

EAA Euro Aviation Academy

Training Manual ATPL integrated

TMINT

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List of effective Chapters

| Chapter | Revision |
|------------|----------|
| ALL | 0 |
| 1.4 TM-D | 1 |
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1 ATPL(A) Integrated

1.1 TM-A Training Plan

1.1.1 Course Aim

The aim of the course is to train pilots to a level of proficiency necessary to enable them to operate as a co-pilot on multi-pilot, multi-engine aeroplanes in commercial air transportation and to obtain the CPL(A)/IR according Appendix 3 A Part-FCL.

1.1.2 Pre-Entry Requirements

The minimum age to enter the course is 17 years and the educational limitation has to show that sufficient knowledge of Mathematics, Physics and English for the successful completion of theoretical instruction is available.

The entry procedure consists of a 2 hour and minimum 180 single choice question test. After successful passage of the theoretical test a positive subjective screening flight on an adequate training device (mostly FNPT II) has to be passed. This screening flight may be conducted by any license owner with an instrument rating.

Entry Candidates shall own a valid Medical Class 1.

The required level of English shall be in accordance with Appendix 2 to Part-FCL (minimum level 4).

1.1.3 Credits for Previous Training

Holders of a PPL(A) or PPL(H) will be credited to a maximum extent of 50 % of the respective total hours flight experience when entering the course. The maximum crediting will be 45 hours total time (maximum 20 hours double flight instruction) for holders of a respective PPL with Night Qualification. Without Night Qualification a maximum extent of 40 hours total time may be credited (maximum 20 hours double flight instruction). The ATO (and NAA if applicable) will take the final decision on crediting after a maximum of 5 instructional (double) hours. This crediting will be documented in the student file and conforms to Appendix 3 A (3) of Part-FCL.

1.1.4 Training Syllabi

| | |
|-----------------------|--|
| Theoretical Training: | Appendix 3 A Part-FCL and AMC1 to Appendix 3 A (c) |
| Flight Training: | Appendix 3 A Part-FCL and AMC1 to Appendix 3 A (d) |

1.1.5 Time Scale

| Course | Location | Duration | Repetition |
|--------------------|----------|----------|------------|
| ATP (A) Integrated | SZG | 63 weeks | 12 months |

1.1.6 Training programme

1.1.6.1 General

The course consist of theoretical knowledge instruction to the ATPL(A) level, visual and instrument flying training and training in multi-crew co-operation for the operation of multi-pilot aeroplanes

| | |
|-------------------------|--------------------|
| Theoretical instruction | Flying instruction |
| 750 hours | 195,5 hours |

By the end of each week, each FI works out the detailed program for next week's flying as well as theoretical training. The flying program must be established for each student. The ground training can be organized for a group of students.

Bad Weather Constraints: Special attention must be given to the weather situation during flight training. It might be necessary to change contents of the appropriate lesson; nevertheless the FI is responsible that all items laid down in the syllabus are performed within the respective phase of training.

Program Constrains: before starting a new phase of training the previous phase has to be successfully completed. Special focus lies on solo flight students, if the cadet has not flown the past 30 days he shall demonstrate his proficiency on a check-flight before he is released for solo flying again. For the first 10 solo-flights no other student pilot shall perform solo flights in the same traffic pattern.

Restriction in Respect of Duty Period for Students: refer to OM-A

Duration of Dual & Solo Flight at various Stages: Except of cross-country flights; normal training flight shall be within 40 – 60 minutes and additional adequate briefing time.

Maximum Flying Hours in any Duty Day and Night: refer to OM-A

Minimum Rest Period between Duty Periods: refer to OM-A

1.1.7 Training records

Rules of Security of Records and Documents: All performed training has to be documented and all records must be kept five years after the end of training.

All Documents and Records shall be stored in a specified room and in a secured locker, required documents are forwarded to the authorities and quality records may be forwarded to contracting parties or employers, if requested.

The following staff shall have access to the Training records:

- Training Staff

- Specified staff of the personnel department
- Authorized staff of the approving authority

Access to computer data shall be limited to specified terminals with special access - code. Access for students to his personal file shall be granted at any time through his FI or Administration. A Copy of his Training Progress File will stay with the student during the whole training process.

The Form of Training Records to be kept: The Training Record, Flight Mission Forms, Flight Logs, and Grade Sheets will be kept in the Student Training Folder.

The binder will be placed in a designated area. In order to be inspected at any time, the binder must not be removed from this area.

Instructors and Student Pilots are responsible for ensuring that all paperwork and records are up to date and that all training is completed prior to a check flight. It is the Flight Instructors responsibility to verify that the records are in order.

After completion of training, records in this binder will be processed to the authority, if requested.

Persons Responsible for Checking Records and Student's Logbook:

| | |
|---|---------------|
| Records in the student training folder: | HT, CFI, CTKI |
| Student's logbook: | FI |

The Nature and Frequency of Record Checks: Checks of the student's logbook and the student' folder shall be performed on regular basis but at least at the end of each training phase.

Standardisation of Entries in Training Records: The basis for all evaluation is the stage of the flight training, with consideration given to prior experience or instruction.

All training lessons will be graded in a Training Progress File, skill tests and examinations will not be graded.

If the Student Pilot has a comment or rebuttal, it will be made on a separate paper and attached to the student file, which will remain on file with the Student Training Folder.

Quality records and training records must be signed. The signature indicates only acknowledgement, not agreement.

The Training Progress File should be completed the same day the mission is flown and debriefed.

1.1.7.1 Rules Concerning Logbook Entries:

D Unit prefix, lesson-time will be credited as Dual Instruction time

S Unit prefix, lesson-time will be credited as Solo/PIC time

C Unit prefix, lesson-time will be credited as SPIC/PIC time

FNPTII/SIM Unit prefix for FNPT/SIM, instruction ground time will not be credited as flight time.

The minimum entry data for logbooks shall be in accordance with Operations Manual A (Logbook Entries).

1.1.8 Safety Training

1.1.8.1 Individual Responsibilities

The FI is responsible for the safety training and the safety during flight. He will explain to the student the risks in each phase of flight, how to counteract and the proper execution of his duties that are:

- related to the safety of the airplane and its occupants and
- specified in the instructions and procedures laid down in the OM

1.1.8.2 Essential Exercises

- Spin avoidance (do not enter the spin)
- Stall recovery (approach to stall)
- Engine Failure (simulated only)
- Engine Fire (simulated only)
- Electrical Fire (simulated only)
- Emergency landing (simulated only)
- Landing without flaps
- Unsafe Gear (simulated only)

1.1.8.3 Emergency Drills (Frequency)

The emergency drills should be trained at least once every month. The FI will add a note to the Training manual log indicating the nature and the date of the last emergency drill.

The emergency and safety equipment training program will be conducted in the applicable airplane or training device.

Dual Checks (Frequency at Various Stages): During checks and skill tests the Instructor/Examiner has the final authority to take over control in any situation and act as pilot in command, if circumstances require such action.

Dual Checks shall be performed with a different FI than normal and can be done every 5th hour of training, covering the topics of the last 4 training hours.

Requirement before First Solo Day, Night or Navigation Flight: The student's solo flights, not extending beyond the local vicinity of the departure airfield, must be supervised by the student's instructor in a way, which enables him to at least observe take-off and landing (supervised Solo). The solo touch and go training can only start when Progress check B (PPL) has been passed by the student and the approval of the AM has been obtained.

During solo cross country flights, a flight instructor familiar with the flight mission and the airplane must be within reach at all times.

If an aircraft piloted by a student is in an emergency situation or the aircraft is overdue the instructor must act according to the emergency plan.

1.1.9 Test and Examination

1.1.9.1 Flying

- Skill test: are official examinations performed by the authority.
- Quality check: See lesson plans for required interval. Also at any time deemed necessary by the Flight Instructor. A progress test is conducted by the CFI or a FI(A) nominated by the CFI.
- Stage check: Any time the student is ready for his skill test he must pass a quality check conducted by the CFI or a FI(A) nominated by the CFI. Before a skill test can be taken, all phases of the training have to be completed with success. All training logs have to be filled out by the student and checked by the FI.

The Training Manual log has to be filled out completely, checked and (electronically) signed by the student and the FI.

Note: Appropriate ACAA Skill Test form must be filled out as necessary and signed off by the FI or CFI. That form must be a part of the documents required for the formal ACAA Skill Test request.

The applicant should demonstrate the ability to:

- operate the aeroplane within its limitations
- complete all manoeuvres with smoothness and accuracy
- exercise good judgement and airmanship
- apply aeronautical knowledge
- maintain control of the aeroplane at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

1.1.9.2 *Flight test tolerances*

| | |
|---|---|
| Height generally | +/- 100 FT |
| Starting a go-around at decision height | +50 feet/-0 feet |
| Minimum descent height/MAP/altitude | +50 feet/-0 feet |
| Tracking on radio aids | ±5° |
| Precision approach | half scale deflection, azimuth and glide path |
| Heading all engines operating | ±10° |
| Heading with simulated engine failure | ±15° |
| Speed all engines operating | ±5 knots |
| Speed with simulated engine failure | +10 knots/-5 knots |

1.1.9.3 *Theoretical Knowledge - Pre-requisites for applicants undergoing a skill test.*

Before a skill test for the issue of a license or rating is taken the applicant shall have passed the associated theoretical knowledge examination, provided that exceptions may be made by the Authority. Instruction for the associated theoretical knowledge examination shall always have been completed before such skill tests are taken and EAA standard pass rate of 75% in all subjects shall be achieved.

The applicant for a skill test shall be recommended for the test by the organization/person responsible for the training.

Authorization for Test: If the student does not attend the class by 75% or more he may be exempted from the course and required to attend another complete course.

Before attending an external test with the Authority, every student shall have passed an internal test by at least 75% in each subject area. A more detailed description is listed under 1.4.3 Student Progress. On completion of the flying training and relevant experience requirements the applicant shall take the CPL(A) skill test on a SEP or MEP Airplane as outlined in EU-FCL.

Prior to prominent steps of flight training, endorsements by instructors are required. Endorsements are made in the Student Pilots Logbook (PLB).

The Student Pilot is responsible for providing these endorsements; the instructor is responsible for checking the required endorsements before giving solo flight orders to the student pilots.

The following endorsements are required:

| Parts | Staff | Endorsement |
|-------|------------|----------------|
| VFR | Instructor | Ready for Solo |

| | | |
|---------------------------------|----------------------|--|
| VFR X- Country | Instructor | Ready for Solo Cross Country |
| VFR Navigation | Instructor | Ready for Solo Night Patterns |
| before Stage Checks/Skill tests | Instructor | Ready for Stage Check/Skill test |
| Stage Checks | Stage Check-Examiner | S Check passed |
| Skill tests | Examiner | Skill test passed (PPL/CPL/IR/ME-IR) |

Rules for Refresher Training before Retest: The student only needs to retake the final internal exam in the failed topic(s) also refer to 1.4.5 Review Procedures

1.1.9.4 Test Report and Records

Test reports and records are kept in the student's file or electronically with backup system.

1.1.9.5 Procedures for Examination Paper Presentation, Type of Question and Assessment, Standards required for Pass

Questions used in both progress and the qualifying test will be chosen from the ATO's question bank by automated random selections within a chapter under supervision of CTKI. There are a minimum of 10 and a maximum of 50 multiple choice questions where at least 75% of correct answers in each topic are needed to pass. The degree of difficulty of the internal exam should reflect the one in the official exam as close as possible.

1.1.9.6 Procedures for Question Analysis and Review and for Raising Replacement Papers:

Individual questions are analysed by the chief theoretic knowledge instructor while exam results are analysed by flight / theoretic knowledge instructors.

1.1.9.7 Examination Re-sit Procedures

Please refer to 1.4.5 Review Procedures

1.1.10 Training Effectiveness

1.1.10.1 Individual Responsibility

Each student shall be willing and eager to perform to his best ability possible. Should there be any question or uncertainty during the training process it is the student's responsibility to address this matter to his FI or any Postholder he thinks is responsible or capable to solve this matter. As the FI is generally the first to notice any abnormal effectiveness, he should not wait to communicate with other FI, the CFI, the CTKI and HT.

1.1.10.2 General Assessment

The basis for all evaluation is the stage of the training concerned, with consideration given to prior experience or instruction.

The general assessment is done by the FI throughout the training by checking the Training manual log for remarks or failed lessons.

The general assessment is also done by the CFI or CTKI once a month by checking the Training Record for remarks or failed lessons.

Training records will be used for all graded training lessons. The comments and recommendations portion of the forms is specifically for use by the Flight Instructor/Flight Examiner.

Note: The Training Progress File should be completed the same day the lesson is flown and after a student debriefing.

1.1.10.3 Grading

The evaluation system differentiates between:

| Passing Grades | | |
|----------------|--------------|---|
| VG | Very Good | Extraordinary performance. |
| G | Good | Better than average performance, small and minor mistakes. |
| A | Average | Satisfactory performance, no serious mistakes. |
| Failure Grades | | |
| S | Sufficient | Sufficient Performance, does not meet required standard in every respect and/or on all occasions. |
| IS | Insufficient | Insufficient Performance |
| Neutral Grades | | |
| NO | Not observed | Unable to assess proficiency |

Note: A single item graded as a failure has to be repeated in one of the next Missions within the current flight training phase.

1.1.10.4 Liaison between Departments

The FI informs the CFI or CTKI about effectiveness of training, at least monthly. CFI or CTKI will report to HT at least monthly.

1.1.10.5 Identification of Unsatisfactory Progress of individual Students

Events that clearly identify lack of proficiency may include:

- Failure of written, oral and/or practical checks being conducted after simulator/flight or ground training. A check is failed when either a defined minimum test score is not reached, or when the instructor deems that a candidate is not qualified enough to reach required company or authority standards;

- (Repeated) non-compliance with defined policies and procedures or
- In the event of an occurrence, incident or accident when after investigation the event obviously resulted due to lack of knowledge/proficiency.

During the complete training a corresponding progress according to the training phases has to be observed. The progress level is reaching the completion standard within each syllabus.

1.1.10.6 Action to Correct Unsatisfactory Progress

If a flight student fails to comply with one or more items permanently the Head of Training or on his behalf the Chief Flight Instructor has to investigate the problem and announce a meeting with the respective student and one representative of EAA management to find a solution for continuation of training.

- Retraining of lessons
- Change of instructor
- Simulator training
- If no progress any more, stop of training for some time
- Any other reasonable course of action

Procedure for Changing Instructors:

- FI informs CFI and CTKI about the necessity.
- CFI and (or) CTKI inform HT.
- Student is interviewed by CFI, CTKI or HT about reasons
- HT, CFI and CTKI evaluate who is best.
- HT, CFI or CTKI inform student about new FI.
- HT, CFI or CTKI inform new FI about student.
- New FI contacts student.

1.1.10.7 Maximum instructor changes per student:

The maximum of instructor changes per student depends on the reason for the change. Normally a student should not train with more than 3 different instructors for the completion of each TM but exceptions may arise.

1.1.10.8 Internal Feedback System for Detecting Training Deficiencies

As part of the compliance management system the student pilot feedback is collected and evaluated in a standardized way, either on forms or electronically.

It is the HT's responsibility to supervise this Student feedback in coordination with the CM and SM. Handling of student feedback shall be in a timely manner and response shall be given to the student if requested and when not reported anonymously.

Procedures for suspending a Student from Training:

- CFI or CTKI report lack of progress to the HT.
- HT interviews the student about the reasons of this lack of progress.
- If necessary the HT suspends the student from training.
- The HT may delegate the decision of suspending to either the CFI or the CTKI.

1.1.10.9 Discipline

Any discipline problems (e.g. not present, alcohol, arguments between students, not following the advice of the FI (solo flight)) may conduct to temporary exclusion from training or even to complete suspension from training.

1.1.10.10 Reporting and Documentation

ATO is providing documentation of any stage of theoretical and flying training.

The student has to file flight time, departure and arrival airport and all other flight relevant information (especially technically) via Flight Training Management System (FTMS).

Instructors recheck and confirm the entry by changing the status of the record and add the relevant training items within the flight phase or lesson and grade the items.

1.1.11 Standards and Level of Performance at various Stages

Individual Responsibilities: The individual instructor is responsible to maintain the quality standards given by this manual.

Also the Student shall be given more and more responsibility for his training as he commences through his training process and his level of competence increases through the training.

Standardization: Head of Training is overall responsible to maintain the quality standards of the instructing staff and the student pilots.

Standardization may be delegated to the Chief Flying Instructor and or Standardization Instructor.

As an overall standard outline the requirements of the Part-FCL are presented.

1.1.11.1 Standardization Requirements and Procedures

As a Standardization Requirements and Procedures tool regular Stage/Quality checks are held throughout the training as outlined for the specified course.

1.1.11.2 Application of Test Criteria

For dual checks and the progress tests, the internal examiner shall apply the test program as worked out in this manual.

During distance learning for each subject and any course the internal pre-test shall be considered as final test for the completion of the subject.

Only the ATO can enrol the student with the NAA for examinations, as soon as all tests are passed and returned.

During all times the ATO may check the level of theoretical knowledge by progress tests without announcement.

1.2 TM-B Briefing and Air Exercises Flight Training

1.2.1 Air Exercise

This syllabus provides a standardized course of instruction ab-initio flight training. It meets the requirements of Part-FCL and the respective AMC and GM, in order to reach a successful completion of the CPL/IR skill test and the MCC course.

The syllabus describes each phase in detail. Detailed pre-flight and post flight briefings are mandatory.

Normally 1 hour of pre-flight briefing is scheduled. The Student Pilot must be familiar with the lesson outline and have mentally practiced the required manoeuvres prior to each lesson. For this he shall make use of documentation (TM, OM, OM-B, POH, AIP), computer based learning and other helpful features provided by the ATO.

Sequence and content of the flight lesson are complied with whenever possible, scheduling may require a deviation from the sequence.

Depending on Student Pilot progress, weather/NOTAM restrictions, equipment malfunction, or other factors, the Instructor Pilot may decide to adjust and vary the content of the lesson to accommodate individual training requirements. The Instructor Pilot is responsible for ensuring that all lesson items are completed during the training.

The “Training Items” column lists topics of importance to be reviewed by the Student Pilot prior to the lesson and subjects newly introduced to the Student Pilot.

The „Briefing“ Column list all topics to be covered by the instructor in the pre-flight briefing.

The “Air exercises” column indicates the profile that should be performed during a lesson.

Additional training items of importance are marked with “demonstrated” or “assisted” to indicate the role of the Instructor Pilot.

Collision avoidance plays an important role during ground and flight ops.

All crew members will continuously make himself/herself aware of the aircraft’s position (visually and with radio navigation equipment), while constantly looking for other traffic and monitoring all radio communications.

Solo Flights:

No manoeuvre or procedure is to be performed on a Solo flight unless the Student Pilot has practiced it on a flight with an Instructor Pilot before. Simulated emergencies are not to be practiced on Solo flights.

Approach to stall manoeuvres and recoveries on Solo flights are prohibited!

Solo Flight Mission Forms are required for each Solo flight. They are given by the signature of the instructor either personally or by the means of an electronic transaction authorization number (TAN) on the Flight Mission Form.

1.2.2 Training Reference

1.2.2.1 Phase 1

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|---------|---------|------|-----------|
| 1 | 1 | FNPT II | DUAL | IFR | 05:00 |

SUMMARY

This phase introduces the Student Pilot to the control and performance concept to the toolbox concept in instrument – training conditions basic IFR manoeuvres, to safety procedures, checklist procedure, pre-flight procedures, training aerodrome and local area, unusual attitude recovery and steep turns.

TRAINING ITEMS

| | |
|--|--|
| Control Instruments - Performance Instruments | Change over to instruments during rotation |
| Attitude Instrument Flying | Instrument Scan and instrument crosscheck |
| Effect of Changing Power, configuration and trim | Attitude Flying, Control Instruments-Performance Instruments |
| Effect of Changing Power and configuration | Cross Checking the Instrument Indications |
| Instrument Interpretation | Direct and Indirect Indications |

BRIEFING ITEMS

| | |
|--|--|
| The toolbox concept - the 5 phases of flight | Use Pitch-Power values of the A/C used for Training |
| Standard rate vs 25° and 30° bank turns | Application of Control and Performance Concept during steep turns with 45° as a cross reference to VFR manoeuvres (Pitch=ATL and V/S, Power=Speed) |
| Unusual Attitudes – Recoveries | Spatial disorientation avoidance |

AIR EXERCISES

| | |
|---|---|
| Practice Take Offs, Climb, Cruise, Descent, Final | Standard Rate turns, 25° bank turns |
| 180° escape turn after unintended flight into IMC | Fly the DA 20 VFR Pattern in IMC with 25° bank turns (see TM Air Exercises) |
| Turns, Std rate, 25°/30° bank turn, 45° turns (for training only in order to support VFR maneuvers) | 180° escape turn after unintended flight into IMC |
| Recovery from high pitch and low pitch attitudes | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 2 | 1 | SEP | DUAL | VFR | 10:00 |

SUMMARY

This unit contains previously introduced contents and is designed to meet the tolerances for the skill testing. It introduces the Student Pilot to the training aircraft, local training areas, emphasis on visual approach and landings, to local procedures consolidation, take off consolidation, visual approach and landing in different configurations. Explanation of the toolbox concept, fully developed stalls and recovery training to proficiency, checklist procedures, local procedures, positional awareness, safety procedures, take off, visual approach and landing, visual circuit, abnormal procedures philosophy, air work manoeuvres, local area and other training airports, positional awareness, local procedures, pre-flight procedures, take off, visual approach and landing, training aerodrome and stalls and spins (mind airplane certification).

TRAINING ITEMS

| | |
|---|--|
| Air work preparation | Manoeuvring during slow flight |
| Aircraft systems knowledge | ATC light signals |
| Attitude flying | Correction technique for slipstream, torque, precession, and P-factor effects in the various regimes of flight |
| Determining aircraft performance / Weight and balance | Engine failure in flight |
| Ground operations | Ground reference maneuvers |
| Pitch / Power Table | Post flight procedures |
| Pre-flight operations | Radio communications |
| Safety aspects operating in and around an aircraft | Simulated engine failure |
| Starting engine, Run-up / Pre-take off procedures | Steep turns, Power-on and Power off stalls |
| Taxi procedure | Use of abnormal list |
| Use of checklists, Certificates and documents | Visual approach procedures |
| Visual Circuit procedures | Weather and NOTAMS |

BRIEFING ITEMS

| | |
|---|--|
| Air work Preparation | Air work |
| Ground reference maneuvers | Aircraft systems – selective subjects |
| Attitude flying | Common errors during landing |
| Correction technique for slipstream, torque, precession, and P-factor effects in the various regimes of flight. | Determining aircraft performance / Mass and balance |
| Cockpit procedures | Engine failure in flight |
| Forms and documents | Forward and Side slips |
| Go-around | Ground reference maneuvers: Rectangular pattern |
| Handling of Abnormal Checklists | Handling of emergencies |
| Manoeuvring during slow flight | Pitch / power affects in different configurations and speeds |
| Pitch / Power Table | Safety aspects operating in and around an aircraft |

| | |
|------------------------------------|----------------------|
| Simulated engine failure in flight | Use of abnormal list |
|------------------------------------|----------------------|

AIR EXERCISES

| | |
|---|--|
| Air work | Air work preparation |
| Aircraft systems – selective subjects | Aircraft systems knowledge |
| Area and training airport familiarization | Area orientation |
| Attitude flying | Cockpit preparation |
| Collision avoidance precautions | Common errors during landing |
| Demonstration of Control and Performance Concept | Demonstration of position of natural horizon |
| Departure and climb | Engine failure in flight |
| Engine start | Forward and side slips |
| Go-around | Ground operations |
| Ground reference maneuvers: Rectangular pattern | Landing |
| Level off | Manoeuvring during slow flight |
| Normal Flaps landing | Normal Landing |
| Operating limitations | Operations at an airport with control tower (if available) |
| Pilot awareness | Post flight procedure |
| Power off stalls all configurations assisted | Power-on stalls all configurations assisted |
| R/T with Training Aerodrome | Run-up |
| Safety aspects operating in and around an aircraft | Simulated engine failure in flight |
| Simulated engine failure in Visual Circuit | Simulated Engine in flight |
| Simulated Engine in flight assisted | Soft field T/O |
| Spins (Airplane certification permitting!) | Stalls |
| Steep turns | Steep turns assisted |
| Straight-and-level flight, Climbs, turns (medium), and descents | T/O and Landings at various flap settings |
| Take off | Take off and departure to training area |
| Take off briefing | Taxi to apron, Shut down and parking |
| Taxi to run-up position | Touch and go |
| Types of Spins | Use of abnormal list |
| Use of checklists | Use of natural horizon |
| Visual approach / Visual Circuit | Visual Circuit procedures |
| Visual inspection | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 3 | 1 | SEP | DUAL | VFR | 01:30 |

SUMMARY

The Student Pilot will prepare and control this lesson in accordance with ATO standards. This lesson will determine the Student Pilot's ability to perform Solo Visual Circuits and will release him for first Solo. The lesson is designed to meet the Tolerances for the Skill Test. Endorsement by Instructor "Stage Check passed" and "Ready for Solo" is required.

The unit contains safety procedures, checklist procedures, positional awareness, consolidation of abnormal procedures, consolidation of local procedures, consolidation of take-off, visual circuits, touch and go and full stop / taxi back.

TRAINING ITEMS

| | |
|--|--|
| Review by student pilot prior flight lesson | Ground operations |
| Safety aspects operating in and around an aircraft | Use of checklists |
| Visual Circuit procedures | Common errors during landing |
| Go – around | Use of abnormal list |
| Engine failure in flight | Approach and landing with different configurations |
| Simulated Engine failure in Visual Circuit | ATC light signals |
| Radio communications failure, Radio communications | Touch/Go and Full stop/taxi back (min 3 landings) |

BRIEFING ITEMS

Give special attention to preparation of the following lesson, where the student pilot performs the first solo. Focus on stress avoidance and professionalism. Discuss in detail how to avoid common errors and how to handle abnormal situations during solo flight. Point out steady watch and possible assistance by the instructor via radio.

AIR EXERCISES

| | |
|--|--|
| Ground operations | Take off and departure to training area |
| Collision avoidance precautions | Steep turns |
| Power-off stalls | Simulated engine failure in flight |
| Visual approach / Visual Circuit | Simulated engine failure in Visual Circuit |
| Touch and go with different configurations | Full stop / taxi back |
| Go around | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 4 | 1 | SEP | DUAL | VFR | 00:30 |

SUMMARY

The Student Pilot will prepare and control this unit in accordance with ATO standards. He/she will fly Visual Circuits, landing different flap settings, special focus on touch and go landings. The lesson is designed to meet the Tolerances for the Skill Test. This unit is completed, when the student pilot has demonstrated confidence to the instructor and professionally performed touch and go landings in accordance with procedures and regulations without assistance of his instructor.

| | |
|--------------------------------------|---|
| Introduction of safety procedures | Introduction of checklist procedures |
| Introduction of positional awareness | Consolidate abnormal procedures |
| Consolidate local procedures | Consolidate take off, Visual Circuits, full stop / taxi back landings |

TRAINING ITEMS

| | |
|--|--|
| Ground operations | Attitude flying |
| Safety aspects operating in and around an aircraft | Use of checklists |
| Visual Circuit procedures | Common errors during landing |
| Go – around | Use of abnormal list |
| Engine failure in flight | Approach and landing with different configurations |
| ATC light signals | Radio communications failure |
| Radio communications | Touch and go, full stop / taxi back |

BRIEFING ITEMS

Review experiences made during first Solo and discuss occurrences. Discuss possibilities to improve safety and strengthen confidence. Highlight avoidance of common errors during touch and go landings and professional handling of appropriate actions, such as go around in any phase of landing.

AIR EXERCISES

| | |
|--|--|
| Collision avoidance precautions | Ground operations |
| Take off | Visual Circuit |
| Touch and Go landings | Pre-flight operations |
| Mass and balance determination | Aeroplane inspection and servicing |
| Aerodrome and traffic pattern operations | Collision avoidance and precautions |
| Control of the aeroplane by external visual references | Normal take-offs and landings |
| Flight at critically low air speeds | Recognition of recovery from incipient and full stalls |
| Spin avoidance | Unusual attitudes and simulated engine failure |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 5 | 1 | SEP | DUAL | VFR | 00:30 |

SUMMARY

Endorsement Stage Check passed. PLB endorsements „Ready for Stage Check“, „Stage Check passed“ and „Ready for Solo“ have been collected by the student pilot. This lesson must be flown as the first supervised Solo.

This lesson is completed; when the student pilot has successfully performed 3 take offs and landings in accordance to procedures and regulations without assistance of his/her instructor.

The Student Pilot will prepare and control this lesson in accordance with ATO standards. He/she will perform Solo Visual Circuits.

The lesson is designed to meet the Tolerances for the Skill Test.

| | |
|--------------------------------------|--|
| Introduction of safety procedures | Introduction of checklist procedures |
| Introduction of positional awareness | Consolidate abnormal procedures |
| Consolidate local procedures | Consolidate take off, Visual Circuits, |
| full stop / taxi back landings | |

TRAINING ITEMS

| | |
|--|--|
| Collect endorsement „Ready for Solo“ | Ground operations |
| Attitude flying - Safety aspects operating in and around an aircraft | Use of checklists |
| Visual Circuit procedures | Common errors during landing |
| Go – around | Use of abnormal list |
| Engine failure in flight | Approach and landing with different configurations |
| ATC light signals | Radio communications failure |
| Radio communications | Full stop / taxi back |

BRIEFING ITEMS

Completed in preparation

AIR EXERCISES

| | |
|--|--|
| Collision avoidance precautions | Ground operations |
| Pre-flight operations | Mass and balance determination |
| Aeroplane inspection and servicing | Aerodrome and traffic pattern operations |
| Collision avoidance and precautions | Control of the aeroplane by external visual references |
| Normal take-offs and landings | Flight at critically low air speeds |
| Recognition of recovery from incipient and full stalls | Spin avoidance |
| Unusual attitudes and simulated engine failure | |

1.2.2.2 Phase 2

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 6 | 2 | SEP | SOLO | VFR | 08:00 |

SUMMARY

The Instructor Pilot will prepare and control this lesson in accordance with ATO standards. The flights within this unit introduce the Student Pilot to cross country planning and flying and preparation of the first cross country solo.

| | |
|--|---|
| Consolidate local procedures | Introduce dead reckoning |
| Introduce flight log preparation for cross country | Introduce map preparation for cross country |
| Introduce pilotage | Introduce preparation of VFR plan |
| Introduction to checklist procedures | Introduction to positional awareness |
| Introduction to safety procedures | |

TRAINING ITEMS

| | |
|---|--|
| Attitude flying | Safety aspects operating in and around an aircraft |
| Short field/obstacle approach and landing | Short field/obstacle take off |
| Short grass field/obstacle approach and landing | Short grass field/obstacle take off |
| VFR flight planning | Weather/NOTAMS |

BRIEFING ITEMS

| | |
|---|---|
| Calculation of minimum safe altitude | Calculation of point of descent |
| Calculation of top of climb | Change of enroute altitude prior to or at turn points |
| Conduct of flight | Dead reckoning |
| Directional gyro, emphasizing precession error | Filing flight plan |
| Flight log entries | Information and flight documents |
| Level off | Opening / closing flight plan |
| Pilotage | Pitch, bank and altitude control |
| Planning of route | Positional awareness |
| Preparation of chart | Principles of planning |
| Short field/obstacle approach and landing | Short field/obstacle take off |
| Short grass field/obstacle approach and landing | Short grass field/obstacle take off |
| Time and fuel calculation | Use of aeronautical charts for VFR navigation |
| Use of flight instruments | Use of timer |
| VFR flight plan | VFR flight planning |

AIR EXERCISES

| | |
|---|---|
| Airport entries at airports with or without control tower | Collision avoidance precautions |
| Dead reckoning | Pilotage |
| Ground operations | Maintain flight log |
| Opening and closing flight plan | Positional awareness |
| Short field/obstacle approach and landing | Short field/obstacle take off and departure |
| Short grass field/obstacle approach and landing | Short grass field/obstacle take off and departure |
| Touch and go / full stop | Visual approach / visual circuit |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 7 | 2 | SEP | SOLO | VFR | 08:00 |

SUMMARY

These lessons allow the student to gain confidence during Solo flights in the pattern and the close vicinity of the airport. The Instructor Pilot will prepare and control this lesson in accordance with flight training standards. These lessons introduces the Student Pilot to cross country planning and flying and prepare his cross country solo flights.

| | |
|--|---|
| Consolidate airwork maneuvers | Consolidate local procedures |
| Consolidate take off, visual approach and landing | Introduce dead reckoning |
| Introduce flight log preparation for cross country | Introduce map preparation for cross country |
| Introduce pilotage | Introduce preparation of VFR plan |
| Introduction to checklist procedures | Introduction to positional awareness |
| Introduction to safety procedures | |

TRAINING ITEMS

| | |
|--|--|
| Aircraft systems knowledge | Airwork |
| Airwork preparation | Approach and landing with different configurations |
| Area orientation | Attitude flying |
| Common errors during landing | Engine failure in flight |
| Engine failure in visual circuit | Go – around |
| Ground operations | Radio communications |
| Safety aspects operating in and around an aircraft | Short grass field/obstacle approach and landing |
| Short grass field/obstacle take off | Use of abnormal list |
| Use of checklists | VFR flight planning |
| Visual circuit procedures | Weather/NOTAMS |

BRIEFING ITEMS

| | |
|---|---|
| Aircraft systems knowledge | Airwork |
| Airwork maneuvers to be performed | Airwork preparation |
| Approach and landing with different configurations | Area orientation |
| Attitude flying | Calculation of minimum safe altitude |
| Calculation of point of descent | Calculation of top of climb |
| Change of enroute altitude prior to or at turn points | Common errors during landing |
| Conduct of flight | Dead reckoning |
| Directional gyro, emphasizing precession error | Engine failure in flight |
| Engine failure in visual circuit | Filing flight plan |
| Flight log entries | Go-around |
| Ground operations | Information and flight documents |
| Level off | Opening / closing flight plan |
| Pilotage | Pitch, bank and altitude control |
| Planning of route | Positional awareness |
| Preparation of chart | Principles of planning |
| Radio communications | Short grass field/obstacle approach and landing |
| Short grass field/obstacle take off | Time and fuel calculation |
| Use of abnormal list | Use of aeronautical charts for VFR navigation |
| Use of checklists | Use of flight instruments |
| Use of timer | VFR flight planning |
| Visual circuit procedures | Visual circuits and approaches to be performed |

AIR EXERCISES

| | |
|--|---|
| Airport entries at airports with or without control tower | Collision avoidance precautions |
| Dead reckoning | Flaps up touch and go |
| Full stop / taxi back landings as authorized by Instructor Pilot | Ground operations |
| Maintain flight log | Opening and closing flight plan |
| Pilotage | Positional awareness |
| Short grass field/obstacle approach and landing | Short grass field/obstacle take off and departure |
| Take off and departure to to pattern and local training area | Touch and go / full stop |
| Visual approach / visual circuit | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 8 | 2 | SEP | DUAL | VFR | 02:00 |

SUMMARY

This lesson should be flown with an instructor who was not previously involved in the training.

| | |
|--|---------------------------|
| Determine proficiency in the following areas of training | Aircraft handling |
| Visual circuit | Airwork |
| Abnormal situations | cross country preparation |
| conduct of cross country flight, | conduct of a diversion |

TRAINING ITEMS

| | |
|---|-----------------------------------|
| Safety aspects operating in and around an aircraft | Aircraft systems knowledge |
| Determining aircraft performance / Weight and balance | Certificates and documents Agenda |
| Attitude flying | Use of checklists |
| ATC light signals | Radio communications |
| Visual circuit procedures | Go-around |
| Abnormal procedures | Airwork preparation |
| Airwork | VFR flight planning |
| Diversion / lost procedure | Flight instrument errors |
| Radio navigation for VFR orientation | Use of flight instruments |

BRIEFING ITEMS

| | |
|--|--|
| Student Pilot presents relevant paperwork to the Check Pilot | Student Pilot will brief the conduct of the lesson to include Airwork |
| Routing | Airports to be visited |
| Arrival and Departure | Enroute Emergency Landing Fields |
| Action in case of Weather Avoidance | Check pilot may ask specific questions and add to the Student Pilot's briefing |

AIR EXERCISES

| | |
|--|---|
| Ground operations | Take off and departure |
| Collision avoidance precautions | Dead reckoning |
| Pilotage | Positional awareness |
| Maintaining flight log | Opening and closing flight plan (if required) |
| Enroute procedure | Airport entries at airports with or without control tower |
| Visual approach / visual circuit | Touch and go / full stop |
| Selective airwork as briefed | Simulated engine failure |
| Maximum performance take-offs and short-field landings | Flight by reference solely to instruments including the completion of a 180° turn |
| Dual cross-country flying using external visual references | Dead reckoning and radio navigation aids |
| Diversion procedures | Aerodrome and traffic pattern operations at different aerodromes |
| Corsswind take-off and landings | Abnormal and emergency procedures and manoeuvres |
| Simulated aeroplane equipment malfunctions | Operations to, from and transiting controlled aerodromes |
| Compliance with ATS procedures, R/T procedures and phraseology | Knowledge of meteorological briefing arrangements, evaluation of weather conditions for flight and use of AIS |

1.2.2.3 Phase 3

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 9 | 3 | SEP | SOLO | VFR | 02:00 |

LESSON SUMMARY

These lessons allow the student to gain confidence during Solo flights in the pattern and the vicinity of the airport.

| | |
|---|--------------------------------------|
| Introduction to safety procedures | Introduction to checklist procedures |
| Introduction to positional awareness | Consolidate local procedures |
| Consolidate take off, visual approach and landing | Consolidate airwork maneuvers |

TRAINING ITEMS

| | |
|----------------------------------|--|
| Ground operations | Aircraft systems knowledge |
| Attitude flying | Use of checklists |
| Visual circuit procedures | Common errors during landing |
| Go – around | Airwork preparation |
| Airwork | Area orientation |
| Use of abnormal list | Engine failure in flight |
| Engine failure in visual circuit | Approach and landing with different configurations |
| Radio communications | |

BRIEFING ITEMS

Not applicable

AIR EXERCISES

| | |
|--|---|
| Ground operations | Take off and departure to pattern and local training area |
| Collision avoidance precautions | Visual approach / visual circuit |
| Flaps up touch and go | Full stop / taxi back landings as authorized by Instructor Pilot |
| Maximum performance take-offs and short-field landings | Flight by reference solely to instruments including the completion of a 180° turn |
| Dual cross-country flying using external visual references | Dead reckoning and radio navigation aids |
| Diversion procedures | Aerodrome and traffic pattern operations at different aerodromes |
| Crosswind take-off and landings | Abnormal and emergency procedures and manoeuvres |
| Simulated aeroplane equipment malfunctions | Operations to, from and transiting controlled aerodromes |
| Compliance with ATS procedures, R/T procedures and phraseology | Knowledge of meteorological briefing arrangements, evaluation of weather conditions for flight and use of AIS |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 10 | 3 | SEP | DUAL | VFR | 05:00 |

LESSON SUMMARY

The Instructor will prepare and control this lesson in accordance with flight training standards. The Student Pilot will be introduced to a new aircraft type (four seater).

| | |
|---|---|
| Consolidate local procedures | Introduction to a larger airplane (four seater) |
| Introduction to safety procedures, Introduction to checklist procedures Introduction to positional awareness and procedures for loss of orientation | Introduction to the airports of the intended 300nm flight |

TRAINING ITEMS

| | |
|---|---------------------|
| Details of the Pilot's Operating Handbook | Loss of orientation |
|---|---------------------|

BRIEFING ITEMS

| | |
|---|--------------------------------|
| Abnormal procedures | Slow flight |
| Airwork | Stalls |
| Differences to the known aircraft type | Touch and goes |
| Operation with maximum performance mass | Aircraft systems |
| Weight and balance | Airwork preparation |
| Airwork preparation | Fuel calculation |
| Go around | Take off and landing distances |
| Normal take off | |

AIR EXERCISES

| | |
|---------------------------------|----------------------------------|
| Collision avoidance precautions | Soft field take off |
| Ground operations | Steep turns |
| Short field take off | Visual approach / visual circuit |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 11 | 3 | SEP | SOLO | VFR | 36:00 |

LESSON SUMMARY

The Student Pilot will prepare and control this lesson in accordance with flight training standards.

OBJECTIVES

| | |
|---|--|
| Consolidate local procedures | Consolidate flight log preparation for cross country flights |
| Consolidate map preparation for cross country flights | Consolidate pilotage and dead reckoning |

TRAINING ITEMS

| | |
|--|---|
| Safety aspects operating in and around an aircraft | Details of the Pilot's Operating Handbook |
| Attitude flying | VFR flight planning |
| Weather/NOTAMS | Cross Country Flying |

BRIEFING ITEMS

| | |
|--|---------------------|
| Safety aspects operating in and around an aircraft | VFR flight planning |
| Weather/NOTAMS | |

AIR EXERCISES

| | |
|---------------------------------|----------------------|
| Pattern | Pilotage |
| Ground operations | Positional awareness |
| Normal departure | Maintain flight log |
| Collision avoidance precautions | Visual approach |
| Dead reckoning | Normal landing |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 12 | 3 | SEP | SOLO | VFR | 04:00 |

SUMMARY

The Student Pilot will prepare and control this lesson in accordance with flight training standards. The lesson consolidates cross-country planning procedures and execution.

The lesson is designed to meet the Tolerances for the Skill Test.

Minimum distance is 300nm in one round trip with 2 full stop landings.

OBJECTIVES

Long XC over 300nm for ATP(A) or 150nm PPL(A)

| | |
|--|--|
| Consolidate local procedures | Consolidate pilotage and dead reckoning |
| Consolidate map and flight log preparation for cross country flights | Consolidate use of radio navigation aids |

TRAINING ITEMS

| | |
|--|---|
| Safety aspects operating in and around an aircraft | Details of the Pilot's Operating Handbook |
| Attitude flying | VFR flight planning |
| Weather/NOTAMS | Cross Country Flying |

BRIEFING ITEMS

| | |
|--|--|
| Safety aspects operating in and around an aircraft | Weather/NOTAMS |
| Attitude flying | VFR flight planning and procedures for loss of orientation |

AIR EXERCISES

| | |
|---------------------------------|----------------------|
| Pattern | Pilotage |
| Ground operations | Positional awareness |
| Normal departure | Maintain flight log |
| Collision avoidance precautions | Visual approach |
| Dead reckoning | Normal landing |

1.2.2.4 Phase TR

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 16 | TR | SEP | DUAL | NVFR | 03:00 |

SUMMARY

The Student Pilot will perform Night Traffic Pattern operations.

OBJECTIVES

1. During this and the subsequent lesson, a minimum of 10 takeoffs and landings at night must be performed. An endorsement regarding the Student Pilot's competency in night flying is required
2. Prior to the Solo Traffic Pattern at Night, a logbook endorsement regarding the Student Pilot's competency in night flying is required.

TRAINING ITEMS

| | |
|-------------------------------|---|
| Aircraft lights | Normal or crosswind approach and landing |
| Airport and runway lighting | Normal or crosswind takeoff and climb |
| Full stop / taxi back | Simulated engine failure in traffic pattern |
| Go-around | Traffic pattern operations |
| Landing without landing light | |

BRIEFING ITEMS

| | |
|---|---------------------------------------|
| Aircraft lights Airport and runway lights | Normal or crosswind takeoff and climb |
| Go-around | Traffic pattern |
| Normal or crosswind approach and landing | |

AIR EXERCISES

| | |
|-----------------|---|
| Traffic pattern | Normal or crosswind takeoff and landing |
| Go-around | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|---------|-----------|
| 17 | TR | SEP | SPIC | IFR NIT | 01:00 |

SUMMARY

Night flying with SEP aeroplane.

LESSON OBJECTIVES

| | |
|-----------------------------|----------------------|
| Common errors | Inflight Performance |
| IFR Procedures | Night Operations |
| Importance of safety speeds | Preflight Planning |

TRAINING ITEMS

| | |
|-----------------------------|----------------|
| Use of alternate aerodromes | XC Preparation |
| XC Flight Planning | |

BRIEFING ITEMS

| | |
|--------------------------|--------------------------|
| CRM / HPL aspects | Operational Consequences |
| Engine and system checks | System Malfunctions |
| Night Operation | Use of Abnormal lists |

AIR EXERCISES

| | |
|---------------------------------|---|
| All kinds of IFR approaches | Crosswind effects and procedure |
| Circling Approaches | Location and use of emergency equipment and exits |
| Crosswind effects and procedure | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 18 | TR | SEP | SOLO | NVFR | 01:00 |

SUMMARY

The Student Pilot will perform Night Traffic Pattern operations.

OBJECTIVES

1. During this lesson, a minimum of 5 solo take-offs and landings to a complete stop at night must be performed.
2. Prior to the Solo Traffic Pattern at Night, a logbook endorsement regarding the Student Pilot's competency in night flying is required

TRAINING ITEMS

| | |
|--|---|
| Traffic pattern operations | Simulated engine failure in traffic pattern |
| Airport and runway lighting | Landing without landing light |
| Aircraft lights | Full stop / taxi back |
| Normal or crosswind takeoff and climb | Go-around |
| Normal or crosswind approach and landing | |

BRIEFING ITEMS

| | |
|---|--|
| Long Briefing: | Normal or crosswind takeoff and climb |
| Traffic pattern | Normal or crosswind approach and landing |
| Aircraft lights Airport and runway lights | Go-around |

AIR EXERCISES

| | |
|--------------------------|-----------------------------|
| Traffic pattern | Normal approach and landing |
| Normal takeoff and climb | COMPLETION STANDARD |

This lesson will be complete when the Student Pilot demonstrates that he/she is able to safely perform solo night traffic pattern operations.

1.2.2.5 Phase 4

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|---------|---------|------|-----------|
| 13 | 4 | FNPT II | DUAL | IFR | 10:00 |

SUMMARY

Review the Control and Performance Concept while flying solely by reference to instruments.

Radio Navigation Procedures, including inbound/outbound tracking.

OBJECTIVES

| | |
|---|---|
| Consolidate checklist procedures, | Inbound/outbound interceptions of VOR radials and NDB bearings (QDR/QDM), crossing Nav Fixes. |
| Consolidate safety procedures, positional awareness | Radio Navigation Procedures, including tracking, |
| Consolidate toolbox maneuvers | Review the Control and Performance Concept while flying solely by reference to instruments full- and partial panel. |
| Consolidate VOR and ADF tracking. | Time and distance checks 45° / 80°. |

TRAINING ITEMS

| | |
|---------------------------------|------------------|
| Control and Performance Concept | Radio Navigation |
| Go around | Toolbox concept |

BRIEFING ITEMS

| | |
|--|---|
| Airwork maneuvers | Instrument flight maneuvers |
| BI-maneuvers: Constant airspeed climb/descent, timed turns, Climb/descending turns | Partial Panel, Recovery from unusual flight attitudes |
| Compass turns | Radio Navigation Procedures VOR, NDB, DME Arc, tracking |
| Constant airspeed climb and descent | RT phraseology |
| Holding Patterns and entries | Station passage procedures |

AIR EXERCISES

| | |
|--|--|
| Airwork maneuvers | Recovery from Unusual Attitude |
| BI-maneuvers: Constant airspeed climb/descent, timed turns, Climb/descending turns | RT phraseology |
| Compass turns | Station passage procedures |
| Interceptions inbound/outbound | T/O, Turns, climbs, and descents, Steep turns |
| Partial Panel, Recovery from unusual flight attitudes | Tracking VOR radials and NDB bearings inbound/outbound |
| Radio Navigation Procedures VOR, NDB, DME Arc, tracking | VFR Pattern in IMC |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|---------|---------|------|-----------|
| 14 | 4 | FNPT II | DUAL | IFR | 15:00 |

SUMMARY

The Student Pilot will review the Control and Performance Concept while flying solely by reference to instruments. He will demonstrate sound knowledge of Instrument departure and approach procedures including Non-precision and precision approaches and holdings

The Student Pilot will review the essential knowledge and skills of the previous phase.

OBJECTIVES

| | |
|--|--|
| Design criteria of instrument approaches | IFR Navigation Planning |
| DME based approaches | ILS |
| DME-Arc approaches | Precision and non precision approaches |
| Holding entries, Holding procedures | SID, STAR, Holdings |
| IFR approaches at different aerodromes | SIDs |

TRAINING ITEMS

| | |
|--|---|
| Airwork | IFR Flight Planning |
| Clarification of open questions and training items | Situational awareness |
| Commencement and continuation of approach criteria | VOR/NDB stations on test/ground checked on |
| Departure, Airwork, Approaches | Weather minima, use of alternate aerodromes |
| Engine malfunctions in IMC | WX analysis, NOTAM analysis |

BRIEFING ITEMS

| | |
|---|--|
| Approach lighting systems | IFR Flight Planning |
| Changeover to visual cues after instrument approach | ILS, VOR/NDB/DME approach |
| Clarification of open questions | PAPI/VASI/TVASI/other visual aids |
| Commencement and continuation of approach criteria | Terrain Awareness |
| Discussion of engine malfunctions in IMC | VOR/NDB stations on test/ground checked only |
| G/A and missed approach | WX analysis, NOTAM analysis |
| Holdings | |

AIR EXERCISES

| | |
|---------------------------------------|--|
| Airwork | Holdings |
| Circling approaches | ILS, VOR, NDB Approaches, Holdings |
| Engine failure (simulated discussion) | Partial Panel, System malfunctions (simulated) |
| G/A and Missed approach | SID, STAR |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 15 | 4 | SEP | DUAL | IFR | 09:00 |

SUMMARY

The Student Pilot will review the Control and Performance Concept while flying solely by reference to instruments. He/She will demonstrate sound knowledge of Instrument departure and approach procedures and holdings. He/She will be familiar with different aerodromes, the documentation and the terrain situation.

OBJECTIVES

| | |
|---|--|
| Analysis of aerodrome facilities and procedures | Partial Panel flying |
| Continuous descent approach. | STARs, SIDs and Instrument approaches at different aerodromes. |
| Familiarisation with IFR navigation flight. | |

TRAINING ITEMS

| | |
|----------------------------|---------------------|
| Aerodrome operating minima | IFR Flight Planning |
| Circling approach | Mass and balance |
| Enroute WX analysis | |

BRIEFING ITEMS

| | |
|--|-----------------------------|
| Circling approaches | Continuous descent approach |
| Analysis of aerodrome documentation (Jeppesen) | Partial Panel flying |
| Mass and balance calculations | |

AIR EXERCISES

| | |
|-------------------|--------------------------|
| SID, STAR | G/A and Missed approach |
| CDA | ILS, VOR, NDB Approaches |
| Circling Approach | Partial Panel ops |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 19 | 4 | SEP | SPIC | IFR | 41:00 |

SUMMARY

Review the Control and Performance Concept while flying IFR.

Basic knowledge of Radio Navigation Procedures

The Student Pilot will review the Control and Performance Concept while flying solely by reference to instruments. He/She will demonstrate sound knowledge of Instrument departure and approach procedures and holdings. He/She will be familiar with different aerodromes, the documentation and the terrain situation.

OBJECTIVES

| | |
|---|---|
| Airwork manoeuvres | IFR approaches at different aerodromes |
| Circling approach | IFR Navigation Planning (WX, NOTAMS, Destinations, Alternates, Performance) |
| Consolidate checklist procedures, local procedures | Partial Panel flying |
| Consolidate safety procedures, positional awareness | Precision and non precision approaches |
| Continuous descent approach | Radio Navigation Procedures, including tracking, inbound/outbound interceptions of |
| DME based approaches | Review the Control and Performance Concept while flying solely by reference to instruments full- and partial panel. |
| DME-Arc approaches | SIDs |
| GPS approach | Time and distance checks 45° / 80°. |
| Handling of system malfunctions and abnormals | VOR radials and NDB bearings (QDR/QDM), crossing Nav Fixes. |
| Holding entries, Holding procedures | |

TRAINING ITEMS

| | |
|--|---|
| Airwork | SID, STAR, Holdings |
| Commencement and continuation of approach criteria | Use of checklists |
| Design criteria of instrument approaches | VOR/NDB tracking |
| IFR Flight Planning | Weather minima, use of alternate aerodromes |
| ILS | WX analysis, NOTAM analysis |

BRIEFING ITEMS

| | |
|---|---|
| Landing from an instrument approach | IFR Flight Planning |
| Airwork Manoeuvres | ILS, VOR/NDB/DME approach |
| Function of trim at constant airspeed climb and descent | Landings from IFR Approach |
| Approach lighting systems | PAPI/VASI/TVASI/other visual aids |
| BI-maneuvres: Constant airspeed climb/descent, timed turns, Climb/descending turns | Partial Panel, Recovery from unusual flight attitudes |
| Changeover to visual cues after instrument approach | Radio Navigation Procedures VOR, NDB, DME Arc, tracking |
| Cold Weather temperature correction of DA/MDA | Recovery from unusual flight attitudes |
| Commencement and continuation of approach criteria | RT phrasiology |
| Compass turns | Station passage procedures |
| Constant rate climbs and descents | Terrain Awareness |
| Control and Performance Concept, Toolbox Concept | Terrain Clearance |
| G/A and missed approach | Toolbox concept |
| GPS programming + GPS approach | Turns to headings |
| Handling of system malfunctions and abnormal | VOR/NDB stations on test/ground checked only |
| Holdings | WX analysis, NOTAM analysis |
| IFR approaches at different aerodromes | |

AIR EXERCISES

| | |
|---|---|
| 5 toolbox manoeuvres | G/A and Missed approach |
| Airwork | Holdings |
| Airwork maneuvers | ILS, VOR, NDB, GPS Approaches, Holdings |
| BI-maneuvres: Constant airspeed climb/descent, timed turns, Climb/descending turns | Inbound and Outbound tracking |
| Circling approaches | Partial Panel, Recovery from unusual flight attitudes |
| Circling approaches | Radio Navigation Procedures VOR, NDB, DME Arc, tracking |
| Compass turns | SID, STAR |
| G/A and Missed approach | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 20 | 4 | SEP | DUAL | IFR | 01:00 |

SUMMARY

The Student Pilot will review the essential knowledge and skills of the previous phase.

OBJECTIVES

| | |
|--------------------------------|-----------------------|
| Flight Planning | Situational awareness |
| Departure, Airwork, Approaches | |

TRAINING ITEMS

| | |
|----------------------------|---------|
| IFR Flight Planning | Airwork |
| Engine malfunctions in IMC | |

BRIEFING ITEMS

| | |
|---------------------------------|--|
| IFR Flight Planning | Discussion of engine malfunctions in IMC |
| Clarification of open questions | |

AIR EXERCISES

| | |
|--|--|
| SID | Engine failure (simulated discussion) |
| Airwork | Precision and non precision approaches |
| Partial Panel, System malfunctions (simulated) | G/A – missed approach |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|---------|---------|------|-----------|
| 21 | 4 | FNPT II | DUAL | IFR | 05:00 |

SUMMARY

Consolidation ME aircraft handling

ME operation in all conditions with system failures and engine failures

OBJECTIVES

| | |
|--|---|
| Advanced use of checklists and abnormal procedures | IFR approach with one engine inop |
| Airplane power plant, Check lists and drills | IFR approaches with all engines |
| ATC considerations | Introduction to the airplane, Explanation of the Cockpit layout, Systems and controls |
| Handling of Engine failures at various Phases | Stabilisation of handling of system malfunctions |

TRAINING ITEMS

| | |
|--|---|
| Abnormal procedures | Harness, seat/rudder pedal adjustment |
| Airplane documentation | Internal checks |
| Correct lift-off speed, Importance of safety speed | Mass and balance calculations |
| Crosswind take-off, considerations and procedures | Normal procedures, supplementary procedures |
| External checks, internal checks | Short field take-off, considerations and procedures |

BRIEFING ITEMS

| | |
|--|---|
| Checks prior to starting, Checks after starting | Handling of a typical system malfunction (gear/flaps/elec/pneumatic) |
| CRM/HPL standards | Mass and balance and performance considerations |
| Engine Failure after T/O and in flight Operational Consequences | Radio nav/com checks, Autopilot operation, Altimeter checks and altitude alerter setting procedures, System checks, programming of flight plans airplane serviceability documents |
| Engine power and system checks | Sequence to handle a engine failure |
| Escape drills, Location and use of emergency equipment and exits | Starting and shutdowns of engines, Engine Checks |
| Flight with asymmetric thrust (T/O, cruise, descent, final, landing) | System Malfunctions |
| FORDEC | Use of Abnormal lists |
| Use of checklists | |

AIR EXERCISES

| | |
|--|--|
| Action in the event of fire in the air and on the ground | IFR approaches |
| Airwork | Land ing gear operation, Flap operation |
| Airwork Use of A/P and altitude alerter | Location and use of emergency equipment and exits |
| Alternate Gear extension | One engine inop approaches and landing & Single Engine go-Around |
| ATC considerations | Precision and Non Precision Approaches |
| Crosswind effects and procedure | Short field take-off and procedure |
| Directional control and use of power | System failures |
| Engine synchronization | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|---------|---------|------|-----------|
| 22 | 4 | FNPT II | DUAL | IFR | 05:00 |

SUMMARY

Consolidation ME aircraft handling

ME IFR operation in all conditions with system failures and engine failures.

OBJECTIVES

| | |
|--|---|
| Advanced use of checklists and abnormal procedures | IFR approach with one engine inop |
| Airplane power plant, Check lists and drills | IFR approaches with all engines |
| ATC considerations | Introduction to the airplane, Explanation of the Cockpit layout, Systems and controls |
| Handling of Engine failures at various Phases | Stabilisation of handling of system malfunctions |

TRAINING ITEMS

| | |
|--|---|
| Abnormal procedures | Harness, seat/rudder pedal adjustment |
| Airplane documentation | Internal checks |
| Correct lift-off speed, Importance of safety speed | Mass and balance calculations |
| Crosswind take-off, considerations and procedures | Normal procedures, supplementary procedures |
| External checks, internal checks | Short field take-off, considerations and procedures |

BRIEFING ITEMS

| | |
|--|---|
| Checks prior to starting, Checks after starting | Handling of a typical system malfunction (gear/flaps/elec/pneumatic) |
| CRM/HPL standards | Mass and balance and performance considerations |
| Engine Failure after T/O and in flight Operational Consequences | Radio nav/com checks, Autopilot operation, Altimeter checks and altitude alerter setting procedures, System checks, programming of flight plans airplane serviceability documents |
| Engine power and system checks | Sequence to handle a engine failure |
| Escape drills, Location and use of emergency equipment and exits | Starting and shutdowns of engines, Engine Checks |
| Flight with asymmetric thrust (T/O, cruise, descent, final, landing) | System Malfunctions |
| FORDEC | Use of Abnormal lists |
| Use of checklists | |

AIR EXERCISES

| | |
|--|--|
| Action in the event of fire in the air and on the ground | IFR approaches |
| Airwork | Land ing gear operation, Flap operation |
| Airwork Use of A/P and altitude alerter | Location and use of emergency equipment and exits |
| Alternate Gear extension | One engine inop approaches and landing & Single Engine go-Around |
| ATC considerations | Precision and Non Precision Approaches |
| Crosswind effects and procedure | Short field take-off and procedure |
| Directional control and use of power | System failures |
| Engine synchronization | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 23 | 4 | MEP | DUAL | IFR | 02:00 |

SUMMARY

| | |
|--|---|
| Introduction to normal ME operation on MEP aircraft | A minimum of 1 hr VFR XC navigation must be performed |
| Consolidation of ME operation. | Consolidation ME aircraft handling |
| Introduction of One engine out procedures | Introduction to handling of system failures |
| The Student Pilot will perform Night Cross country operations. | |

LESSON OBJECTIVES

| | |
|---|--|
| Introduction to the airplane | Night cross country flight planning and navigation |
| Outside checks | Advanced use of checklists and drills |
| Normal operation | ATC considerations |
| Importance of safety speeds | Discussion of System failures |
| Handling of engine failures during take-off, cruise and descent | Night Operation |
| Common errors | |

TRAINING ITEM

| | |
|--|---|
| Airplane documentation | airplane serviceability documents |
| Mass and balance calculations | Escape drills, Location and use of emergency equipment and exits |
| External checks, Internal checks | Sequence to handle a engine failure |
| Harness, seat/rudder pedal radjus TMENT | Use of Abnormal lists |
| Airplane documentation | Flight with assymetric thrust (T/O, cruise, descent, final, landing) |
| Abnormal procedures concerning engine | Engine Failure after T/O and in flight |
| Night cross country flight planning in an multi engine environment | Operational Consequences |
| Simulated emergencies at night | CRM/HPL standards |
| Departure and Arrival at night | FORDEC |
| Airplane documentation | System Malfunctions |
| Air Exercises TM | Optical Visual Illusions at night |
| Use of checklists | Common navigation failures, |
| Checks prior to starting, Checks after starting | Special aspects of emergencies at night in unknown terrain |
| Mass and balance and performance considerations | Engine and system checks |
| Starting and shutdowns of engines, Engine Checks | Handling of a typical system malfunction (gear / flaps / elec / peumatic) |

| | |
|--|-----------------|
| Radio nav / com checks, Autopilot operation, Altimeter checks and altitude alerter setting procedures, System checks programming of flight plans | Night Operation |
|--|-----------------|

AIR EXERCISES

| | |
|--|---|
| Directional control and use of power | Engine failure |
| Landing gear operation, Flap operation | One engine inop operation |
| Engine synchronization | One engine inop instrument approaches |
| Airwork | Visual Pattern |
| Use of A/P and altitude alerter | Cross country night flight VFR and IFR |
| Precision and Non Precision Approaches | Crosswind effects and procedure |
| Action in the event of fire in the air and on the ground | Precision and Non Precision Approaches |
| Engine Shutdown in flight | Location and use of emergency equipment and exits |
| Engine restart in flight | |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 24 | 4 | MEP | SPIC | IFR | 02:00 |

SUMMARY

| | |
|--|---|
| Consolidation ME aircraft handling | Introduction to handling of system failures |
| Consolidation of ME procedures, all engines and one engine out | Preparation for the Stage Check. |
| Engine Failure in Visual Pattern | |

LESSON OBJECTIVES

| | |
|--|---|
| Abnormal procedures concerning engine | Common errors |
| Abnormals and Supplementary procedures | Discussion of System failures |
| Advanced use of checklists and drills | Engine Failure in visual pattern |
| Air Exercises | Handling of engine failures during take-off, cruise and descent |
| Aircraft Performance limitations | Holdings |
| Airplane documentation | IFR Procedures |
| All kinds of IFR approaches | Importance of safety speeds |
| ATC considerations | Inflight Performance |
| Circling Approaches | Preflight Planning |

TRAINING ITEMS

| | |
|-----------------------------|----------------|
| Use of alternate aerodromes | XC Preparation |
| XC Flight Planning | |

BRIEFING ITEMS

| | |
|--|---|
| Contents of the CPL skilltest | Handling of a typical system malfunction (gear / flaps / elec / peumatic) |
| CRM / HPL aspects | |
| Engine and system checks | Operational Consequences |
| Engine Failure after T/O and in flight | Sequence to handle an engine failure |
| Engine Failure Visual Pattern | System Malfunctions |
| Flight with assymetric thrust (T/O, cruise, descent, final, landing) | Use of Abnormal lists |
| FORDEC | |

AIR EXERCISES

| | |
|-----------------------------|--|
| Aerodrome pattern flying | Engine Failure Visual Pattern |
| All kinds of IFR approaches | Engine Shutdown in flight and restart in flight (discussion) |

| | |
|---|---|
| Alternate Gear extension (discussion) | Location and use of emergency equipment and exits |
| Changeover from VFR to IFR or vice versa Holdings | One engine inop instrument approaches (simulated zero thrust) |
| Circling Approaches / Crosswind effects and procedure | One engine inop operation (simulated zero thrust) |
| Engine failure (simulated) | Precision and Non Precision Approaches |

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|------|---------|------|-----------|
| 25 | 4 | MEP | SPIC | IFR | 02:00 |

SUMMARY

The Student Pilot will demonstrate thorough knowledge and understanding of ME Operation during VFR navigation, traffic pattern, instrument airwork, IFR navigation and IFR instrument approaches, including holding entries and holding.

OBJECTIVES

Final confirmation of successful progress.

TRAINING ITEMS

| | |
|------------------------|------------------------|
| Aircraft Performance | VFR and IFR procedures |
| Aircraft documentation | CRM/HPL concepts |

BRIEFING ITEMS

Repetition of items in the last units

AIR EXERCISES

| | |
|----------------|---|
| Airwork | IFR Approaches, Circling, Holding |
| VFR XC | Engine Failure (simulated) |
| Visual Pattern | Engine Failure in VFR Pattern (simulated) |

1.2.2.6 Phase 5

| Sequence | Phase | Type | Control | Rule | Blocktime |
|----------|-------|-------------|---------|------|-----------|
| 26 | 5 | FNPT II MCC | PF/PNF | IFR | 15:00 |

SUMMARY

| | |
|--|---|
| Student occupies RH or LH pilots seat, depending on planned position | Assisting commander will be assigned (if necessary) Student acts as pilot flying (PF) and pilot not flying (PNF) |
| Instructor (acc. Instr. Qualification) occupies instructors station | |

OBJECTIVES

| | |
|--|--|
| Engine failure drill, decision making | Pitch&Power concept review, Abnormal & Emergency operation |
| Instructor (acc. Instr. Qualification) occupies instructors station | Student acts as pilot flying (PF) and pilot not flying (PNF) |
| Introduction to Simulator and MCC, Pitch & Power Concept, use of SOPs, attitude flying, AP/FD-intro. | Student occupies RH or LH pilots seat, depending on planned position |
| Navigation procedures, low speed maneuvers, wind effects | |
| NOTE: Before the lesson, the training crew must be briefed on the emergency equipment of the trainer (Emergency Shutdown, Fire Extinguisher, Flash Light, Escape Routings) | |

TRAINING ITEMS

| | |
|--|---|
| Individual checklist flows | Working through all individual checklists with using the expanded checklist |
| Use of SOPs during abnormal procedures (drills, flows) | |

BRIEFING ITEMS

| | |
|--|--|
| Abnormal / Emergency operation | Minimum-equipment-list (MEL) |
| Abnormal / Emergency Philosophy | MSA/MOCA/MORA checks / RA |
| Aircraft performance, passenger load, fuel load, aircraft weights | Non-precision approach |
| Airwork - Stall / Steep turn | Normal descent/descent planning/overspeed warning during Descent/VMO/MMO/Mach-buffet |
| Basic attitude exercises | Normal takeoff, climb and cruise, Configuration changes |
| Cat II demonstration/monitored approach | Partial panel |
| Challenge and Response (C+R) vs. Read and Reconfirm (R+R) | Pitch and power requirements (different flap settings) |
| CM 1/2 incapacitation | Pitch power concept review |
| CRM/FORDEC part | Precision approach |
| Crosswind T/O and landing | Prop fail/Overspeed |
| Decision making (FORDEC, PPAA) | Rejected T/O / On Ground Emergency |
| Engine fail after V1 / during G/A | RTO due to severe failure before V1 |
| Engine failure during Cruise / Approach / Go Around | Smoke emergency |
| Engine failure/fire after V1 / during G/A | Stall |
| Engine failure/fire during G/A | Stall exercises (clean / landing configuration) |
| Engine restart in flight | Steep turns |
| Engine shutdown | System failures à Electric, Hydraulic, Environmental |
| Engine start malfunctions | System procedure training / use of Autopilot and FD |
| Engine start, Taxi / pre-takeoff checks | TCAS/GPWS intro |
| Enroute Navigation, Fuel Management | Two pilots concept PF-PNF; LP-RP |
| Flight planning, Weather Charts, Approach and T/O minima, Weight and Balance, Departure Slots/CTOT | Unusual attitudes |
| FORDEC exercise | Use of brakes, steering and asymmetric power |
| Go around (G/A), missed approach (MAP) | Use of checklist, SOP's, QRH, Cockpit preparation |
| Handling of Checklists | Use of FD/AP (Best use of equipment) |
| ILS approach and landing (AP/FD/-FD) | Volcanic ash encounter |
| ILS, NDB Apps (raw data/FD) | Wind Shear during T/O and landing |
| Inadvertent stall | Windshear |
| Individual problems – deficit | |
| May Day/Pan Call | |

AIR EXERCISES

| | |
|--------------------------------|------------------------------------|
| Abnormal operation | Handling of volcanic ash encounter |
| Aircraft – Handling | Handling of wind shear |
| Approach / Landing | IFR – Navigation |
| Approach briefing | ILS approach / landing with AP |
| Cat II demo | ILS approach manually with F/D |
| Checklist work | ILS approach manually without F/D |
| Climb / Cruise | Inadvertent stall |
| Climb / Cruise / Descent | Landing techniques |
| Configuration changes | MCC |
| Crewmember incapacitation | Missed approach |
| CRM | MSA/MOCA/MORA check |
| Decision making | NDB approach |
| Descent / Approach | Normal takeoff |
| Descent planning | Pitch Power exercise |
| Emergency operation | RTO / On ground emergency |
| Engine failure aft. V1 | Stall / clean |
| Engine failure during G/A | Stall / landing configuration |
| Engine failure enroute | Stall exercises |
| Engine failure/fire after V1 | Steep turns |
| Engine failure/fire during G/A | Take Off |
| FORDEC | Take off (X-wind) |
| Go around | Take off / Climb / Cruise |
| Handling of Decompression | Turns |
| Handling of RTO a/p | Unusual attitudes |
| Handling of RTO f/p | Use of AP / FD |
| Handling of RTO PF | Use of Nav aids |
| Handling of RTO PM | Weather Consideration |
| Handling of system failures | Windshear recovery |

1.2.2.7

1.2.3 Training Phases

The ATPL(A) integrated course is divided into 6 phases concerning flight training (as illustrated in the following table).

| Phase | Sequence | Content |
|------------|----------|---|
| Phase 1 | 1 | VFR flight instruction up to first solo flight comprising of at least 17 hours double instruction on single-engine aeroplanes. |
| | 2 | |
| | 3 | |
| | 4 | |
| | 5 | |
| Phase 2 | 6 | VFR flight instruction up to first solo cross-country flight comprising of at least 10 hours double instruction and 10 hours solo flight experience. |
| | 7 | |
| | 8 | |
| | 9 | |
| Phase 3 | 10 | VFR flight instruction up to the VFR navigation progress test comprising at least 5 hours of dual instruction and at least 40 hours as PIC. |
| | 11 | |
| | 12 | |
| Phase 4 | 13 | Exercises up to the instrument rating skill test comprise at least 55 hours of instrument flight (maximum 40 hours in an FNPT II and maximum 20 hours instrument time flown as SPIC). |
| | 14 | |
| | 15 | |
| Transition | 16 | Transitional phase comprising of 4 hours dual instruction and 1 hour solo traffic patterns (5 full stopped landings and take-offs) at night on a minimum 4 seated single-engine aeroplane. |
| | 17 | |
| | 18 | |
| Phase 4 | 19 | Continue of exercises up to the instrument rating skill test comprise at least 55 hours of instrument flight (maximum 40 hours in an FNPT II and maximum 20 hours instrument time flown as SPIC). |
| | 20 | |
| | 21 | |
| | 22 | |
| | 23 | |
| | 24 | |
| | 25 | |
| Phase 5 | 26 | Exercises up to the MCC certificate comprise at least 25 hours of theoretical instruction and 15 hours flight time on an FNPT II MCC (7,5 as PF and 7,5 as PNF). |

1.2.3.1 Subdivision of block times

The training course is subdivided on the different phases and aircraft types as illustrated in the following table. The shaded areas describe the actual syllabus and the rows prefixed with + or – state the regulated minimum (-) or maximum (+) hours in the relevant legal regulations.

| Phase | DUAL + SPIC | DUAL | SPIC | PIC SOLO | XC DUAL | XC SOLO | NIGHT | IFR | VFR | SEP | MEP | FNPT II | TOTAL | |
|-------|-------------|--------|-------|----------|---------|---------|-------|-------|--------|-------|--------|---------|-------|--------|
| 1 | + | 12:00 | 12:00 | 00:30 | | | | 05:00 | 12:30 | 12:30 | | 05:00 | 17:30 | |
| | - | | 10:00 | | | | | | | | | | | |
| 2 | + | 10:00 | 10:00 | 10:00 | 10:00 | 10:00 | | | 20:00 | 20:00 | | | 20:00 | |
| | - | | 10:00 | 10:00 | | | | | | | | | | |
| 3 | + | 05:00 | 05:00 | 40:00 | 05:00 | 40:00 | | | 45:00 | 45:00 | | | 45:00 | |
| | - | | 05:00 | 40:00 | | | | | | | | | | |
| TR | + | 04:00 | 04:00 | 01:00 | 04:00 | | 05:00 | 04:00 | 01:00 | 05:00 | | | 05:00 | |
| | - | | | | | | | | | | | | | |
| 4 | + | 58:00 | 38:00 | 20:00 | | 58:00 | | 93:00 | | 51:00 | 07:00 | 35:00 | 93:00 | |
| | - | | | | | | | 55:00 | | | | | | |
| 5 | + | 15:00 | | | | | | 15:00 | | | | 15:00 | 15:00 | |
| | - | | | | | | | | | | | 15:00 | | |
| Total | + | 104:00 | 69:00 | 20:00 | 51:30 | 77:00 | 50:00 | 05:00 | 117:00 | 78:30 | 133:30 | 07:00 | 55:00 | 195:30 |
| | - | 95:00 | | | | | 50:00 | | 115:00 | | | 05:00 | | 195:00 |

1.2.3.2 Logical sequence of training

The logical order of the different phases comprises of instructional training exercises (dual), respective solo flight experiences and the required proficiency checks and is outlined in the following table.

| Phase | Sequence | Type | Control | Rule | Blocktime | Content |
|------------|----------|---------|----------------|---------|-----------|----------------------------------|
| Phase 1 | 1 | FNPT II | DUAL | IFR | 05:00 | Introduction |
| | 2 | SEP | DUAL | VFR | 10:00 | Basic PPL |
| | 3 | SEP | DUAL | VFR | 01:30 | Proficiency Check |
| | 4 | SEP | DUAL | VFR | 00:30 | Consolidation |
| | 5 | SEP | SOLO | VFR | 00:30 | First Solo |
| Phase 2 | 6 | SEP | DUAL | VFR | 08:00 | Cross Country |
| | 7 | SEP | SOLO | VFR | 08:00 | Cross Country |
| | 8 | SEP | DUAL | VFR | 02:00 | Proficiency Check |
| | 9 | SEP | SOLO | VFR | 02:00 | First Solo Cross-Country |
| Phase 3 | 10 | SEP | DUAL | VFR | 05:00 | Consolidation |
| | 11 | SEP | SOLO | VFR | 36:00 | Cross-Country |
| | 12 | SEP | SOLO | VFR | 04:00 | 300 NM Cross-Country |
| Phase 4 | 13 | FNPT II | DUAL | IFR | 10:00 | Basic IFR |
| | 14 | FNPT II | DUAL | IFR | 15:00 | Advanced IFR |
| | 15 | SEP | DUAL | IFR | 09:00 | Basic IFR |
| Transition | 16 | SEP | DUAL | IFR NIT | 03:00 | NIT |
| | 17 | SEP | SPIC | IFR NIT | 01:00 | NIT – Cross Country |
| | 18 | SEP | SOLO | VFR NIT | 01:00 | NIT VFR T/G |
| Phase 4 | 19 | SEP | DUAL / SPIC | IFR | 41:00: | Advanced IFR |
| | 20 | SEP | DUAL | IFR | 02:00 | Proficiency Check |
| | 21 | FNPT II | DUAL | IFR | 05:00 | MEP – Abnormal & Emergency Items |
| | 22 | FNPT II | DUAL | IFR | 05:00 | MEP – IR Transition Items |
| | 23 | MEP | DUAL | IFR | 02:00 | MEP CR Items |
| | 24 | MEP | DUAL | IFR | 02:00 | MEP IR Transition Items |
| | 25 | MEP | SPIC | IFR | 02:00 | Proficiency Check |
| Phase 5 | 26 | FNPT II | PF & PNF | IFR | 15:00 | MCC |

1.2.4 Course Structure: Integration of Syllabi

Please refer to sequence units of chapter 1.2.3.2

1.2.5 Student Progress

In accordance to the compliance management structure of the company all dual flights are graded. This lesson is completed when the Student Pilot (SP) has fully understood all subjects and was able to transfer knowledge into practical application. He has demonstrated increased understanding of safety and operational procedures and has developed the learning progress necessary to cope with the following lesson or skill test.

1.2.6 Instructional Methods

The ATO policy requires all training staff to follow the principles in respect to pre-and post-flying briefings according to the subjects as listed below

- Visual Presentation
- Technical Accuracy
- Clarity of explanation and clarity of speech
- Instructional technique, use of models and aids
- Student participation

The briefing normally includes a statement of the aim and a brief allusion to principles of flight only if relevant. An explanation is to be given of exactly what air exercises are to be taught by the instructor and practiced by the student during the flight. It should include how the flight will be conducted with regard to who is to fly the airplane and what airmanship, weather and flight safety aspects currently apply. The nature of the lesson will govern the order in which the constituent parts are to be taught.

The four basic components of the briefing will be:

- The aim
- Principles of flight (briefest reference only)
- The air exercise(s) (what, and how and by whom)
- Airmanship (weather, flight safety etc.)

A strict adherence to the training syllabi and training specifications of the TM has to be adhered to maintain a continuous standard in EAA operation.

1.2.7 Progress Tests

Quality / Stage / Proficiency Checks are considered as Progress Tests within EAA and are outlined in the respective course.

1.2.8 List of Abbreviations

| | |
|------|--|
| ' | Feet |
| " | Inches |
| °C | Temperature in Degrees Celsius |
| °F | Temperature in Degrees Fahrenheit |
| A | Ampere |
| ACFT | Aircraft |
| ACG | Austro Control Gmbh |
| ADD | Additional |
| ADF | Automatic Direction Finder |
| AEO | All Engine Operation |
| AFM | Aircraft Flight Manual |
| AGL | Above Ground Level |
| AHT | Assistant Head of Training |
| ALT | Altitude |
| ALTM | Altimeter |
| ALTN | Alternate |
| AM | Accountable Manager |
| AP | Autopilot |
| APA | Altitude Pre-select and Alert |
| ARR | Arrival |
| ATC | Air Traffic Control |
| ATIS | Automated Terminal Information Service |
| ATO | Actual Time Over |
| AVBL | Available |

| | |
|--------|--------------------------------|
| AVGAS | Aviation Gasoline |
| AWY | Airway |
| BEW | Basic Empty Weight |
| BRG | Bearing |
| CARB | Carburetor |
| CB | Cumulus Nimbus Cloud |
| CB | Circuit Breaker |
| CFI | Chief Flying Instructor |
| CFP | Company Flight Plan |
| CGI | Chief Ground Instructor |
| CLR | Clearance |
| COM | Communication |
| COMAIL | Company Mail |
| CRI | Class Room Instructor |
| CRS | Course |
| CRZ | Cruise |
| CTR | Control Zone |
| CVFR | Controlled Visual Flight Rules |
| DEG | Degrees |
| DEP | Department |
| DESC | Descent |
| DME | Distant Measuring Equipment |
| DQM | Deputy Quality Manager |
| E | East |
| EET | Estimated En route Time |

| | |
|----------|-----------------------------------|
| EGT | Exhaust Gas Temperature |
| ELBA | Emergency Locator Beacon Aircraft |
| ELT | Emergency Locator Transmitter |
| ENG | Engine |
| ETA | Estimated Time of Arrival |
| ETO | Estimated Time Over |
| FAA | Federal Aviation Administration |
| FD | Flight Director |
| FE | Flight Examiner |
| FF | Fuel Flow |
| FI | Flying Instructor VFR |
| FII | Flight Instructor Instructor |
| FIR | Flight Information Region |
| FL | Flight Level |
| FLT | Flight |
| FOM | Flight Operation Manual |
| FPL | Flight Plan |
| FPM | Feet per Minute |
| FREQ | Frequency |
| FS | Full Stop |
| EAA | Flight Time |
| EAA/AAL | Feet above Aerodrome Level |
| EAA/AGL | Feet above Ground Level |
| EAA/AMSL | Feet above Mean Sea Level |
| FTC | Flight Time Counter |

| | |
|-------|-----------------------------------|
| G | Acceleration due to Earth Gravity |
| GA | Go Around |
| GD | Ground Distance |
| GI | Ground Instructor |
| GND | Ground |
| GP | Glide Path |
| GPH | US Gallons per Hour |
| GPS | Global Positioning System |
| GS | Glide slope |
| GS | Groundspeed |
| HD | Heading |
| HIL | Hold Item List |
| HLDG | Holding |
| HP | Horse Power |
| hPA | Hecto Pascal |
| HR | Hours |
| HSI | Horizontal Situation Indicator |
| HT | Head of Training |
| HW | Head Wind |
| IAS | Indicated Airspeed |
| IFR | Instrument Flight Rules |
| IMC | Instrument Metrological Condition |
| IN | Inches |
| IN HG | Inches of Mercury |
| INOP | Inoperative |

| | |
|-------|------------------------------|
| IRI | Instrument Rating Instructor |
| KG | Kilograms |
| KIAS | Knots Indicated Airspeed |
| KM | Kilometer |
| KTAS | Knots True Airspeed |
| KTS | Knots |
| LBS | Pounds |
| LDG | Landing |
| LH | Left Hand |
| M | Meters |
| MAX | Maximum |
| MCCI | MCC Instructor |
| MDI | Moving Dial Indicator |
| MEL | Minimum Equipment List |
| MH | Magnetic Heading |
| MIN | Minutes |
| MNM | Minimum |
| MOGAS | Motor Gasoline |
| MRL | Minimum Required List |
| MT | Magnetic Track |
| MTOW | Maximum Take Off Weight |
| N | North |
| NAA | National Aviation Authority |
| NAV | Navigation |
| NAV | Navigation Receiver |

| | |
|-------|-------------------------------------|
| NDB | Non Directional Beacon |
| NIL | No Item Listed |
| NM | Nautical Miles |
| NOTAM | Notice to Airmen |
| NPA | Non Precision Approach |
| NVFR | Night Visual Flight Rules |
| OAT | Outside Air Temperature |
| OEI | One Engine Inoperative |
| OBS | Omni Bearing Selector |
| OBST | Obstacle |
| PA | Pressure Altitude |
| PAX | Passenger |
| PIC | Pilot in Command |
| POH | Pilot Operation Handbook |
| PPR | Prior Permission Required |
| PSI | Pounds per Square Inch |
| QDM | Magnetic Bearing to the Station |
| QDR | Magnetic Bearing from the Station |
| QFE | Altimeter Setting |
| QM | Quality Manager |
| QNH | Atmospheric Pressure at the Airport |
| QTE | True Bearing from the Station |
| RBI | Relative Bearing Indicator |
| RES | Reserve |
| RH | Right Hand |

| | |
|--------|----------------------------------|
| RI | Responsible Instructor |
| RMI | Radio Magnetic Indicator |
| ROC | Rate of Climb |
| ROD | Rate of Descent |
| RPM | Revolutions per Minute |
| RTE | Route |
| RWY | Runway |
| S | South |
| SEC | Seconds |
| SFI | Synthetic Flight Instructor |
| SNOCLO | Snow closed |
| SR | Sun Rise |
| SS | Sun Set |
| SVFR | Special Visual Flight Rules |
| TAS | True Airspeed |
| Tbd | To be defined |
| TDI | Track Deviation Indicator |
| TG | Touch and Go |
| TKI | Theoretical Knowledge Instructor |
| TKOF | Take Off |
| TM | Technical Manager |
| TMA | Terminal Control Area |
| TOC | Top of Climb |
| TOD | Top of Descent |
| TOW | Take Off Weight |

| | |
|------|--|
| TRE | Type Rating Examiner |
| TRI | Type Rating Instructor |
| TRK | Track |
| TW | Tail Wind |
| USG | US Gallons |
| UTC | Universal Time Coordinated |
| V c | Climb Speed |
| V fa | Final Approach Speed |
| V a | Monoeuvering Speed |
| V r | Rotation Speed |
| V x | Best Angle of Climb Speed |
| V y | Best Rate of Climb Speed |
| VDF | Very High Frequency Direction Finder |
| VDP | Visual Descent Point |
| VFR | Visual Flight Rules |
| VMC | Visual Metrological Conditions |
| VOR | Very High Frequency Omni Directional Range |
| W | West |
| W&B | Weight and Balance |
| WPT | Waypoint |
| WX | Weather |
| QTS | Quarts |
| Z | Zulu Time |

CATEGORY (OF AIRCRAFT)

Categorization of aircraft according to specified basic characteristics, e.g. airplane, helicopter, glider, free balloon.

CONVERSION (OF A LICENSE)

The issue of a Part-FCL license on the basis of a license issued by a non-EASA State.

DUAL INSTRUCTION TIME

Flight time or instrument ground time during which a person is receiving flight instruction from a properly authorized instructor.

FLIGHT ENGINEER

A Flight Engineer is a person who complies with the requirements in Part-FCL

FLIGHT TIME

The total time from the moment that an aircraft first moves under its own or external power for the purpose of taking off until the moment it comes to rest at the end of the flight.

INSTRUMENT TIME

Instrument flight time or instrument ground time.

INSTRUMENT FLIGHT TIME

Time during which a pilot is controlling an aircraft in flight solely by reference to instruments.

INSTRUMENT GROUND TIME

Time during which a pilot is receiving instruction in simulated instrument flight in synthetic training devices (STDs).

MULTI-CREW CO-OPERATION

The functioning of the flight crew as a team of co-operating members led by the pilot-in-command.

MULTI-PILOT AIRPLANES

Airplanes certificated for operation with a minimum crew of at least two pilots.

NIGHT

The period between the end of evening civil twilight and the beginning of morning civil twilight, or such other period between sunset and sunrise as may be prescribed by the appropriate Authority.

OTHER TRAINING DEVICES

Training aids other than flight simulators, flight training devices or flight and navigation procedures trainers which provide means for training where a complete flight deck environment is not necessary.

PRIVATE PILOT

A pilot who holds a license which prohibits the piloting of aircraft in operations for which remuneration is given.

PROFESSIONAL PILOT

A pilot who holds a license which permits the piloting of aircraft in operations for which remuneration is given.

PROFICIENCY CHECKS

Demonstrations of skill to revalidate or renew ratings, and including such oral examination as the examiner may require.

RATING

An entry in a license stating special conditions, privileges or limitations pertaining to that license.

Renewal (of e.g. a rating or approval):

The administrative action taken after a rating or approval has lapsed that renews the privileges of the rating or approval for a further specified period consequent upon the fulfillment of specified requirements.

REVALIDATION (OF E.G. A RATING OR APPROVAL)

The administrative action taken within the period of validity of a rating or approval that allows the holder to continue to exercise the privileges of a rating or approval for a further specified period consequent upon the fulfillment of specified requirements. Route sector:

A flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases.]

SINGLE-PILOT AIRPLANES

Airplanes certificated for operation by one pilot.

SKILL TESTS

Skill tests are demonstrations of skill for license or rating issue, including such oral examination as the examiner may require.

SOLO FLIGHT TIME

Flight time during which a student pilot is the sole occupant of an aircraft.

STAGE CHECK INSTRUCTOR

Nominated and special selected Flight Instructor (by HT or AHT) holding the required ratings and licences for the relevant training who is conducting the stage checks as listed training syllabus

STUDENT PILOT-IN-COMMAND (SPIC)

Flight time during which the flight instructor will only observe the student acting as pilot-in-command and shall not influence or control the flight of the aircraft.

TOURING MOTOR GLIDER (OM-DG)

A motor glider having a certificate of airworthiness issued or accepted by a JAA Member State having an integrally mounted, non-retractable engine and a non-retractable propeller.

It shall be capable of taking off and climbing under its own power according to its flight manual.

TYPE (OF AIRCRAFT)

All aircraft of the same basic design, including all modifications except those modifications which result in a change of handling, flight characteristics or flight crew complement.

1.3 TM-C Briefing and Air Exercises FSTD

Since EASA-FCL Regulations does not contain any specific training syllabus for FSTD training and all Lessons conducted on a FSTD are marked with FNPT II, the same syllabus as depicted in TM-B is used.

1.4 TM-D Theoretical Knowledge Instruction

1.4.1 Structure of the Theoretical Knowledge Instruction

The theoretical knowledge syllabus is set out in AMC1 to Appendix 3 to Part-FCL and will be held according the following tables.

MCC course shall comprise at least 25 hours of theoretical knowledge instruction and 15h of practical exercises.

| PART-FCL Chapter and Title | | Classroom Hours | Distance Hours | Total Hours | CR Days 6h / day | DIST Days 2 h / day | TOTAL Days |
|----------------------------|------------------------------------|-----------------|----------------|-------------|------------------|---------------------|------------|
| 010 | Air Law and ATC Procedures | 18 | 45 | 42 | 3 | 20 | 15 |
| 021 | Airframes and Systems / Powerplant | 30 | 58 | 204 | 5 | 29 | 41 |
| 022 | Instrumentation / Electrics | 30 | 44 | | 5 | 22 | 41 |
| 031 | Mass and Balance | 12 | 29 | 108 | 2 | 15 | 10 |
| 032 | Performance | 12 | 39 | | 2 | 20 | 14 |
| 033 | Flight Planning and Monitoring | 12 | 50 | | 2 | 25 | 18 |
| 040 | Human Performance | 18 | 50 | 50 | 3 | 25 | 19 |
| 050 | Meteorology | 48 | 56 | 72 | 8 | 28 | 20 |
| 061 | General Navigation | 48 | 41 | 156 | 8 | 21 | 44 |
| 062 | Radio Navigation | 12 | 48 | | 2 | 24 | 14 |
| 070 | Operational Procedures | 12 | 50 | 36 | 2 | 25 | 14 |
| 081 | Principles of Flight | 24 | 44 | 56 | 4 | 22 | 20 |
| 091 | Communications VFR | 12 | 11 | 42 | 2 | 6 | 10 |
| 092 | Communications IFR | 6 | | | 1 | | 5 |
| Total | | 294 | 565 | 859 | 49 | 282 | 331 |
| MCC | Theoretical Instruction for MCC | 25 | 0 | 25 | 4 | 0 | 4 |
| Total | | 319 | 565 | 884 | 53 | 282 | 335 |

Each subject consists of a fixed number of classroom days since the hours can be divided through the standard hours for one day of theoretical instruction. Each integrated ATPL course starts with 4 weeks (5 days per week and 6 hours per day) basic instruction and covers the subjects as depicted in the following table including radio communication training. This basic training will be held with each course individually.

| Training Day | Exemplary Date | | Type | Subject | Number | Hours |
|--------------|----------------|----|------|------------------------------------|--------|-------|
| 1 | | Mo | CR | Human Performance | 040 | 6 |
| 2 | | Di | CR | Airframes and Systems / Powerplant | 021 | 6 |
| 3 | | Mi | CR | Instrumentation / Electrics | 022 | 6 |
| 4 | | Do | CR | Principles of Flight | 081 | 6 |
| 5 | | Fr | CR | Principles of Flight | 081 | 6 |
| 6 | | Sa | | | | |
| 7 | | So | | | | |
| 8 | | Mo | CR | Operational Procedures | 070 | 6 |
| 9 | | Di | CR | General Navigation | 061 | 6 |
| 10 | | Mi | CR | General Navigation | 061 | 6 |
| 11 | | Do | CR | General Navigation | 061 | 6 |
| 12 | | Fr | CR | Radio Navigation | 062 | 6 |
| 13 | | Sa | | | | |
| 14 | | So | | | | |
| 15 | | Mo | CR | Meteorology | 050 | 6 |
| 16 | | Di | CR | Meteorology | 050 | 6 |
| 17 | | Mi | CR | Meteorology | 050 | 6 |
| 18 | | Do | CR | Air Law and ATC Procedures | 010 | 6 |
| 19 | | Fr | CR | Communications VFR | 091 | 6 |
| 20 | | Sa | | | | |
| 21 | | So | | | | |
| 22 | | Mo | CR | Performance | 032 | 6 |
| 23 | | Di | CR | Mass and Balance | 031 | 6 |
| 24 | | Mi | CR | Flight Planning and Monitoring | 033 | 6 |
| 25 | | Do | CR | Communications IFR | 092 | 6 |
| 26 | | Fr | CR | Communications IFR | 092 | 6 |

Thereafter the remaining instructional days (49 minus 20 equals 29) are held on a fixed schedule on 2 days per week during 6 months meaning 2 runs within 12 months open for all active integrated cadets. This schedule shall be fixed for a whole year.

| Week | Type | Activity | Hours |
|------|-------|-------------------|-------|
| 1 | CR | Basic Instruction | 30 |
| 1 | DIST | Basic | 5 |
| 2 | CR | Basic Instruction | 30 |
| 2 | DIST | Basic | 5 |
| 3 | CR | Basic Instruction | 30 |
| 3 | DIST | Basic | 5 |
| 4 | CR | Basic Instruction | 30 |
| 4 | DIST | Basic | 5 |
| 5 | CR | ATPL Instruction | 4,83 |
| 5 | DIST | Basic | 5 |
| 5 | FNPT2 | VFR Simulator | 3,33 |

| | | | |
|----|-------|------------------|------|
| 5 | SEP | VFR Basic | 3,14 |
| 6 | CR | ATPL Instruction | 4,83 |
| 6 | DIST | Basic | 5 |
| 6 | FNPT2 | VFR Simulator | 3,33 |
| 6 | SEP | VFR Basic | 3,14 |
| 7 | CR | ATPL Instruction | 4,83 |
| 7 | DIST | Basic | 5 |
| 7 | FNPT2 | VFR Simulator | 3,33 |
| 7 | SEP | VFR Basic | 3,14 |
| 8 | CR | ATPL Instruction | 4,83 |
| 8 | DIST | Basic | 5 |
| 8 | SEP | VFR Basic | 3,14 |
| 9 | CR | ATPL Instruction | 4,83 |
| 9 | DIST | Basic | 5 |
| 9 | SEP | VFR Basic | 3,14 |
| 10 | CR | ATPL Instruction | 4,83 |
| 10 | DIST | Basic | 5 |
| 10 | SEP | VFR Basic | 3,14 |
| 11 | CR | ATPL Instruction | 4,83 |
| 11 | DIST | Basic | 5 |
| 11 | SEP | VFR Basic | 3,14 |
| 11 | SEP | VFR Solo | 5,44 |
| 12 | CR | ATPL Instruction | 4,83 |
| 12 | DIST | Basic | 5 |
| 12 | SEP | VFR Solo | 5,44 |
| 13 | CR | ATPL Instruction | 4,83 |
| 13 | DIST | Basic | 5 |
| 13 | SEP | VFR Solo | 5,44 |
| 14 | CR | ATPL Instruction | 4,83 |
| 14 | DIST | Basic | 5 |
| 14 | SEP | VFR Solo | 5,44 |
| 15 | CR | ATPL Instruction | 4,83 |
| 15 | DIST | Basic | 5 |
| 15 | SEP | VFR Solo | 5,44 |
| 16 | CR | ATPL Instruction | 4,83 |
| 16 | DIST | Basic | 5 |
| 16 | SEP | VFR Solo | 5,44 |
| 17 | CR | ATPL Instruction | 4,83 |
| 17 | DIST | Basic | 5 |
| 17 | SEP | VFR Solo | 5,44 |
| 18 | CR | ATPL Instruction | 4,83 |
| 18 | DIST | Basic | 5 |
| 18 | SEP | VFR Solo | 5,44 |
| 19 | CR | ATPL Instruction | 4,83 |

| | | | |
|----|-------|------------------|-------|
| 19 | DIST | Basic | 5 |
| 19 | SEP | VFR Solo | 5,44 |
| 20 | CR | ATPL Instruction | 4,83 |
| 20 | DIST | Basic | 5 |
| 21 | DIST | Exam Preparation | 22,67 |
| 22 | DIST | Exam Preparation | 22,67 |
| 23 | DIST | Exam Preparation | 22,67 |
| 24 | FNPT2 | IFR Simulator | 4 |
| 25 | CR | ATPL Instruction | 4,83 |
| 25 | DIST | Basic | 5 |
| 25 | FNPT2 | IFR Simulator | 4 |
| 26 | CR | ATPL Instruction | 4,83 |
| 26 | DIST | Basic | 5 |
| 26 | FNPT2 | IFR Simulator | 4 |
| 27 | CR | ATPL Instruction | 4,83 |
| 27 | DIST | Basic | 5 |
| 27 | FNPT2 | IFR Simulator | 4 |
| 28 | CR | ATPL Instruction | 4,83 |
| 28 | DIST | Basic | 5 |
| 28 | FNPT2 | IFR Simulator | 4 |
| 29 | CR | ATPL Instruction | 4,83 |
| 29 | DIST | Basic | 5 |
| 29 | SEPIR | IFR Aircraft | 3,09 |
| 30 | CR | ATPL Instruction | 4,83 |
| 30 | DIST | Basic | 5 |
| 30 | SEPIR | IFR Aircraft | 3,09 |
| 31 | CR | ATPL Instruction | 4,83 |
| 31 | DIST | Basic | 5 |
| 31 | SEPIR | IFR Aircraft | 3,09 |
| 32 | DIST | Exam Preparation | 22,67 |
| 33 | DIST | Exam Preparation | 22,67 |
| 34 | DIST | Exam Preparation | 22,67 |
| 35 | CR | ATPL Instruction | 4,83 |
| 35 | DIST | Basic | 5 |
| 35 | SEPIR | IFR Aircraft | 3,09 |
| 36 | CR | ATPL Instruction | 4,83 |
| 36 | DIST | Basic | 5 |
| 36 | SEPIR | IFR Aircraft | 3,09 |
| 37 | CR | ATPL Instruction | 4,83 |
| 37 | DIST | Basic | 5 |
| 37 | SEPIR | IFR Aircraft | 3,09 |
| 38 | CR | ATPL Instruction | 4,83 |
| 38 | DIST | Basic | 5 |
| 38 | SEPIR | IFR Aircraft | 3,09 |

| | | | |
|----|-------|------------------|-------|
| 39 | CR | ATPL Instruction | 4,83 |
| 39 | DIST | Basic | 5 |
| 39 | SEPIR | IFR Aircraft | 3,09 |
| 40 | CR | ATPL Instruction | 4,83 |
| 40 | DIST | Basic | 5 |
| 40 | SEPIR | IFR Aircraft | 3,09 |
| 41 | CR | ATPL Instruction | 4,83 |
| 41 | DIST | Basic | 5 |
| 41 | SEPIR | IFR Aircraft | 3,09 |
| 42 | CR | ATPL Instruction | 4,83 |
| 42 | DIST | Basic | 5 |
| 42 | SEPIR | IFR Aircraft | 3,09 |
| 43 | DIST | Exam Preparation | 22,67 |
| 44 | DIST | Exam Preparation | 22,67 |
| 45 | DIST | Exam Preparation | 22,67 |
| 46 | CR | ATPL Instruction | 4,83 |
| 46 | DIST | Basic | 5 |
| 46 | SEPIR | IFR Aircraft | 3,09 |
| 47 | CR | ATPL Instruction | 4,83 |
| 47 | DIST | Basic | 5 |
| 47 | SEPIR | IFR Aircraft | 3,09 |
| 48 | CR | ATPL Instruction | 4,83 |
| 48 | DIST | Basic | 5 |
| 48 | SEPIR | IFR Aircraft | 3,09 |
| 49 | CR | ATPL Instruction | 4,83 |
| 49 | DIST | Basic | 5 |
| 49 | SEPIR | IFR Aircraft | 3,09 |
| 50 | CR | ATPL Instruction | 4,83 |
| 50 | DIST | Basic | 5 |
| 50 | SEPIR | IFR Aircraft | 3,09 |
| 51 | DIST | Exam Preparation | 22,67 |
| 52 | DIST | Exam Preparation | 22,67 |
| 53 | DIST | Exam Preparation | 22,67 |
| 54 | FNPT2 | MEP Simulator | 2,5 |
| 55 | FNPT2 | MEP Simulator | 2,5 |
| 56 | FNPT2 | MEP Simulator | 2,5 |
| 56 | MEPIR | MEP Aircraft | 4 |
| 57 | FNPT2 | MEP Simulator | 2,5 |
| 57 | MEPIR | MEP Aircraft | 4 |
| 58 | MEPIR | MEP Aircraft | 4 |
| 59 | MEPIR | MEP Aircraft | 4 |
| 60 | MEPIR | MEP Aircraft | 4 |
| 61 | FNPT2 | MCC Simulator | 5 |
| 62 | FNPT2 | MCC Simulator | 5 |

| | | | |
|----|-------|---------------|---|
| 63 | FNPT2 | MCC Simulator | 5 |
|----|-------|---------------|---|

Note: This timetable serves as a guideline, changes of this Timetable may be approved by the Head of Training or the Assistant Head of Training if deemed necessary due to special circumstances (weather, operational reasons, availability of a/c ...). However the minimum required hours according Part-FCL-FCL and the maximum duty time limitations must be observed and may never be changed.

1.4.2 Teaching Material

For distance training purpose, the ATO uses software solutions of Peters Software GmbH (www.peterssoftware.de).

Additionally for theoretical instruction, a variety of deranged spare parts is used and stored in the respective classroom.

1.4.3 Student Progress

Before being released for any official exam at NAA the student has to prove that he has sufficient required knowledge by passing a test for any subject by at least 85%. Tests are conducted online and the result will automatically be transmitted into the student's database together with a timestamp.

The pre-tests for theoretical examinations have to be conducted within two stages. The first stage will consist of questions from the theoretical instruction material to ensure that the respective theoretical material has at least been read and understood since this knowledge goes beyond pure question study and fulfils the higher quality standards. The tests of the first stage can be accomplished whenever theoretical classroom instruction and adequate computer-based-training times are above 75 % of attendance. The tests of the first stage can be accomplished one by one.

The second level stage tests consist of an exam simulation where all the subjects relevant for the next exam session have to be taken in one step (one day) with questions of NAVLEG database. For this step the passing grade per subject lies by 90 %.

Only students who have passed the relevant attendance in classroom and CBT instruction will be admitted to the pre-test stages.

The passed pre-test subjects which are ready for official examination will be endorsed on an additional sheet (exam preparation as found in the appendix to this chapter). This form has to be presented to the NAA where for each of the six possible session the respective subjects have to be ticked and signed by the respective nominated person (either CTKI or DHT or HT or CDO).

To investigate the actual student progress regarding official theoretical knowledge exams several monitoring possibilities exist. Either direct in the basic cadet data or via a special report showing

cadets' performances at theoretical examinations limited by a desired period. For this purpose improvements can be tracked.

1.4.4 Progress Testing

Student progress is monitored throughout the student's learning phase.

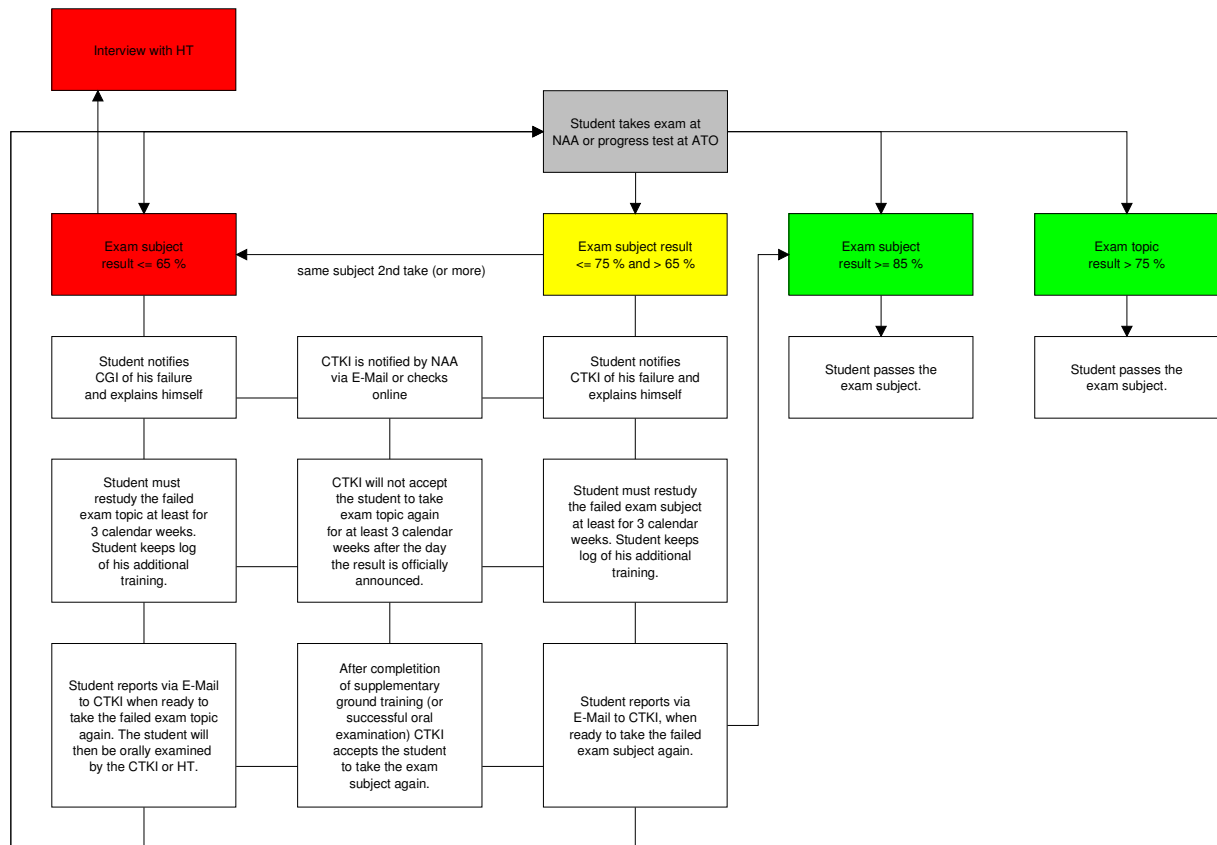
This is achieved by checking various reports ("Overall Theory Status", "Plan Performance Status" ...) for distance and classroom training once a month. This is done by the CTKI.

| | |
|--|-------------------------|
| Week of training | Theoretical stage check |
| <= 8 weeks | Stage Check PPL Theory |
| <= 8 weeks | Stage Check SEP POH |
| <= 24 weeks (at least before IFR Basic Training) | Stage Check PANS-OPS |
| <= 29 weeks (at least before G1000) | Stage Check G1000 |
| <= 29 weeks (at least before new aircraft) | Stage Check SEP IFR POH |
| <= 54 weeks | All pre-tests passed |
| <= 54 weeks | All NAA exams passed |
| <= 54 weeks (at least before new aircraft) | Stage Check MEP IFR POH |

In case a student fails for the third time within a subject topic he will have to explain the reasons in written format and personally to the CTKI.

The CTKI will then organize supplementary training for that student, if required.

1.4.5 Review Procedures



1.4.6 Appendix



Cadet

The above mentioned Cadet is entitled to take the respective Exams in the subjects as marked below on the noted sessiondate.

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |

| | | | | | | |
|--|----------|----------|---------|----------|----------|----------|
| Sessiondate | | | | | | |
| 010 AL | 021 AGK | 022 INS | 031 MB | 032 PERF | 033 FPM | 040 HP |
| 050 MET | 061 GNAV | 062 RNAV | 070 OPS | 081 POF | 091 VFRC | 092 IFRC |
| Signature / Function for Authorization | | | | | | |