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PART-ORA
APPROVED TRAINING ORGANISATION MANUAL

This document supports the European Union
PART-ORA Approved Training Organisation Approval of:

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FOREWORD

This manual has been prepared in order to support the Alexander Air PART-ORA Approved Training Organisation Approval. This document is divided into FOUR parts.

PART 1	**MANAGEMENT ORGANISATION**
PART 2	**OPERATIONS MANUAL**
PART 3	**TRAINING MANUAL**
PART 4	**APPENDICES**

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For Manual /~~Amendment*~~ Approval

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All	All	All	Revised following CAA comments CBIR syllabus revised
20, 47	20, 47	20, 47	Minor updates
25-34, 45, 46	25-34, 45, 46	25-34, 45, 46	Updated SMS and revised MOR procedures

Approved By:

Compliance Manager
Part-ORA Alexander *Air*.

Date: 14 January 2020

FOR UK CAA USE ONLY
Approved By:

For the UK Civil Aviation Authority:

Date:

Following investigation and approval by the UK CAA, a signed & stamped copy of this page shall be returned to the Part-ORA Alexander Air, for inclusion in all copies held by the company.

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6	18/12/19	18/12/19	
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Compliance manager
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Head of Training
Administration
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CORPORATE COMMITMENT BY THE ACCOUNTABLE MANAGER

PART-ORA Approved Training Organisation Manual

This document defines the organisation and procedures upon which the UK CAA PART- ORA Training approval is based.

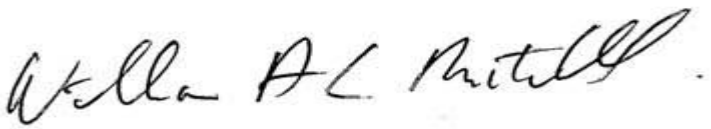
It is accepted that these procedures do not override the necessity of complying with any new or amended regulation published by EASA from time to time where these new or amended regulations are in conflict with these procedures.

It is understood that the UK CAA will approve this organisation whilst satisfied that the procedures are being followed. It is understood that the UK CAA reserves the right, provisionally or substantively, to suspend, vary or revoke the PART-ORA approval, as applicable, if the UK CAA has reasonable cause to believe that the procedures are not being followed and / or the standards not being upheld.

These procedures are approved by the undersigned and must be complied with, as applicable, whenever training is being delivered under the terms of the PART-ORA approval.

The undersigned fully accepts the duties and responsibilities of Accountable Manager as defined in ORA.GEN.210.

Signed:



Accountable Manager: W.A. Mitchell

For and on behalf of: Alexander Air

PART 1 – Organisation Management

- Management Procedures
- Compliance Monitoring
- Safety Management

1 Management Procedures

1.1 Authority and Applicability

The Alexander Air ATO Organisation Management Manual (OMM) is issued in accordance with Commission Regulation (EU) 1178/2011. It complies with AMC1 ORA.GEN.200

This manual shall be made available to all ATO staff.

1.2 Structure

The Organisation Management Manual is structured as follows:

PART	TITLE	CONTENTS
1	Management Procedures	Describes the management procedures to comply with those applicable requirements of Part-ORA that are not included in the Opertaions Manual or Training Manuals
2	Compliance Monitoring	Describes the compliance monitoring function of the management system and demonstrates compliance with ORA.GEN.200(6)
3	Safety Management	Describes the safety management procedures of the ATO and demonstrates compliance with ORA.GEN.200(1), (2) and (3)

1.2.1 Scope of Training

1.2.1.1 The following training courses are provided:

- PPL(A)
- LAPL(A)
- LAPL(A) to PPL(A) upgrade
- Night Rating (A)
- IR(R) (A)
- CBIR (A)

1.2.2 Personnel

The titles and names of persons referred to in ORA.GEN.210(a) and (b) are as follows:

ORA.GEN.210 Post	Name
***** Accountable Manager	W.A. Mitchell
Compliance Monitoring Manager	A.K. Guild
***** Safety Manager	A.K. Guild

*Indicates roles can be combined

1.2.3 Organisation Chart

Refer to Part 2, section 1.2.1.

1.2.4 Facilities

Description of facilities:

Flight training is conducted from Aberdeen Airport (EGPD), Signature Flight Support, Wellheads Drive, Aberdeen. The following facilities are provided:

- A combined operations room; flight planning room; briefing room and office with access to charts; AIS & meteorological information; safety information.

- A lounge providing crew rest area.
- An internal telephone system for contacting ATC.
- Classroom facilities for theoretical knowledge are provided in the crew room.

1.2.5 Notification of Changes to Organisations Activities

1.2.5.1 Any change to the Organisations activities, the scope of approval (locations where training takes place or courses), or any element of the management system, as detailed in GM1 ORA.GEN.130(a), requires the prior approval of the competent authority before the changes are implemented.

1.2.5.2 Applications for the amendment of the approval certificate are to be made prior to the commencement of any change and accompanied by all necessary supporting documentation. In the case of a planned change of a nominated person, this should be notified to the competent authority as soon as practicable.

1.2.5.3 Unforeseen changes must be notified to the competent authority at the earliest opportunity.

1.2.6 Changes not Requiring Prior Approval

1.2.6.1 Changes to the organisation that do not require prior approval by the competent authority are to be made only when agreed with the Accountable Manager. Changes are to be fully documented prior to implementation and in accordance with the Organisation's document control procedures.

1.2.6.2 The competent authority is to be notified of changes not requiring prior approval as soon as practicable. Notification is to be accompanied by all relevant documentation.

1.2.7 Terms of Approval

The scope of the ATO's approval is detailed in paragraph 1.2.1 above. The Organisation also provides flight training for the issue of FAA licences, ratings and certificates. It is the responsibility of the Head of Training to ensure that procedures for the provision of FAA training are kept distinct and separate from those related to training under Part-FCL. In particular, care is to be taken to ensure that Part-FCL course documentation is used only for students undergoing Part-FCL training.

1.2.8 Continued Validity

The ATO approval certificate remains valid subject to the Organisation remaining in compliance with the relevant requirements and the certificate not being revoked or surrendered.

1.2.9 Access by the Competent Authority

Representatives of the CAA are to be given access to all of the Organisation's facilities, aircraft, documentation, records, data, procedures or any other material relevant to its approved activities.

1.2.10 Staff Training

1.2.10.1 All personnel will be trained and their competence assessed to perform their tasks. Staff training is the responsibility of the Head of Training and they are responsible for maintaining records of all training accomplished.

1.2.10.2 Procedures for the training of instructional staff are detailed in section 4 of the ATO Operations Manual.

1.2.11 Contracted Activities

Not applicable.

1.2.12 Dissemination of Information

1.2.12.1 All personnel are to be aware of the rules and procedures relevant to the exercise of their duties.

1.2.12.2 The Head of Training is responsible for ensuring that all staff are aware of the contents of the relevant publications.

1.2.12.3 Signature sheets are to be maintained for the operations manual and personnel are to certify their knowledge and understanding as follows:

Document	Signature(s) Required
Operations Manual	All flight instructors and students before first acting as PIC of an ATO aeroplane and thereafter at every amendment.
Training Manuals	All instructors before first giving instruction on the relevant course and thereafter at each amendment.
Organisation Management Manual	All staff on first taking up employment and thereafter at each amendment.

1.2.13 Licensing Records

The Head of Training is responsible for maintaining accurate and up to date information on student licences and associated ratings and certificates, including the expiry dates of medical certificates and language proficiency. These will be retained on the online booking system.

1.2.14 Training Aircraft

The Accountable Manager is responsible for maintaining an adequate fleet of aircraft suitably equipped for the approved courses. Details of current fleet and course suitability are listed in document AA-RECD-0001 Aircraft Fleet Details.

1.2.15 Aerodromes

The Head of Training is to ensure that all aerodromes nominated for training meet the requirements of AMC1 ORA.ATO.140. A list of suitable aerodromes is advised to all instructors and is given below:

- Aberdeen*
- Dundee*
- Perth*
- Inverness*
- Fife
- Longside
- Dornoch

* Denotes suitable for night rating training

1.2.16 Personnel Requirements

Personnel appointed to instructional positions within the ATO must meet the following minimum requirements:

Position	Requirements
Head of Training	Have extensive experience in training as an instructor in the areas relevant to the training provided.
Flight Instructors	Hold at least the licence and, where relevant, the rating for which instruction is to be given. Be entitled to act as PIC on the aircraft during flight instruction. Hold a FI(A) certificate issued in accordance with Part-FCL.
Theoretical Knowledge Instructor	Hold at least the licence and, where relevant, the rating for which theoretical knowledge instruction is to be given. Hold a FI(A) certificate issued in accordance with Part-FCL.

2 Compliance Monitoring

2.1 Terminology

Term	Meaning
Audit	A systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements are complied with.
Corrective action	Corrective actions are steps that are taken to remove the causes of an existing nonconformity or undesirable situation. The corrective action process is designed to prevent the recurrence of nonconformities or undesirable situations. It tries to make sure that existing nonconformities and situations don't happen again. It tries to prevent recurrence by eliminating causes. Corrective actions address actual problems. Because of this, the corrective action process can be thought of as a problem solving process.
Inspection	An independent documented conformity evaluation by observation and judgement accompanied as appropriate by measurement, testing or gauging, in order to verify compliance with applicable requirements.
Non compliance	Failure to meet regulatory or other. A compliance audit makes findings of non-compliance
Non conformance	Nonfulfillment of a requirement. Non-conformity or non-comformances are any deviations from established procedures, programs and other arrangements related to the ATO. They may include non-compliances to regulations, but not all non-compliances are necessarily non-conformances.
Observation	An observation indicates that a situation has been discovered during an audit warranting clarification or further investigation in order to improve the overall status and effectiveness of the ATO. Observations do not involve situations where there is direct evidence indicating nonconformance. Observations may signal the potential for a future nonconformity.
Preventive action	Preventive actions are steps that are taken to remove the causes of potential nonconformities or potential situations that are undesirable. The preventive action process is designed to prevent the occurrence of nonconformities or situations that do not yet exist. It tries to prevent occurrence by eliminating causes. While corrective actions prevent recurrence, preventive actions prevent occurrence. Both types of actions are intended to prevent nonconformities. Preventive actions address potential problems, ones that haven't yet occurred. In general, the preventive action process can be thought of as a risk analysis process.

2.2 Specified Activity Standards

The compliance monitoring function provides a method of ensuring the ATO's compliance with:

(a) All relevant requirements of Regulation EU 216/2008 and its implementing rules

(b) Relevant national legislation as detailed in the Air Navigation Order

(c) ATO procedures as defined in:

  i. The Organisation Management manual

  ii. The ATO Operations Manual

  iii. The Training Manual(s) for the course(s) provided

(d) Any other regulatory requirements to which the ATO is subject (e.g. FARs, etc.)

2.2.1 Compliance Audits

Compliance Audits are programmed by the Compliance Monitoring Manager and conducted by auditors who are **not** normally involved in the day-to-day business of the area to be audited. Findings are recorded on the Audit Completion Certificate AA-FORM-0001 and a timescale for corrective action is agreed with the responsible person. The Compliance Monitoring Manager maintains a record of any non-conformance and ensures that a follow-up audit is completed at the end of the agreed period to ensure that corrective action has been successful. If the corrective action is found to be ineffective, it is reported to the Accountable Manager.

2.2.2 Non-Conformance Reports

All staff have access to Non-Conformance Report Forms AA-FORM-0002 which are completed and passed to the Compliance Monitoring Manager. Corrective action is decided upon in conjunction with the Head of Training and the originator of the report is informed of progress. A record of all Non-Conformance Reports and corrective or preventative actions is kept by the Compliance Monitoring Manager.

2.3 Responsibilities

The compliance monitoring programme is controlled by the Compliance Monitoring Manager who is responsible to the Accountable Manager for:

(a) Monitoring the ATO's compliance with all applicable regulatory requirements

(b) Monitoring compliance with the provision of the Operations, Training and Safety Management Manuals

(c) Ensuring that the compliance monitoring programme is properly implemented, maintained and continually reviewed and improved

(d) Ensuring that audits are conducted by suitably qualified, competent and independent personnel

2.4 Regulatory Compliance

Procedures to ensure regulatory compliance are detailed in the following 3 parts of the manual:

- The Organisation Management Manual
- The ATO Operations Manual
- The Training Manual for the relevant course(s)

The Compliance Monitoring Manager will ensure that audits are scheduled to confirm that all procedures are being complied with in accordance with the relevant instructions. All ATO procedures are to be audited within a 12-month period.

2.5 Compliance Monitoring Programme

The Compliance Monitoring Manager will maintain a schedule of audits that ensures that all parts of the ATO are subject to audit with a 12-month period.

2.5.1 Audit Procedures

2.5.1.1 Techniques for Effective Auditing

Auditors should feel free to develop their own techniques for conducting audits that promote the free passage of information between the unit that is being audited and the auditor himself. The following techniques should be used as guidelines when attempting to conduct an effective audit:

i. Interviews or discussion with personnel
ii. A review of published documents
iii. The examination of an adequate sample of records
iv. The witnessing of the activities which make up the operation
v. The preservation of documents and the recording of observations.

2.5.1.2 The Process of Auditing

An audit should be planned with care and methodically carried out. The auditor should consider the following points as steps in the process of the audit that will assist in the planning of specific audits:

i. Determine process(s) to be audited.
ii. The Compliance Monitoring Manager should be consulted prior to every audit to agree the scope and depth required for that particular unit.
iii. Planning and Preparation
iv. Review documentation relevant to the areas/processes being audited.
v. Carry out audit
vi. Raise audit report
vii. When the audit is completed the auditor should provide a verbal summary of his findings to the local responsible person.
viii. Report findings to the Compliance Monitoring Manager
ix. Once the audit is complete and the auditor has discussed the findings with the local responsible person the auditor should prepare a detailed auditor report for the Compliance Monitoring Manager and classify the severity of the non-conformities. A time frame for compliance should be included.
x. Closure action
xi. Verify the effectiveness of the closure action.

2.5.2 Recording System

Audits are carried out using the Compliance Monitoring Audit Checklist [AA-FORM-0001]. Each subject area on this checklist is audited at least once per year. Findings are recorded on the audit checklist. Non-conformances are recorded on the non-conformance reporting form [AA-FORM-0002]. Actions are tracked to completion using the action tracking register (spreadsheet based).

Completed audit checklists, non-conformance sheets and the action tracking spreadsheet are retained on the Alexander Air shared drive.

2.6 Training Syllabus

2.6.1 Competency Requirements for Compliance Manager

The compliance manager shall meet the following competency requirements:

- 5 years' experience in an aviation related post (may be a flying or ground based role)
- 5 years' experience of legal compliance in a health and safety or a general compliance role
- Qualified auditor or health and safety inspector

2.6.2 Compliance Awareness Training for all Staff

All Alexander Air staff shall receive training in the following areas:

- This manual

- Document control procedures and location of all controlled documents
- Safety
- Relevant Aberdeen International Airport Procedures

2.7 Document Control

The document control procedure is detailed in AA-PROC-0001. All documents have a front sheet which states the document number, title and revision status. The author, reviewer and approver are named.

Documents are all one of the following types:

- Manual
- Procedure
- Report (other than audit)
- Checklist (other than audit)
- Audit checklist or report

All audit reports are controlled documents and will be assigned a document number.

Controlled documents are maintained on the Alexander Air shared drive.

3 Safety Management

3.1 Scope of the Manual

Alexander Air is a non-complex organisation in accordance with the Aircrew Regulations, Annex VII. As such, the primary considerations of this Safety Management System to the organisation are set out below. Continuous improvement of safety performance will be achieved through:

i. Identifying hazards and risks associated with the organisation and its operations
ii. Developing mitigations for these to reduce the risk to a level that is as low as reasonably practicable
iii. Maintain a safety reporting system which identifies incidents and steps taken to prevent a recurrence
iv. To keep records of all reports, hazards, risks and mitigations
v. Ensure that all staff, club members and clients abide by the Company Safety Policy.

When changes such as staff changes, new equipment including introduction of a new aircraft, changes to facilities, new locations/training routes and courses etc are planned then an assessment of the implications of the changes will be made to ensure risks are mitigated.

This Safety Management System was designed in accordance with CAP 1059 (Safety Management Systems: Guidance for small non-complex organisations). Definitions of terms used are provided in CAP1059.

3.2 Safety Policy

The Organisations Safety Policy represents commitment by the Accountable Manager that the organisation will:

- Provide a safe environment for flight instruction
- Promote a high standard of safety and risk management at all times
- Improve towards the highest safety standards
- Comply with all applicable legislation, meet all applicable standards and consider best practice
- Provide appropriate resources
- Enforce safety as a primary responsibility of all managers
- Not blame someone for reporting something that would not have been otherwise detected by operating a Just Culture

Signed: (Accountable Manager)

Date: 21 December 2016

3.3 Safety Reports & Records

In general, the organisation maintains two forms of Safety Records – the Safety Report form and the Hazard Log / Risk Register.

Individuals can make a report on any safety related issues using the Safety Report Form (AA-FORM-0003). Completed forms should be submitted to the Safety Manager as soon as practicable after the accident or incident has occurred.

The Safety Manager will investigate all incidents; in accordance with Para 1.20.8 of the Operations Manual, calling on such specialist assistance that may be required and prepare a report for the Accountable Manager. Findings from all incidents will be reviewed and recommendations will be made to the Accountable Manager for any changes that may be required to prevent a recurrence.

The Organisation also maintains a Risk Register, available to all, which identifies hazards and the associated risk(s) apparent to the Organisation. It will also detail results of the risk assessment and mitigations that have been introduced to reduce the risk to a point where it is as low as reasonably practical. Items on the Hazard log and the mitigation effectiveness are constantly monitored to assess whether they have achieved the desired outcome.

Safety records are managed and retained by the Safety Manager for a minimum of 5 years from the date that they are generated. These are maintained on the Alexander Air shared drive.

3.4 Just Culture

Safe flight/maintenance operations are the ATOs most important commitment. To ensure that commitment, it is imperative to have uninhibited reporting of all incidents and occurrences that compromise safety. Whilst negligence or deliberate violation of the rules is unacceptable, it is recognized that people make mistakes and systems must be designed to be error tolerant.

The investigation of Accident, Incident, occurrence and Safety reports will be entirely non-punitive. The prime objective of the investigative process is to ensure the highest possible degree of safety and not to apportion blame.

3.5 Safety Communication

Safety communication is carried out in four ways:

- By email to students and renters
- Via the online booking system
- On the classroom noticeboard
- In face to face briefings during lessons and checkouts

3.6 Hazard Identification and Risk Management

3.6.1 Definitions

Hazard	A hazard is defined as a condition, event or circumstance that has the potential to cause harm to people or damage to aircraft, equipment or structures.
Risk	A risk is defined as the potential outcome from a hazard and is defined in terms of the likelihood of the harm occurring and the severity if it does

3.6.2 Hazard Identification

The hazard identification process is the formal means of collecting, recording, analysing, acting on and generating feedback about hazards that affect the safety of the ATO's operational activities. Hazard identification is an ongoing process that is managed by the Safety Manager.

3.63 Risk Assessment

The purpose of the risk assessment process is to allow the organisation to assess the level of risk associated with the identified hazards in terms of the potential harm. Risks are assessed in terms of severity and likelihood and a simple risk assessment matrix is used to determine the overall level of risk.

3.6.4 Risk Severity

3.6.4.1 The severity of risk will be determined considering any mitigation measures that may already be in place. Severity should be assessed in terms of the worst possible realistic scenario.

3.6.4.2 Risk severity should be defined in accordance with the following table.

SEVERITY OF CONSEQUENCES		
Definition	**Meaning**	**Value**
Catastrophic	Results in an accident, death or equipment destroyed	5
Hazardous	Serious injury or major equipment damage	4
Major	Serious incident or injury	3
Minor	Results in a minor incident	2
Negligible	Nuisance of little consequence	1

3.6.5 Risk Likelihood

3.6.5.1 The likelihood of an individual risk will be determined considering any mitigation measures that may already be in place. Determination of likelihood is not an exact science but relies on a logical, common sense analysis of the risk to arrive at a reasonable answer.

3.6.5.2 Risk likelihood should be defined in accordance with the following table:

LIKELIHOOD OF OCCURRENCE		
Definition	**Meaning**	**Value**
Frequent	Likely to occur many times	5
Occasional	Likely to occur sometimes	4
Remote	Unlikely to occur but possible	3
Improbable	Very unlikely to occur	2
Extremely Improbable	Almost inconceivable that the event will occur	1

3.6.6 Tolerability

3.6.6.1 When severity and likelihood have been defined, the tolerability of the risk can be determined. Tolerability is defined as either acceptable, to be reviewed or

unacceptable allowing a suitable risk mitigation strategy to be developed if required.

3.6.6.2 Definitions of tolerability levels are as follows:

Unacceptable	If the risk is unacceptable, the operation or activity should stop immediately or not take place. Major mitigation will be necessary to reduce the severity if the risk actually occurs or reduce the likelihood of the risk occurring. Normally it is the likelihood of the occurrence that can be reduced rather than the severity.
Review	If the risk falls into the review category, the severity or likelihood of occurrence is of concern; measures to mitigate the risk to as low as reasonably practicable (ALARP) should be sought. Where the risk is still in the review category after this action has been taken it may be that the cost of actions required to reduce the risk further are too prohibitive. The risk may be accepted, provided that the risk is understood and has the endorsement of the Accountable Manager.
Acceptable	If the risk is acceptable the consequence is so unlikely or not severe enough to be of concern; the risk is acceptable. However, consideration should still be given to reducing the risk further.

3.6.7 Risk Tolerability Matrix

The tolerability of an individual risk is determined by use of the following Risk Tolerability Matrix:

Risk Likelihood	**Risk Severity**				
	Catastrophic 5	**Hazardous 4**	**Major 3**	**Minor 2**	**Negligible 1**
Frequent 5	Unacceptable	Unacceptable	Unacceptable	Review	Review
Occasional 4	Unacceptable	Unacceptable	Review	Review	Review
Remote 3	Unacceptable	Review	Review	Review	Acceptable
Improbable 2	Review	Review	Review	Acceptable	Acceptable
Extremely Improbable 1	Review	Acceptable	Acceptable	Acceptable	Acceptable

3.6.8 Mitigation

3.6.8.1 If the level of risk falls into the unacceptable or review categories, mitigation measures will be required to reduce the risk to a level as low as reasonably practicable (ALARP).

3.6.8.2 Mitigation measures will be determined by the Safety Committee, in consultation with the Safety Manager and Accountable Manager. When measures are implemented to mitigate the severity and/or likelihood of a risk, a further assessment of tolerability will be conducted, using the Risk Tolerability Matrix.

3.6.9 Hazard Log

3.6.9.1 The Safety Manager will maintain a Hazard Log in which is recorded any identified safety hazards, risk assessments and subsequent follow-up actions. The log will include each identified hazard, the associated risk(s), results of the risk

assessment, taking into account any current mitigation measures in place, further risk mitigation measures if required and a re-assessment of the risk once the mitigation measures have been implemented, to assess whether they have achieved the desired outcome.

3.6.9.2 The Hazard Log will be reviewed regularly by the Safety Manager and at each meeting of the Safety Committee

3.7 Safety Assurance

Safety Manager monitors the performance and effectiveness of the Safety Management System to ensure that the hazard identification, risk assessment and mitigation process is being implemented effectively.

3.8 Safety Performance Monitoring

Alexander Air monitors it's safety performance by means of the following Safety Performance Indicators (SPI):-.

- Number of reportable accidents/incidents involving our aircraft
- Number of flight operations occurrences (MORs)
- Number of ground operations occurrences (MORs)
- Number of engineering occurrences (MORs)
- Number of injuries to our staff, members and guests
- Number of non-compliances with operating standards

Number of non-compliances with legislative requirements (e.g. Part-FCL. Part-ORA, etc.)

3.9 Mandatory Occurrence Reports

European Commission Regulations 2014/376 and 2015/1018 state that certain occurrences must be reported to the Competent Authority. Details of exactly which occurrences can be found in Annex V to EC2015/1018. The regulations also place certain responsibilities upon Alexander Air as an organisation. These include

- Reporting of the MOR to the Competent Authority (CAA) within 72 hours of being made aware of the occurrence using the online ECCAIRS tool
- Conducting an analysis of the occurrence to determine the cause and potential actions to prevent a re-occurrence and reporting these to the Competent Authority within 30 days
- Reporting upon the success of corrective and preventative actions within a further 3 months
- Establishing a voluntary reporting system for incidents that are not covered within Annex V but that are considered by the Safety Committee to potentially affect safety. The Safety Reporting scheme described In Para 3.2 will form the basis of such reports

Alexander Air will ensure that the person designated to handle the internal evaluation processing and analysis of any MORs is independent of the event itself. Analysis of occurrences and the success of the corrective and preventative actions will form part of the Safety Committee review described in Section 3.14 below.

3.10 Management of Change

The operation of the organisation is dynamic, and changes will frequently occur. Changes such as the introduction of new equipment, changes to facilities or scope

of work, introduction of new aircraft or courses, new contractors, new procedures or changes to key staff members.

Procedures for managing change include:

- Risk assessment
- Identification of the goals and objectives and nature of the proposed change
- Identification of operational procedures
- Analysis of changes in location, equipment or operating conditions
- Ensuring that all personnel are made aware of and understand changes
- Ensuring that changes are approved by the appropriate level of management
- The responsibility for reviewing, evaluating and recording the potential safety hazards from the change or its implementation

The Management of Change Procedure (AA-MAN-0003) provides further information.

3.11 Incident Management

3.11.1 Purpose & Responsibilities

3.11.1.1 Incidents will inevitably occur and can provide a valuable learning opportunity. The Safety Manager will investigate all incidents, calling on such specialist assistance that may be required and prepare a report for the Safety Committee. The Board will review the findings from all incidents and recommend to the Accountable Manager any changes that may be required to prevent a recurrence.

3.11.1.2 The Accountable Manager is responsible for implementing any changes recommended by the Safety Committee and for ensuring that any relevant safety lessons are shared as widely as possible, both within the ATO and with other organisations

3.11.1.3 The purpose of the investigation of an incident is not to apportion blame, merely to determine what happened, when, where, how and who was involved. Every effort should be made to understand why the incident happened and, to this end it is important to establish the facts and avoid speculation.

3.11.2 Emergency Preparedness and Response

An emergency is an event that is, by its very nature, high risk for victims at the immediate scene, and also for first responders and those assisting those responders. The Emergency Response Plan (ERP) exists to control the organisational response to the emergency so as to minimize the risk for all facets of the operation. A copy of the ATO's Emergency Response Plan is contained in document AA-PROC-0006.

3.11.3 Emergency Response Plan (ERP)

The ERP outlines in writing what is done when an emergency occurs, what to do after an accident happens and who is responsible for each action. A copy of the ERP is readily available at the Operations Desk. The ERP will be:

(a) Exercised periodically to ensure the adequacy of the plan and the readiness of the people who must make it work.

(b) Updated when contact information changes.

(c) Briefed to all personnel along with their responsibilities.

3.12 Contracted Activities

3.13.1.1 The Company may contract certain activities to external organisations for the provision of services. The ultimate responsibility for contracted activities, i.e. for the product or service provided by external organisations always remains with the Company.

3.13.2.2 A written agreement signed between the Company and the contracted organisation shall clearly define the contracted activities and the applicable requirements.

3.13.2.3 Currently, no activities are contracted out.

3.13 Safety Committee

The safety committee will meet every six months and is comprised of the following personnel:

- Accountable Manager/HT
- Safety Manager/Compliance Manager
- All Flight Instructors

The following agenda shall be followed:

- Review of safety metrics and any trends
- Review of any occurrences, Airproxes, incidents or accidents
- Review of any changes
- Review of operations out of Aberdeen Airport
- Any suggested updates to syllabi or teaching methods
- Open discussion to allow members to bring up any safety concerns

3.14 Training

All ATO personnel receive safety training as appropriate for their safety responsibilities. The Safety Manager maintains records of all safety training provided.

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PART 2 – Operations Manual

- General
- Technical
- Route
- Personnel Training

1 General

1.1 List & Description of the Operations Manual

Part	Title	Contents
1	General	General information describing the organisation and structure of the ATO.
2	Technical	Information related to the servicing and maintenance of the ATO's aircraft and to normal, abnormal and emergency handling procedures
3	Route	Instructions relating to flight planning, performance and loading of the ATO's aircraft
4	Personnel Training	Information regarding the induction, refresher and induction training of ATO staff and evaluation of instructional standards

1.2 Administration

1.2.1 ATO Structure

Note: * Roles may be combined

1.3 Responsibilities

1.3.1 Accountable Manager

The Accountable Manager is responsible to *the board of directors* for:

- Establishing and maintaining an effective management system
- Ensuring that the organisation has sufficient qualified personnel for the planned tasks and activities
- Promoting the highest degree of safety awareness throughout the organisation
- Ensuring that all activities can be financed

1.3.2 Head of Training (HT)

The HT is responsible to the Accountable Manager for:

- Ensuring that the training provided is in compliance with Part-FCL.
- Ensuring the satisfactory integration of flight or synthetic flight training with theoretical knowledge training.

- Supervising the progress of individual students
- Fostering the highest degree of safety awareness throughout the organisation
- Liaison with the competent authority.

1.3.3 Safety Manager

The Safety Manager is responsible to the Accountable Manager for:

- Acting as the focal point for safety issues.
- The development, administration and maintenance of an effective safety management system
- Facilitating hazard identification, risk analysis and management
- Monitoring the implementation of actions taken to mitigate risk
- Providing periodic reports to the Accountable Manager on safety performance
- Ensuring the maintenance of safety management documentation
- Ensuring that safety management training is available and that it meets acceptable standards
- Providing advice on safety matters
- Ensuring the initiation and follow-up of internal occurrence/accident investigations

1.3.4 Compliance Monitoring Manager

The Compliance Monitoring Manager is responsible to the Accountable Manager for:

- Monitoring the compliance of the organisation with all applicable regulatory requirements
- Monitoring the compliance of the organisation with the provisions of the Operations, Training and Safety Management Manuals
- Ensuring that the compliance monitoring programme is properly implemented, maintained and continually reviewed and improved
- Ensuring that audits are conducted by suitably trained and independent personnel

1.4 Student Discipline

1.4.1 Not applicable

1.4.2 Alcohol

No pilot shall fly in an ATO aircraft if he/she has consumed any alcohol within eight hours of take-off.

1.4.3 Drugs

1.4.3.1 Recreational drug use is not compatible with aviation safety and any student found to be indulging in such drug use is liable to immediate suspension from training.

1.4.3.2 No pilot is to fly an ATO aircraft if he has taken any medication, whether prescribed or not, unless approval has been given by an Aero-Medical Examiner (AME).

1.4.4 Reporting and Documentation

Details of a student's suspension shall be recorded in the trainee training file.

1.5 Approval and Authorisation of Flights

1.5.1.1 In accordance with FCL.020, a student pilot shall not fly solo unless authorised to do so and supervised by a flight instructor.

1.5.1.2 All flights in ATO aircraft are to be authorised in writing on the authorisation sheet and are to include full details of the intended flight and the limits of the authorisation.

1.5.1.3 Students on solo cross-country flights are to carry with them evidence of their authorisation.

1.5.1.4 Powers of authorisation for flights in ATO aircraft are delegated to flight instructors as follows:

Appointment	Authorising Powers
Head of Training	All flights
Flight Instructors (Unrestricted)	All training flights and student solo flights including land-away flights to airfields approved by the Company
Flight Instructors (Restricted)	As for unrestricted flight instructors but excluding first solo flight by day and night, and first solo cross flight.

1.5.2 Deviating from an Authorisation

1.5.2.1 The nature and limitations of the Flight Authorisation must be adhered to during the subsequent flight, except in case of emergency, or other extenuating circumstances.

1.5.2.2 In such circumstances the pilot shall, as soon as possible after the flight has ended, inform the instructor who authorised the flight of the details of the subsequent excursion from his authorisation.

1.6 Preparation of Flying Programme

Not applicable.

1.6.1 Restriction on Numbers of Aircraft in Poor Weather

The instructor responsible for the flight will determine whether the weather is suitable for that flight. If it is not, the flight will be rescheduled or an alternative flight will be proposed.

Renters are responsible for their own weather decision. However, they must comply with Company operating minima.

The Head of Training and Safety Manager have the final decision over the authorisation of any flight.

1.7 Nomination of Pilot-in-Command of Aircraft

When authorising a flight in an ATO aircraft, the instructor is to nominate one person as pilot-in-command (PIC), bearing in mind the following requirements:

(a) On dual instructional flights the instructor will always be nominated as pilot in command.

1.8 Responsibilities of Pilot in Command

The pilot in command must take all reasonable steps to

- maintain familiarity with relevant national and international aviation legislation and agreed aviation practices and procedures;
- maintain familiarity with such provisions of the ATO Operations Manual as are necessary to fulfil his function.

- Make himself familiar with all relevant information concerning the safe conduct of the flight. As a minimum, this will include a weather and Notam briefing.

1.8.1 Specific Responsibilities

1.8.1.1 The pilot in command shall:

(a) be responsible for the safe operation of the aircraft and the safety of its occupants and cargo during flight;

(b) have authority to give all commands he deems necessary for the purpose of securing the safety of the aircraft and of persons or property carried therein, and all persons carried in the aircraft shall obey such commands;

(c) have authority to disembark any person, or any part of the baggage, which in his opinion, may represent a potential hazard to the safety of the aircraft or its occupants;

(d) not allow a person to be carried in the aircraft who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered;

(e) ensure that all passengers are fully briefed on:

i. use of the seat belt or harness;
ii. the location and operation of emergency exits;
iii. the method of locating and opening windows;
iv. the method of opening cabin doors;
v. the method of deploying life rafts and their subsequent operation (as appropriate);
vi. the method and use of life jackets (as appropriate)
vii. deployment and use of the ELT or PLB (as applicable);
viii. other type specific safety features;
ix. the need to read the passenger briefing card;
x. the use of portable electronic equipment such as mobile phones, laptop PCs etc.

(f) ensure that all operational procedures and checklists are complied with, in accordance with the Operations Manual;

(g) ensure that the weather forecast and reports for the proposed operating area and flight duration indicate that the flight may be conducted without infringing Company operation minima;

(h) decide whether or not to accept an aircraft with unserviceable equipment in accordance with the list of allowable deficiencies.

(i) take all reasonable steps to ensure that the aircraft, and any required equipment is serviceable;

(j) in the absence of a qualified engineer, ensure that aircraft refuelling is supervised with particular attention being paid to:

i. the correct grade and amount of fuel;
ii. fuel water checks;
iii. fire safety precautions;
iv. checking filler caps for security and correct replacement after refuelling;

(k) take all reasonable steps to ensure that the aircraft weight and balance is within the calculated limits for the operating conditions;

(l) confirm that the aircraft's performance will enable it to complete safely the proposed flight;

(m) not permit any pilot to perform any activity during take-off, initial climb, final approach and landing except those duties required for the safe operation of the aircraft;

(n) take all responsible steps to ensure that before take-off and before landing the flight crew are properly secured in their allocated seats;

(o) take all reasonable steps to ensure that whenever the aircraft is taxiing, taking off or landing, or whenever he considers it advisable (e.g. in turbulent conditions), all passengers are properly secured in their seats, and all cabin baggage is stowed in the approved stowage;

(p) ensure that the pre-flight inspection has been carried out.

1.8.2 Deviation from Procedures in Emergencies

The pilot-in-command shall, in an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such a case, he may deviate from rules, operational procedures, and methods in the interest of safety.

1.8.3 Responsibilities in Respect of Third Party Maintenance

1.8.3.1 In the event that third-party maintenance of a Company aircraft is required away from base, the PIC is first to contact the Head of Training or his nominated deputy for authorisation. Any costs incurred for maintenance that has not been properly authorised will be wholly the responsibility of the PIC.

1.8.3.2 The PIC must ensure that, in the event of third party maintenance being required while away from base, the procedures referred to in the Technical Log are complied with.

1.9 Carriage of Passengers

Subject to the approval of the Head of Training and the privileges of his licence, a person may fly as PIC of a Company aircraft carrying passengers provided that the following conditions are complied with:

(a) He shall not act as pilot-in-command of an aircraft carrying passengers unless within the preceding 90 days he has made 3 circuits, each to include take-offs and landings, as the sole manipulator of the controls in an aircraft of the same type to be flown.

(b) Passengers may not be carried on student solo flights

(c) Passengers may not be carried on dual instructional flights with the following exceptions:

i. Another student on the same course of training may be carried if there is a training benefit to be gained.

ii. CAA inspectors may be carried on any dual instructional flight.

iii. Passengers may be carried on trial lessons provided that they have a clear and direct interest in the flight (e.g. parents, partner, etc.) and no remuneration of any kind is given in respect of their carriage.

1.10 Aircraft Documentation

1.10.1 Technical Log

1.10.1.1 It is the responsibility of all pilots to check the aircraft technical log prior to engine start in order to establish that the aircraft is serviceable for the proposed flight.

1.10.1.2 The Daily 'A' Check may be conducted only by a licensed pilot or engineer. The person conducting the check is to certify its completion by inserting his signature and CAA reference number (or other authorisation reference) in the relevant boxes, along with the date and time that the check was completed.

1.10.1.3 The PIC of the aircraft is to sign the 'Pilots Acceptance Column' certifying that he is satisfied with the pre-flight inspection and fuel/oil states for the intended flight.

1.10.1.4 On completion of the flight, the PIC is responsible for entering the flying time, engine starts and any un-serviceability as soon as practicable after landing.

1.10.1.5 Flight time is defined in accordance with FCL.010

1.10.1.6 Any defect recorded in the technical log shall be cleared or deferred by a licensed engineer, or other authorised person, prior to the next flight.

1.10.1.7 Care must be taken at all times to ensure that the technical log is completed accurately, legibly and in full.

1.10.2 Documents to be Carried in Flight

1.10.2.1 The following documents are to be carried on each flight as originals or copies unless otherwise specified:

i. Approved Flight Manual
ii. Certificate of Airworthiness (original)
iii. Airworthiness Review Certificate
iv. Certificate of Registration (original)
v. Noise Certificate, if applicable
vi. List of specific approvals, if applicable
vii. Aircraft Radio Licence, if applicable
viii. Certificate of third party liability insurance
ix. Aircraft Technical Log
x. Details of the filed ATS flight plan
xi. Current and suitable aeronautical charts for the route of the proposed flight and any reasonably foreseeable diversions
xii. Procedures and visual signals information for use by intercepting and intercepted aircraft
xiii. The MEL or CDL (if applicable)
xiv. Any other documentation that may be pertinent to the flight or is required by the states concerned with the flight

1.10.2.2 In the case of flights intended to take off and land at the same aerodrome and remaining within UK airspace, items iv to ix above may be retained at the aerodrome.

1.11 Retention of Documents

Technical Logs shall be maintained for the life of the aircraft plus 2 years. Completed Technical Logs will be archived by month and year.

Copies of Technical logs of non-ATO aircraft used for approved training shall be retained for a period of 3 years. When such aircraft are used only for short periods, copies of the relevant technical log pages are to be retained with the associated training record(s) for audit purposes.

1.12 Flight Crew Qualification Records

The Head of Training is responsible for maintaining an up-to-date record of the validity of staff and student licences, ratings and certificates. He is to ensure that personnel are not permitted to fly if any required qualification is not valid.

1.12.1 Currency of Licences and Ratings

1.12.1.1 All rental pilots are to be in possession of a valid pilot licence and medical certificate or declaration before acting as pilot in command of an ATO aircraft. Student pilots shall hold a valid medical certificate or declaration. In order to be valid:

- The licence and medical certificate must be signed by the holder.
- The medical certificate or declaration expiry date must not have been exceeded.
- The licence must contain a valid Certificate of Revalidation for the aircraft class to be flown.
- The licence must contain a valid Language Proficiency Rating.
- For flight under IFR, the licence must contain a valid instrument rating.
- If the flight involves flight at night, the licence must contain a night rating or a night qualification (unless the pilot is undergoing training for a night qualification).

1.12.1.2 A pilot who holds a licence issued by another ICAO State shall ensure that the licence is valid in all respects demanded by that State. This includes a medical certificate valid in the state of licence issue.

1.13 Revalidation

It is the responsibility of each instructor to ensure that all licences, ratings and certificates necessary for the conduct of their duties remain valid at all times.

1.14 Flight Duty Period and Flight Time Limitations (Flight Instructors)

(a) The maximum flight duty period in a day shall be 12 hours.

(b) The maximum weekly flight duty period shall be 60 hours.

(c) The maximum monthly flight duty period shall be 190 hours.

1.14.1 Flight Time Limitations

(a) A daily maximum of 8 flight hours which may include up to 8 instructional hours.

(b) A maximum of 100 flight hours in any calendar month which may include up to 100 instructional hours.

(c) An annual maximum of 600 flight hours which may include up to 600 instructional hours.

1.15 Flight Duty Period and Flight Time Limitations (Students)

(a) The maximum daily flight duty period shall be 8 hours.

(b) Maximum weekly flight duty period shall be 48 hours.

(c) Maximum monthly flight duty period shall be 190 hours.

1.15.1 Flight Time Limitations

(a) Maximum daily flying hours = 8.

(b) Maximum monthly flying hours = 100.

(c) Maximum annual flying hours = 600.

1.16 Rest Periods (Flight Instructors)

(a) The minimum rest period between consecutive duty periods shall be 10 hours.

(b) The rest period per week shall be one day per week.

1.17 Rest Periods (Students)

(a) The minimum rest period between flights shall be 1 hour if more than one flight is being conducted in a day. This will not apply to a sequence of flights in one day such as transit for circuit training or a land away cross country.

(b) The minimum rest period between consecutive duty periods shall be 10 hours.

1.18 Pilots' Log Books

1.18.1.1 All pilots are to maintain their personal logbooks in accordance with the provisions of AMC1 FCL.050

1.18.1.2 In particular, pilots are to ensure that the following particulars are recorded in their current log book:

- The name and address of the holder.
- Particulars of the holder's licence (if any) to act as a member of the flight crew of an aircraft.

1.18.1.3 On completion of a course of training, the Head of Training is to inspect each trainee's logbook and certify that it contains an accurate record of the flights carried out

1.19 Flight Planning (General)

Prior to each flight, the pilot-in-command is responsible for the proper planning of the flight. In particular, the PIC is to take into account:

- Current meteorological reports and forecasts
- Weather minima
- NOTAMs
- Aerodrome information
- Current charts and amendments
- Aircraft mass and balance

1.20 Safety Responsibilities

1.20.1 Safety Manager

1.20.1.1 The Safety Manager is responsible for monitoring the standards of flight safety within the ATO, and for ensuring that all information affecting flight safety is disseminated immediately to all flying personnel.

1.20.1.2 Notwithstanding the above, all personnel have a personal responsibility towards flight safety. Anyone who discovers a factor affecting flight safety, or who wishes or discuss any matter affecting safety, should contact the Safety Manager.

1.20.2 Safety Equipment

1.20.2.1 All pilots are to ensure that they are familiar with the use of the fire extinguishers and ELTs/PLBs fitted to the ATO's aircraft.

1.20.2.2. Prior to each flight pilots are to ensure that the fire extinguisher and first aid kit have been inspected within the preceding 12 months.

1.20.3 Radio Listening Watch

Pilots are to ensure that a listening watch is maintained on a suitable radio frequency throughout the flight. In normal circumstances, pilots are always to be in receipt of at least a Basic Service.

1.20.4 Accidents and Incidents

1.20.4.1 Any pilot involved in an accident or incident in an ATO aircraft is to complete an internal Safety Report Form (AA-FORM-0003), a copy of which is in Appendix 1. Once completed, the report is to be passed to the Safety Manager.

1.20.4.2 The Safety Manager is to investigate any incident or occurrence involving School aircraft or any other operational matter. This in no way absolves the School or aircraft PIC from their duty, under the Air Navigation Order, to report accidents or incidents.

1.20.4.3 The object of an internal investigation of an accident or incident is as follows.

- To find out what happened.
- To find out why it happened.
- To recommend measures to prevent it happening again.

1.20.4.4 It is not the purpose of an investigation to find a scapegoat or to allocate blame.

1.20.5 Definition of an Accident

1.20.5.1 The following is the ICAO definition of 'accident' and also the UK definition of 'reportable accident'.

An occurrence associated with the operation of an aircraft that takes place between the time when any person boards the aircraft with the intention of flight and such time as all persons have disembarked there from, in which:

Any person suffers death or serious injury while in or upon the aircraft or by direct contact with any part of the aircraft (including any part which has become detached from the aircraft) or by direct exposure to jet blast, except when the death or serious injury is from natural causes, is self-inflicted or is inflicted by other persons or when the death or serious injury is suffered by a stowaway hiding outside the areas normally available in flight to the passengers and members of the crew of the aircraft, or

The aircraft incurs damage or structural failure, other than:

Engine failure or damage, when the damage is limited to the engine, its cowling or accessories;

Damage limited to propellers, wing tips, antennae, tyres, brakes, fairings, small dents or punctured holes in the aircraft skin, which adversely affects its structural strength, performance or flight characteristics and which would normally require major repair or replacement of the affected component, or

The aircraft is missing or is completely inaccessible or

Significant damage is caused to property of the Company or any third party.

1.20.6 Definition of a Serious Injury

1.20.6.1 Serious injury means an injury that is sustained by a person in a reportable accident and which:

i. Requires his stay in hospital for more than 48 hours commencing within seven days from the date on which the injury was received.

ii. Results in a fracture of any bone (except fracture of fingers/toes/nose).

iii. Involves lacerations that cause nerve, muscle or tendon damage or severe haemorrhage or involves injury to any internal organ.

iv. Involves second or third degree burns affecting more than five per cent of the body surface.

v. Involves verified exposure to infectious substances or injurious radiation.

1.20.7 Reporting Procedures

1.20.7.1 Following an accident, it is the responsibility of the pilot concerned to ensure that the appropriate reporting procedures are followed.

1.20.7.2 The following sequence must be observed.

- Inform the ATO immediately and by the quickest means possible - the person receiving the call will inform the HT.
- Inform the competent authority as soon as possible - in the UK this is the Chief Inspector, Air Accident Investigation, Department of Transport.
- Inform the local police as soon as possible - see Civil Aviation (Investigation of Accidents) Regulations 1996.

1.20.7.3 The accident report form should be completed as soon as possible, and submitted to the responsible authority (with a copy to the HT) within 72 hours. This form will be supplied by the ATO.

1.20.7.4 For further information, see AIC P 55/2009 'Aircraft Accidents and Serious Incidents - Duty to Report'

1.20.8 Incident Reporting

1.20.8.1 An 'incident' is an occurrence that has

- jeopardised the safety of passengers, crew or aircraft, but which has terminated without serious injury or damage,
- was caused by damage to, or failure of, any major component, not resulting in serious injury or damage.

1.20.8.2 Following an incident, it is the responsibility of the pilot concerned to ensure that the appropriate reporting procedures are followed.

1.20.8.3 The following sequence must be observed.

- Inform the ATO immediately and by the quickest means possible - the School will inform the HT.
- Complete an incident report form and submit it to the HT within 3 days - the relevant form will be supplied by the ATO.

1.20.9 Occurrence Reporting

An 'occurrence' is something that is not a notifiable accident.

Mandatory Occurrence report is subject to EU Law (EC2014/376) and those incidents which are classified as Mandatory Occurrence Reports are defined in Annex V of EC2015/1018

The overriding criteria to determine whether an occurrence is reportable is if it has endangered or, if uncorrected would have endangered, the aircraft, occupants or other persons.

All pilots or any persons must report such occurrences using the online reporting form into the European ECCAIRS system. This can be accessed via the CAA website http://www.caa.co.uk/Our-work/Make-a-report-or-complaint/MOR/Mandatory-occurrence-reporting/.

For further information see Part 1, Section 3 (Safety Management System) of this manual.

1.20.10 AirProx

An airprox report shall be made whenever a pilot or controller considers that the horizontal or vertical distance between aircraft has been such that the safety of the aircraft was, or may have been, compromised.

Pilots wishing to make an airprox report should immediately inform ATC. If this is not possible, then the report should be made as soon as possible after landing, by telephone, to any UK ATCC.

A follow-up report on Form CA 1094 should then be submitted to the UK AirProx Board within seven days.

AirProx are to be reported to the Safety Manager and details will be recorded as part of the Safety Management System data. For further information, see General Aviation Safety Sense leaflet 13A and UK AIP, ENR Section 1.14.

1.20.11 Bird Strike

Any bird strikes or near miss is to be reported. Birdstrikes are to be treated as and reported in the same manner as any other occurrence, using the same reporting sysem as described in section 1.20.8 above

Bird strikes and near misses are to be reported to the Safety Manager and the details are to be recorded as part of the SMS data.

1.20.12 Wake Vortices

Any pilots experiencing wake vortex problems are to report in accordance with the Mandatory Occurrence Reporting procedures details in the previous paragraph.

1.20.13 General Reporting

All accidents, occurrences and airproxes involving approved training courses, including dual sorties with instructors, are to be notified to Approvals Support, CAA Licensing and Training Standards Department (Fax: 01293 573996).

2 Technical

2.21 Aircraft Descriptive Notes

Technical details of the aircraft used for training can be found in the relevant Pilots Operating Handbook or Flight Manual, which are to be considered as Annexes to this Manual as follows:

	Type	POH/FM Ref.	Revision
A	Cessna 172	Reims/Cessna 172M	6
B	PA28-161	Piper Warrior PA28-161	1
C	Cessna F150G	D397-1-13	26/07/96
D	Cessna 172	Reims/Cessna 172P	1

2.22 Aircraft Handling

2.22.1 Checklists

2.22.1.1 Aircraft are to be operated in accordance with the relevant checklist. Where any conflict is found between the checklist and the manufacturer's Pilot's Operating Handbook, the latter is to take precedence.

2.22.1.2 Any conflict between the checklist and the Pilot's Operating Handbook is to be reported to the Head of Training without delay.

2.22.1.3 All pilots are to be in possession of the appropriate checklist for the aircraft they are flying.

2.22.1.4 Pilots are to comply with the handling notes and checklist for each specific aircraft type flown.

2.22.2 Limitations

2.22.2.1 Aircraft are to be operated within the limitations laid down in the Pilot's Operating Handbook and any relevant national legislation.

2.22.2.2 Should any limitation be exceeded inadvertently, the fact is to be recorded in the technical log and the Head of Training is to be informed without delay.

2.22.2.3 If any structural or engine operating limitation is exceeded, the aircraft is to be landed as soon as is practicable and is not to be flown again except with the permission of the Head of Training.

2.22.3 Maintenance

Alexander Air Aircraft are maintained under an agreed Aircraft Maintenance Program. Alexander Air owned aircraft are maintained by Airspeed Aviation at Derby. Annual inspections are carried out at Derby, 50 hour and 150 hour inspections may be carried out at Aberdeen.

Maintenance of leased aircraft are the responsibility of the lessor.

2.22.4 Technical Logs

2.22.4.1 It is the responsibility of all pilots, including students on solo training exercises, to check the aircraft technical log prior to engine start in order to establish that the aircraft is serviceable for the proposed flight.

2.22.4.2 The PIC of the aircraft is to sign the 'Captain's Acceptance' certifying that he is satisfied with the pre-flight inspection and fuel/oil states for the intended flight.

2.22.4.3 On completion of the flight, the PIC is responsible for entering the flying time and any un-serviceability. If a solo student has any doubts concerning the serviceability of the aircraft, then the matter is to be discussed with an instructor.

2.22.4.4 Any defect recorded in the technical log is to be cleared or deferred by a licensed engineer, or other authorised person, prior to the next flight.

2.22.4.5 Care must be taken at all times to ensure that the technical log is completed accurately, legibly and in full.

2.22.5 Deferred Defects

2.22.5.1 Any aircraft defect that seriously hazards flight safety is to be rectified before the aircraft's next flight.

2.22.5.2 The decision as to whether a defect seriously hazards flight safety may be taken only by authorised certifying staff as defined in EASA Part M

2.22.5.3 Rectification of any aircraft or operational defect that does not seriously hazard flight safety may be deferred but it must be rectified as soon as practicable after it is reported and within any time limits specified in the applicable maintenance data.

2.22.5.4 Any defect not rectified before flight is to be recorded on the Deferred Defect Record kept in the aircraft document folder. Rectification of aircraft defects may be deferred only by authorised certifying staff as defined in EASA Part M. The pilot may defer rectification of operational log.

2.22.5.5 Aircraft defects are considered to be failure or malfunction of, or damage to, an aircraft's structure, systems and associated equipment that may affect its airworthiness.

2.22.5.6 Operational defects are considered to be failure or malfunction of aircraft instruments, equipment or systems not required to comply with Schedule 5 and 6 of the Air Navigation Order 2016.

2.22.5.7 Deferred defects and the action taken to correct them must also be recorded in the relevant aircraft logbooks

2.23 Emergency Procedures

2.23.1 General

2.23.1.1 In case of emergency, the procedures laid down in the relevant checklist are to be followed. Where any conflict is found between the checklist and the Pilot's Operating Handbook, the latter is to take precedence.

2.23.1.2 Any conflict between the checklist and the Pilot's Operating Handbook is to be reported to the Head of Training without delay.

2.23.1.3 Training of students in emergency procedures is covered under Part 3, paragraph 1.7.2.

2.24 Radio and Radio Navigation Aids

2.24.1 General

All aircraft are fitted with VHF radio and basic navigational aids. No aircraft is to fly without at least one VHF radio operational. Following a radio failure, the flight may be continued to a suitable aerodrome.

2.25 Allowable Deficiencies

2.25.1.1 Aircraft are to meet the minimum airworthiness requirements at all times and all equipment required by European and national legislation, appropriate to the type of flight intended, is to be fitted and working.

2.25.2 Aircraft with an Established Minimum Equipment List

Under Part-NCO of the Air Operations Regulation an approved Minimum Equipment List is not mandatory for training aircraft. However, if an approved MEL is required under any other Part of the Regulation (e.g. if the aircraft is also used for commercial air transport), its provisions are to apply to the aircraft when used for training

2.25.3 Aircraft Without an Established MEL

For dual instructional flying in aircraft that do not have a minimum equipment list established under the Air Operations Regulation, the component or system listed in column 1 of the following tables may be inoperative prior to the flight commencing, taking account of the environmental conditions indicated in columns 2 and 3, subject to the remarks in column 4.

Allowable Deficiencies – Single-Engine Aircraft			
(1) Deficiency	Acceptable		(4) Remarks
	(2) Day	(3) Night	
Cockpit or cabin lights	✓	✓	Head torch to be carried by each crew member at night.
Strobes/Flashing beacon			
Landing light/Taxi light	✓	✓	
Navigation (Position) lights	✓		
OAT gauge	✓	✓	Flight to remain clear of known icing conditions
Pitot heater	✓	✓	Flight to remain clear of known icing conditions
Cabin heating	✓	✓	
Airspeed indicator			
Altimeter	✓	✓	One may be unserviceable if two are fitted, subject to legal requirement for the flight
VSI	✓	✓	No solo student flights permitted
Attitude indicator	✓		Day VMC only
Turn co-ordinator	✓	✓	VMC only. No spin/stall awareness/avoidance training permitted. No solo student flights permitted
Directional gyro	✓	✓	No solo student flights permitted
VHF comms	✓	✓	Continue to destination only if no requirement for radio at destination
Intercom	✓	✓	For non-instructional flights only
Radionavaids/GPS	✓	✓	Subject to legal requirement for the flight
Transponder	✓	✓	Subject to legal requirement for the flight. No solo flights permitted
Fuel contents gauge	✓	✓	No solo student flights permitted Visual inspection must be carried out before every flight (Fuel for the planned flight with normal reserves, plus one hour's contingency fuel is the minimum departure load)
Fuel totaliser	✓	✓	
Oil Temperature Gauge			
Oil Pressure Gauge			

3 Route

3.1 Performance

3.1.1.1 Part 5, Chapter 2, Section 2 of the Air Navigation Order 2016 places on the pilot in command of an aircraft the responsibility to ensure that having regard to the performance of the aircraft in the conditions to be expected on the intended flight, and to any obstructions at the places of departure and intended destination and on the intended route, it is capable of safely taking off, reaching and maintaining a safe height thereafter and making a safe landing at the place of intended destination.

3.1.1.2 Prior to each flight in an ATO aircraft, pilots are to ensure that the calculated performance of the aircraft is sufficient to allow the intended flight profile to be completed.

3.1.2 Take-off

The pilot in command shall carry out the necessary performance calculations to ensure that take offs and climbs can be conducted safely and with the necessary obstacle clearance. All pilots must be familiar with AIC 127/2006. The safety factors from Safety Sense Leaflet 7 shall be applied.

No turns shall be carried out below 300ft AGL or below the published climb speed, except for emergency and collision avoidance.

3.1.3 Route

En route performance calculations shall be carried out using data from the POH.

VFR departures/arrivals from/to Aberdeen via the VFR lanes published in the AIP or via the Loch of Skene.

Instructions specific to the category and type/class of the ATO's aircraft covering:

Minimum performance required for en-route flying (sufficient for en-route climb)

Single engine performance/drift down (ME aircraft only)

3.1.4 Landing

The pilot in command shall carry out the necessary performance calculations to ensure that approach and landing can be conducted safely and with the necessary obstacle clearance. All pilots must be familiar with AIC 127/2006. The safety factors from Safety Sense Leaflet 7 shall be applied.

3.2 Flight Planning

3.2.1 Fuel

3.2.1.1 Prior to each flight the PIC is to ensure that sufficient fuel has been loaded to complete the intended flight profile and to allow the aircraft to land with sufficient fuel to fly for:

Day VFR: 30 minutes.

Night VFR: 60 minutes.

IFR (no alternate required): 60 minutes.

IFR (alternate required): to the alternate airfield then 45 minutes at normal cruising speed.

3.2.2 Oil

3.2.2.1 Before starting the engine of an ATO aircraft, the pilot is to ensure that the engine oil level exceeds the minimum stated in the Pilot's Operating Handbook /Flight Manual.

3.2.3 Minimum Safe Altitude

3.2.3.1 Before departing on a cross-country flight, pilots are to calculate a minimum safe altitude for the intended route: If, during the flight, the weather conditions are such that VMC cannot be maintained with good ground reference, the flight is to be continued above the MSA or terminated and the aircraft landed as soon as practicable.

3.2.3.2 Minimum safe altitude is to be calculated as follows:

- Locate the highest obstruction 5nm either side of track/turning points/destination.
- Round up to the nearest 100ft then add 1000ft.

3.2.3.3 For manoeuvring flight, the altitude chosen shall be sufficient to recover by the following:

- Stalling: recovery by 2000ft AGL.
- Spinning: recovery by 3000ft AGL.

3.2.4 Navigation Equipment

The PIC should ensure that before departure the aircraft's navigational equipment is checked for serviceability relevant to the lesson plan and in accordance with the ATO MEL. The necessary equipment (stopwatch, chart, plotter etc) must be carried.

3.3 Loading

3.3.1 General

3.3.1.1 No ATO aircraft is to take-off at a mass greater than the maximum authorised Take-Off Mass (MTOM). To achieve this, it may be necessary to reduce the fuel load carried (with due regard to the fuel required for the flight as detailed in the flight planning requirements at paragraph 3.2 above) or to reduce the payload. In addition, pilots are to ensure that:

(a) The aircraft mass will be below the Maximum Landing Mass (MLM) before the first landing or touch and go.

(b) The crew/passenger/baggage/ballast distribution results in a C of G position within the flight envelope published in the Pilot Operating Handbook/Flight Manual.

(c) A copy of the aircraft's latest Mass and Balance Report is held in the aircraft Technical Log or the aircraft's documents folder.

3.3.2 Load Sheets

3.3.2.1 It is the responsibility of the PIC to ensure that an aircraft is loaded in such a way as to meet the limitations related to all up weight and centre of gravity detailed in the appropriate flight manual or pilot's operating handbook. If any doubt exists as to the proper distribution of an aircraft's load, a load sheet is to be prepared, in accordance with the instructions in the relevant Pilot's Operating Handbook/ Flight Manual, showing the centre of gravity.

3.4 Weather Minima (Flight Instructors)

Flight Exercise	Visibility	Cloud Base	Surface Wind Velocity	Crosswind Component
Day – circuits and LFA	5km	800ft AAL	30Kt	See POH
Day – cross country	5km	1500ft AGL	30Kt	See POH
Night – circuits and LFA	5km	1500ft AAL	30Kt	See POH
Night – cross country	5km	1500ft AGL	30Kt	See POH
IMC	1500m	600ft AAL	30Kt	See POH

3.5 Weather Minima, (Students & Renters)

Flight Exercise	Visibility	Cloud Base	Surface Wind Velocity	Crosswind Component
Solo Students				
Day – circuits and LFA	8 km	1200ft AAL	20Kt	10K
Day – cross country	10 km	2500ft AGL	20Kt	10K
Night – circuits	10km	1500ft AAL	20Kt	10K
Night - LFA	10km	2500ft AGL	20Kt	10K
Renters				
PPL <100hrs PIC	10km	2000ft AGL	25Kt	12K
PPL >100hrs PIC	5km	1500ft AGL	30Kt	See POH
IMC Holders	3km	600ft AAL	25K	See POH

Note: Student weather limits may be varied according to experience.

3.6 Training Routes/Areas

3.6.1 Aerodrome Opening Hours

Aberdeen:

- Hours of operation: 0600-2230 local.
- Operations outside of normal hours are not permitted.

Perth:

- Hours of operation: 0900-1700 local.
- Flight instruction outside of normal hours are not permitted.
- Renter operations outside of normal hours permitted if a valid out of hours indemnity policy is in force.

Fife:

- Hours of operation: 0900-1700 local.
- Flight instruction outside of normal hours are not permitted.
- Local noise abatement procedures apply – see the AFE or Pooleys Guides.

Inverness:

- Hours of operation: 0600-2230 local.
- Operations outside of normal hours are not permitted.

Dundee:

- Hours of operation: Mon – Fri 0700-2045 local.
- Operations outside of normal hours are not permitted.
- Weekend hours vary – refer to AIP.

Longside:

- Daylight hours only.

Dornoch:

- Daylight hours only.

Airfield diagrams are available in Appendix 2 or from the AIP or Pooley's Guide.

3.6.2 Taxiing Procedures

Aircraft shall be parked in recognised parking areas. They are to be left chocked, brakes off, gust locks and pitot covers in place.

Care must be taken before taxying to ensure that persons, aircraft or vehicles do not present a hazard. Taxi no quicker than a fast jogging pace.

Low power settings should be used whenever possible to prevent damage to propellers and aircraft.

At Aberdeen, aircraft shall be pulled into the middle of the apron prior to starting but must remain behind the double white lines. Power checks will be carried out at E1.

At other airfields, power checks shall be carried out at recognised run up areas. Aircraft, where practicable, shall be turned into the wind.

3.6.3 Circuit Procedures

Circuit procedures can be found in the relevant section of the AIP or in the Pooleys or AFE Flight Guides.

Circuit altitudes are as follows:

- Aberdeen: 1200ft
- Inverness: 1000ft
- Dundee: 1000ft
- Perth: 1400ft
- Fife: 1400ft
- Longside: 1000ft
- Dornoch: 1000ft

Standard calls shall be made in the circuit. The instructor shall call "fan-stop", then "climbing away" when carrying out an EFATO.

Bad weather circuits shall be carried out at 80Kt, with one stage of flaps and no lower than 500ft AGL.

The circuit patterns are provided in Appendix 3. The procedures prior to first solo are given in Appendix 4.

3.6.4 VFR Circuit Departure

Circuit departures from Aberdeen shall be via one of the following routes:

- Peterhead Lane
- Inverurie Lane
- Stonehaven Lane
- Loch of Skene, Alford
- Loch of Skene, Banchory

Circuit departures from Longside shall be carried out from the upwind or the middle of the downwind leg. The departure frequency is Aberdeen Radar 134.100.

Circuit departures from Dundee shall be carried out from the upwind or the end of the downwind legs. Departures to the east shall follow the south bank of the Tay, not above an altitude of 1000ft unless otherwise authorised by ATC.

Circuit departures from Perth or Fife shall be carried out from the upwind or the end of the downwind legs. Alternatively, pilots may climb into the overhead at an altitude of 2000ft AAL before departing en route.

Circuit departures from Inverness shall be carried out from the end of the upwind or downwind legs.

When D703 is active, departures from Dornoch will be via the VFR entry/exit lane, not above 1000ft on the Inverness QNH.

Standard radio calls should be made i.e. downwind and departing the circuit (stating the direction of departure). Any ATC requests for radio calls shall be complied with.

3.6.5 Noise Abatement

At Fife, pilots shall avoid flying over the village of Kinglassie or the housing estate to the east of the airfield. Further details are given in the Pooleys or AFE Guides.

At Dundee, pilots shall avoid flying over Dundee City below an altitude of 2000ft.

3.6.6 Local Flying Area

Local flying areas are provided below for Aberdeen. It is not anticipated that general handling will take place from any other airfield. The local flying areas are:

1. The Laurencekirk and Montrose areas.
2. The area between Insch, Rhynie, Huntly, Banff and Turriff.
3. The area between Cruden Bay and Mintlaw.

Pilots must remain aware of the limits of controlled airspace, in particular the following:

- The Northern extent of the Aberdeen CTA: the 10 DME arc from the ADN VOR.
- The southern extent of the Aberdeen CTA: training should be carried out west of Banchory or Alford or south of Fourdon. Pilots should be aware that the base of the CTA is 3000ft until south of Fourdon. See Appendix 5 for further information.

Pilots should be in receipt of at least a basic service and comply with any ATC communications requests.

3.6.7 Standard Cross-country Routes

Training routes:

- Aberdeen – Insch – Turriff – Peterhead – Aberdeen
- Aberdeen – Banchory – Montrose – Stonehaven – Aberdeen
- Aberdeen – Perth – Aberdeen

- Aberdeen – Inverness – Aberdeen

80nm cross country (LAPL) route(s):

- Aberdeen – Perth –– Aberdeen
- Aberdeen –– Inverness – Aberdeen

150nm cross-country (PPL(A)) route(s)

- Aberdeen – Fife – Perth – Aberdeen

Chart extracts are given in Appendix 6

3.6.8 Prohibited and Danger Areas

The following prohibited, restricted and danger areas within 50nm are listed here. Further information is available in the AIP.

- D604 – Barry Budden (NB: vertical extent may be varied by notam).
- D703 – Tain Range
- R612 – Arbroath

In addition, there are HIRTAs at RAF Buchan and Mormond Hill.

3.6.9 Circuit Rejoin Procedures

Circuit rejoin at Aberdeen will be via the VFR lanes described in section 3.6.4 and at the discretion of ATC.

Circuit rejoin at Dundee will be via Broughty Ferry or Erroll and at the discretion of ATC.

Circuit rejoins at Inverness will be determined by ATC and are usually downwind or base leg joins.

Circuit rejoins at Perth and Fife will use the standard overhead rejoin.

Circuit rejoins at Longside will use the overhead join at 1500ft on the Aberdeen QNH.

When D703 is active, departures from Dornoch will be via the VFR entry/exit lane, not above 1000ft on the Inverness QNH.

Joining traffic will use standard R/T calls (deadside descending, downwind and final). Joining traffic shall give way to traffic already in the circuit.

3.6.10 After Flight Procedures

Aircraft shall use established taxiways. At Aberdeen, the standard route to the Signature Apron is via the E1 taxiway.

Aircraft shall park on established aprons which may include firm grass. Aircraft shall be left chocked, with the gust locks in and pitot covers fitted. Aircraft left overnight shall be tied down whenever practicable.

Pilots shall supervise refuelling and ensure that the fuel caps are correctly refitted.

4 Personnel Training

4.1 Responsibilities

The Head of Training is responsible for the supervision of all flight and synthetic instructors and the standardisation of all flight instruction. He is also responsible for maintaining appropriate records.

4.2 Initial Training

The following training will be given to instructors before they commence instructional duties:

- Company organisation.
- Facilities and security.
- Company documentation including the Operations and Training manuals.
- Flight and theoretical knowledge training programs.
- Emergency and safety training.
- Standardisation notes.
- Local area familiarisation and standardisation check.

4.3 Refresher Training

Flying Instructors remain in current instructing practice for the courses they teach and will not need refresher training. If, however, an instructor has not given a particular course of training in the last year, before recommencing instruction they will receive refresher training to the satisfaction of the HT.

4.4 Standardisation Training & Proficiency Check

Flying Instructors must be prepared to undergo a biennial standardisation check. The check will take the form of the HT or his nominee observing a briefing given by the FI, back-seating a flight with the Flying Instructor with a student and observing the subsequent debrief.

Any observations from the HT will be discussed with the FI following the check (but will not be discussed in the presence of the student) and recorded in the FI's file. Any issues that require further standardisation training will be both recorded and subsequently addressed.

Records are held on forms AA-FORM-0006 and AA-FORM-0007.

4.5 Proficiency Checks

See section 4.4.

4.6 Upgrading Training

Differences training shall be provided as required. This shall be provided by any qualified instructor so as authorised in AA-PROC-0002 Delegation of Authority Matrix.

4.7 ATO Personnel Standards Evaluation

Instructors are assessed against the following standards:

- Standards document 10(A) for instructional duties.
- Standards document 3 for VFR flying.
- Standards Document 1(A) for instrument flying.

Flying is assessed by the HT or his nominee on initial hire then again during refresher training. Additional assessment may be undertaken at the discretion of the HT.

PART 3 – Training Manual

LAPL, PPL, IR(R), CBIR

- 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.

The aim of the IR(R) course is to train the holder to fly in class D, E or G airspace under conditions requiring compliance with instrument flight rules. It is not a replacement for the IR and is for use in UK airspace only.

The aim of the CBIR course is to provide a competency based approach to the IR. It allows the holder to fly in conditions requiring compliance with instrument 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:

- 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

The pre-entry requirements for the LAPL(A) to PPL(A) conversion course are:

- Hold an LAPL(A)
- Hold a valid medical certificate issued in accordance with Part-MED

The pre-entry requirements for the IR(R) course are:

- Hold at least a PPL(A).
- Hold a valid medical certificate issued in accordance with Part-MED or a national medical declaration.
- Demonstrate evidence of English language proficiency equivalent to at least ICAO Level 4
- Hold a Flight Radio Telephony Operator's Licence.

The pre-entry requirements for the CBIR course are:

- Hold at least a PPL(A).
- Hold a valid medical certificate issued in accordance with Part-MED
- Have completed at least 50 hours of cross country flight as PIC.
- If the student has completed the Theoretical Knowledge Exams prior to commencing flight training, then the training must be completed and the skills test must be passed within the validity of the examinations.

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(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 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.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.

1.3.3 IR(R)

1.3.3.1 The holder of a course completion certificate for the EASA Basic Instrument Flying Module may have the total amount of flight training reduced by 10 hours.

1.3.3.2 UK IMC Rating privileges are included in the UK CPL(A) and UK ATPL(A). No further training or tests are required.

1.3.3.3 Holders of the AOPA (UK) Radio Navigation certificate may have the instrument flight training during the applied stage reduced by 5 hours.

1.3.3.4 Additional credits are available. Refer to CAP804 Section 5, part E.

1.3.4 CBIR

1.3.4.1 When the applicant has completed instrument flight instruction provided by an IRI(A) or an FI(A) holding the privilege to provide training for the IR; or has prior experience of instrument flight time as PIC on aeroplanes, under a rating providing the privileges to fly under IFR and in IMC these hours may be credited towards the required 40 hours up to maximum of 30 hours

1.3.4.2 Holders of the IR(R) may have credited up to 15 hours of flight instruction during which they were flying solely by reference to instruments.

1.3.4.3 Holders of ICAO compliant Instrument Ratings are required to have completed at least 50 hours of flight time under IFR as PIC.

1.3.4.4 Holders of ICAO compliant Instrument Ratings are not required to complete any specified flight or theoretical knowledge training.

1.3.5 CBIR – Assessment of Prior Experience

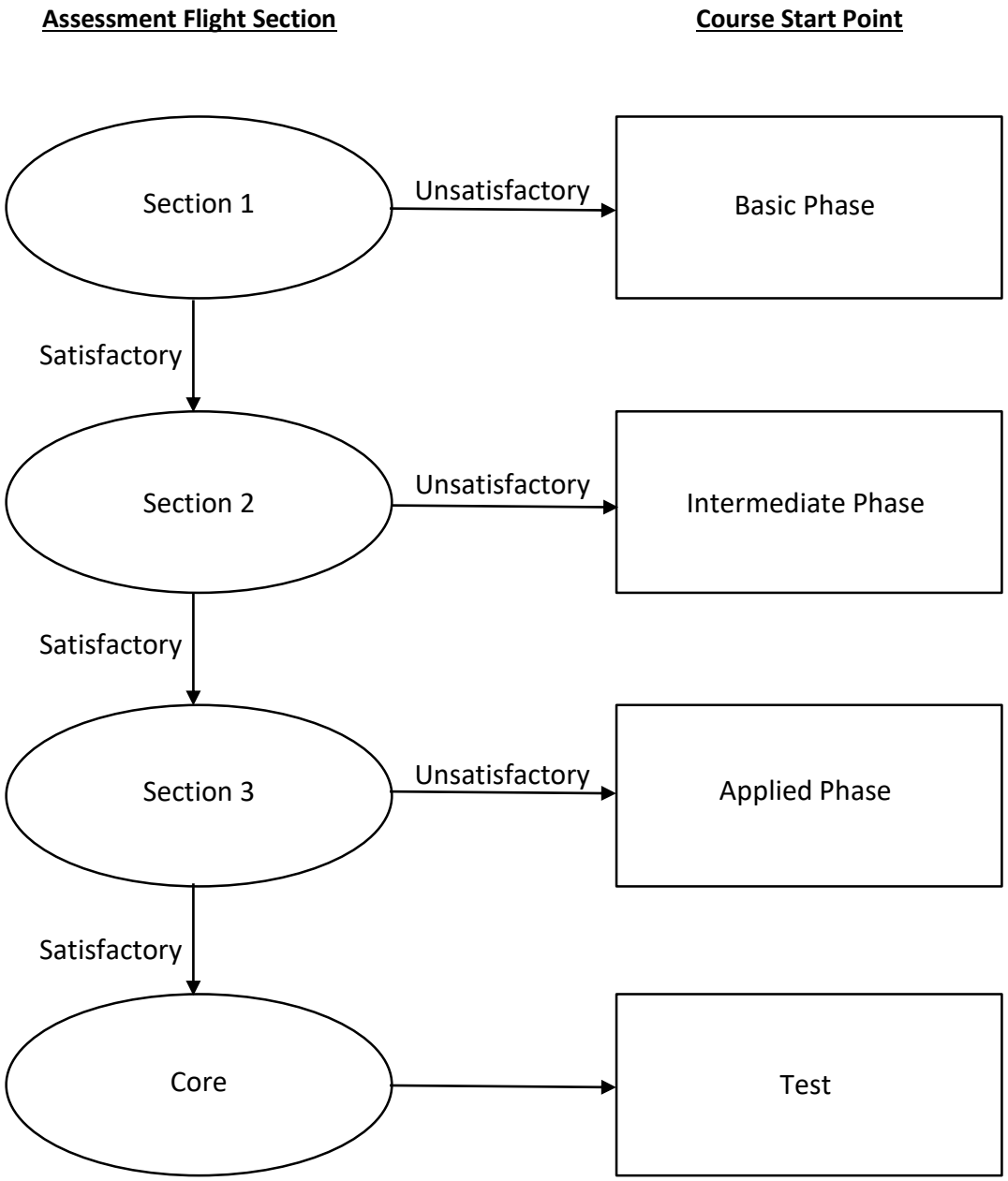
If a candidate does not hold a valid and current ICAO compliant IR(A) then his experience and competence shall be assessed as follows.

The pre-course assessment – by an Alexander Air instructor authorised to teach the CBIR(A) – shall take the form of a planned flight in accordance with IFR and in

IMC or simulated IMC. The flight shall include three sections detailed in the section 1.4.9. The candidate will be assessed against the standards set out in Standards Document 1. His ability to achieve the performance standard for each section will determine which modules of the course shall be completed. This is depicted in figure 1 below.

The amount of credit given for prior flight time shall be assessed from the candidate's logbook against the requirements detailed in section 1.3.4 and figure 1 below.

Figure 1 – Assessment of Prior Experience



1.4 Training Syllabi

1.4.1 Flight Training – LAPL(A)

The LAPL(A) course comprises a minimum of 30 hours of flight instruction, including 24 hours of dual flight instruction and 6 hours of supervised solo flight time, including 3 hours of solo cross-country flight time.

Flt	Sortie	Flight Time		Total	Remarks
		Dual	Solo		
1	Effects of Controls	1.2		1.2	Ex.4; 5a
2	Straight and Level	1.2		2.4	Ex.6; 5b
3	Climbing/Descending	1.0		3.4	Ex7; 8
4	Turning/Descending	1.0		4.4	Ex.9; 8
5	Slow Flight	1.0		5.4	Ex.10a
6	Stalling	1.0		6.4	Ex.10b
7	Spin Avoidance/Circuits	1.0		7.4	Ex.11; 12; 13
8	Circuits	1.0		8.4	Ex12; 13; 12/13E
9	Circuits	1.0		9.4	Ex12; 13; 12/13E
10	Circuits	1.0		10.4	Ex12; 13; 12/13E
11	First Solo		0.3	10.7	Ex.14
12	Circuit Consolidation 1	0.6	0.7	12.0	Ex12; 13; 12/13E
13	Circuit Consolidation 2	0.5	1.0	13.5	Ex12; 13; 12/13E
14	Advanced turning/GH Revision	1.0		14.5	Ex.5-13; 15
15	FLWOP	1.0		15.5	Ex. 16
16	Solo GH		1.0	16.5	Ex.5-13; 15; 16
17	Precautionary Landings	1.0		17.5	Ex.5-13; 15-17
18	Dual GH	1.0		18.5	Ex.5-13; 15-17
19	Nav 1	1.0		19.5	Ex.18a
20	Nav 2	1.5		21.0	Ex.18a
21	Nav 3		1.0	22.0	Ex.18a
22	Nav 4 (VFR Diversion)	1.5		23.5	Ex.18a
23	Nav 5 (Land-away)	1.5		25.0	Ex.18a
24a	LAPL Cross country 1		1.0	26.0	Ex.18a
24b	LAPL Cross country 2		1.0	27.0	Ex.18a
25	Nav 6 (Low level & Poor visibility)	1.0		28.0	Ex.18b
26	Nav 7 (Introduction to Radio Navigation)	0.5		28.5	Ex.18c
27	Mock skill test	1.5		30.0	As Required

1.4.2 Flight Training – LAPL(H)

Not applicable.

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	Ex18a; 18b
34	Solo Nav		1.5	38.2	Ex.18a
35	Radio Nav	1.5		39.7	Ex.18c

36a	PPL Cross Country 1		1.0	40.7	Ex.18a
36b	PPL Cross Country 2		1.0	41.7	Ex.18a
36c	PPL Cross Country 3		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 – PPL(H)

Not applicable

1.4.5 Flight Training – LAPL to PPL Upgrade

PPL(A) applicants holding a LAPL(A) shall have completed at least 15 hours of flight time on aeroplanes after the issue of the LAPL(A). The training course comprises 10 hours flight instruction, including 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 are made.

Flt	Sortie	Flight Time		Total	Remarks
		Dual	Solo		
1	Instrument Flying	1.0		1.0	Ex 19
2	Stalling	1.0		2.0	Ex.10b
3	Radio Navigation	1.0		3.0	Ex.18c
4	Nav Revision (VFR Diversion)	1.5		4.5	Ex 18a,c
5a	PPL Cross country 1		1.0	5.5	Ex.18a
5b	PPL Cross country 2		0.5	6.0	Ex.18a
5c	PPL Cross country 3		1.0	7.0	Ex.18a
6	GH Skills Test Revision	1.5		8.5	Ex.5-13; 15-17
7	Solo GH Skills Test Revision		1.5	10.0	Ex.5-13; 15; 16

1.4.6 Flight Training – PPL(S) to PPL(A)

Not applicable.

1.4.7 Night Rating

Applicants for the Night Rating (A) shall have a PPL(A) or a LAPL(A). The ATO training course comprises 5 hours flight instruction, including a dual cross country of at least 50km and 5 solo take offs and landings – all to a full stop.

Flt	Sortie	Flight Time		Total	Remarks
		Dual	Solo		
1	Introduction to Night Flying	1.5		1.5	Ex 20
2	Night Navex	1.5		3.0	Ex 20
3	Circuits	0.8		3.8	Ex 20
4	Solo Circuits		0.5	4.3	Ex 20
5	Night Navex	0.7		5.0	Ex 20

1.4.8 Instrument Rating (Restricted)

Applicants for the Instrument Rating (Restricted) shall have a PPL(A) and 10 hours of cross country as PIC after issue of the PPL(A). The ATO training course shall consist of a minimum of 15 hours flight time and a minimum of 10 hours simulated instrument flying.

Flt	Sortie	Flight Time		Total	Remarks
		Dual	Solo		
1	Attitude Instrument Flying	1.0		1.0	Ex 19a
2	Instrument Flight Patterns	1.0		2.0	Ex 19a
3	Limited Panel Instrument Flying	1.0		3.0	Ex.19b
4	Stalling & Unusual Attitude Recoveries	1.0		4.0	Ex.19b
5	VOR and NDB Tracking	2.0		6.0	Ex.19b
6	VOR Approaches	1.5		7.5	Ex.19c
7	ILS Approaches	1.5		9.0	Ex.19c
8	NDB Approaches	1.5		10.5	Ex.19c
9	RNAV Approaches	1.5		12	Ex 19c
10	Revision & Test Preparation	3.0		15.0	Ex.19c

1.4.9 Competency Based Instrument Rating (SE Only)

Flt	Sortie	Flight Time		Remarks
		Dual	Total	
Module 1: Basic				
1	Basic Full Panel Instrument Flying	1.0	1.0	B1
2	Advanced Full Panel Instrument Flying	2.0	3.0	B2
3	Limited Panel Instrument Flying	1.5	4.5	B3
4	Steep Turns, Stalling & Unusual Attitude Recoveries	1.5	6.0	B4
5	VOR Tracking, position fix	1.5	7.5	B5
6	NDB Tracking, position fix	1.5	9.0	B6
7	Consolidation of en-route RNAV[1]	1.0	10.0	B7
Module 2: Intermediate				
8	VOR Holds and Approaches	1.5	11.5	I1
9	ILS Approaches	1.5	13.0	I2
10	NDB Holds and Approaches, IFR off airways	2.5	15.5	I3
11	RNAV Holds and Approaches, IFR off airways	2.0	17.5	I4
12	DME Arcs[2], IFR off airways	2.5	20.0	I5
Module 3: Advanced				
13	Airways procedures, SID, STAR, vectored ILS, holds, vectored non-precision approach, missed approach	3.5	23.5	A1
14	Airways procedures, SID, STAR, procedural ILS, procedural non-precision approach, holds missed approach	3.5	27.0	A2
15	Off airways procedures, ILS and RNAV approaches, RNAV holds, missed approaches	3.0	30.0	A3
Module 4: Core[3]				
16	Airways procedures, SID, STAR, vectored ILS, holds, vectored non-precision approach, missed approach	3.5	33.5	C1
17	Airways procedures, SID, STAR, procedural ILS, procedural non-precision approach, holds missed approach	3.5	37.0	C2
18	Mock skill test	3.0	40.0	C3

1. Use of the approach approved GPS will be used to teach en-route PBN techniques from the very first lesson. Lesson 7 is designed to fill in any gaps. Further information is contained in section 2.4.

2. Only if available within a reasonable distance and will be combined with off airways IFR and with precision/non-precision approaches.

3. All applicants complete the Core module (minimum 10 hours) unless they hold a current ICAO compliant IR(A)

1.4.10 Theoretical Knowledge Training

Theoretical knowledge training uses a combination of self-study and instructor led workshops. The syllabi for each course are summarised below. Full details are provided in AA-SYLL-0001 Theoretical Knowledge Syllabus.

- PPL
  - Self-study: Air Pilot's Manual series
  - Instructor led workshops are provided for use of the CRP1/CRP5 and for flight planning.
- IR(R): Air Pilot's Manual Volume 5
- CBIR: Candidates will be required to complete an approved course of theoretical knowledge training unless they already hold an ICAO IR. This course is not provided by Alexander Air.
- Those CBIR candidates that already hold an ICAO IR do not have to complete theoretical knowledge instruction. However, use of the Air Pilot's Manual Volume 5 and "EASA EIR/CBIR" by Phil Croucher is highly recommended. CBIR candidates that do not hold an ICAO IR are required to complete the Theoretical Knowledge exams applicable to the IR.

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

Training takes place Mon – Sun 0800-2200. Slots are booked by the relevant instructor using the Alexander Air online booking system. Students also have access to the booking system. Theoretical knowledge training is booked in one hour slots by agreement between the instructor and student.

1.6.2 Bad Weather Constraints

If the weather is unsuitable for the planned lesson, an alternative will be offered if at all possible. If the weather precludes flying, a theoretical knowledge class may be offered instead.

1.6.3 Maximum Student Training Times

Student max duty period: 8 hours.

Typical duration of dual and solo flights: 1.5 hours

Typical duration of cross country flights: 2.5 hours

Max number of flying hours per day: 8 hours

Minimum rest period between flights: 1 hour. This does not apply to a sequence of flights such as navigation or transit flights.

Minimum rest period between consecutive duty periods: 10 hours.

1.6.4 Training Records

Training records are stored electronically using the Alexander Air shared drive. There are separate folders for active students and those who have completed or discontinued their training.

Only flight instructors shall have access to these records. The shared drive is password protected.

Students are encouraged to read their own training records. Instructors are expected to keep students informed of their overall progress.

1.6.5 Form of Training Records

Training records are maintained in spreadsheet format and contain the following:

- Student personal details and evidence that the pre-requisites for first solo have been 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 time of take-off and landing, 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 in the case of EASA licence training.

1.6.6 Checking of Records and Logbooks

The HT will check training records on a six-monthly basis. This will involve checking that:

- The relevant exercises have been carried out.
- The student notes are adequate to accurately gauge a student's progress.
- The relevant emergency training has been carried out and that this has been done at the correct time.
- That the relevant written exams have been carried out prior to first solo, first cross country and qualifying cross country.

Checks are recorded by the HTI annotating the student records with his comments.

The student's primary instructor will check the student's logbook on at least a monthly basis. This will involve checking that:

- Hours are recorded in the correct column of the logbook.
- The relevant totals columns are correctly filled in on each page.
- Each exercise is correctly described in the remarks column.

Checks are recorded by the instructor countersigning the logbook.

1.6.7 Standardisation of Entries

Training records are held electronically. The instructor carrying out the flight exercise is responsible for filling in all columns on the student record. In the case

of ground exams, the ground examiner shall annotate the student records after marking the exam paper.

Narrative reports of each exercise are recorded in the “comments” column of the “student notes” tab. Entries shall accurately and objectively describe student performance together with a description of any deficiencies in performance and how they might be resolved. Subjective comments, or comments not justified by evidence should be avoided.

The marking scheme consists of columns marked “Explained”, “Practiced” and “Achieved”. These are filled in with a tick when the instructor considers that the appropriate level of performance has been achieved.

Students debriefs shall be consistent with the student notes. Students are encouraged to review their notes.

1.6.8 Log Book Entries

Students’ logbooks are to be completed in accordance with AMC1 FCL.050.

1.7 Safety Training

1.7.1 Individual Responsibilities

1.7.1.1 The Safety Manager has overall responsibility for safety training on all Alexander Air 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 are to be taught and refreshed as follows:

Emergency Procedures	To Be Completed Prior To	Refresh Frequency
Evacuation	First Solo	n/a
Engine fire on ground	First Solo	Every six months
Engine fire in air	First Solo	Annually
Electrical fire	First Solo	Annually
Cabin fire	First Solo	Annually
Burst or flat tyre	First Solo	Annually
Trim failure	First solo XC	Annually
Stuck throttle	First solo XC	Annually
Low voltage warning	First solo XC	Annually
Vacuum failure	First solo XC	n/a
Comms failure	First Solo	Every six months

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.

Renters will require a dual check if they have not flown within the previous 4 weeks (renter has < 100 hours total time) or if they have not flown within the last 6

weeks (> 100 hours total time). Checkout frequency may be varied at the HT's discretion if warranted by pilot performance and relevant current experience. All renters will require a 6 month check, irrespective of the above. Checkouts from other flight schools will not be accepted.

1.7.4 Requirements before First Solo

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

(a) Have satisfactorily completed flights 1-13 of the PPL(A) syllabus or 1-10 of the LAPL syllabus

(b) Have completed at least 10 hours of dual flight training

(c) Have satisfactorily completed the relevant emergency drill training detailed at para 1.7.2 above

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 flights 1-29 of the PPL(A) syllabus or flights 1-19 of the LAPL(A) syllabus

1.8 Tests and Examinations

1.8.1 Flying

(a) **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). Skill tests for the IR(R) are conducted in accordance with Standards Document 25(A) and skill tests for the CBIR in accordance with Standards Document 1(A).

1.8.2 Theoretical Knowledge

(a) **Progress Tests**

Progress testing will be carried out through oral questioning – conducted by the student's primary instructor. If the student has been using online question banks, then proof that the student has achieved at least 85% in three consecutive tests will also be accepted as proof of progress. However, it will not replace oral questioning.

(b) **Theoretical Knowledge Examinations**

Theoretical knowledge exams will be conducted in accordance with the following procedure:

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.

iii. Examination papers are kept in a lockable cabinet which can be accessed only by the nominated custodian.

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.

Students will be required to complete all nine examinations within 6 sittings, each sitting being defined as a period of 10 consecutive days. Only one attempt at a particular subject is allowed within each sitting. Following failure of an exam, the student will receive one to one ground school with an instructor prior to retest. If an exam is failed on a third occasion, the student will be required to attend the CAA exam centre at Gatwick for retest.

1.8.3 Authorisation for Test

(a) **LAPL, PPL, IR(R) & CBIR Skill Tests**

In accordance with FCL.030(b) it is the responsibility of the ATO to recommend a candidate for the PPL, LAPL or CBIR Skill Tests. Formal recommendation is made on Form SRG 2128 (SRG1125 for IR(R) and SRG 1183A for CBIR) by the Head of Training or other authorised person. This certificate may not be signed until:

- All training is complete
- The candidate has passed all of the theoretical knowledge examinations

(b) **Theoretical Knowledge Examinations**

The primary instructor will recommend the student for a theoretical knowledge examination once that student has passed the progress test detailed in section 1.8.2 above. An email recommendation is sufficient.

1.8.4 Test Reports & Records

Completed examination papers are held in a locked cabinet to which only the ground examiner has access. These papers are held for 42 months.

Following successful completion of the examination, the student's training records will be updated accordingly. The student's primary instructor shall be responsible for entering exam results on the course completion form.

The Ground Examiner shall ensure that, following failure of an examination, the student does not sit the same exam paper again.

LAPL/PPL/IR(R)/CBIR skill test reports shall be submitted to the CAA by the flight examiner.

1.8.5 Examination Re-sit Procedures

Following failure of a theoretical knowledge examination:

- The Ground Examiner shall complete an SRG 2155 form and have it signed by the student.
- The student shall receive compulsory one to one ground school prior to resitting that subject.
- The student shall not make a second attempt at that subject within the same exam sitting.
- The student shall not sit the same exam paper twice.

1.9 Training Effectiveness

1.9.1 Identification of Unsatisfactory Progress

Not applicable

2 Briefings and Air Exercises

2.1 Air Exercises – PPL/LAPL/LAPL to PPL Upgrade

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

Ex 1b	Emergency Procedures
Aim:	To learn essential emergency procedures
Briefing	Emergency Drills Action in the event of a fire on the ground or in the air: Engine fire Cockpit/cabin fire Electrical fire Escape exits
Air Exercise	N/A
Comp Stnd	Knowledge of emergency drills and emergency equipment

Ex 2	Preparation for and Action After Flight
Aim:	To learn the actions required before flight and how to secure the aircraft after flight.
Briefing	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
Air Exercise	N/A
Completion Standard	Able to complete applicable checks with use of checklist

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

Ex 4	**Effect of Controls**
Aim:	To learn the effects of the cockpit controls and the functions of the instruments
Air Exercise:	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
Completion Standard	Demonstrate an understanding of the effects of the cockpit controls and the functions of the instruments

Ex 5	Taxiing
Aim:	To learn to manoeuvre the aircraft on the ground
Ground Exercise:	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
Completion Standard	Demonstrate the ability to manoeuvre the aircraft safely on the ground

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

Ex 6	Straight & Level Flight
Aim:	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
Air Exercise:	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
Completion Standard	Achieve and maintain straight & level flight, in balance, within: Height - ±150ft, Heading - ±10°, Speed - ±15kts

Ex 7	Climbing
Aim:	To learn to enter and maintain a climb in a constant direction and to level off at selected altitudes/heights
Air Exercise:	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
Completion Standard	Enter a climb maintaining direction within ±10°. Maintain a steady climb whilst maintaining heading within ±10° and speed within ±15kts. Level from a climb within 150ft of a selected altitude/height maintaining heading within ±10°. Display basic airmanship

Ex 8	Descending
Aim:	To learn to enter and maintain a descent in a constant direction and to level off at selected altitudes/heights
Air Exercise:	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
Completion Standard	Enter a descent maintaining direction within ±10°. Maintain a constant rate of descent whilst maintaining heading within ±10° and speed within ±15kts. Level from a descent within 150ft of a selected altitude/height maintaining heading within ±10°. Display basic airmanship

Ex 9	Turning
Aim:	To learn to complete a level turn at medium angles of bank onto selected headings
Air Exercise:	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
Completion Standard	Enter a turn at 30°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. Display basic airmanship

Ex 10a	Slow Flight
Aim:	To learn to manoeuvre the aircraft safely at slow speed
Air Exercise:	Airmanship Safety Checks Introduction to Slow Flight Controlled Slow Flight in the Clean Configuration at: V_{s1} + 10 knots & with Flaps Down V_{so} + 10 knots: Straight & Level Flight Level Turns Climbing & Descending Climbing & Descending Turns Controlled Slow Flight in the Clean Configuration at: V_{s1} + 5 knots & with Flaps Down V_{so} + 5 knots: Straight & Level Flight Level Turns* Climbing & Descending Climbing & 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
Completion Standard	Demonstrate the ability to manoeuvre the aircraft safely at slow speed. Display basic airmanship

Ex 10b	Stalling
Aim:	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
Air Exercise:	Airmanship – Safety checks The symptoms of the Stall Stall Recognition & Recovery Recovery Without Power Recovery With Power Recovery with uncommanded roll at the Stall Stalling with Power 'ON' & Recovery Stalling with Flap 'Down' & Recovery Maximum Power Climb (straight & turning flight) to the point of Stall with uncompensated Yaw– Effect of unbalance at the stall when climbing power is being used. Stalling & Recovery during Manoeuvres involving more than 1G (accelerated stalls, including secondary stalls & recoveries) Recoveries from Incipient Stalls in the landing and other configurations & conditions Recoveries at the Incipient Stage during change of Configuration
Completion Standard	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
Aim:	To learn to recognise the signs of an incipient spin and to recover with minimum height loss
Air Exercise:	Airmanship - Safety checks Stalling and recovery at the incipient spin stage (stall with uncommanded roll, about 45°) Instructor induced distractions during the stall
Completion Standard	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
Aim:	To learn to take-off, enter the climb and position the aircraft on the downwind leg of the circuit
Air Exercise:	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
Completion Standard	Demonstrate the take off and follow the correct circuit pattern. Display basic airmanship

Ex 13	The Circuit, Approach and Landing
Aim:	To learn to take-off and land facing into wind, crosswind and downwind
Air Exercise:	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
Completion Standard	Demonstrate the ability to follow the correct circuit pattern, to maintain the correct approach path and safely land the aircraft in various configurations. Perform required R/T Display basic airmanship

Ex 12/13E	Emergencies in the Circuit
Aim:	To learn to take the correct actions in the event of an emergency occurring in the circuit area
Air Exercise:	Aborted take-off Engine failure after take-off Mislanding/go-around Missed approach
Completion Standard	Demonstrate the ability to carry out the correct actions in the event of an emergency occurring during departure and landing.

Ex 14	First Solo
Aim:	To fly the normal circuit pattern and carry out a normal approach and landing
Air Exercise:	Normal circuit, approach and landing
Completion Standard	One solo circuit and full stop landing

Ex 15	Advanced Turning
Aim:	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
Air Exercise:	Steep turns (45°), level and descending Stalling in the turn and recovery Recoveries from unusual attitudes, including spiral dives Airmanship
Completion Standard	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. Display basic airmanship

Ex 16	Forced Landing Without Power
Aim:	To learn to make a safe approach and landing after a partial or complete engine failure
Air Exercise:	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
Completion Standard	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 for entering and leaving the circuit Display appropriate airmanship

Ex 17	Precautionary Landing
Aim:	To learn to learn to land the aircraft safely other than at the planned airfield
Air Exercise:	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
Completion Standard	Carry out checks and drills in accordance with the aircraft checklist Display appropriate airmanship

Ex 18a	Navigation
Aim:	To learn to plan a cross-country flight and to navigate by visual reference
Air Exercise:	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 navaids - 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
Completion Standard	Correctly employ pre-flight planning facilities and techniques Employ correct VFR navigational techniques while maintaining heading $\pm$10°, height/altitude $\pm$ 150ft and speed $\pm$15kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413; Display appropriate airmanship

Ex 18b	Navigation Procedure at Lower Levels & in Reduced Visibility
Aim:	To learn to navigate accurately at low level and in reduced visibility
Air Exercise:	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
Completion Standard	Correctly employ pre-flight planning facilities and techniques Employ correct VFR navigational techniques while maintaining heading ±10°, height/altitude ± 150ft and speed ±15kts 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
Aim:	To learn how to use radio aids to navigation
Air Exercise:	Navigation procedures as necessary Use of GNSS VOR ADF/NDB* VHF/DF En-route or terminal radar Secondary Surveillance Radar DME* * Not required for LAPL(A).
Completion Standard	Employ correct VFR navigational techniques while maintaining heading ±10°, height/altitude ± 150ft and speed ±15kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19	Introduction to Instrument Flight (Not required for LAPL(A))
Aim:	To learn to fly the aircraft safely by sole reference to instruments
Air Exercise:	Physiological sensations Instrument appreciation Attitude instrument flight Instrument limitations Basic manoeuvres 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
Completion Standard	Carry out all exercises while maintaining height/altitude ± 150ft, heading ±10°, speed ±15kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

2.2 – Air Exercises – Night

Ex 20	Introduction to Night Flying
Aim:	To learn to fly the aircraft VFR at night. To become familiar with the local flying area at night.
Briefing:	Legal aspects of night flying Human performance and limitations Cockpit organisation Pre-flight inspection Ground operations Flight operations Instrument scan Night emergencies
Air Exercise:	Taxi Take off and departure Basic manoeuvres Straight and level at various airspeeds and configurations Climbing and descending Standard rate turns, climbing and descending, onto selected headings Use of instruments to supplement visual flight Stalling – recovery at incipient stall Approach to stall in descending turn with bank with approach configuration and power Approach to stall in landing configuration and power Simulated electrical failure: demonstrate adaptation of eye
Completion Standard	Carry out all exercises while maintaining height/altitude ± 150ft, heading ±10°, speed ±15kts Stalls to be recovered safely to a V_y climb on a nominated heading ±10° with mimimum height loss. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 20	Night Navigation Exercise
Aim:	To execute a night navigation exercise using visual navigation
Air Exercise:	Flight planning Weather forecast and actual - map selection and preparation - choice of route – choice of waypoints - safety altitudes – additional night VFR requirements Departure & En-route Organisation of cockpit workload - altimeter settings – visual navigation – use of instrument scan to supplement visual flight – maintenance of altitude and heading – identification of waypoints – use of radio navigation to supplement visual navigation Arrival, approach and landing
Completion Standard	Correctly employ pre-flight planning facilities and techniques Employ correct VFR navigational techniques while maintaining heading $\pm$10°, height/altitude $\pm$ 150ft and speed $\pm$15kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413; Display appropriate airmanship

Ex 20	Night Circuits – Dual
Aim:	To learn to fly normal approaches and landings at night.
Air Exercise:	Normal circuit Normal approach and landing Landing without a landing light Go around from low height
Completion Standard	Maintains Take off/V_r $\pm$15kts/-5K, V_{AT}/V_{ref} $\pm$15kts/-5K Maintains directional control on roll out/touch and go/go around Adjusts descent and roundout (flare) to achieve a safe landing with little or no float and with the appropriate drift and crosswind correcton. Executes a timely decision to go around and maintains directional control, balance and airspeed control then transitions to a safe climb at V_Y. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 20	Night Circuits – Solo
Aim:	To carry out 5 solo take offs and landings to a full stop.
Air Exercise:	Normal circuit, approach and landing
Completion Standard	Complete 5 solo night take offs and landings

2.3 – Air Exercises IR(R)

Ex 19a	Full Panel Instrument Flight
Aim:	To learn to fly the aircraft safely by sole reference to instruments using the full panel
Briefing:	Instrument scan Instrument operation and limitations Human performance and limitations Operation of RNAV equipment: Radios, VOR/LOC, Direct to Function
Air Exercise:	Physiological sensations Attitude instrument flight Instrument limitations Basic manoeuvres 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
Completion Standard	Carry out all exercises while maintaining height/altitude ± 150ft, heading ±10°, speed ±10kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19a	Full Panel Instrument Flight Patterns
Aim:	To learn to improve the instrument scan and aircraft control through the flying of instrument flight patterns
Briefing:	Pitot static instruments Instrument pre flight checks Operation of RNAV equipment: loading, activating and amending flight plans
Air Exercise:	Pattern A & Pattern B. The purpose of these instrument flight patterns is to further develop the student's ability to control the aircraft without deliberate thought. These patterns will help prepare the student for the procedure turns and teardrop turns that he will fly during instrument approaches. Initial practice should be on cardinal headings. As proficiency increases, other patterns may be flown. Pattern A requires speed changes when straight and level. Pattern B requires spedd changes when in the turn.
Completion Standard	Carries out the relevant instrument pre flight checks Carry out all exercises while maintaining height/altitude ± 150ft, heading ±10°, speed ±10kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19b	Limited Panel Instrument Flight
Aim:	To learn to fly the aircraft safely by sole reference to instruments using a limited panel
Briefing:	Limited panel instrument scan Recognition and causes of instrument failure Compass errors Timed turns Use of RNSAV function to assist with limited panel operations
Air Exercise:	Basic manoeuvres using the limited panel Straight and level at various airspeeds and configurations Climbing and descending Standard rate timed turns onto selected headings Standard rate timed turns, climbing and descending, onto selected headings Recoveries from climbing and descending turns
Completion Standard	Carry out all exercises while maintaining height/altitude ± 200ft, heading ±15°, speed ±10kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19b	Stalling & Unusual Attitude Recoveries
Aim:	To learn to safely recover the aircraft from unusual attitude recoveries using a full panel and then a limited panel. To safely recover the aircraft from the approach to a stall (not required for IR (Restricted))
Air Exercise:	To recover from the following unusual attitudes using a full panel: Recovery from a steep descending turn Recovery form a steep climbing turn Recovery from a sustained 45º banked turn To recover from the following unusual attitudes using a full panel: Recovery from a steep descending turn Recovery form a steep climbing turn Recovery from a sustained 45º banked turn Stalling – recovery at incipient stall Approach to stall in descending turn with bank with approach configuration and power Approach to stall in landing configuration and power Use of “nearest” function on RNAV equipment
Completion Standard	Recovers unusual attitudes safely to straight and level flight at a suitable airspeed Stalls to be recovered safely to a V_y climb on a nominated heading ±10° with minimum height loss Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19c	VOR & NDB Tracking
Aim:	To learn to intercept and track VOR radials and NDB bearings
Briefing:	Operation of VORs Operation of ADF/NDBs Operation of DME Interception and tracking of VOR radials and NDB bearings Wind drift correction and maximum drift Instrument checks Selection of correct navigation source for CDI
Air Exercise:	Select, tune and identify the relevant station Intercept & track VOR radials inbound and outbound Intercept and track NDB bearings
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±10°, speed ±10kts Tracks VOR radial ±5° Tracks NDB bearing ±10° Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19c	VOR Approaches
Aim:	To learn to carry out VOR approaches both procedural and vectored
Briefing:	Approach plates Minimum descent altitudes and decision altitudes Circling minima Continuous descent final approach (CDFA) Approach briefing Execution of the approach Approach ban
Air Exercise:	Select, tune and identify the relevant station Procedural VOR approach – CDFA where applicable Vectored VOR approach – CDFA where applicable Missed approach
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±10°, speed ±10kts Tracks VOR radial ±5°, Starts go around at decision altitude ± 50ft, -0ft Minimum descent altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19c	ILS Approaches
Aim:	To learn to carry out ILS approaches both procedural and vectored
Briefing:	Components of the ILS system Pressure error correction Decision altitude Execution of the ILS approach Approach ban
Air Exercise:	Select, tune and identify the relevant station Procedural ILS approach Vectored ILS approach
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±10°, speed ±10kts Half scale deflection, azimuth and glidepath Starts go around at decision altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19c	NDB Approaches
Aim:	To learn to carry out NDB approaches both procedural and vectored
Briefing:	Execution of the NDB approach Approach ban
Air Exercise:	Select, tune and identify the relevant station Procedural NDB approach – CDFA where applicable Vectored NDB approach – CDFA where applicable Missed approach
Completion Standard	Carry out all exercises while maintaining height/altitude + 100ft, heading +10°, speed +10kts Starts go around at decision altitude + 50ft, -0ft Minimum descent altitude + 50ft, -0ft Circling mimima + 100ft, -0ft Tracks NDB bearing +10° Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex 19c	RNAV Approaches
Aim:	To learn to carry out RNAV approaches both procedural and vectored
Briefing:	LPV, LP and LNAV approaches Loading and activation of approaches RAIM prediction Execution of the RNAV Approach Correct use of the RNAV Equipment Design of the RNAV Approach
Air Exercise:	RAIM prediction Loading and activation of approaches Procedural RNAV approach Vectored RNAV approach Missed approach
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±10°, speed ±10kts Starts go around at decision altitude ± 50ft, -0ft (LPV, LNAV CDFA) Minimum descent altitude ± 50ft, -0ft (LNAV non CDFA) Circling mimima ± 100ft, -0ft CDI Half scale deflection, azimuth (all approaches) and glidepath (LPV only) Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

2.4 Air Exercises - CBIR

Ex B1	Basic Full Panel Instrument Flight
Aim:	To learn to fly the aircraft safely by sole reference to instruments using the full panel
Briefing:	Instrument scan Instrument operation and limitations Human performance and limitations Operation of RNAV equipment: Radios, VOR/LOC, Direct to Function
Air Exercise:	Physiological sensations Attitude instrument flight Instrument limitations Basic manoeuvres Straight and level at various airspeeds and configurations Climbing and descending – constant speed and constant rate Standard rate turns, climbing and descending, onto selected headings Recoveries from climbing and descending turns
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B2	Advanced Full Panel Instrument Flight Patterns
Aim:	To learn to improve the instrument scan and aircraft control through the flying of instrument flight patterns
Briefing:	Pitot static instruments Instrument pre flight checks Operation of RNAV: loading, amending and using flight plans
Air Exercise:	Pattern A & Pattern B. The purpose of these instrument flight patterns is to further develop the student's ability to control the aircraft without deliberate thought. These patterns will help prepare the student for the procedure turns and teardrop turns that he will fly during instrument approaches. Initial practice should be on cardinal headings. As proficiency increases, other patterns may be flown. Pattern A requires speed changes when straight and level. Pattern B requires speed changes when in the turn.
Completion Standard	Carries out the relevant instrument pre flight checks Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B3	Limited Panel Instrument Flight
Aim:	To learn to fly the aircraft safely by sole reference to instruments using a limited panel
Briefing:	Limited panel instrument scan Recognition and causes of instrument failure Compass errors Timed turns Use of RNAV to assist with limited panel operations
Air Exercise:	Basic manoeuvres using the limited panel Straight and level at various airspeeds and configurations Climbing and descending Standard rate timed turns onto selected headings Standard rate timed turns, climbing and descending, onto selected headings Recoveries from climbing and descending turns
Completion Standard	Carry out all exercises while maintaining height/altitude ± 200ft, heading ±15°, speed ±10kts Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B4	Steep Turns, Stalling & Unusual Attitude Recoveries
Aim:	To safely carry out steep turns solely by reference to instruments To safely recover the aircraft from the approach to a stall To learn to safely recover the aircraft from unusual attitude recoveries using a full panel and then a limited panel.
Briefing	Steep turns Stalling Unusual attitude recoveries Use of “nearest” function on RNAV equipment
Air Exercise:	Steep turns, left and right, minimum 45 degrees of bank Stalling – recovery at incipient stall Approach to stall in descending turn with bank with approach configuration and power Approach to stall in landing configuration and power To recover from the following unusual attitudes using a full panel: Recovery from a steep descending turn Recovery form a steep climbing turn Recovery from a sustained 45º banked turn To recover from the following unusual attitudes using a limited panel: Recovery from a steep descending turn Recovery form a steep climbing turn Recovery from a sustained 45º banked turn
Completion Standard	Steep turns while maintaining height/altitude ± 100ft, speed ±10kts, rolls out on heading ±10° Stalls to be recovered safely to a V_y climb on a nominated heading ±10° with minimum height loss Recovers unusual attitudes safely to straight and level flight at a suitable airspeed using correct technique, instrument scan and instrument interpretation Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B5	VOR Tracking, Position Fix
Aim:	To learn to intercept and track VOR radials To learn to fix position using VOR/VOR and VOR/DME
Briefing:	Operation of VORs Operation of DME Interception and tracking of VOR radials Wind drift correction and maximum drift Instrument checks including correct selection of CDI navigation source RNAV operation: VNAV
Air Exercise:	Select, tune and identify the relevant station Correct selection of CDI Intercept & track VOR radials inbound and outbound Fix position using 2 VORs and a VOR/DME
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Tracks VOR radial ±5° Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B6	NDB Tracking, Position Fix
Aim:	To learn to intercept and track NDB bearings To learn to fix position using NDB/DME & NDB/VOR
Briefing:	Operation of ADF/NDBs Interception and tracking of NDB bearings Wind drift correction and maximum drift Instrument checks
Air Exercise:	Select, tune and identify the relevant station Intercept & track VOR radials inbound and outbound Intercept and track NDB bearings Position fix: NDB/DME, NDB/VOR
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Tracks NDB bearing ±5° Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex B7	Consolidation of En Route RNAV
Aim:	To learn to learn how to use RNAV equipment for en route IFR RNAV
Briefing:	Principles of GPS Rules for carriage of RNAV equipment Operation of key GPS features RAIM prediction Activation of flight plan and tracking of flight planned route
Air Exercise:	Load and activate GPS flight plan Track route as loaded into the GPS In-flight amendment of the flight plan Use of vertical navigation feature
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Correctly chooses correct navigation source for the CDI Follows chosen track with less than half full scale deflection on the CDI Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex I1	VOR Holds & Approaches
Aim:	To learn to carry out VOR approaches both procedural and vectored To lean how to carry out hold entries and VOR holds
Briefing:	Approach plates Minimum descent altitudes and decision altitudes Circling minima Continuous descent final approach (CDFA) Approach briefing Execution of the approach Approach ban Principles of holding including hold entries application of wind drift correction in the hold
Air Exercise:	Select, tune and identify the relevant station Procedural VOR approach – CDFA where applicable Vectored VOR approach – CDFA where applicable Missed approach VOR holds
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Tracks VOR radial ±5°, Starts go around at decision altitude ± 50ft, -0ft (CDFA) Minimum descent altitude +50ft, -0ft (non CDFA) Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex I2	ILS Approaches
Aim:	To learn to carry out ILS approaches both procedural and vectored
Briefing:	Components of the ILS system Pressure error correction Decision altitude Execution of the ILS approach Approach ban
Air Exercise:	Select, tune and identify the relevant station Procedural ILS approach Vectored ILS approach
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Half scale deflection or less , azimuth and glidepath Starts go around at decision altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex I3	NDB Holds & Approaches, IFR off Airways
Aim:	To learn to carry out NDB approaches both procedural and vectored To learn to carry out a flight under IFR in airways with approaches at the destination airfield and return to the point of departure for a final approach
Briefing:	IFR flight planning and off airways operations Execution of the NDB hold & approach Approach ban
Air Exercise:	File IFR flight plan Select, tune and identify the relevant stations Correctly set up and use RNAV equipment Departure, en route and arrival procedures Procedural NDB approach – CDFA where applicable Vectored NDB approach – CDFA where applicable Missed approach NDB Holds
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed +5kts Starts go around at decision altitude + 50ft, -0ft (CDFA) Minimum descent altitude + 50ft, -0ft (non CDFA) Circling mimima + 100ft, -0ft Tracks NDB bearing +5° Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex I4	RNAV Holds & Approaches, IFR off Airways
Aim:	To learn to carry out RNAV approaches both procedural and vectored To learn to carry out a flight under IFR in airways with approaches at the destination airfield and return to the point of departure for a final approach
Briefing:	Use of RNAV flight plan off airways LPV, LP and LNAV approaches Loading and activation of approaches RAIM prediction Execution of the RNAV Approach Execution of the RNAV hold RAIM prediction
Air Exercise:	File IFR flight plan Correctly set up and use RNAV equipment Departure, en route and arrival procedures RAIM prediction Procedural RNAV approach Vectored RNAV approach Missed approach RNAV holds
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Starts go around at decision altitude ± 50ft, -0ft (LPV or LNAV – CDFA) Minimum descent altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft CDI Half scale deflection, azimuth (all approaches) and glidepath (LPV only) Correctly sets CDI navigation source Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex I5	DME Arcing, IFR off Airways
Aim:	To correctly join, track then exit a DME arc To learn to carry out a flight under IFR in airways with approaches at the destination airfield and return to the point of departure for a final approach NB: this exercise will be conducted in conjuction with precision and non precision approaches
Briefing:	Filing IFR flight plan Principles of the DME arc Entry Maintenance of the arc and wind drift correction Exiting the arc onto an instrument approach
Air Exercise:	Select, tune and identify the relevant stations Enter the arc Maintain the arc, applying suitable and sufficient wind drift correction Exiting the arc to commence an approach Execution of precision or non-precision approaches Missed approach

Completion Standard	Mainatins height/altitude ± 100ft, heading ±5°, speed ±5kts Maintains the arc +/- 1nm Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship Approach completion standards as per exercises I2-I4

Ex A1	**Airways Flight**
Aim:	To learn to carry out a flight under IFR in airways with an approach at the destination airfield and return to the point of departure for a second approach
Briefing:	Flight planning Filing of flight plan Use of airways SID/STAR Holding Vectored precision and non-precision approaches
Air Exercise:	Flight planning Weather forecast and actual, map selection and preparation, choice of route, controlled airspace, danger, prohibited and restricted areas, safety altitudes, alternate planning, RAIM prediction Calculations Magnetic heading(s) and time(s), fuel consumption, mass and balance, 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, SID, ATC liaison in controlled airspace, ATSOCAS, setting heading procedure, noting of ETAs, maintenance of altitude and heading, revisions of ETA and heading, log keeping, use of radio, use of navaids, minimum weather conditions for continuation of flight, in-flight decisions, transiting controlled/regulated airspace, diversion procedures Arrival, aerodrome joining procedure STAR, holding Vectored precision and non-precision approaches Diversion to alternate (point of departure)
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Half scale deflection, azimuth and glidepath for ILS Tracks VOR radial ±5°, Tracks NDB bearing ±5°, Starts go around at decision altitude ± 50ft, -0ft Minimum descent altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex A2	Airways Flight
Aim:	To learn to carry out a flight under IFR in airways with an approach at the destination airfield and return to the point of departure for a second approach
Briefing:	Flight planning Filing of flight plan Use of airways SID/STAR Holding Procedural precision and non-precision approaches
Air Exercise:	Flight planning Weather forecast and actual, map selection and preparation, choice of route, controlled airspace, danger, prohibited and restricted areas, safety altitudes, alternate planning, RAIM prediction Calculations Magnetic heading(s) and time(s), fuel consumption, mass and balance, 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, SID, ATC liaison in controlled airspace, ATSOCAS, setting heading procedure, noting of ETAs, maintenance of altitude and heading, revisions of ETA and heading, log keeping, use of radio, use of navaids, minimum weather conditions for continuation of flight, in-flight decisions, transiting controlled/regulated airspace, diversion procedures Arrival, aerodrome joining procedure STAR, holding Procedural precision and non-precision approaches Diversion to alternate (point of departure)
Completion Standard	Carry out all exercises while maintaining height/altitude + 100ft, heading +5°, speed +5kts Half scale deflection, azimuth and glidepath for ILS Tracks VOR radial +5°, Tracks NDB bearing +5°, Starts go around at decision altitude + 50ft, -0ft Minimum descent altitude + 50ft, -0ft Circling mimima + 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex A3	Off Airways Flight
Aim:	To learn to carry out a flight under IFR off airways with an approaches at the destination airfield and return to the point of departure for a second approach
Briefing:	Flight planning Filing of flight plan Procedural precision and RNAV approaches Holding
Air Exercise:	Flight planning Weather forecast and actual, map selection and preparation, choice of route, controlled airspace, danger, prohibited and restricted areas, safety altitudes, alternate planning, RAIM prediction Calculations Magnetic heading(s) and time(s), fuel consumption, mass and balance, 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 airspace, ATSOCAS, setting heading procedure, noting of ETAs, maintenance of altitude and heading, revisions of ETA and heading, log keeping, use of radio, use of navaids, minimum weather conditions for continuation of flight, in-flight decisions, transiting controlled/regulated airspace, diversion procedures Procedural precision and RNAV approaches RNAV Holding Diversion to alternate (point of departure)
Completion Standard	Carry out all exercises while maintaining height/altitude + 100ft, heading +5°, speed +5kts Half scale deflection, azimuth and glidepath for ILS RNAV approaches: CDI Half scale deflection, azimuth (all approaches) and glidepath (LPV only) Tracks VOR radial +5°, Tracks NDB bearing +5°, Starts go around at decision altitude + 50ft, -0ft Minimum descent altitude + 50ft, -0ft Circling mimima + 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex C1	Airways Flight
Aim:	To learn to carry out a flight under IFR in airways with an approach at the destination airfield and return to the point of departure for a second approach
Briefing:	Flight planning Filing of flight plan Use of airways SID/STAR Holding Vectored precision and non-precision approaches
Air Exercise:	Flight planning Weather forecast and actual, map selection and preparation, choice of route, controlled airspace, danger, prohibited and restricted areas, safety altitudes, alternate planning, RAIM prediction Calculations Magnetic heading(s) and time(s), fuel consumption, mass and balance, 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, SID, ATC liaison in controlled airspace, ATSOCAS, setting heading procedure, noting of ETAs, maintenance of altitude and heading, revisions of ETA and heading, log keeping, use of radio, use of navaids, minimum weather conditions for continuation of flight, in-flight decisions, transiting controlled/regulated airspace, diversion procedures Arrival, aerodrome joining procedure STAR, holding Vectored precision and non-precision approaches Diversion to alternate (point of departure)
Completion Standard	Carry out all exercises while maintaining height/altitude ± 100ft, heading ±5°, speed ±5kts Half scale deflection, azimuth and glidepath for ILS Tracks VOR radial ±5°, Tracks NDB bearing ±5°, Starts go around at decision altitude ± 50ft, -0ft Minimum descent altitude ± 50ft, -0ft Circling mimima ± 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex C2	Airways Flight
Aim:	To learn to carry out a flight under IFR in airways with an approach at the destination airfield and return to the point of departure for a second approach
Briefing:	Flight planning Filing of flight plan Use of airways SID/STAR Holding Procedural precision and non-precision approaches
Air Exercise:	Flight planning Weather forecast and actual, map selection and preparation, choice of route, controlled airspace, danger, prohibited and restricted areas, safety altitudes, alternate planning, RAIM prediction Calculations Magnetic heading(s) and time(s), fuel consumption, mass and balance, 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, SID, ATC liaison in controlled airspace, ATSOCAS, setting heading procedure, noting of ETAs, maintenance of altitude and heading, revisions of ETA and heading, log keeping, use of radio, use of navaids, minimum weather conditions for continuation of flight, in-flight decisions, transiting controlled/regulated airspace, diversion procedures Arrival, aerodrome joining procedure STAR, holding Procedural precision and non-precision approaches Diversion to alternate (point of departure)
Completion Standard	Carry out all exercises while maintaining height/altitude + 100ft, heading +5°, speed +5kts Half scale deflection, azimuth and glidepath for ILS Tracks VOR radial +5°, Tracks NDB bearing +5°, Starts go around at decision altitude + 50ft, -0ft Minimum descent altitude + 50ft, -0ft Circling mimima + 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

Ex C3	Mock Skill Test
Aim:	To carry out a full skill test profile under simulated test conditions
Briefing:	As per flight examiners manual for the IR(A) initial skill test
Air Exercise:	Flight planning Notification of the flight Departure Airways flight Emergency procedures: icing Holding Procedural ILS approach Missed approach Divert to departure point General handling: Stalls: base to final turn configuration stall, final approach configuration stall (both recovered at incipient stage) Limited panel straight and level, climbs, descents, timed turns Limited panel unusual attitude recoveries Arrival, aerodrome joining procedure Non-precision approaches
Completion Standard	Carry out all exercises while maintaining height/altitude + 100ft, heading +5°, speed +5kts Half scale deflection, azimuth and glidepath for ILS RNAV approaches: CDI Half scale deflection, azimuth (all approaches) and glidepath (LPV only) Tracks VOR radial +5°, Tracks NDB bearing +5°, Starts go around at decision altitude + 50ft, -0ft Minimum descent altitude + 50ft, -0ft Circling mimima + 100ft, -0ft Completes and approach briefing with the checks and drills for landing; sets and identifies applicable radio navaids, uses the appropriate altimeter setting. Carry out checks and drills in accordance with the aircraft checklist Make RT calls in accordance with CAP413 Display appropriate airmanship

2.2 Air Exercise Reference List

These are contained in the following documents:

- AA-PROC-0007 Air Exercise Reference List – PPL/LAPL
- AA-PROC-0008 Air Exercise Reference List – Night Rating
- AA-PROC-0009 Air Exercise Reference List – IR(R)
- AA-PROC-0010 Air Exercise Reference List – CBIR

These documents are designed as an in-flight reference list for instructors and will be issued in A5 flip card format.

2.3 Course Structure

2.3.1 Phase of Training

2.3.1.1 The courses are divided into phases as follows:

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

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

IR(R) (A)		
Phase	**Exercises**	**Min. Hours**
1	19A	4
2	19B	4
3	19C	7

CBIR(A)*		
Phase	**Exercises**	**Min. Hours**
Basic	B1-B7	8
Intermediate	I1-I5	10.5
Advanced	A1-A3	8.5

* Assumes a minimum of 27 hours but this may increase depending on experience

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 theoretical knowledge training is arranged to complement the flight exercises. The syllabus is defined in document AA-SYLL-0001. The primary instructor is responsible for assigning the study requirements after each lesson.

2.3.3 Student Progress

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

(a) Completed all of the flight exercises to a satisfactory standard

(b) Completed at least the minimum hours indicated at paragraph 2.3.1 above

(c) Passed the relevant Progress Test

2.4 Instructional Methods

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/practised. 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 Head of Training.

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 following consultation with the supervising FI nominated by the ATO for this purpose.

2.5 Progress Tests

Not applicable.

3 Synthetic Flight Training

Not applicable.

4 Theoretical Knowledge

4.1 Course Structure

Theoretical knowledge training uses a combination of self-study and instructor led workshops. The syllabi for each course are summarised below. Full details are provided in AA-SYLL-0001 Theoretical Knowledge Syllabi.

Those CBIR candidates that already hold an ICAO IR do not have to complete theoretical knowledge instruction. However, use of the recommended materials is highly recommended. CBIR candidates that do not hold an ICAO IR are required to complete an Approved Theoretical Knowledge course applicable to the IR.

The conduct of theoretical knowledge examinations is detailed in Part 3, Section 1.8.

4.2 Teaching Materials

The following materials are used:

- PPL
  - Self-study: Air Pilot's Manual series
  - Instructor led workshops are provided for use of the CRP1/CRP5 and for flight planning.
- IR(R): Air Pilot's Manual Volume 5
- CBIR: Air Pilot's Manual Volume 5 and "EASA EIR/CBIR" by Phil Croucher

4.3 Student Progress

Students are expected to follow the relevant Alexander Air Theoretical Knowledge syllabus.

Prior to sitting a Theoretical Knowledge exam, candidates are expected to pass a series of oral questions with a pass mark of 85%. If the student has used a question bank, they may provide evidence that they have sat at least three tests with an average score of at least 85%.

4.4 Progress Testing

Not applicable.

PART 4 – Appendices

Appendix 1 Examples of Documents and Forms Used

The following is a list of Alexander Air controlled documents. To ensure the integrity of the document control system, these are not reproduced here. Instead, the documents are stored on the Alexander Air shared drive.

AA-PROC-0001	Document Control Procedure
AA-PROC-0002	Delegation of Authority Matrix
AA-PROC-0003	Management of Change Procedure
AA-PROC-0004	Compliance Monitoring Audit Procedure
AA-PROC-0005	Incident Investigation & Reporting Procedure
AA-PROC-0006	Emergency Response Plan
AA-PROC-0007	Air Exercise Reference List – PPL/LAPL
AA-PROC-0008	Air Exercise Reference List – Night Rating
AA-PROC-0009	Air Exercise Reference List – IR(R)
AA-PROC-0010	Air Exercise Reference List – CBIR
AA-SYLL-0001	Theoretical Knowledge Syllabus
AA-SYLL-0002	Flight Syllabus
AA-RECD-0001	Technical Log
AA-RECD-0002	Student Notes Template - PPL
AA-RECD-0003	Student Notes Template - LAPL
AA-RECD-0004	Student Notes Template - Night Rating
AA-RECD-0005	Student Notes Template - IRR
AA-RECD-0006	Student Notes Template - CBIR
AA-FORM-0001	Audit Completion Certificate
AA-FORM-0002	Non Conformance Report
AA-FORM-0003	Safety Report Form
AA-FORM-0004	Accident and Incident Investigation Form
AA-FORM-0005	Instructor Personal Record
AA-FORM-0006	Instructor Staff Training Form
AA-FORM-0007	FI Standards Evaluation Form
AA-FORM-0008	Deferred Defect Log
AA-FORM-0009	Solo Student Authorisation Form

Examples of key forms are given in the remainder of Appendix 1, overleaf.

AA-FORM-0003-C01

Alexander Air Safety Report Form

Part A to be completed by the person identifying the safety issue or hazard

Date of Event		Local Time	
Location:			
Name of Reporter		Company	

Please fully describe the event or identified hazard:
Include your suggestions on how to prevent similar occurrences

In your opinion, what is the likelihood of such an event, or a similar event, happening again?

Unlikely	Probable	Likely
1	2	3

What do you consider to be worst possible consequence if this event happened again?

Negligible or Minor Incident	Serious Incident	Fatality
1	3	5

AA-FORM-0003-C01

Part B To be completed by the Safety Manager
This report has been dis-identified and logged

Report Reference		
Signature		Date:
Name		

If further investigation is needed, perform that now and document it on the investigation form. This information will support the Safety Committee activities.

Part C To be Completed by the Safety Committee
Rate the likelihood of the event recurring:

Unlikely	Probable	Likely
1	2	3

Rate the most credible worst-case consequences

Negligible or Minor Incident	Serious Incident	Fatality
1	3	5

What action, or actions, have been taken to prevent the issue or hazard from occurring in future and/or mitigate its consequences?

Resources Required	
Actionee	

Agreed & accepted by:

Accountable Manager:	Date:

Appropriate Feedback given by Safety Manager Signed:	Date:

Follow up action required:

What	
Who	
When	

AA-FORM-0004-C01

Alexander Air Accident & Incident Investigation Form

Part A to be completed by the person identifying the safety issue or hazard

Date of Event		Local Time	
Location:		Original Safety Report Reference	
Name of Investigator		Company	

Describe What Happened:

Describe why the issue happened and any root causes associated with it:

AA-FORM-0004-C01

Identify recommended corrective actions:

Document the recommended action plan and follow up:

Action	Actionee	Due Date

Investigator's Signature		Date	
Hazard Log Updated		When	

AA-PROC-003-C01 Management of Change Procedure

1. What is the change?
Describe the change
2. Who?
Describe who is to implement the change
3. Describe the major components of the change
These will help you to identify the main risks of each component that will be populated in section 7. The checklist in appendix 2 may be helpful
4. Who does the change affect?
Consider which individuals and organisations may be affected
5. What is the impact of the change?
Consider why the change is taking place and the impact on the organisation & its processes and procedures
6. What follow up action is required? (assurance)
Consider how the change will be communicated and whether additional activities such as audits are required during the change and after the change has taken place
7. Safety Issues and the Risk Assessment

Hazard	Consequences	Severity	Likelihood	Risk Rank	Mitigation Actions	Actionee Date

The change is acceptable to implement							
Final Acceptance Signature				Name Date			

Aircraft Technical Log

Type:

Sheet ..... of .....

Next Check Due Hours:

Next Check Due Date:

Annual Due Date:

Reg:

Hours Carried Forward:

Date	Inst/Pilot	Student/ Pax	Air Ex	Routing	Auth Sig.	A Check Complete	Fuel uplift (Ltrs)	Oil Uplift	Capt Sig	Take Off Time	Ldg Time	Flight Time	Tacho Start	Tacho Finish	Ldgs	Hrs Rem	Defects

Alexander Air

A/C Type:

Page Number:

DEFERRED DEFECT LOG

A/C Reg:

DEFERRED DEFECT DETAILS						DEFECT CLEARANCE			
Defect No	Tech Log Page No	DEFECT	Signed (Print Name)	Date	Defect deferred Until	ACTION	Signed	Date	Tech Log Page No

When clearing the defect on the Defect Log, details of the Deferred Defect, its number and the Technical Log page number and rectification action must be recorded on this sheet.

Audit Completion Certificate

#	SUBJECT	✓ / X	REMARKS
	MANAGEMENT AND ADMINISTRATION		
1	Does the management structure accord with the ATO Operations Manual? *AA-MANL-0001*		
2	Is the Head of Training suitably approved by the Authority? *AMC 2 ORA.ATO.210 (a)*		
3	Does the Accountable Manager have overall responsibility for the ATO, is he qualified and approved.? *ORA.GEN.200 (a)*		
4	Is the Safety Manager qualified/trained and approved? *AMC 1 ORA.GEN.200 (c) Management system*		
5	Are sufficient Flight Instructors employed to maintain satisfactory student instructor ratios?		
6	Is the Safety Management System promoted among the staff? *AMC 1 ORA.GEN.200 (a) (2) (3) Management system*		
7	Are the Flight Instructors properly qualified and current?		
8	Have the senior management and staff received SMS training? *AMC1 ORA.GEN.200 (a) (4) Management system* *AA-MANL-0001 Part 1 Section 3.14*		
9	Are the safety management meetings documented in accordance with the SMS manual? *AA-MANL-0001 Part 1 Section 3.13*		
10	Are the Training Manuals up to date, pertinent and in the correct format? *AMC1 ORA.ATO 230 (a) Training manual.*		
12	Is the training programme to the correct format and freely available to staff and trainees? *AMC1 ORA.ATO.125*		
13	Is the Operations Manual up to date and pertinent to the ATO operation? *AMC1 ORA.ATO 230 (b) Training manual.*		
14	Does the Accountable Manager have overall responsibility for the ATO, is he qualified and approved.? *ORA.GEN.200 (a)*		

15	Is there an effective system for checking that students fulfil all requirements before entering training? *AMC1 ORA.ATO.145 Pre-requisites for training*		
16	Is there an effective Management System within the ATO? AMC1 ORA.GEN.200 (a) (4) Management system		
17	Are the instructors' duty and training hours in accordance with the operations manual? *AA-MANL-0001 Part 3 Section 1.14*		
18	Are the trainee duty and training hours in accordance with the operations manual? *AA-MANL-0001 Part 3 Section 1.15*		
19	Are the Operations and Training Manuals made available to all staff and trainees and is there a system to ensure that both groups are familiar with the contents? *AA-MANL-0001 Part 3 Section 1.2.12*		
	FACILITIES AND ACCOMODATION		
1	Is there adequate and properly equipped Flight Operations accommodation? *AMC" ORA.GEN.215 (a) Facility requirements*		
2	Are there adequate numbers of briefing and lecture facilities available for the number of students? *AMC" ORA.GEN.215 (a) (2)*		
3	Do trainees have free access to flight planning information. (AIP, AICs, NOTAMS, Weather, etc.) *AMC" ORA.GEN.215 (a) Facility requirements.*		
4	Do trainees have free access to ATO publications (Operations Manual and Training Manuals)? *AMC" ORA.GEN.215 (a) Facility requirements*		
5	Are all operations, training and planning documents up to date and pertinent to the courses provided? *AMC" ORA.GEN.215 (a) Facility requirements.*		
6	Does the aerodrome meet the published requirements and is suitable to accommodate flight training? *AMC1 ORA ATO140*		
	AIRCRAFT AND EQUIPMENT		
1	Are the aircraft used for training equipped and maintained to a suitable standard (Record registration of those aircraft which		

	were checked)? *AMC1 ORA.ATO.135 Training aircraft.*		
2	Are the aircraft documents correctly maintained and available to the PIC for inspection? *AA-MANL-0001 Part 3 Section 1.10.2*		
3	Are aircraft defects recorded and in accordance with the operations manual? *AA-MANL-0001 Part 3 Section 2.25.2*		
4	Are there suitable RT training and testing facilities within the ATO? *AMC1 ORA.GEN.215 Facilities*		
5	Does a process exist whereby the Head of Training ensures that new training aircraft are suitable for the intended training course?		
6	Does the process ensure that the CAA are notified of new training aircraft?		
7	Are Tech Logs / Flight Authorisation sheets completed fully and accurately? *AA-MANL-0001 Part 1 1.10.1*		
8	Do all aircraft contain the relevant documentation *AA-MANL-0001 Part 1 1.10.2*		
	FLIGHT AND THEORY TRAINING		
1	Was the published training programme followed both as to total hours and order of exercises? (Record names of those trainees whose records were checked) *AMC ORA.ATO.120 (a) (b)*		
2	Were training records correctly and fully completed? (Record names of those trainees whose records were checked) *AMC1 ORA.GEN 220 (b) Record keeping.*		
3	Are the training records retained for the required duration? *AMC1 ORA.ATO.120 (a) (b)*		
4	Were skill tests conducted by a qualified examiner not connected with the candidates training?		
5	Do all trainees records show evidence of classroom instruction for the theory training? *AMC1 FCL115; FCL120 LAPL* *AltMoC1 FCL210; FCL215 PPL* *AA-MANL-0001 Part 3*		
6	Do the training records comply with the format specified in the Training Manual appendices?		
7	Are all trainees formally assessed as having sufficient knowledge of the		

	relevant syllabus prior to entry to the Theoretical Knowledge Examinations? *AA-MANL-0001 Part 3 4.3*		
8	Were minimum flight training hours achieved for all trainees? *FCL110A or FCL210A*		
9	Were all training flights authorised in accordance with the company procedure? *AA-MANL-0001 Part 1 1.5*		
10	Is there evidence that emergency drill and essential safety exercises are being taught in accordance with the training plan? *AA-MANL-0001 Part 3 Section 1.7*		
11	Did the student meet all specified requirement before:- 1) First solo 2) First solo cross-country *AA-MANL-0001 Part 3 Sections 1.7.4 / 1.7.5*		
12	Was SRG Form 2128 completed, recommending the trainee for the licence skills test, prior to the event? *FCL.030b and AA-MANL-0001 Part 3 1.8.3*		
	INSTRUCTOR STANDARDISATION		
1	Is there an effective method of assessing and maintaining instructional standards? *AA-MANL-0001 Part 3 Section 4*		
2	Is there an effective standardisation and staff training program in accordance with the Operations manual? *AA-MANL-0001 Part 3 Section 4*		
3	Are the instructors logbooks kept up to date and in accordance with the Operations manual? *AMC1 FCL 050 (a)* *AA-MANL-0001 Part 1 Section 1.18*		
4	Does the ATO submit to the CAA and maintain a list of Examiners for the conduct of the skill tests? *AA-MANL-0001 Part 3 Section2.5.3*		
5	Is instructor initial, refresher and standardisation training conducted in accordance with the published procedures? *AA-MANL-0001 Part 3 Section 4*		
	COMPLIANCE MONITORING SYSTEM		
1	Are audits being completed in accordance with the program specified in the Compliance Monitoring System? *AA-PROC-0004*		
2	Is the auditor independent of the area(s) which are being audited? *AMC1 ORA GEN 200(a)(6) Para c6*		
3	Do the audits completed cover all		

	aspects of the ATO, specifically the Regulatory requirements and internal procedures? *AMC1 ORA GEN 200(a)(6) Para b*		
4	Where previous audits identified non-conformances, have these been resolved in a timely manner?		
5	Where corrective or preventative action was identified on previous findings, has this subsequently been checked and found to be effective?		
6	Where any changes requiring prior approval of the Authority have been identified, was approval sought? *AA-MANL-0001 Part 1 Section 1.2.6*		
7	Is there an effective system for document control in place? *AMC1 ORA.GEN.200 (b) (5)*		
8	Are document / version control procedures being followed when manual revisions are made? *AA-PROC-0001*		

Audit conducted by (print name)	Position held
Signature	Date

Non-Conformance Report Form

Audit Ref: Insert reference for the audit		Non-Conformance / finding No.(unique # for this finding)			Date: (date audit took place)	
Non-Conformance / finding Ref (EASA /OM / TM / MS.): (what is it a finding against?)						
Nature of Non-Conformance / finding (describe what was found and why it is a non-conformance)						
Category of non-conformance/ finding	One		Two		Suggestion for improvement	
Area of non-conformance / finding						
Aircraft		Publications				
Accommodation		Synthetic Training Devices				
Course Material		Training Programmes				
Compliance Monitoring System		Training Record				
Document Control						
Signed: (signature of person raising the finding) Auditor		Accepted: (HT should sign to agree / acknowledge finding) Head of Training				
Agreed Corrective Action (What is intended to be done to fix the problem and prevent a re-occurrence)						
Agreed Completion Date: (when by)		Person responsible: (who will do it?)				
Corrective Action Verified as effective (ideally the person who raised the finding should go back after the completion date and re-audit to see if the problem has been fixed (the action was effective) and whether it has re-occurred subsequently. This means the auditor cannot have the issue assigned to him/her to actually fix the problem)						
Date: (date re-audited)		CMM / Auditor: (by auditor)				
Signed:					Head of Training	

Sample Audit Schedule

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Management and Administration			X									
Aircraft / Equipment			X									
Facilities (classrooms / airfield etc)			X									
Training Programs and records						X						
Instructor Standardisation						X						
Compliance Monitoring System						X						

Solo Authorisation Form

Solo Student Authorisation

The student pilot shall:

- be at least 16 years of age in the case of aeroplanes
- carry a government issued photo ID
- carry a valid medical certificate

Student Details	
Name	
Authorisation Valid Until	

Solo Authorisation	**To be completed by the authorising instructor**
The above named person is authorised to carry out the following flight (delete as appropriate):	
Solo circuits Local Navigation (within 30/40nm of EGPD) Cross country flight to: _____ Qualifying cross country flight to _____ & _____	
Weather Minima To undertake this flight, the weather should be at least equal to that in section 3.5 of the Operations Manual.	
Instructor's Name:	Licence Number:
ATO Name: Alexander Air	ATO Number:
Signature (Authorising Instructor):	Date:

In the event of a landing being made at an aerodrome other than those named above, the authorisation for the flight is automatically terminated. The authorising instructor is then to be contacted immediately on and the flight must not be continued without specific authorisation.

Student Record Templates

These are embedded files. Please click on the icon to view the details.

AA-RECD-0002
Student Notes PPL.x

AA-RECD-0003
Student Notes LAPL.

AA-RECD-0004
Student Notes Nigh

AA-RECD-0005
Student Notes IRR.x

AA-RECD-0006
Student Notes CBIR.

AA-FORM-0005-C01

Alexander Air Instructor Personal Record

Name		**CAA Ref Number**	
Address		**Next of kin** **Address**	
Tel No:		**Tel No:**	
Details of Licences Held:			
Issuing Authority	**Type/Class of licence**	**Licence No**	**Expiry Date**
Details of Ratings Held:			
Aircraft Class	**Expiry Date**	**Aircraft Class**	**Expiry Date**
Medical Class: 1 Y/N	**OML: Y/N**	**Expiry Date:**	
Rating	**Expiry Date**	**Rating**	**Expiry Date**
Night	n/a	FI(A)	
IR(R)			
IR(A)			
FI Restrictions			
Flying Experience - SEP			
Total	PIC	Instructional – VFR	Instructional – IR(R)/IR
Signed		**Date**	

AA-FORM-0006-C01

Alexander Air Instructor Training Form

Date:	**Name of Trainer:**		
A/C Reg:	**Name of Instructor:**		
A/C Type:	**Reason for training:**		
Off Blocks:	**Take off:**	**Land:**	**On Blocks:**
Subjects Covered	**Ground (G) or Flight (F)**	**Remarks:**	
1			
2			
3			
4			
5			
6			
7			
8			
Overall Standard Shown		**Signature of Instructor Receiving Training**	
Poor			
Average		**Signature of Instructor Giving Training**	
Good			
Excellent			

AA-FORM-0007-C01

Alexander Air FI Standards Evaluation Form

Date		**Name of Trainer:**		
A/C Reg:		**Name of Instructor:**		
Off Blocks:	**Take off:**	**Land:**	**On Blocks:**	
Exercise Covered:				
Pre Flight Briefing				
Standard Shown:				
Poor		**Remarks:**		
Average				
Good				
Excellent				
Flying				
Poor		**Remarks:**		
Average				
Good				
Excellent				
Instructional Technique				
Poor		**Remarks:**		
Average				
Good				
Excellent				
Debrief				
Poor		**Remarks:**		
Average				
Good				
Excellent				
Signature of Instructor Receiving Training		**Signature of Instructor Giving Training**		

Appendix 2 Airfield Diagrams

Aberdeen

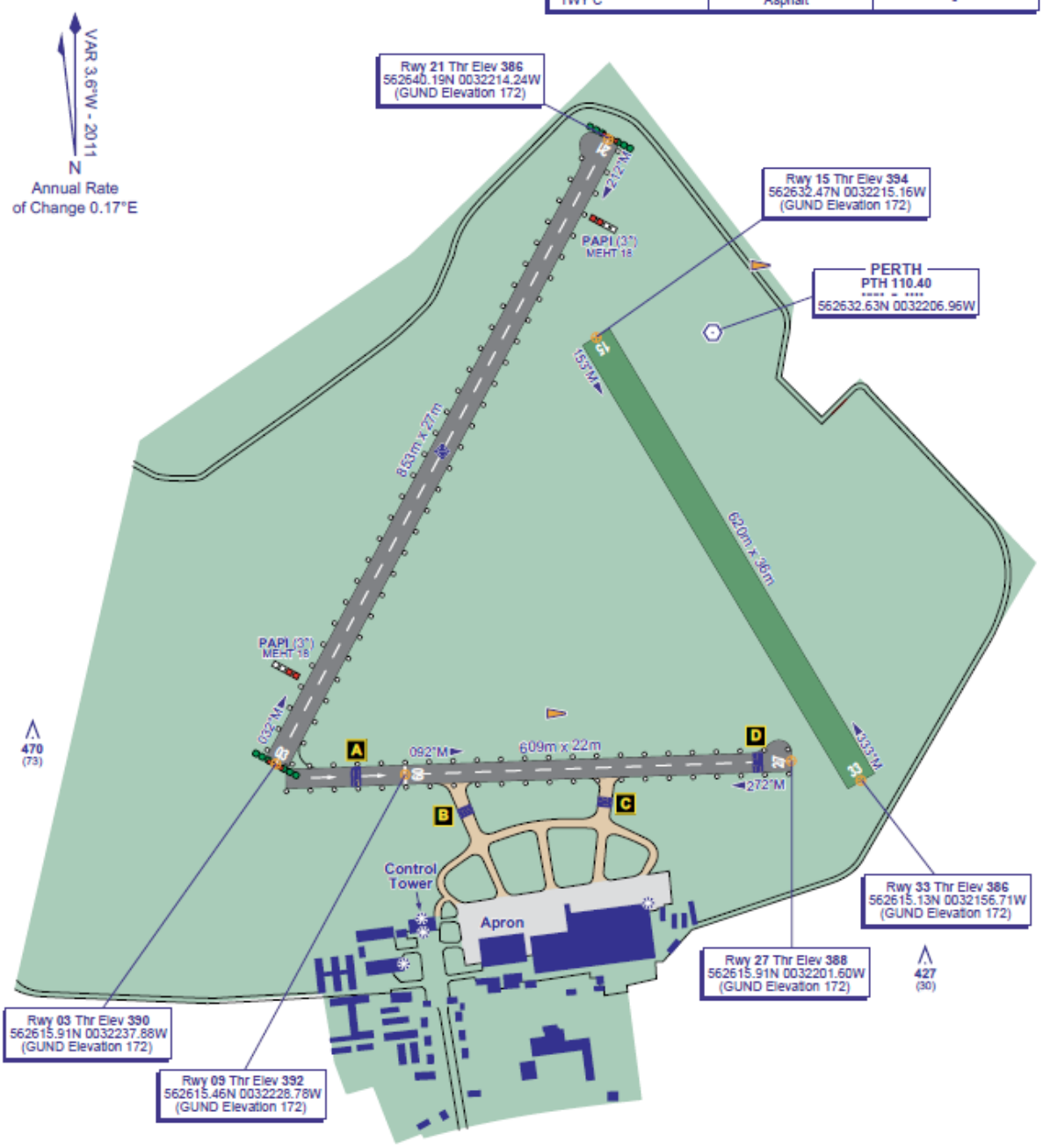
LIGHTING
THR 16/34 Green with green 'W' bars.
THR 23 White.
RWY 16/34 Hi brd colour codes C/L (15m spacing). Variable intensity bi-d edge. End lights red.
RWY 23 White omni-d edge. Yellow touchdown square.
TWY Main taxiway green C/L, others blue edge lights/reflective markers.
COM
ATIS 121.650 (114.3 VOR-AZN)
TWR 118.100 ABERDEEN INFO
121.700 (GMC) ABERDEEN TOWER
121.900 ABERDEEN GROUND
ABERDEEN FIRE
Hot Spots
HS2/HS3/HS4
Runway Guard Ear Not Available.
Mobile Crane
Rwy 16 Thr Elev 209
GUND Elevation 154
(Highest Elev in TDZ)
Rwy 34 Thr Elev 215
Rwy H23 Thr Elev 188
(GUND Elevation 154)
Rwy H32 Thr Elev 197
Rwy H14 Thr Elev 202
Rwy H05 Thr Elev 209
Rwy H18 Thr Elev 209
Rwy H32 Thr Elev 209
Rwy H23 Thr Elev 209
TLOF Elev 192
Hot Spot
HS1
Longer distance between hold lines may be required than at other holds due to taxiway angle.
Pilots should not produce signal when approaching holding point.
ABERDEEN
I-ABZ
(ILS-LOC)
Fire Ground
Eastern Area Hangar
CHC-Scotia Apron
Control Tower
Apron
Charlie Apron
Bristow Apron
Terminal Building
Main Apron
Car Park
Echo Apron
Bond Offshore Helicopters Apron
Fire Station
Flying Club
NHV Helicopters Apron
Compass Base
Anemometer
BMI Regional Hangar
Hangar
Twy A
Twy M
Twy E
Twy L
Twy K
Twy J
Twy H
Twy G
Twy F
Twy D
Twy C
Twy B
Apron 01
Apron 02
Apron 03
Apron 04
Apron 05
Apron 06
Apron 07
Apron 08
Apron 09
Apron 10
Apron 11
Apron 12
Apron 13
Apron 14
Apron 15
Apron 16
Apron 17
Apron 18
Apron 19
Apron 20
Apron

Perth

GUND (Geoid Undulation) – The height of the Geoid (MSL) above the Reference Elipsoid (WGS 84) at the stated position.	
BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET	
ELEVATIONS IN FEET AMSL HEIGHTS IN FEET ABOVE AD	470 (73)

50 0 50 100 150m
100 0 300 500ft

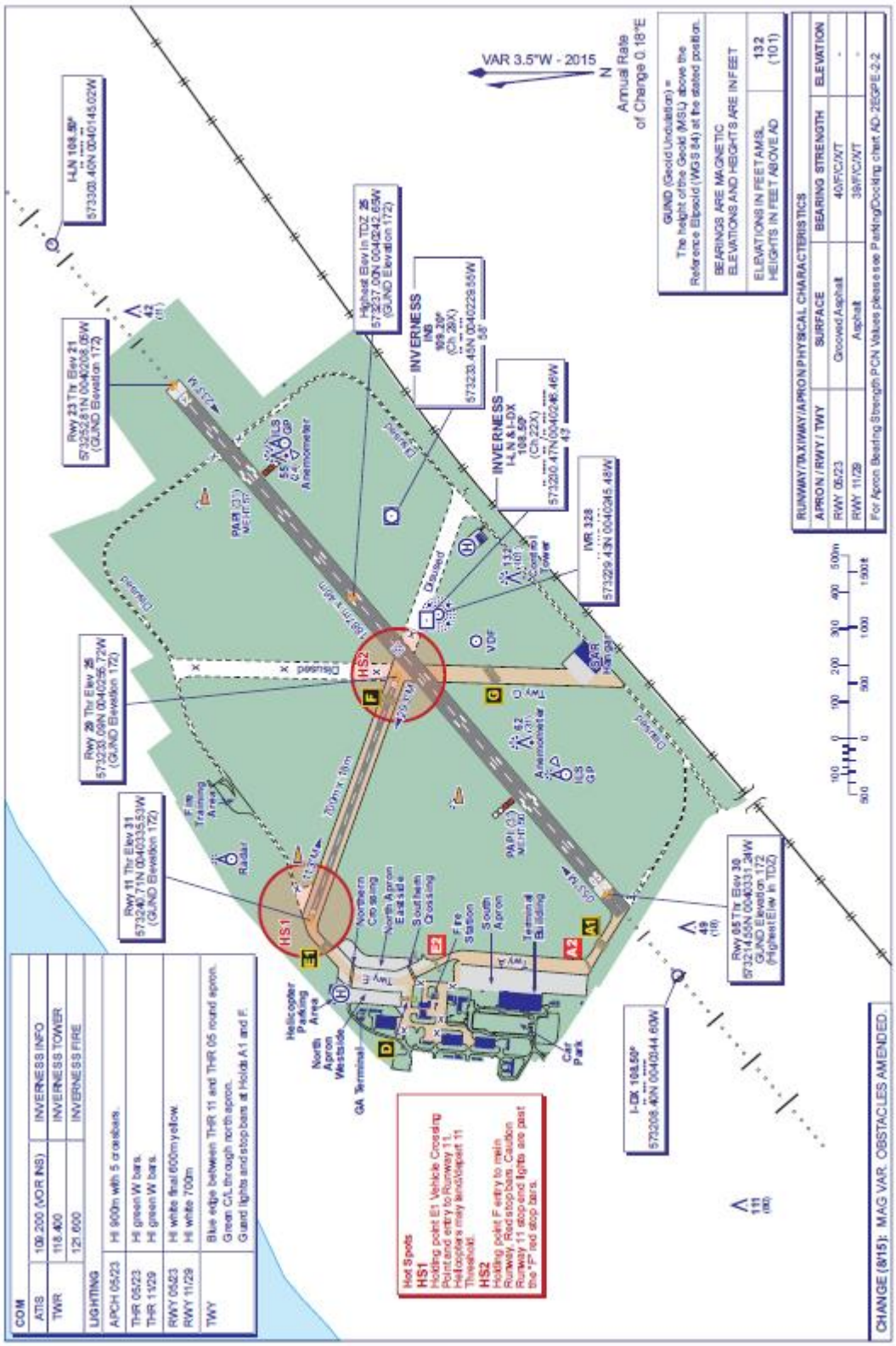
RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
APRON / RWY / TWY	SURFACE	BEARING STRENGTH
RWY 03/21	Asphalt	-
RWY 09/27	Asphalt	-
RWY 15/33	Grass	-
Main Apron -385' AMSL	Asphalt	-
TWY B	Asphalt	-
TWY C	Asphalt	-



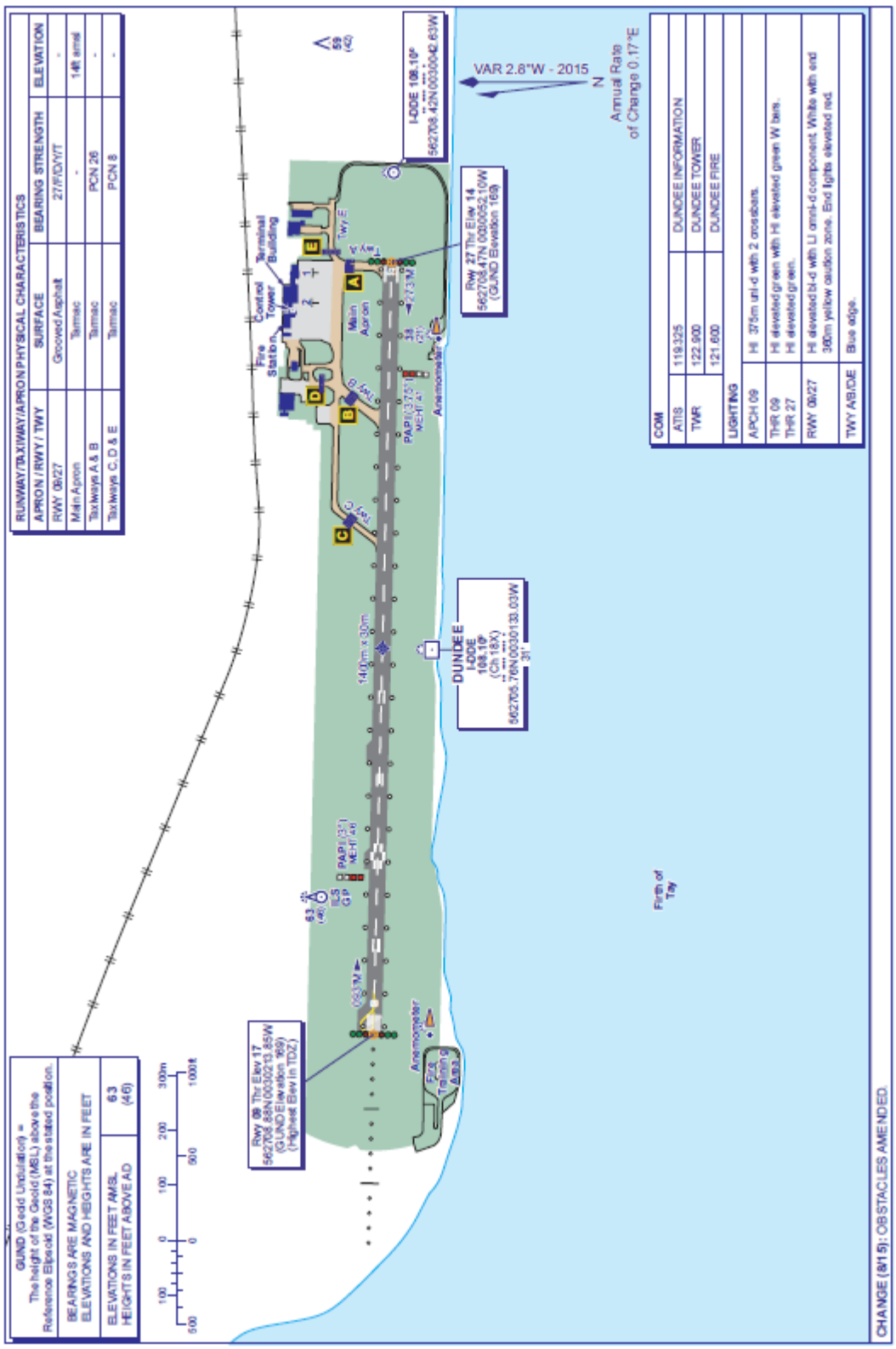
COM		
A/G	119.800	PERTH RADIO
LIGHTING		
THR 03/21	LI Green.	
RWY 03/21 RWY 09/27	LI Edge. End lights Red. LI Edge.	
TWY	Link Bravo: Green C/L.	

CHANGE: MAG VAR. RUNWAY HEADINGS. ARP REPOSITIONED.

Inverness

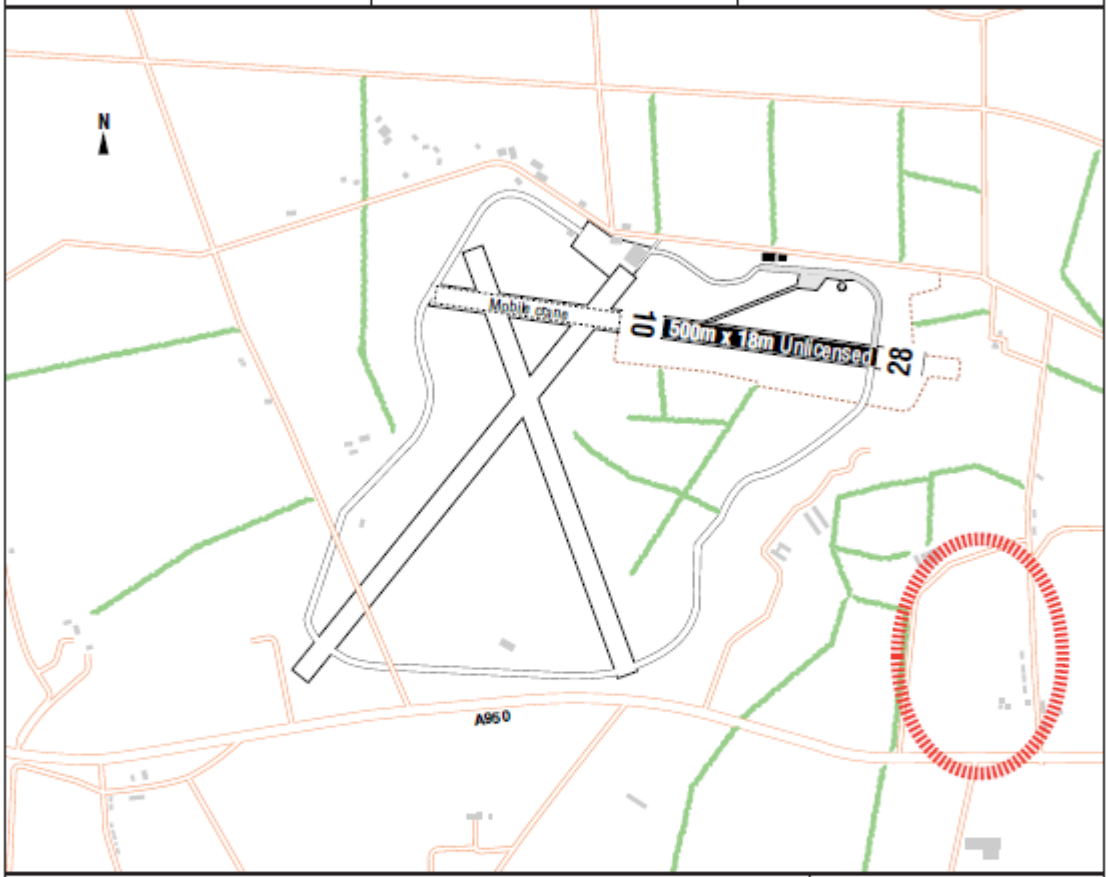

VAR 3.5°W - 2015
Annual Rate of Change 0.18°E
GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.
BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL
HEIGHTS IN FEET ABOVE AD
132 (101)
RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS
APRON / RWY / TWY
SURFACE
BEARING STRENGTH
ELEVATION
RWY 05/23
Grooved Asphalt
40/F/C/X/T
RWY 11/29
Asphalt
39/F/C/X/T
For Apron Bearing Strength PCN Values please see Parking/Docking chart AD-2EGPE-2-2
COM
ATIS
109.200 (VOR INS)
INVERNESS INFO
TWR
118.400
INVERNESS TOWER
121.600
INVERNESS FIRE
LIGHTING
APCH 05/23
HI 900m with 5 crossbars.
THR 05/23
HI green W bars.
THR 11/29
HI green W bars.
RWY 05/23
HI white final 600m yellow.
RWY 11/29
HI white 700m
TWY
Blue edge between THR 11 and THR 05 round apron.
Green C/L through north apron.
Guard lights and stop bars at Holds A1 and F.
Hot Spots
HS1
Holding point E1 Vehicle Crossing Point and entry to Runway 11. Helicopters may land/depart 11 Threshold.
HS2
Holding point F entry to main Runway. Red stop bars. Caution Runway 11 stop and lights are past the "F" red stop bars.
CHANGE (8/15): MAG VAR. OBSTACLES AMENDED.
Rwy 23 Thr Elev 21
Rwy 29 Thr Elev 25
Rwy 11 Thr Elev 31
Rwy 05 Thr Elev 30
INVERNESS
INVERNESS
Highest Elev in TDZ 25
Anemometer
Control Tower
Fire Training Area
Radar
Northern Crossing
North Apron Eastside
Southern Crossing
Fire Station
South Apron
Terminal Building
Helicopter Parking Area
North Apron Westside
GA Terminal
Car Park
Disused
VDF
HS1
HS2
A1
A2
E1
E2
F
G
D

Dundee


RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS
APRON / RWY / TWY
SURFACE
BEARING STRENGTH
ELEVATION
RWY 09/27
Grooved Asphalt
27/F/D/Y/T
-
Main Apron
Tarmac
-
14ft amsl
Taxiways A & B
Tarmac
PCN 26
-
Taxiways C, D & E
Tarmac
PCN 8
-
GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.
BEARINGS ARE MAGNETIC
ELEVATIONS AND HEIGHTS ARE IN FEET
ELEVATIONS IN FEET AMSL
HEIGHTS IN FEET ABOVE AD
63 (46)
VAR 2.8°W - 2015
Annual Rate of Change 0.17°E
IDDE 108.10°
562708.42N0030042.63W
Rwy 27 Thr Elev 14
562708.47N0030521.10W
(GUND Elevation 16ft)
Rwy 09 Thr Elev 17
562708.83N0030213.45W
(GUND Elevation 16ft)
(Highest Elev in TDZ)
DUNDEE
IDDE
108.10°
(Ch 18X)
562705.76N0030133.03W
31'
1401m x 30m
COM
ATIS
119.325
DUNDEE INFORMATION
TWR
122.900
DUNDEE TOWER
121.600
DUNDEE FIRE
LIGHTING
APCH 09
Hi 375m uni-d with 2 crossbars.
THR 09
THR 27
Hi elevated green with Hi elevated green W bars.
Hi elevated green.
RWY 09/27
Hi elevated bi-d with LI omni-d component. White with end 300m yellow caution zone. End lights elevated red.
TWY A&IDE
Blue edge.
Terminal Building
Control Tower
Fire Station
Main Apron
Anemometer
Firth of Tay
CHANGE (8/15): OBSTACLES AMENDED.

Longside

120ft 4hPa	2.5nm W of Peterhead N5731.00 W00151.55	PPR	Alternative AD Aberdeen (EGPD)	Non-standard join
Longside		APP Aberdeen 119.050		A/G 130.575



RWY	SURFACE	TORA	LDA	U/L	LIGHTING
10/28	Asphalt			500x18	Nil

Airfield Operations

RNAV

ADN 114.30 045 17.4

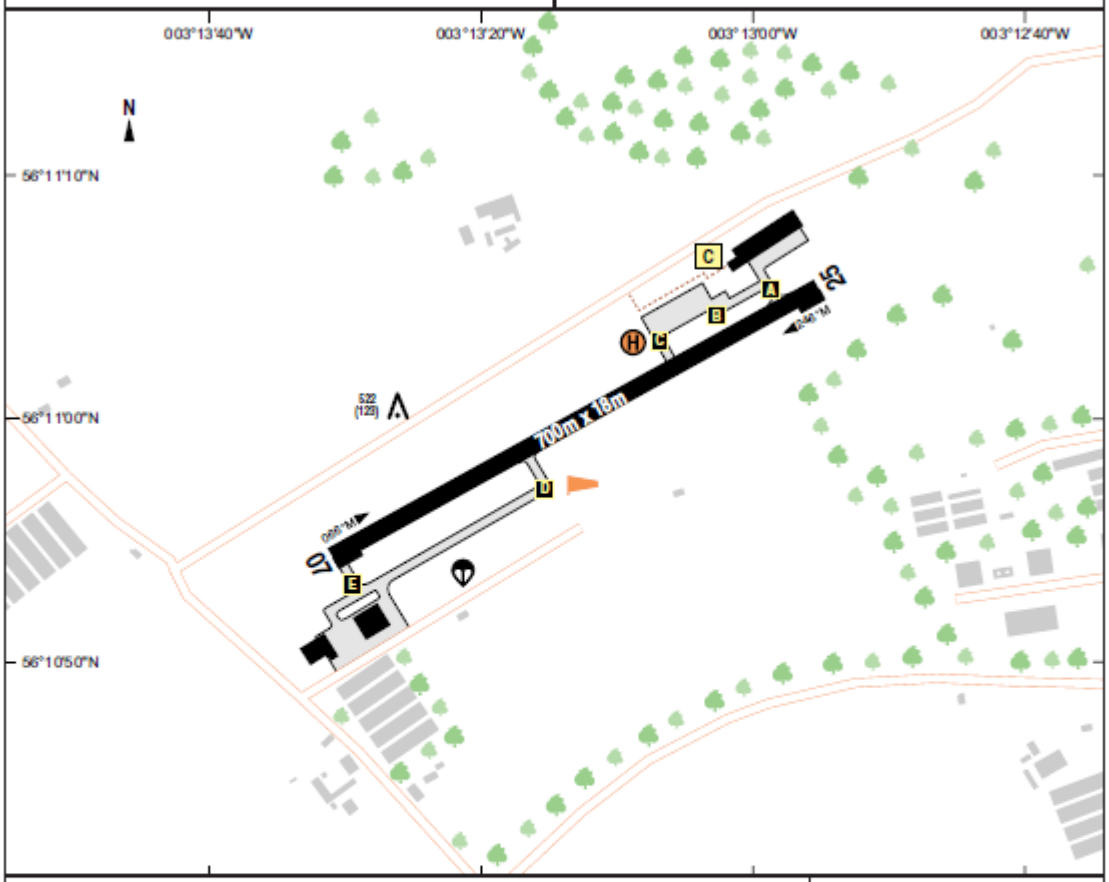
Remarks
PPR by telephone

Warnings
Intense helicopter activity in the area down to 500ft AGL. Keep a good look out at all times. Mobile crane operating on Rwy10 APP.
Noise: Avoid over flying Tortorston Village and surrounding houses/areas.

Fife

399ft 13hPa	2nm W of Glenrothes N5611.00 W00313.22	PPR	Alternative AD Diversion AD	Edinburgh (EGPH) Perth (EGPT)

Fife	A/G 130.450



RWY	SURFACE	TORA	LDA	U/L	LIGHTING
06/24	Asphalt			700x18	Nil

Airfield Operations

RNAV

PTH	110.40	169	16.3

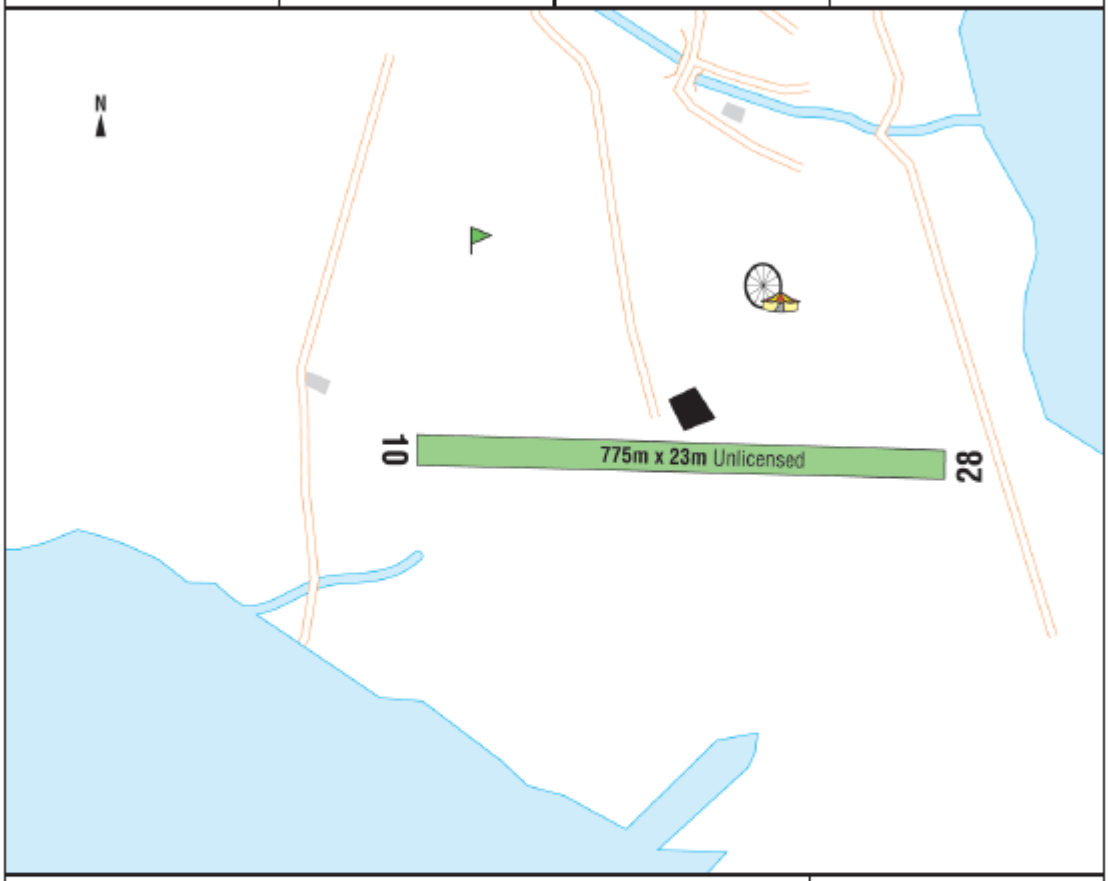
Remarks
Strict PPR. Pilots should avoid flying over the town of Glenrothes and are advised when taking off from Rwy06 to turn right on reaching 300ft aal. Parachuting takes place on AD from FL 130 Sat-Sun 0900-2100 (Summer & Winter) Fri 1700-2100 (Summer).

Warnings
Parachute dropping at weekends.
Caution: Road close to Rwy06 Thr
Noise: Avoid over flying Kinglassie SW of AD. Dept Rwy24 climb straight ahead until W of Kinglassie village before turning left into circuit. Rwy06 extend downwind leg to turn base leg W of Kinglassie village. Overhead rejoin if circuit busy. When turning final for Rwy24 at 300ft avoid all houses.

Dornoch

3ft 0hPa	1nm S of Dornoch N5752.14 W00401.32	PPR Tel	Alternative AD Inverness(EGPE) Wick (EGPC) Diversion AD

Non-Radio	LARS Lossiemouth 118.900	DAAIS Tain Range 122.750	Safetycom 135.475



RWY	SURFACE	TORA	LDA	U/L	LIGHTING
10/28	Grass			775x23	Nil

Airfield Operations

RNAV

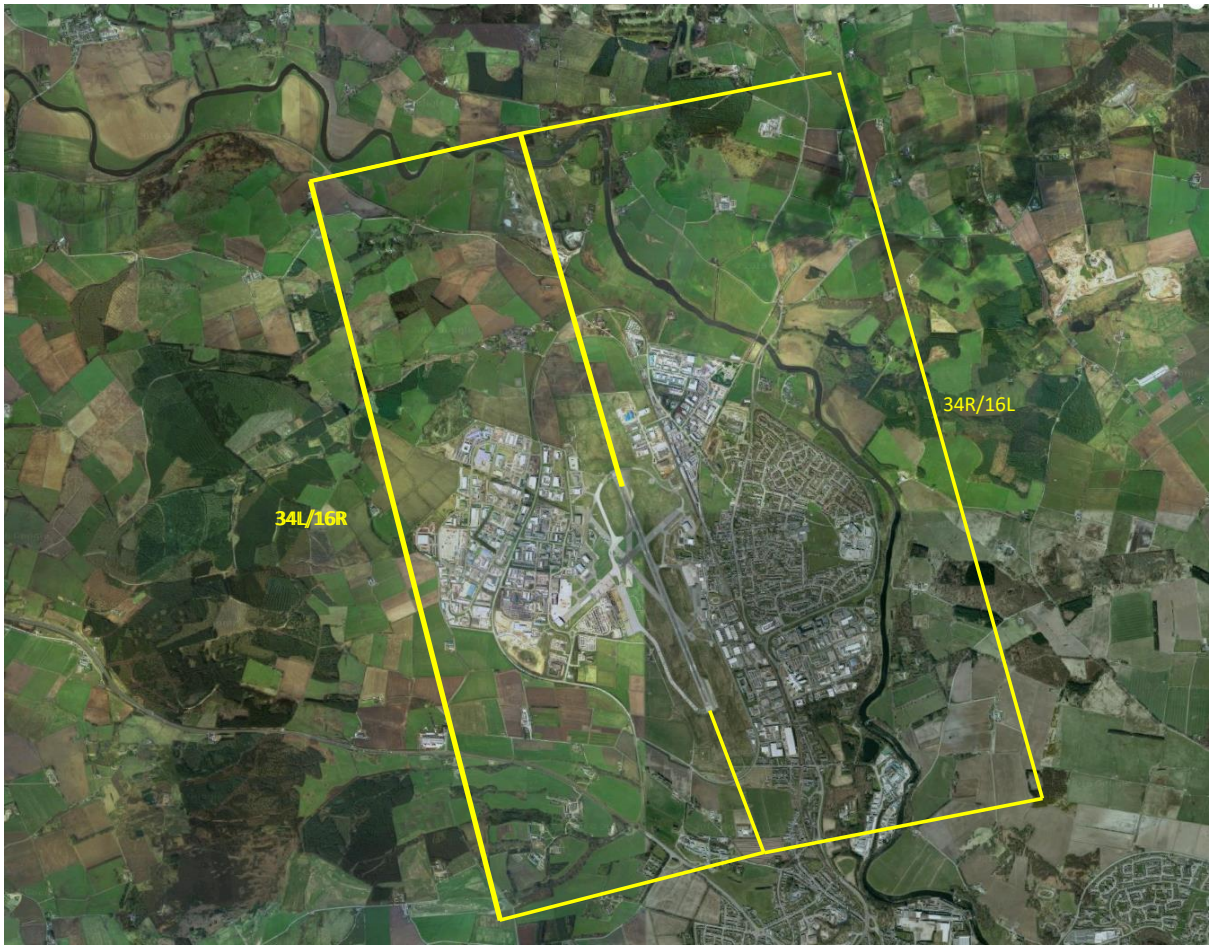
INS	109.20	008	19.7

Remarks
PPR prospective visitors must telephone Council Offices, Golspie during office Hrs. An entry/exit lane is established from the Danger Area boundary S to the AD via Embo from the surface to 1000ft amsl. Clearance to enter the Danger Area is required prior to Arr & Dept. Telephone available at AD.

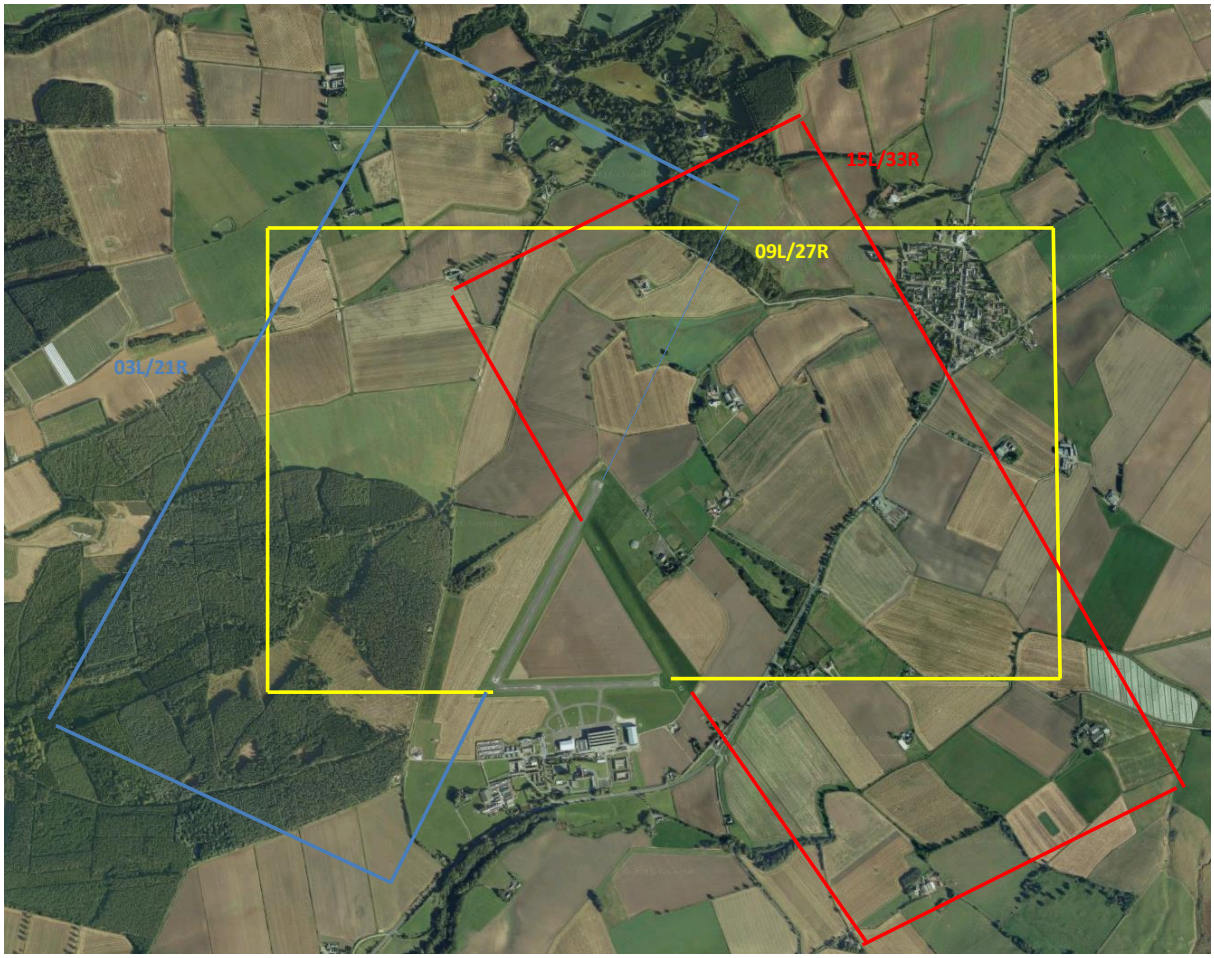
Warnings
AD situated near W edge of Danger Area D703. DAAIS Tain Range. Landing strip is marked by 3ft high posts 90m either side of Rwy centreline and across ends.

Appendix 3 Circuit Patterns

Aberdeen

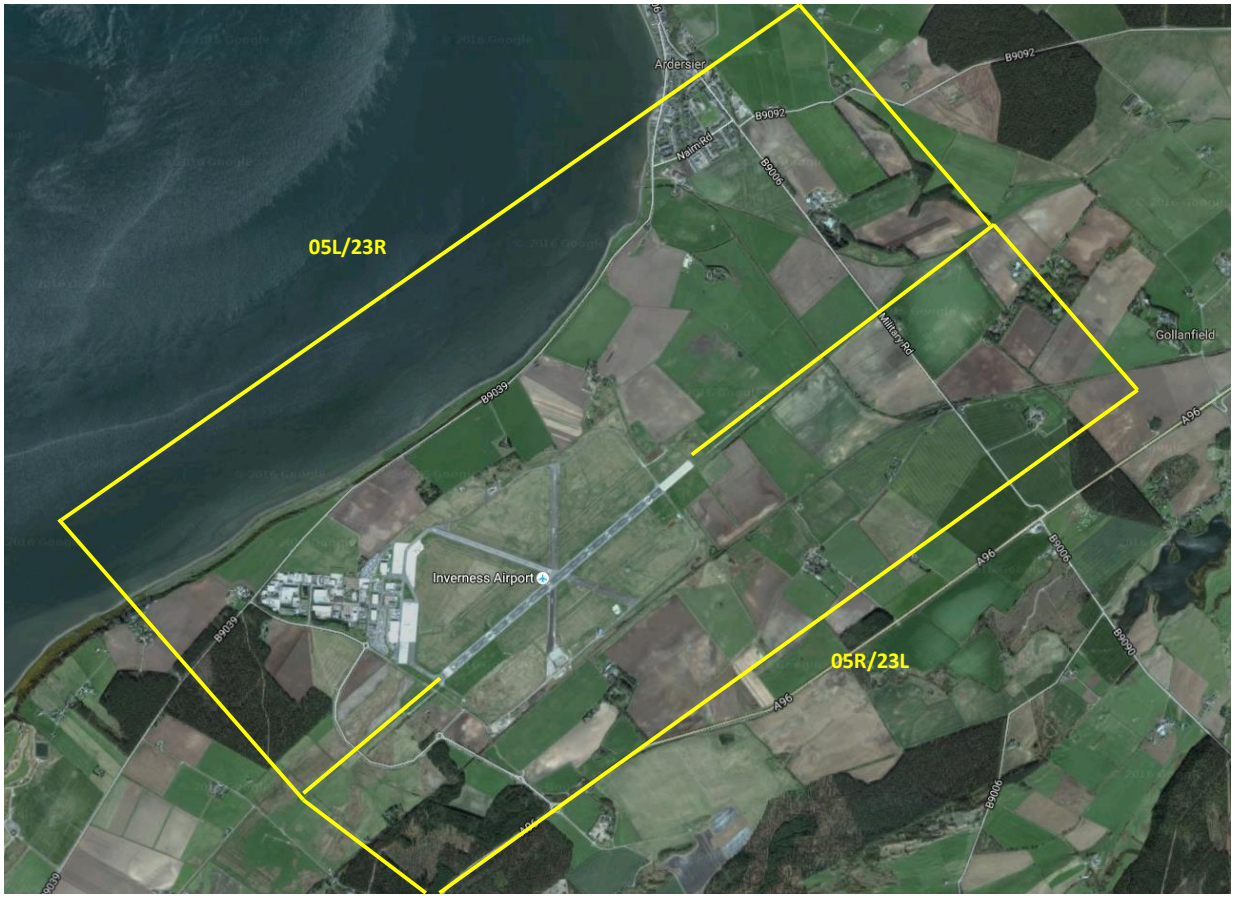


Perth



Dundee

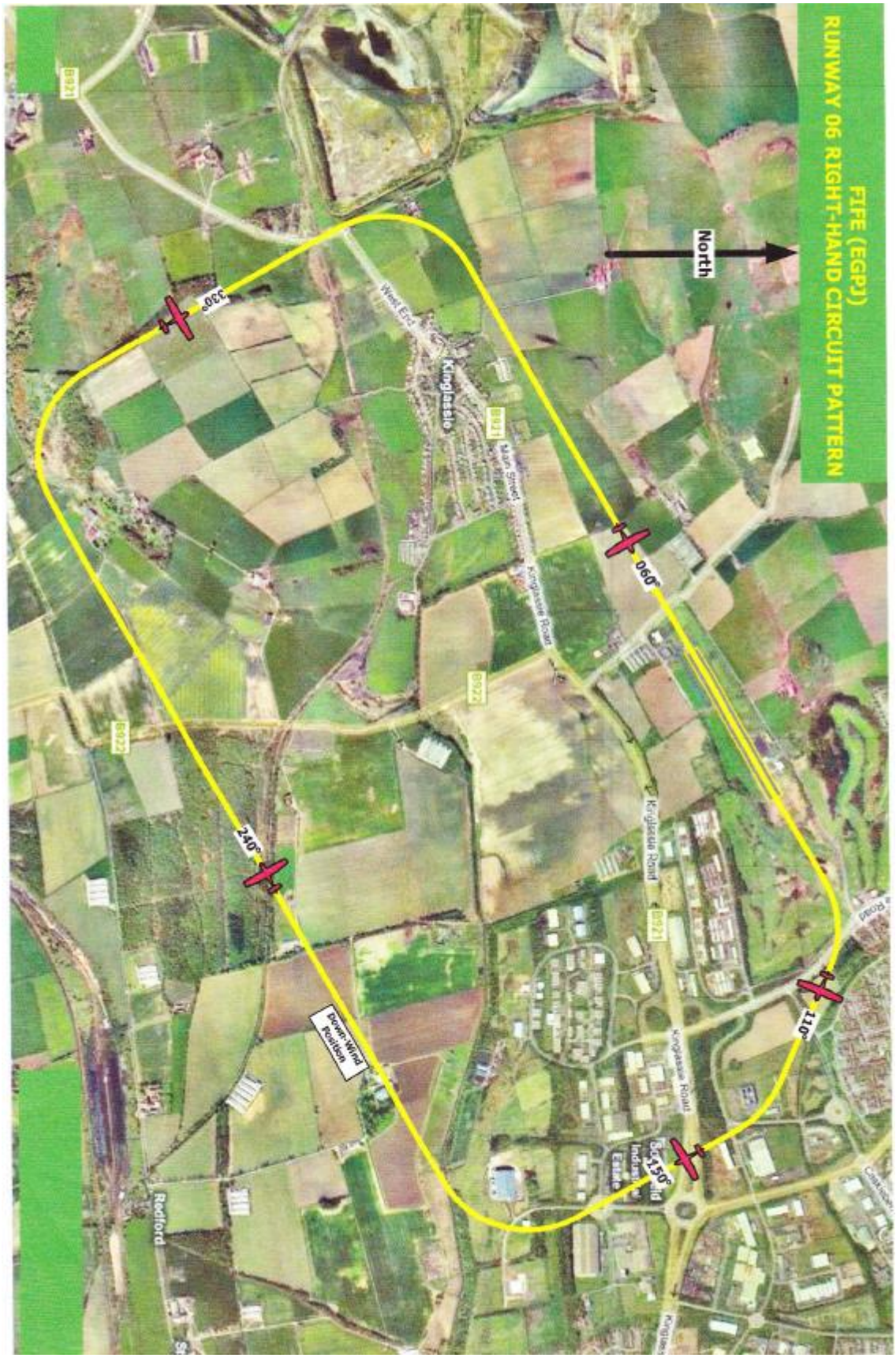
Inverness

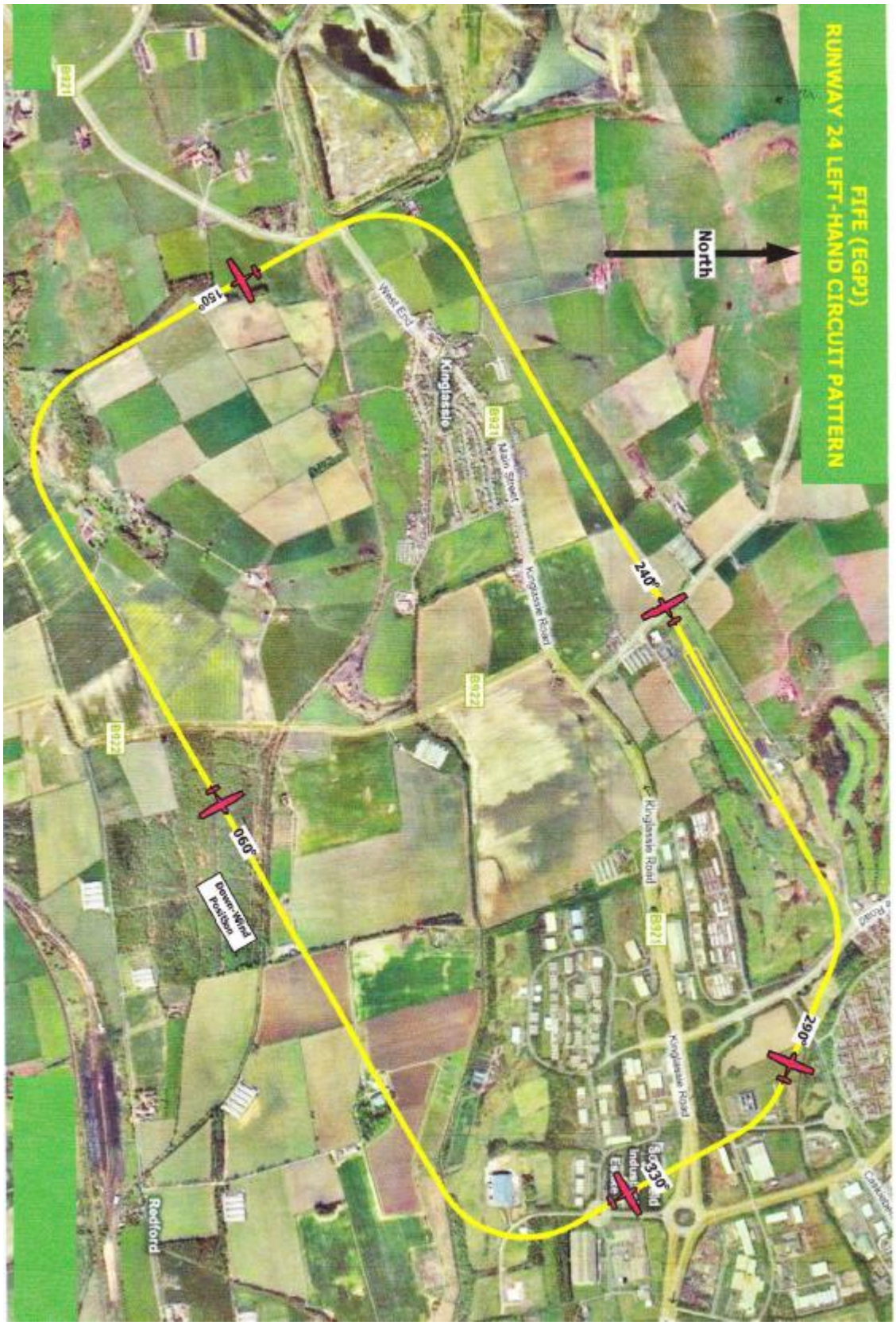

05L/23R
05R/23L
Inverness Airport
Ardersier
Naimid
B9092
B9006
B9039
A96
Gollanfield
Millbuy Rd

Dornoch

Longside

Fife


FIFE (EGPJ)
RUNWAY 06 RIGHT-HAND CIRCUIT PATTERN
North
330°
060°
240°
110°
150°
Kinglassie
Kinglassie Road
Main Street
West End
Down-Wind Position
Redford


FIFE (EGPJ)
RUNWAY 24 LEFT-HAND CIRCUIT PATTERN
North
150°
240°
290°
330°
060°
Kinglassie
West End
Main Street
Kinglassie Road
Down-Wind Position
Redford

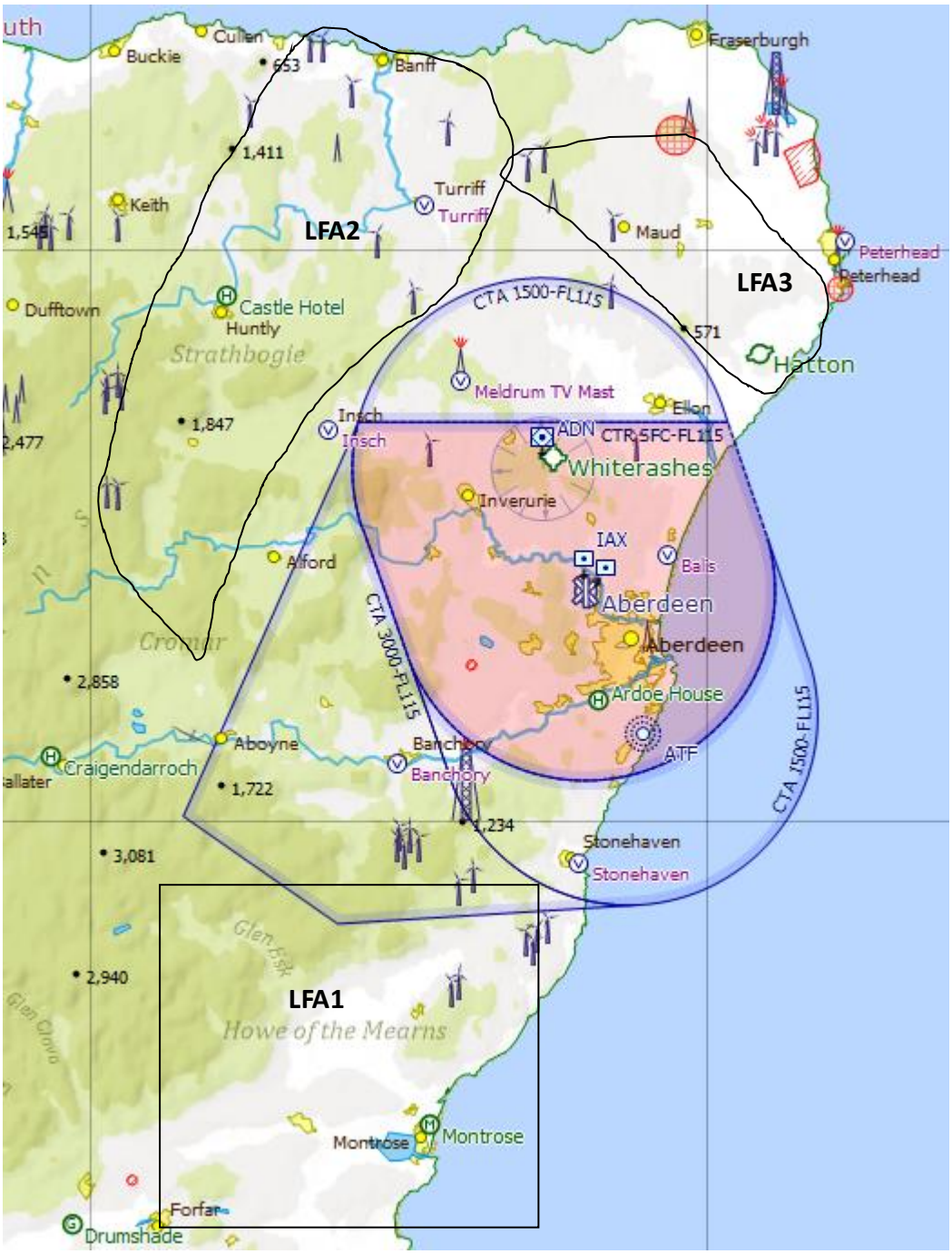
Appendix 4 First Solo Checklist

Regulatory	Has valid medical	
In Flight - consistently	Maintains centre line on take-off, rotates at correct speed	
	Safely executes an EFATO	
	Coordinated flight – ball kept in the centre	
	Aware of wind and makes corrections as required	
	Speed stable at all times	
	Stabilised approaches at the correct speed	
	Flares at the correct height	
	Consistently touches down on main wheels and on centre line without lateral drift	
	Makes corrections without being prompted	
	Go- arounds executed promptly & safely	
	RT clear and unambiguous	
	Uses checklist correctly	
Practiced	Glide approach and landing Flapless approach and landing	
Decision Making	Is able to consistently recognise a poor approach	
	Is able to consistently recognise a go around situation – and then safely and promptly execute the go around	
	Is able to consistently recognise incorrect round out	
	Has demonstrated his ability to correct an incorrect roundout (would normally require a go-around)	
	I'M SAFE – fit to fly solo?	
Emergency Procedures Competently Executed	Brake failure on ground	
	Steering failure on ground	
	Electrical failure	
	Engine fire on ground	
	Engine fire in air	
	Electrical fire	
	Burst or flat tyre	
	Abandonment drill	

Instructor's Briefing to Student

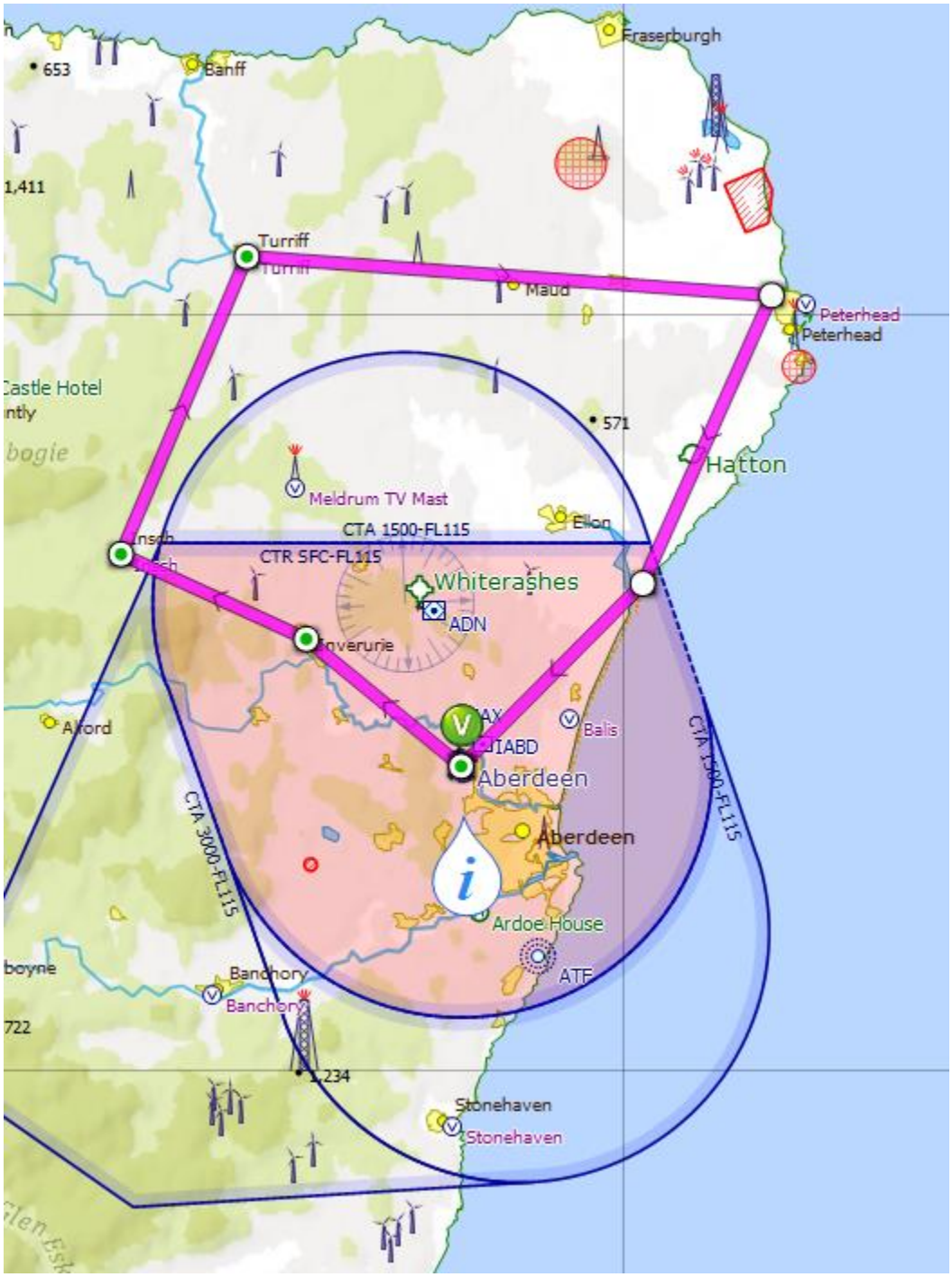
- One circuit and landing to a full stop – no other manoeuvres to be carried out unless you need to execute a go around
- A go around should be performed if you have any doubt about the approach or round out
- Point out improvement in performance as the aircraft has reduced weight due to absence of instructor
- Review circuit procedures
- Reinforce the need for good lookout
- Affirm confidence in the student's ability to fly safely and well

Appendix 5 Local Flying Areas

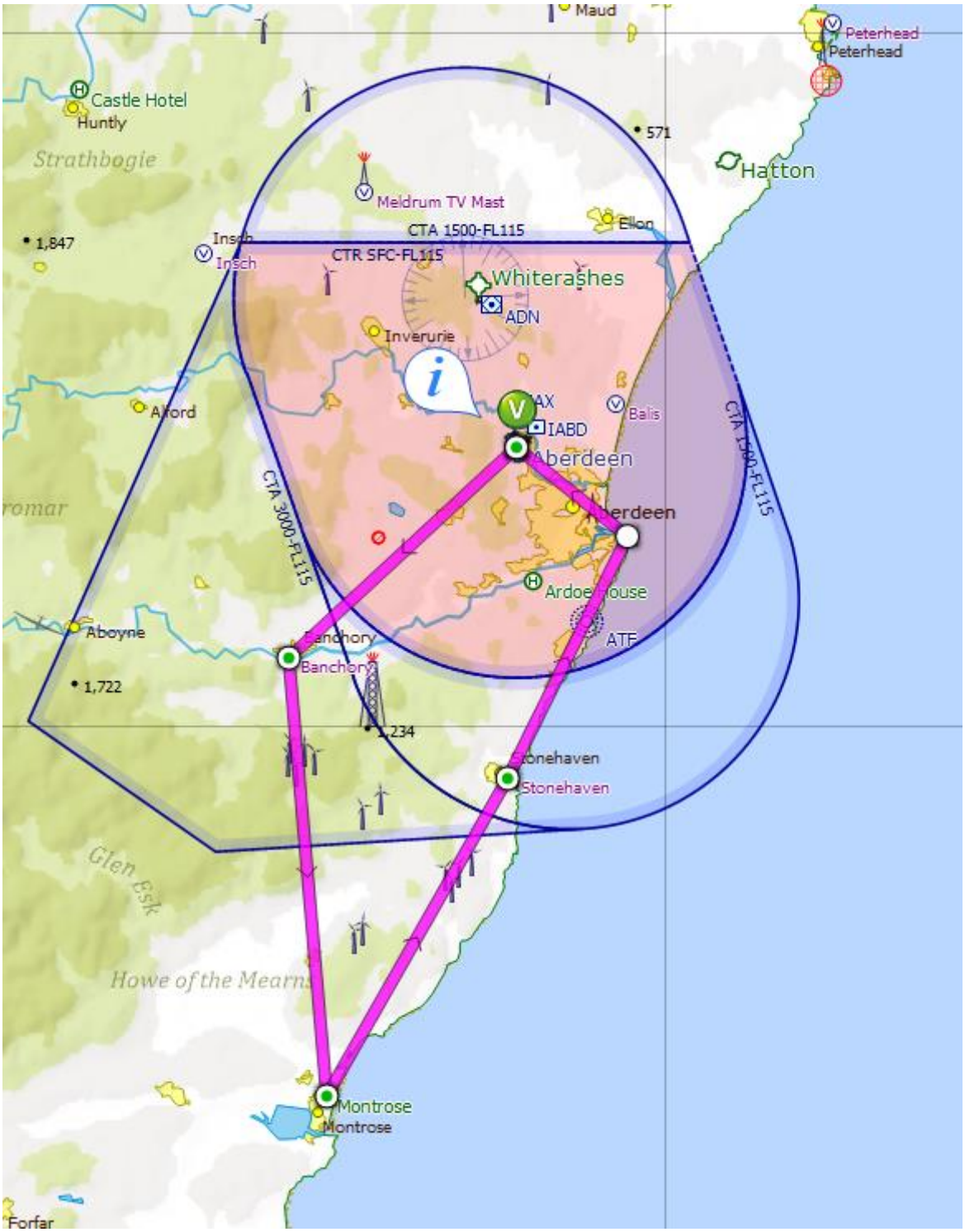


Appendix 6 Cross Country Routes

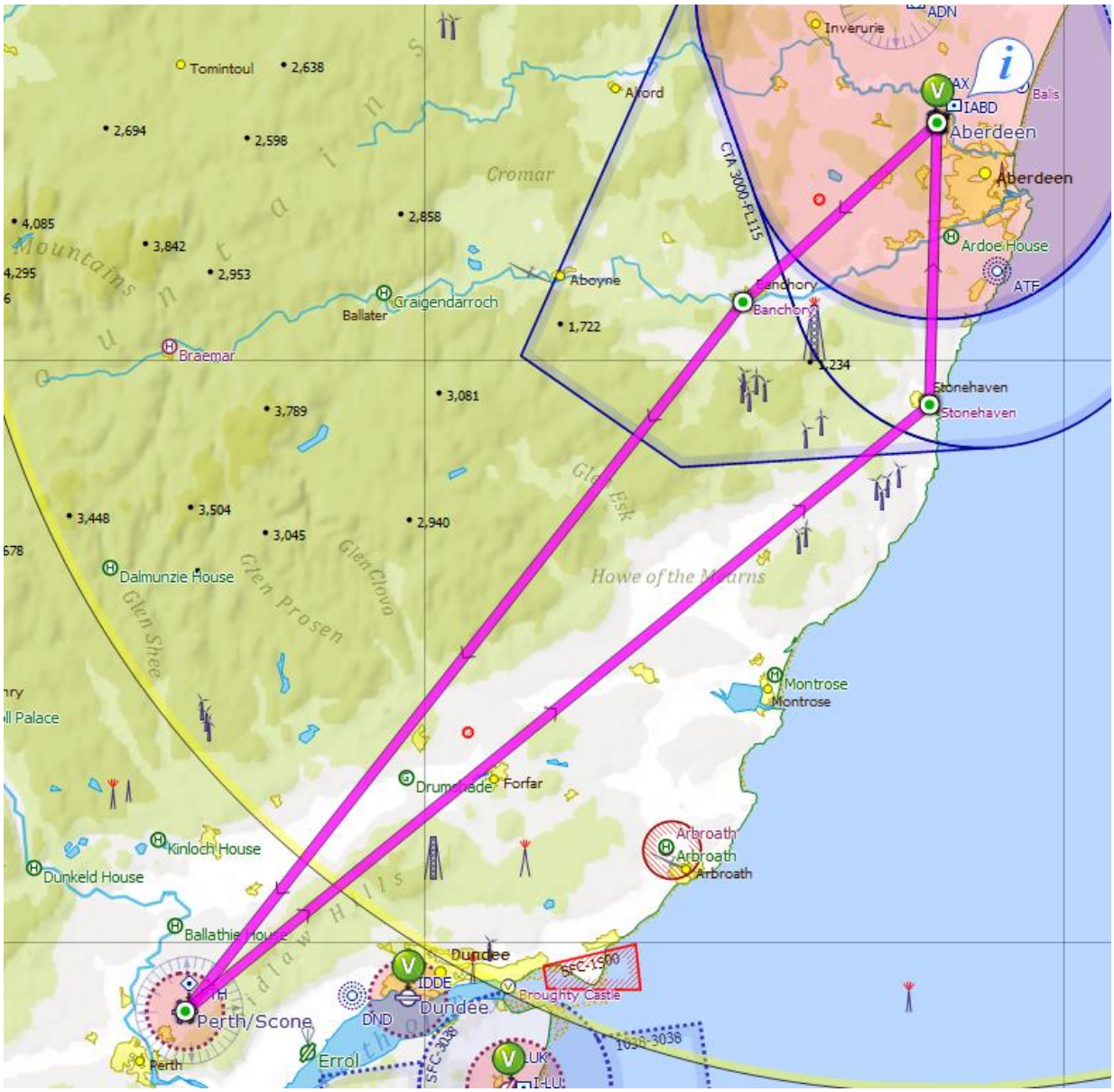
Aberdeen – Insch – Turriff – Peterhead – Aberdeen (Training Route)



Aberdeen-Banchory-Montrose-Stonehaven-Aberdeen (Training Route)

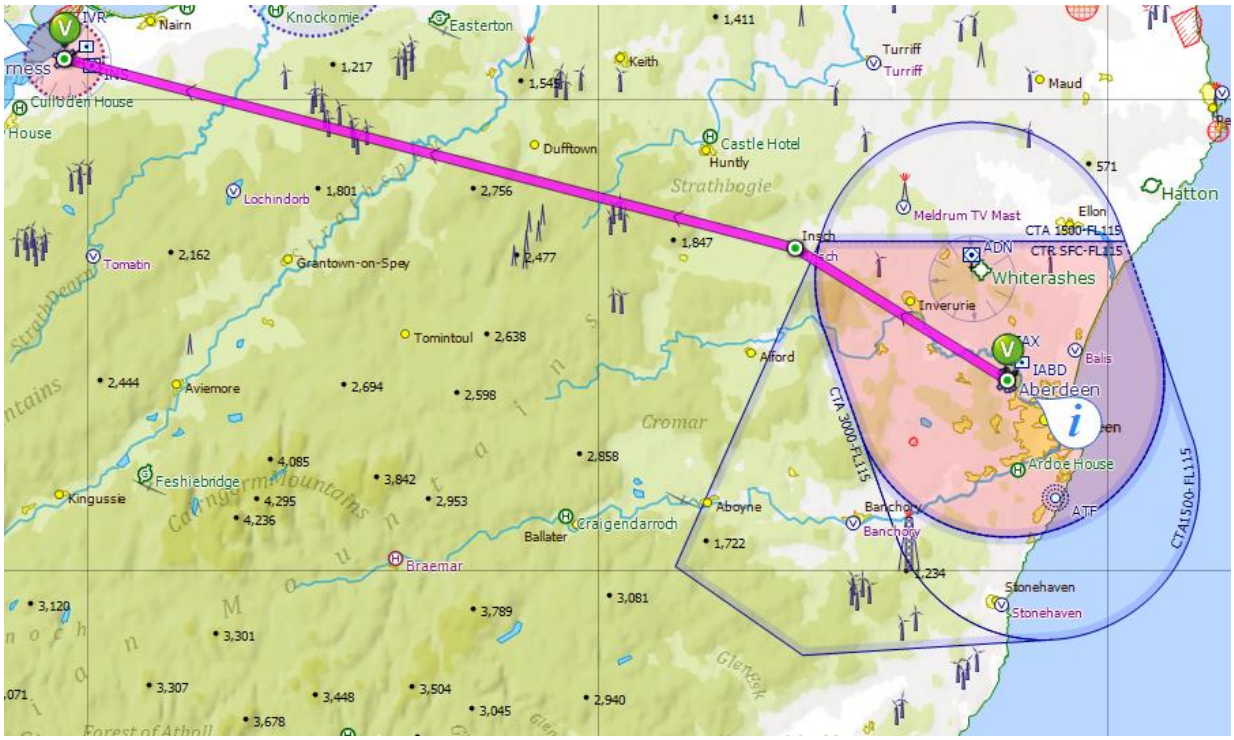


Aberdeen-Perth-Aberdeen (Training Route)

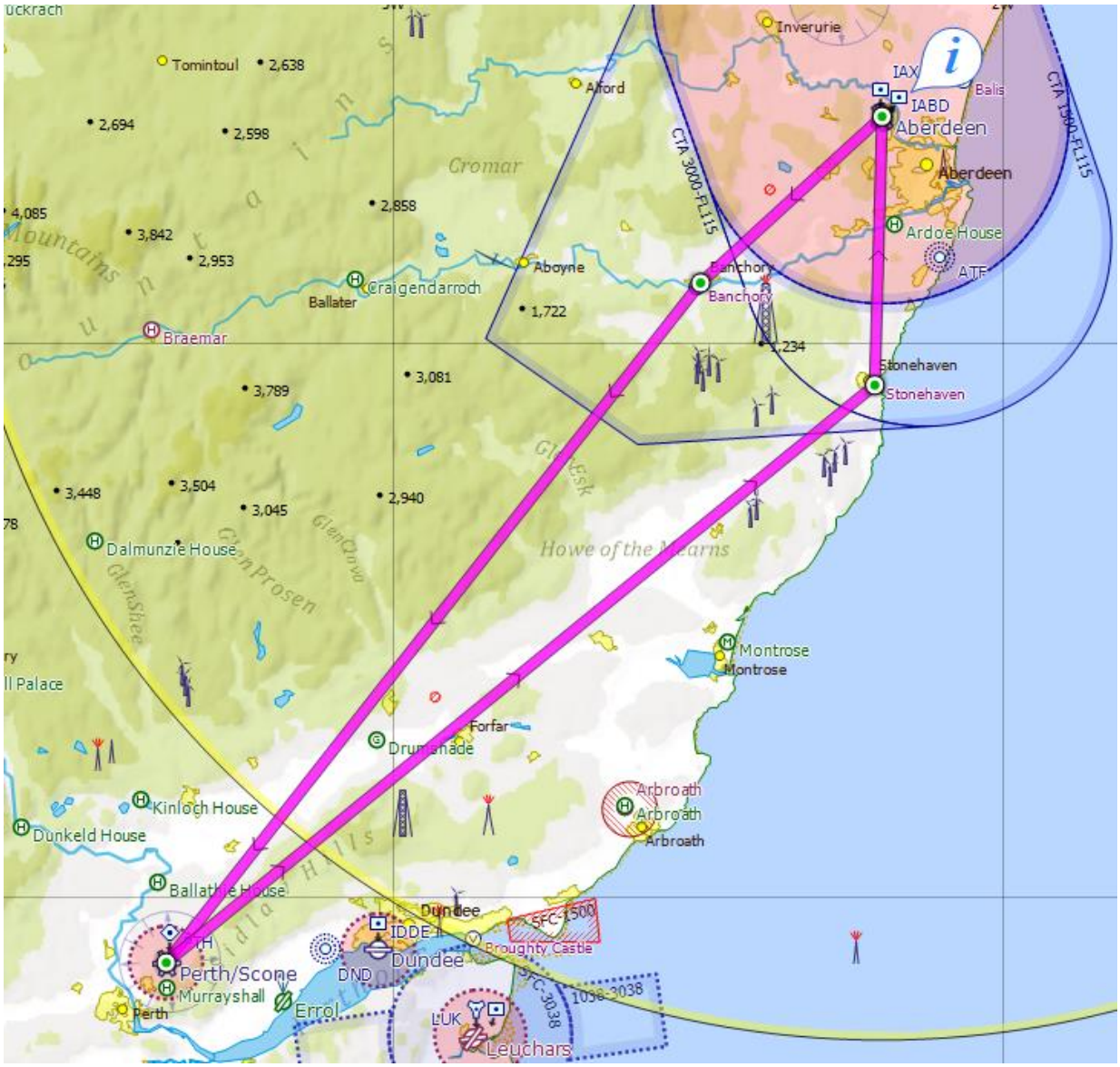
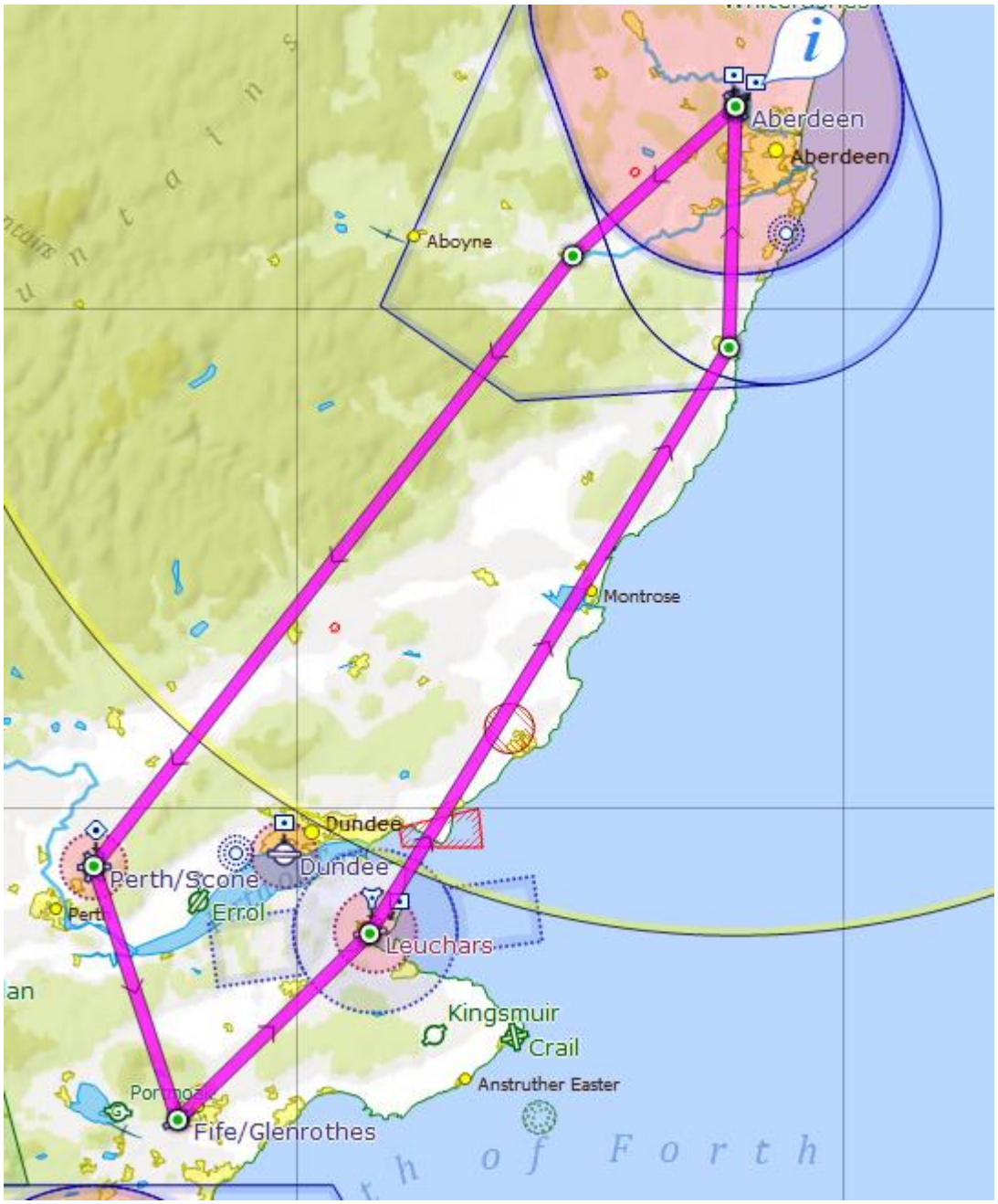


Aberdeen-Inverness-Aberdeen (Training Route)

80nm LAPL Route



Aberdeen-Perth-Aberdeen (80nm LAPL Route)



Aberdeen – Fife – Perth – Aberdeen (150nm PPL Route)