling Off Levelling Off at Selected Altitudes Climbing with Flaps down Recovery to normal Climb En Route Climb (Cruise Climb) Maximum Angle of Climb Use of Instruments to achieve Precision Flight Airmanship
<b>Completion Standard</b>	Enter a climb maintaining direction within $\pm 10^\circ$ . Maintain a steady climb whilst maintaining heading within $\pm 10^\circ$ and speed within $\pm 15$ kts. Level from a climb within 150ft of a selected altitude/height maintaining heading within $\pm 10^\circ$ . Display basic airmanship

Ex 8	Descending
<b>Aim:</b>	To learn to enter and maintain a descent in a constant direction and to level off at selected altitudes/heights
<b>Air Exercise:</b>	Entry and maintaining the Glide Levelling Off Levelling Off at Selected Altitudes Descending with Flaps down Powered Descent – Cruise Descent (inc. effect of Power/Airspeed) Sideslipping (on suitable types) Use of Instrument to achieve Precision Flight Airmanship
<b>Completion Standard</b>	Enter a descent maintaining direction within $\pm 10^\circ$ . Maintain a constant rate of descent whilst maintaining heading within $\pm 10^\circ$ and speed within $\pm 15$ kts. Level from a descent within 150ft of a selected altitude/height maintaining heading within $\pm 10^\circ$ . Display basic airmanship

Ex 9	Turning
<b>Aim:</b>	To learn to complete a level turn at medium angles of bank onto selected headings
<b>Air Exercise:</b>	Entry and maintaining Medium Level Turns Resuming straight flight Faults in the Turn (incorrect Pitch, Bank, Balance) Climbing Turns Descending Turns Slipping Turns (on suitable types) Turns to Selected Headings, use of Gyro Heading Indicator and Compass Use of Instruments to achieve Precision flight Airmanship
<b>Completion Standard</b>	Enter a turn at $30^\circ$ AOB maintaining level flight within $\pm 150$ ft and maintaining balance. Maintain a constant angle of bank whilst maintaining level flight within $\pm 150$ ft and speed within $\pm 15$ kts, in balance. Recover to straight and level flight on a selected heading within $\pm 10^\circ$ whilst maintaining level flight within $\pm 150$ ft, in balance. Display basic airmanship

Ex 10a	Slow Flight
<b>Aim:</b>	To learn to manoeuvre the aircraft safely at slow speed
<b>Air Exercise:</b>	<p>Airmanship                      Safety Checks                      Introduction to Slow Flight                      Controlled Slow Flight in the Clean Configuration at:                          <math>V_{s1} + 10</math> knots &amp; with Flaps Down                          <math>V_{so+}</math> 10 knots:                              Straight &amp; Level Flight                              Level Turns*                              Climbing &amp; Descending*                              Climbing &amp; Descending Turns*</p> <p>Controlled Slow Flight in the Clean Configuration at:                          <math>V_{s1} + 5</math> knots &amp; with Flaps Down                          <math>V_{so+}</math> 5 knots:                              Straight &amp; Level Flight                              Level Turns*                              Climbing &amp; Descending*                              Climbing &amp; Descending Turns*                              Descending ‘Unbalanced’ Turns at Low Airspeed – the need to maintain Balanced Flight*                      Application of full power with correct attitude and balance to achieve normal climb speed</p> <p style="text-align: right;">* Not required for LAPL(A)</p>
<b>Completion Standard</b>	Demonstrate the ability to manoeuvre the aircraft safely at slow speed. Display basic airmanship

Ex 10b	Stalling
<b>Aim:</b>	To recognise and recover from an approaching stall with minimum height loss. To learn the effect of power and flap on the stalling characteristics of the aircraft
<b>Air Exercise:</b>	<p>Airmanship – Safety checks                      The symptoms of the Stall                      Stall Recognition &amp; Recovery                          Recovery Without Power                          Recovery With Power                          Recovery when a Wing Drops at the Stall                      Stalling with Power ‘ON’ &amp; Recovery                      Stalling with Flap ‘Down’ &amp; Recovery                      Maximum Power Climb (straight &amp; turning flight) to the point of Stall with uncompensated YAW – Effect of unbalance at the stall when climbing power is being used.*                      Stalling &amp; Recovery during Manoeuvres involving more than 1G (accelerated stalls, including secondary stalls &amp; recoveries)                      Recoveries from Incipient Stalls in the landing and other configurations &amp; conditions*                      Recoveries at the Incipient Stage during change of Configuration*</p> <p style="text-align: right;">* Not required for LAPL(A)</p>
<b>Completion Standard</b>	Demonstrate the ability to recognise the signs of the approaching stall, particularly in the landing and approach configurations, and to execute the standard recovery, minimising height loss. Display basic airmanship

Ex 11	Spin Avoidance
<b>Aim:</b>	To learn to recognise the signs of an incipient spin and to recover with minimum height loss
<b>Air Exercise:</b>	Airmanship - Safety checks Stalling and recovery at the incipient spin stage (stall with excessive wing drop, about 45°) Instructor induced distractions during the stall
<b>Completion Standard</b>	To recognise the approach of an incipient spin and to take the correct actions to avoid it developing Display basic airmanship

Ex 12	Take-off & Climb to Downwind Position
<b>Aim:</b>	To learn to take-off, enter the climb and position the aircraft on the downwind leg of the circuit
<b>Air Exercise:</b>	Pre-take-off checks Into wind take-off Safeguarding the nosewheel Crosswind take-off Drills during and after take-off Short take-off and soft field procedure/techniques including performance calculations Noise abatement procedures Airmanship
<b>Completion Standard</b>	Demonstrate the ability to follow the correct circuit pattern. Display basic airmanship

Ex 13	The Circuit, Approach and Landing
<b>Aim:</b>	To learn to take-off and land facing into wind, crosswind and downwind
<b>Air Exercise:</b>	Circuit procedures, downwind, base leg Powered approach and landing Safeguarding the nosewheel Effect of wind on approach and touchdown speeds, use of flaps Crosswind approach and landing Glide approach and landing Short landing and soft field procedures/techniques Flapless approach and landing Wheel landing (tail wheel aeroplanes) Noise abatement procedures Airmanship
<b>Completion Standard</b>	Demonstrate the ability to follow the correct circuit pattern, to maintain the correct approach path and safely land the aircraft in various configurations Display basic airmanship

Ex 12/13E	Emergencies in the Circuit
<b>Aim:</b>	To learn to take the correct actions in the event of an emergency occurring in the circuit area
<b>Air Exercise:</b>	Aborted take-off Engine failure after take-off Miss landing/go-around Missed approach
<b>Completion Standard</b>	Demonstrate the ability to carry out the correct actions in the event of an emergency occurring in the circuit area.
Ex 14	First Solo
<b>Aim:</b>	To fly the normal circuit pattern and carry out a normal approach and landing
<b>Air Exercise:</b>	Normal circuit, approach and landing
<b>Completion Standard</b>	N/A
Ex 15	Advanced Turning
<b>Aim:</b>	To learn to turn the aircraft at high angles of bank (45°-60°) and to recognise and recover from a stall in the turn with minimum height loss
<b>Air Exercise:</b>	Steep turns (45°), level and descending Stalling in the turn and recovery Recoveries from unusual attitudes, including spiral dives Airmanship
<b>Completion Standard</b>	Enter a turn at 45°AOB maintaining level flight within ±150ft and maintaining balance. Maintain a constant angle of bank whilst maintaining level flight within ±150ft and speed within ±15kts, in balance. Recover to straight and level flight on a selected heading within ±10° whilst maintaining level flight within ±150ft, in balance. Carry out checks and drills in accordance with the aircraft checklist. Make RT calls in accordance with CAP413. Display basic airmanship
Ex 16	Forced Landing Without Power
<b>Aim:</b>	To learn to make a safe approach and landing after a partial or complete engine failure
<b>Air Exercise:</b>	Choice of landing area, provision for change of plan Gliding distance Descent plan Key positions Engine cooling Engine failure checks Use of radio Base leg Final approach Landing Actions after landing Airmanship
<b>Completion Standard</b>	Demonstrate the ability to make an approach to a suitable landing area with a realistic chance of landing safely in the selected area and recover to the climb Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship



Ex 17	Precautionary Landing
<b>Aim:</b>	To learn to learn to land the aircraft safely other than at the planned airfield
<b>Air Exercise:</b>	Full procedure away from aerodrome to break-off height Occasions necessitating In-flight conditions Landing area selection Normal aerodrome Disused aerodrome Ordinary field Circuit and approach Actions after landing Airmanship
<b>Completion Standard</b>	Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 18a	Navigation
<b>Aim:</b>	To learn to plan a cross-country flight and to navigate by visual reference
<b>Air Exercise:</b>	Flight planning Weather forecast and actual - map selection and preparation - choice of route - controlled airspace - danger, prohibited and restricted areas - safety altitudes Calculations Magnetic heading(s) and time(s) en-route - fuel consumption - mass and balance - mass and performance Flight information NOTAMS etc. - radio frequencies - selection of alternate aerodromes - aeroplane documentation Notification of the flight pre-flight administrative procedures - flight plan form Departure & En-route Organisation of cockpit workload - altimeter settings - ATC liaison in controlled/regulated airspace - setting heading procedure - noting of ETAs - maintenance of altitude and heading - revisions of ETA and heading - log keeping - use of radio - use of nav aids - minimum weather conditions for continuation of flight - in-flight decisions - transiting controlled/regulated airspace - diversion procedures - uncertainty of position procedure - lost procedure Arrival, aerodrome joining procedure ATC liaison in controlled/regulated airspace - altimeter setting - entering the traffic pattern - circuit procedures – parking - security of aeroplane – refuelling - closing of flight plan, if appropriate - post-flight administrative procedures
<b>Completion Standard</b>	Correctly employ pre-flight planning facilities and techniques Employ correct VFR navigational techniques while maintaining heading $\pm 10^\circ$ , height/altitude $\pm 150\text{ft}$ and speed $\pm 15\text{kts}$ Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413; Display appropriate airmanship

Ex 18b	Navigation Problems at Lower Levels & in Reduced Visibility
<b>Aim:</b>	To learn to navigate accurately at low level and in reduced visibility
<b>Air Exercise:</b>	Actions prior to descending Hazards (e.g. obstacles, and terrain) Difficulties of map reading Effects of wind and turbulence Vertical situational awareness (avoidance of controlled flight into terrain) Avoidance of noise sensitive areas Joining the circuit Bad weather circuit and landing
<b>Completion Standard</b>	Correctly employ pre-flight planning facilities and techniques Employ correct VFR navigational techniques while maintaining heading $\pm 10^\circ$ , height/altitude $\pm 150\text{ft}$ and speed $\pm 15\text{kts}$ Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413; Display appropriate airmanship

Ex 18c	Radio Navigation
<b>Aim:</b>	To learn how to use radio aids to navigation
<b>Air Exercise:</b>	Navigation procedures as necessary Use of GNSS VOR ADF/NDB* VHF/DF En-route or terminal radar Secondary Surveillance Radar DME*
<b>Completion Standard</b>	Employ correct VFR navigational techniques while maintaining heading $\pm 10^\circ$ , height/altitude $\pm 150\text{ft}$ and speed $\pm 15\text{kts}$ Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

\* Not required for LAPL(A).

Ex 18d	Moving Map GPS (Skydemon)
<b>Aim:</b>	To learn how to set up and use Skydemon as a secondary source of Navigation
<b>Air Exercise:</b>	Navigation procedures as necessary Use of
<b>Completion Standard</b>	Employ correct Preparation of Skydemon and to be able to cross reference skydemon map to paper chart and maintain an accurate flight log .

\* Not required for LAPL(A).

Ex 19	Introduction to Instrument Flight (Not required for LAPL(A))
<b>Aim:</b>	To learn to fly the aircraft safely by sole reference to instruments
<b>Air Exercise:</b>	Physiological sensations Instrument appreciation Attitude instrument flight Instrument limitations Basic maneuvers Straight and level at various airspeeds and configurations Climbing and descending Standard rate turns, climbing and descending, onto selected headings Recoveries from climbing and descending turns
<b>Completion Standard</b>	Carry out all exercises while maintaining height/altitude $\pm 150$ ft, heading $\pm 10^\circ$ , speed $\pm 15$ kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

*Further exercises, such as night flying, aerobatics, etc., should be added as required by the ATO*

**2.2 Air Exercise Reference List**

Air Exercise	
<b>1 Aircraft familiarisation</b>	
<b>2 Prep for and after flight</b>	
<b>3 Air Experience</b>	
<b>4 Effects of Controls</b>	
<b>5 Taxing</b>	
<b>6 Straight &amp; level</b>	
<b>7 Climbing</b>	
<b>8 Descending</b>	
<b>9 Turning</b>	
<b>10a Slow Flight</b>	
<b>10b Stalling</b>	
<b>11 Spin Avoidance</b>	
<b>12 Take off &amp; Climb Out</b>	
<b>13 Circuit Approach &amp; landing</b>	
<b>14 First Solo</b>	
<b>15 Advanced Turning</b>	
<b>16 Forced Landing</b>	
<b>17 Precautionary Landing</b>	
<b>18 A/B Navigation</b>	

## 2.3 Course Structure

### 2.3.1 Phase of Training

2.3.1.1 The course is divided into three phases, each terminating in a Progress Test as follows:

LAPL(A)			
Phase	Exercises	Min. Hours	Completion
1	1-13	10	Progress Test 1
2	14-18a	10	Progress Test 2
3	18b-18c	10	Progress Test 3

PPL(A)			
Phase	Exercises	Min. Hours	Completion
1	1-13	12	Progress Test 1
2	14-18a	18	Progress Test 2
3	18b-19	15	Progress Test 3

2.3.1.2 Flight exercises will normally be taught in the order detailed at paragraph 4.1 above, which ensures that they are taught in the most suitable learning sequence. If deviation from the normal order is necessary due, for example, to weather or aircraft unserviceability, the circumstances are to be detailed in the student's training record.

### 2.3.2 Integration of Syllabi

The integration of the syllabi is at the discretion of the individual instructors but is monitored by the H/T theory should run alongside the associated practical exercises where possible.

### 2.3.3 Student Progress

Before progressing from one phase of training to the next a student must have:

- Completed all of the flight exercises to a satisfactory standard
- Completed at least the minimum hours indicated at paragraph 2.3.1 above
- Passed the relevant Progress Test

## 2.4 Instructional Methods

Most flying training is conducted in a 2-seat, high wing aircraft with excellent handling characteristics ideal for the training environment. Lessons will always include time for a pre-flight preparatory brief, flying instruction, and after your flight, time to de-brief the lesson and discuss any points that may have arisen. There is no time limit for the completion of the course but we suggest that budget permitting, you take regular lessons so as to avoid having to revise some exercises in the air as this will help keep the overall cost down. We would suggest a minimum of one lesson per week and at this rate, the course can be completed within a year. The weather however, may prove to be a limiting factor during the winter

and it is not uncommon for some students to take between eighteen months to two years to complete the course. All dual instruction (with the instructor sitting next to you) will take place mostly in the local training area and will be broken down into set exercises: flying straight and level, climbing and descending, circuits including take-offs and landings, stall recovery, steep turns, navigation and so on.

Solo tuition, comes when your instructor has prepared you to the required standards:

### 2.4.1 Pre-flight Briefings

Each flight exercise, whether dual or solo, is to be preceded by a thorough pre-flight briefing. The student should be left in no doubt as to his responsibilities during the flight and the order in which exercises are to be taught/practiced. As early as possible in the course, the student should be expected to arrive at the briefing prepared to brief the instructor on the current meteorological and AIS information.

**2.4.2 Post-flight Discussion**

The student should be debriefed as soon as practicable after each flight. The debriefing must match the subsequent entry in the student's training record, which the student is expected to sign.

**2.4.3 Adherence to Syllabus**

Instructors are to give instruction in accordance with the flight training syllabus in this Part and the theoretical knowledge syllabus at Part 4. It is essential that instruction is standardised to avoid confusion if the student should fly with more than one instructor. Any examples of a lack of standardisation are to be brought to the attention of the Chief Flight Instructor.

**2.4.4 Authorisation for Solo Flight**

Students are to be authorised for solo flights only after they have received a thorough pre-flight briefing from the authorising instructor. Flight instructors with restricted privileges may authorise solo students only with the approval of the supervising FI nominated by the ATO for this purpose.

**2.5 Progress Tests****2.5.1 Progress Test 1**

Progress Test 1 is a test of the student's ability to fly the aircraft safely and to a standard suitable to be allowed to fly as PIC. The test is conducted by the student's allocated instructor and must be passed before the student is authorised for the first solo flight. The content of PT1 is detailed in the report form, an example of which is at Appendix 1 to this Part.

**2.5.2 Progress Test 2**

Progress Test 2 is a test of the student's ability to conduct safely a cross-country flight under VFR and to complete other flight maneuvers with an acceptable degree of accuracy. The test is conducted by an experienced instructor nominated by the Head of Training and must be passed before the student is authorised for the first solo cross-country. The Content of PT2 is detailed in the report form, a copy of which is at Appendix 1 to this Part.

**2.5.3 Progress Test 3**

Progress Test 3 is designed to ensure that the student can complete all of the relevant exercises to the standard required at the PPL Skill Test. PT3 must be passed before a recommendation is made, in accordance with paragraph 1.9.3 above, for a student to attempt the skill test. The test is conducted by an experienced instructor, nominated by the Head of Training, who must also be authorised to sign the recommendation for test. The Content of PT3 is detailed in the report form, a copy of which is at Appendix 1 to this Part.

**2.5.4 Nomination of Examiners**

The Head of Training will nominate instructors as examiners for progress tests on the basis of their experience and instructional ability.

Progress tests are an integral part of the flight instruction and the flight time is included in the total time for the course. Progress tests should be recorded by the student as dual flight time and not as P1/s or PICUS.

A PT examiner will be an authorised Flightinstructor or FlightExaminer . The progress test is considered to be flight instruction; an FE who conducts a progress test cannot then conduct a skill test for the same student.

**2.5.5 Conduct of Progress Tests**

Progress checks are to be conducted by any PPL examiner or if not available an experiencedQFI nominated by the CFI the progress checks are to consist of all the exercises completed by the student upto the date of the Progress Test- it must be noted that any examiner carrying out a progress check may not be used as an examiner for that students final Skills test. Progress Tests must be logged as PUT and can be counted as part of the students training. A comprehensive report should be made in the students record.

**2.5.6 Documentation**

Examples of progress test report forms are shown in Appendix A to this part.

**3 Synthetic Flight Training**

Andrewsfield does not offer any Synthetic Flight Training

## 4 Theoretical Knowledge

### 4.1 Course Structure

- The theoretical knowledge training course is identical for both LAPL and PPL courses and is recommended to comprises of at least 100 hours of theoretical knowledge instruction provided by the ATO. The syllabus of theoretical knowledge instruction for both licences is contained in AMC1 FCL.210; FCL.215.
- AMC1 FCL.210; FCL.215 states that the theoretical knowledge instruction should include a certain element of formal classroom work but may also include such facilities as interactive video, slide or tape presentation, computer-based training and other media distance learning courses. CAA policy is that no more than 33% of the total instructional time may be devoted to computer based training and other media distance learning courses.
- Self-study may be acceptable as an ‘other media distance learning course’ provided that it is approved by the CAA and the procedures are detailed in this Part of the Training Manual.
- The amount of time to be allocated to each subject within the 100 hours is detailed in the training manual and the training record includes a means of recording that the required hours of instruction have been completed.
- The process to ensure that the requirements of FCL.025(b)(3) in respect of number of sittings are met are detailed in the Training Manual. Examinations are scheduled in such a way that allowance is made for re-tests should one or more papers be failed. Each paper may be attempted only once in each sitting

### 4.2 Teaching Materials

Andrewsfield provide through CATS an on line study guide along with recommending Air Pilots Manuals 1 to 7

### 4.3 Student Progress

If students are consistently falling below 75% on tests then the student will be called for interview.

### 4.4 Progress Testing

The students progress will be monitored by the progress online tests on the CATS administration website. If students are consistently falling below 75% on tests then the student will be called for interview.

### 4.5 The planned sequence of TK training is :-

Phase of Flying Training	TK training should be completed before this phase of flying is commenced.
Exercise 14 – First Solo	Air Law Aircraft General Knowledge Principles of Flight
Exercise 18 - Dual Navigation	Navigation Flight Performance and Planning Operational procedures Met
Exercise 18 – Solo Navigation	Communications Communications Practical
Skills Test	Human Performance

4.6 The following as a suggested time allocation to each subject:-

Subject	Self Learning	CBT	Classroom	Total Hours
Air law	4	4	4	12
Human performance	1	1	1	3
Meteorology	5	5	6	16
Communications	2	2	1	5
Principles of flight,	5	5	5	15
Operational procedures	2	3	3	8
Flight performance and planning	4	4	4	12
Aircraft general knowledge	4	4	4	12
Navigation	6	5	6	17
Total Hours	33	33	34	100

The distance learning element shall be provided by the CATS Aviation Training School website [www.catsaviation.com/ppl](http://www.catsaviation.com/ppl)

## 4.7 References

Part- FCL

Standards Document 19

Aeronautical Information Circulars (AIC) UK AIP (Aeronautical Information Publication)

CAP 393 Air Navigation Order (ANO)

CAP 804

Acceptable Means of Compliance and Guidance Material to Part-FCL

CAP 413 Radiotelephony Manual

CAP 637 Visual Aids Handbook

## 4.8

# PART 4 – Appendices

- Example of documents and forms used
- A Progress Test Report Form
- B Student Ground Exam Ready for Test Form
- C List Of Instructors & Qualifications
- D List Of School Aircraft
- E Weight & Balance with Factors
- F Student Record Form
- G Andrewsfield Circuit
- H Andrewsfield Local Training Area
- I Naples Air Centre Local Training Area



## 4.9 Documents and forms used

- Student record
- Course Completion certificate(s)
- Compliance monitoring procedure ( Compliance Manual)
- Internal audit schedule ( Compliance Manual)
- Internal audit report ( Compliance Manual)
- List of aerodromes used for training ( Training Manual)
- List of aircraft - nominated by ATO( Ops Manual)
- List of Instructors – including their qualifications ( Training Manual)
- Staff training record (to include qualifications, history and subjects taught).
- Progress test reports
- Staff standardisation form - Include example of reporting form for staff standards training/evaluation
- Flight Authorisation sheet/Tech Log
- Accident/incident report form - Include an example of the report form to be used for reporting accidents and incidents for internal investigation
- Airfield layouts – (Ops Manual)
- Circuit procedures ( Ops Manual)
- Local flying areas - Include a map extract showing the Local Flying area(s) ( Ops Manual)
- Standard Cross-country Routes - Include map extract(s) showing standard cross country training routes( Ops Manual)

# ANDREWSFIELD AVIATION LTD

## PRIVATE PILOTS LICENCE/LIGHT AIRCRAFT PILOT LICENCE

### Pre Course Requirements

Student Name		Telephone Number	
Student Address			
Next Of Kin		Date Of Birth	
Email Address			
<b>Health &amp; Safety Briefing Received</b>			
Building Emergency Exits	Fire Extinguishers	Aerodrome Safety	Accident Reporting
Aircraft Familiarisation			
	<b>Signed by Student</b>		
Date Commenced Training			
As Per PPL/LAPL Course Training Syllabus			
Completion Of Ground Exams		CFI	
Completion Of Flight Training		CFI	
Course Training Completed on		Signature CFI	
Course Completed		Signature Student	
PPL/LAPL Skill Test	PASS/FAIL	Signature Examiner	
Head Of Training Course Instructor		Signature	

## Progress Check Report Form APPENDICES A

Student:

D=Date Satisfactorily Completed S=Instructor

Exercise	D	S	Exercise	D	S
<b>Ex. 1-3</b>			<b>Ex. 7 - Climbing</b>		
Flight Auth/AC acceptance			Climb Entry/Maint/Exit		
Aircraft Documents			Vy Climb		
External Checks			Vx Climb		
Internal Checks			Cruise Climb		
Starting Checks			Climbing with Flap		
Power Checks			Flap Retract in Climb		
Shutdown Checks					
Document Completion			<b>Ex. 8 - Descending</b>		
Propeller Safety			Glide/Cruise-Entry/Maint/Exit		
Handover/Takeover Control			Achieving Selected Altitude		
Lookout			Flapped/Powered Descent		
			Sideslipping		
<b>Ex. 4 - Effects of Controls</b>					
Primary Effects			<b>Ex. 9 - Turning</b>		
Further Effects			Level 30° Entry/Maint/Exit		
Effect of Airspeed/Slipstream			Turn on Hdg/Feature		
Power/Trim/Flaps			Rate 1 Turn		
Mixture/Carb Heat/Cabin Air			Climb/Desc Turns		
<b>Ex. 5 - Taxiing</b>			<b>Ex. 10a - Slow flight</b>		
Start & Stop			Entry/Maint/Exit		
Speed Control			Recognise App Stall Symptoms		
Direction Control			Turning		
Use of Brakes/Failure			Climbing & Descending		
Tight Turns					
Wind/Use of Control Column			<b>Ex. 10b - Stalling</b>		
Instrument Checks			HASELL/HELL Checks		
			Symptoms/Characteristics of Stall		
<b>Ex. 6 - Straight &amp; Level</b>			Basic Stall		
S&L LAI/PAT			Standard Stall Recovery		
Regain Hdg/Alt/Spd			Base Leg Stall		
S&L Diff Configs/Speeds			Base Turn Stall		
Range/Endurance			Final App Stall		
Cross Controls/Sideslip					
			<b>Ex. 11 – Spinning (Not Mandatory)</b>		
			Safety checks		
			Incip. Recognition & Recovery		
			Fully Dev Recognition & Recovery		
Exercise	D	S	Exercise	D	S
<b>Ex. 12 - Takeoff and Climb</b>			<b>Ex. 17 - Precautionary Landing</b>		
Pre-Takeoff checks			Initial procedures		
Normal Takeoff			Field Selection		
Crosswind Takeoff			Circuit		
Short Field/Soft Field Takeoff			The Landing		
Determine Flap Setting			Actions after landing		
After Takeoff Checks					

## Andrewsfield Student Pack

			<b>Ex. 18 - Navigation</b>		
<b>Ex. 13 - App and Land</b>			Planning		
Circuit Procedures + RT			1st Dual Navex		
Use of Flaps			2nd Dual Navex		
Flap 2 Approach			1st Solo Navex - <b>See Below</b>		
Flap 3 Approach			2nd Solo Navex		
Crosswind Approach			Landaway 1 Dual		
Short Field Approach			Landaway 2 Dual		
Poor Wx Ccts			Landaway 1 Solo		
			Landaway 2 Solo		
<b>BEFORE FIRST SOLO (PT1)</b>			QXC		
Signed Ops Manual			SKYDEMON		
Medical Valid			<b>BEFORE FIRST SOLO NAV (PT2)</b>		
Bounce, Balloon & Go Around			"Before First Solo" Checklist		
EFATO			Completed Ex. 14-18A		
Flapless			Lost Procedures		
Glide			Diversion Planning		
Engine Failure Downwind			Completed Routes 1 to 3		
<b>Should</b> Pass Air Law & Op Proc			<b>Must</b> Pass Comms & Nav		
<b>INSTRUCTOR SIGN</b>			<b>INSTRUCTOR SIGN</b>		
<b>STUDENT SIGN</b>			<b>STUDENT SIGN</b>		
<b>Leaving/Joining Circuit</b>			<b>Ex. 19 - Instrument Appreciation</b>		
Use of Transponder			Physiology		
Depart Proc & RT			Straight & Level		
Rejoin Proc & RT			Climbing/Descending		
			Turning		
<b>Ex. 15 - Advanced Turning</b>			Climbing/Descending Turns		
Steep level Turns			Compass turns		
Cl/Dec/Glide Steep turns					
Spiral Dive Recovery					
Unusual Attitudes					
<b>Ex. 16 - Forced Landing w/o Power</b>			<b>RECOMMEND FOR TEST (PT3)</b>		
High + Low Key			"Before First Solo Nav" Checklist		
Circuit			Completed Ex. 1-19		
Field Selection			45 Hours Completed		
Restart Checks			Written Exams Completed		
Mayday + 7700			Read Standards Doc 19		
Shutdown Checks			Logbook Checked & Up To Date		
Sideslipping/S-Turns			<b>INSTRUCTOR SIGN</b>		
The Landing			<b>STUDENT SIGN</b>		
Actions After Landing					

APENDICES B



**Andrewsfield Aviation Ltd**

**Student Ground Exam Ready for Test**

**This is to confirm that the student named below has attended a pretest refresher and has shown adequate knowledge in the named subject and is ready for test**

**Students Name .....**

**Subject.....**

**Instructors Name.....**

**Signed.....**

**Date.....**

## APENDICES C

## 4.9 List Of Instructors and Qualifications

NAMES	CAN INSTRUCT	CAN EXAMINE
Carol Cooper	LAPL/PPL- FIC -MULTI - RT CPL-CRI-MULTI	LAPL/PPL-IMC-MULTI-RT-CRI FI
Paul Slater	LAPL/PPL –CPL-IMC-NIGHT	LAPL/PPL
Robert Gardner	LAPL/PPL-CPL-IMC-FIC	LAPL/PPL/IMC
Sean Reynolds	LAPL/PPL	
Steve Wilkes	LAPL/PPL-MULTI-IMC	
Timothy Senior	LAPL/PPL – NIGHT-IMC	PPL/IMC
Ian Laws	LAPL/PPL	
Mike Naylor	LAPL/PPL/NIGHT	
Julie Westhorp	LAPL/PPL-CPL-MULTI-IMC	PPL/IMC
Mike Rowland	LAPL-CRI- GROUND SCHOOL	
John Forster	LAPL/PPL	
Andy Yeomans	LAPL/PPL	LAPL/PPL
Mick Pitcher	LAPL/PPL	
Dave Gauntlett	LAPL/PPL	
Mike Derrett	LAPL/PPL	
Nicola Gentil (NAC)	LAPL/PPL-Multi-IMC-CPL-Night	LAPL/PPL/IMC
Victor Caliva (NAC)	LAPL/PPL-Multi-IMC-CPL-Night	LAPL/PPL/IMC
Massimo Iacopino (NAC)	LAPL/PPL- CPL	

## APENDICES D

## 4.10 List of Aircraft -

<b>Main Site</b>	<b>Site 2</b>	<b>Site 2 cont.</b>
G-BNSG PA 28 R (200)	N946AC Cessna 152	N977AC Pa28-161 Warrior
G-BGND C172	N920AC Pa28-161 Warrior	N978AC Pa28-161 Warrior
G-BMFG PA 28 Warrior(160)	N960AC Pa28-161 Warrior	N953AC Cessna 172
G- BNFR Cessna 152	N965AC Pa28-161 Warrior	N954AC Cessna 172
G- BNRL Cessna 152	N970AC Pa28-161 Warrior	N955AC Cessna 172
G-EGSL Cessna 152	N971AC Pa28-161 Warrior	N980AC Pa28R-201 Arrow
G-BOFC-Duchess B76	N974AC Pa28-161 Warrior	N991AC Pa44-180
G-BZHE Cessna 152	N975AC Pa28-161 Warrior	N725SA DA 42 NG
G-ECAD Cessna 152 Aerobat	N976AC Pa28-161 Warrior	
G-BSJX PA 28 (161)		
G-AZRL PA 18 (CUB)		

APENDICES E

**FACTORING DATA FOR TAKE-OFF AND LANDING WEIGHT, BALANCE & PERFORMANCE**

*Factors are cumulative and must be multiplied*

Item	Weight	Arm	Moment
A/C basic weight			
Row 1			
Row 2			
Fuel			
Oil			
Baggage 1			
Baggage 2			
Totals			

Total moment ÷ Total weight = C of G

Pressure altitude .....Temp .....

Head/Tail wind .....

Runway slope % .....

Take-off ground roll required .....x.....x.....=  
Conversion to metres =

Take-off total to clear 50ft obstacle .....x.....x.....=  
Conversion to metres =

Landing ground roll required .....x.....x.....=  
Conversion to metres =

Landing total to clear 50ft obstacle .....x.....x.....=  
Conversion to metres =

CONDITION	TAKE-OFF		LANDING	
	INCREASE In distance to height 50 feet	FACTOR	INCREASE In landing distance from 50 feet	FACTOR
A 10% increase in aeroplane weight e.g. another passenger	20%	1.2	10%	1.1
An increase of 1000 ft in aerodrome elevation	10%	1.1	10%	1.05
An increase of 10°C in ambient temperature	10%	1.1	5%	1.05
Dry grass*				
- Short (5"/13 cm)	20%	1.2	20% **	1.2
- Long (5-10"/13-25cm)	25%	1.25	30% **	1.3
Wet grass				
- Short (5"/13 cm)	25%	1.25	30%	1.3
- Long (5-10"/13-25cm)	30%	1.3	40%	1.4
A 2% slope	Uphill 10%	1.1	Downhill 10%	1.1
A tailwind component of 10% of take-off speed	20%	1.2	20%	1.2
Soft ground or snow	25% or more	1.25 **	25% or more	1.25 **
NOW USE ADDITIONAL SAFETY FACTORS (if data is unfactored)	1.33		1.43	
<p>NOTES * Effect on ground roll will be greater. **For a few types of aeroplane, e.g. those without brakes, grass surfaces may decrease the landing roll. However, for safety, assume the increase shown until you are thoroughly conversant with the aeroplane type. Any deviation from normal operating techniques is likely to result in an increased distance.</p>				



APENDICES F

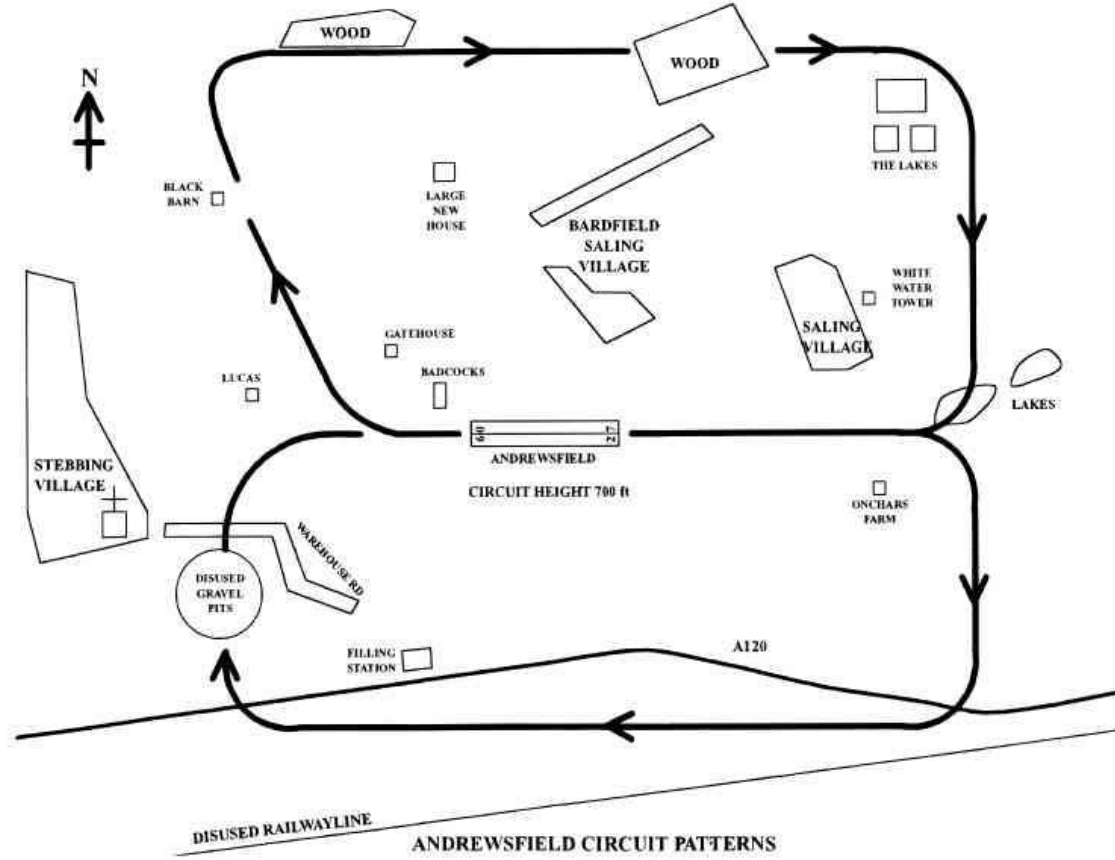
ANDREWSFIELD AVIATION STUDENT RECORD

Name .....

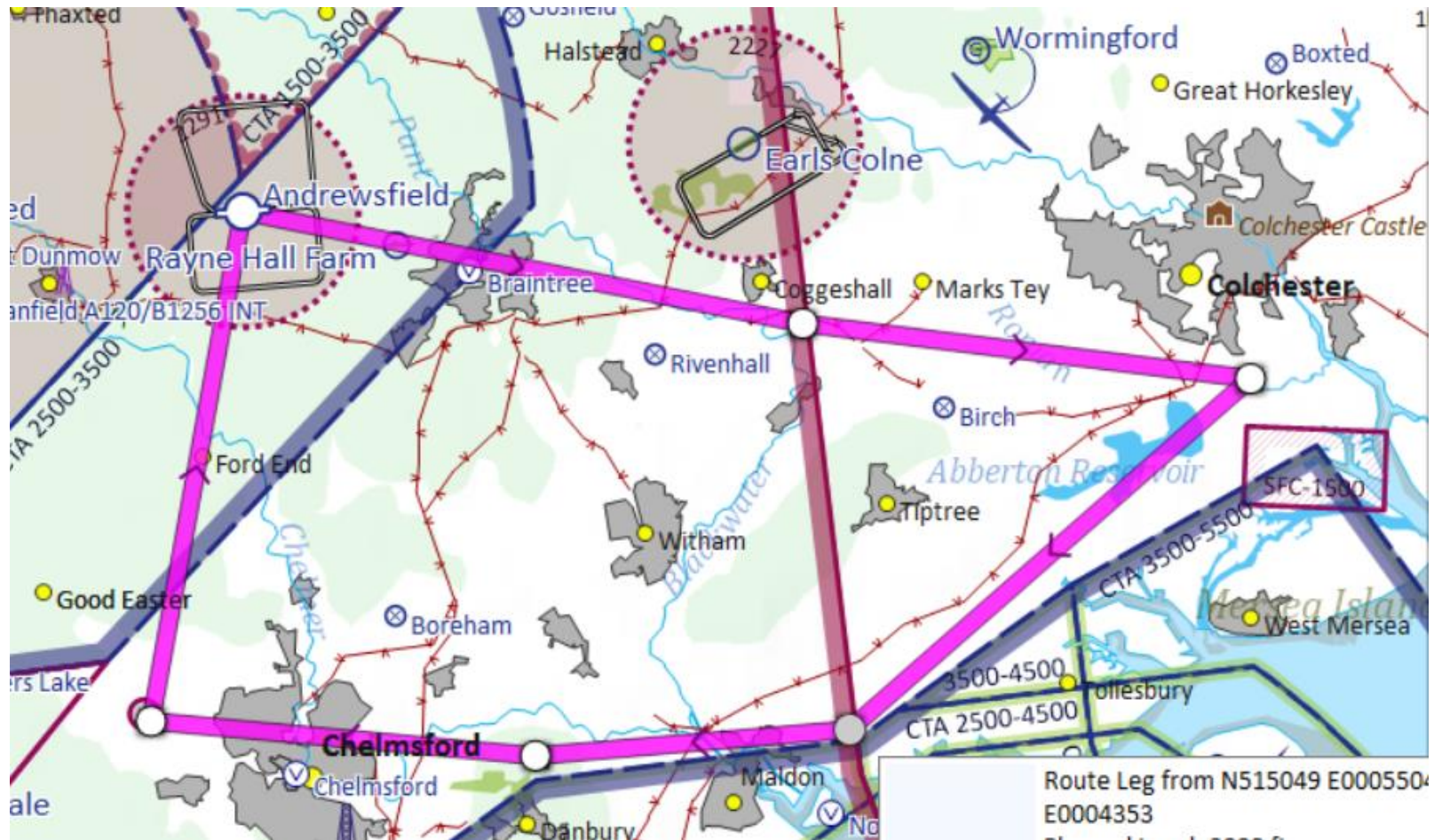
Sheet No.....

Date	Aircraft Reg.	Instructor	Exercise Number	Flight Time		Cross Country		Instrument Flying	Comments
				Dual	Solo	Dual	Solo		
<b>TOTALS BROUGHT FORWARD</b>									
TOTALS									

### APPENDICE G



APENDICES H



The Andrewsfield Training Area



The Naples Training Area