



# Training Manual ATPL (INT)

***eea Aviation Academy GmbH***

Wilhelm-Spazier-Strasse 2a

5020 Salzburg

Austria/Europe

T: +43 (0) 662 831 322 - 0

F: +43 (0) 662 831 322 - 99

I: [www.eaa.aero](http://www.eaa.aero)

E: [office@eea.aero](mailto:office@eea.aero)

Company register: Salzburg-Stadt FN 344977 w

Certified according to the requirements of the European Union Aviation Safety Agency

EASA Certification Number: AT.ATO.147

# Content

Amendment and Revisions	4
List of effective Chapters	4
<b>1</b>	<b>TM-A Training Plan</b> <b>5</b>
1.1	Course aim ..... 5
1.2	Pre-entry requirements..... 5
1.3	Credits for previous training..... 5
1.4	Training syllabi..... 5
1.5	Time scale..... 5
1.6	Training programme..... 5
1.7	Training records ..... 6
1.8	Safety training ..... 7
1.9	Test and examination ..... 7
1.10	Training effectiveness..... 9
1.11	Standards and level of performance at various stages..... 11
<b>2</b>	<b>TM-B Briefing and Air Exercises Flight Training</b> <b>12</b>
2.1	Air exercises..... 12
2.2	Air exercise reference list..... 13
2.3	Course structure ..... 14
2.4	Integration of syllabi ..... 15
2.5	Student progress ..... 15
2.6	Instructional methods..... 15
2.7	Progress tests..... 15
2.8	Glossary of terms..... 15
<b>3</b>	<b>TM-C Briefing and Air Exercises FSTD</b> <b>17</b>
<b>4</b>	<b>TM-D Theoretical Knowledge Instruction</b> <b>19</b>
4.1	Structure of the theoretical knowledge instruction ..... 19
4.2	Lesson plan ..... 20
4.3	Teaching Material..... 21
4.4	Student Progress ..... 22
4.5	Progress Testing ..... 22
4.6	Review Procedures ..... 23

### Amendment and Revisions

T	Issue	Revision	Highlights	Done by	Valid from	Valid until
S	01	00	Complete new EASA proposal	KUS	04.04.2014	---
S	01	01	revised for pre-test procedures	KUS	04.11.2014	---
S	01	02	New Syllabus for practical training New computer-based training for theory training	EDT	06.10.2015	---
S	02	01	<b>New Computer Based Training course</b> <b>Changes of syllabus – practical training</b> <b>Change of syllabus – theoretical training</b> <b>New layout</b>	HEC	01.01.2021	

### List of effective Chapters

Chapter	Issue	Revision
ALL	01	00
4 TM-D	01	01
1.2 TM - B	01	02
1.2 TM - D 2	01	02
<b>ALL</b>	<b>02</b>	<b>01</b>

# 1 TM-A Training Plan

## 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.

*Reference: Appendix 3 to Part-FCL § A*

## 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 minimum level 4.

*Reference: FCL 300; MED.A.030; Appendix 2 to Part-FCL.*

## 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.

*Reference: Appendix 3 A (3) to Part-FCL.*

## 1.4 Training syllabi

Theoretical Training:	Refer to Annex 1 TRM ATPL(INT)_Syllabus of this Manual Appendix 3 A Part-FCL and AMC1 to Appendix 3 A (c)
Flight Training:	Refer to Annex 1 TRM ATPL(INT)_Syllabus of this Manual Appendix 3 A Part-FCL and AMC1 to Appendix 3 A (d)

## 1.5 Time scale

Course	Location	Duration
ATP (A) Integrated	SZG	63 weeks

## 1.6 Training programme

**General:** The course consists 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
833 hours	195 hours

**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 constraints** 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

## 1.7 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.

*Reference: AMC1 ORA.ATO.230(a)(6)*

### 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).

*Reference: OM – A*

## 1.8 Safety training

### 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 and OMM

*Reference OM –A – Safety General; OMM – Safety Management*

### 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)

### 1.8.3 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 instructor in a way, which enables him to at least observe take-off and landing (supervised Solo), must supervise the student's solo flights, not extending beyond the local vicinity of the departure airfield. The solo touch and go training can only start when Progress check B has been passed by the student and the approval of the AM has been obtained.

During solo cross-country flights, a FI(A) 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.

## 1.9 Test and examination

### 1.9.1 Flying

Skill test: are official examinations performed by the authority.

Progress Test: 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. Any time the student is ready for the Skill Test he must pass a Progress Test 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.

*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.

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 Progress Test/Skill tests	Instructor	Ready for Progress Test/Skill test
Progress Test	Progress Test-Examiner	Progress Test 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).

*Reference: Chapter 4.6. – Review Procedure*

### 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

*Reference: Appendix 4 to Part FCL § B (4)*

### 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 90% in all subjects shall be achieved.

Authorization for Test: The applicant for a skill test shall be recommended for the test by the organization/person responsible for the training. If the student does not attend the class by 90% 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 Qualifying Test, by at least 90% in each subject area. A more detailed description is listed under 4.4 – 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 PART-FCL.

*Reference: Chapter 4.4 Student Progress  
Chapter 4.6 – Review Procedure*

### 1.9.4 Test report and records

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



### 1.9.5 Procedures for examination paper presentation

Questions used in both Progress Test 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 is 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.

### 1.9.6 Procedures for question analysis and review

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

### 1.9.7 Examination re-sit procedures

Please refer to 4.6. – Review procedure

## 1.10 Training effectiveness

### 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.

### 1.10.2 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.

### 1.10.3 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.

### 1.10.4 Liaison between departments

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

### 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.

### 1.10.6 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 anymore, 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.

### 1.10.7 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 Phase, but exceptions may arise.

### 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.

### 1.10.9 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.

### 1.10.10 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.

### 1.11 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.

#### 1.11.1 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.

#### 1.11.2 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.

## 2 TM-B Briefing and Air Exercises Flight Training

### 2.1 Air exercises

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.

**Detailed description of the air exercises please refer to Appendix 1 of this manual**

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 crewmembers 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.

*Reference: Appendix 1 TRM ATPL(INT)\_Syllabus*

## 2.2 Air exercise reference list

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

Phase	Sequence	Type	Control	Rule	Hours	Content
1	1	FNPT II	DUAL	IFR	05:00	Introduction
	2	SEP	DUAL	VFR	07:00	Basic VFR
	3	SEP	DUAL	VFR	02:00	Basic UPRT
	4	SEP	DUAL	VFR	01:30	<b>Progress Test A</b>
	5	SEP	DUAL	VFR	00:30	Consolidation
	6	SEP	SOLO	VFR	01:00	First Solo
2	7	SEP	DUAL	VFR	08:00	Cross Country
	8	SEP	SOLO	VFR	09:00	Cross Country
	9	SEP	DUAL	VFR	02:00	<b>Progress Test B</b>
	10	SEP	SOLO	VFR	02:00	First Solo Cross-Country
3	11	SEP	SOLO	VFR	35:00	Cross-Country
	12	SEP	SOLO	VFR	04:00	300 NM Cross-Country
	13	SEP	DUAL	NIT	03:00	NIT
	14	SEP	DUAL	NIT	01:00	NIT – Cross Country
	15	SEP	SOLO	NIT	01:00	NIT VFR T/G
4	16	FNPT II	DUAL	IFR	07:30	Basic IFR
	17	FNPTII	DUAL	IFR	02:30	<b>Progress Test C</b>
	18	FNPT II	DUAL	IFR	12:30	Advanced IFR
	19	FNPTII	DUAL	IFR	02:30	<b>Progress Test D</b>
	20	SEP	DUAL	IFR	20:00	Basic IFR
	21	SEP	DUAL	IFR	02:00	<b>Progress Test E</b>
	22	SEP	DUAL	IFR	12:00	Advanced IFR
	23	SEP	SPIC	IFR	18:00	Advanced IFR
	24	SEP	DUAL	IFR	02:00	<b>Progress Test F</b>
	25	FNPT II	DUAL	IFR	05:00	MEP – Abnormal & Emergency Items
	26	FNPT II	DUAL	IFR	05:00	MEP – IR Transition Items
	27	MEP	DUAL	IFR	02:00	MEP CR Items
	28	MEP	DUAL	IFR	02:00	MEP IR Transition Items
	29	MEP	SPIC	IFR	02:00	<b>Progress Test G</b>
5	30	SEP	DUAL	VFR	03:00	Advanced UPRT
6	31	FNPT II	PF & PNF	IFR	15:00	MCC

TOTAL 195

### 2.3 Course structure

#### 2.3.1 Phase of Training

Phase	Content
1	VFR flight instruction up to first solo flight comprising of at least 16 hours double instruction on single-engine aeroplanes.
2	VFR flight instruction up to first solo cross-country flight comprising of at least 10 hours double instruction and 10 hours solo flight experience.
3	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. Night Training 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
4	Exercises up to the instrument rating skill test comprise at least 55 hours of instrument flight (35 hours in an FNPT II and 43 hours instrument time flown as SPIC).
5	Exercises for the Advanced UPRT acc FCL.745.A
6	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).

#### 2.3.2 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	+	16:00	16:00		01:00				05:00	12:00	12:00		05:00	17:00
	-		10:00											
2	+	10:00	10:00		11:00	08:00	11:00			21:00	21:00			21:00
	-		10:00		10:00									
3	+	05:00	05:00		40:00	01:00	40:00	05:00		44:00	44:00			44:00
	-		05:00		40:00									
4	+	95:00	75:00	20:00		40:00			95:00		54:00	06:00	40:00	95:00
	-								55:00					
5	+	03:00	03:00							03:00	03:00			03:00
	-													
6	+								15:00				15:00	15:00
	-												15:00	
Total	+	129:00	109:00	20:00	55:00	49:00	51:00	05:00	115:00	80:00	134:00	06:00	55:00	195:00
	-	95:00		20:00			50:00		115:00			05:00		195:00

## 2.4 Integration of syllabi

Please refer to Appendix 2 of this manual

*Reference: Appendix 2 TRM ATPL(INT)*

## 2.5 Student progress

In accordance with 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.

## 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.

## 2.7 Progress tests

Progress Tests within EAA are outlined in the respective Syllabus.

*Reference: Appendix 1 TRM ATPL(INT)*

## 2.8 Glossary of terms

Please refer to OMM Chapter 1 - Definitions

This page has been left intentionally blank



### **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.

*Reference: Annex 1 TRM ATPL(INT)\_Syllabus*

This page has been left intentionally blank

## 4 TM-D Theoretical Knowledge Instruction

### 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.

Please refer also to Annex 1 of this Manual – ATPL(INT) Syllabus Chapter 1.

Reference: Annex 1 TRM ATPL(INT)\_Syllabus

PART-FCL Chapter and Title		Classroom Hours Basic Training	Classroom Hours Advanced Training	CBT Hours	Total Hours	CR Days 6h / day	CBT Days 2 h / day	TOTAL Days
010	Air Law and ATC Procedures	6	6	42	54	2	21	23
021	Airframes and Systems / Powerplant	6	18	54	78	4	27	31
022	Instrumentation / Electrics	6	12	46	64	3	23	26
031	Mass and Balance	---	6	27	33	1	17	18
032	Performance	6	12	40	58	3	20	23
033	Flight Planning and Monitoring	6	12	32	50	3	25	28
040	Human Performance	---	12	40	52	2	20	22
050	Meteorology	12	18	71	101	5	35	40
061	General Navigation	12	12	41	65	4	21	25
062	Radio Navigation	6	12	45	63	3	23	26
070	Operational Procedures	0	6	38	44	1	19	20
081	Principles of Flight	12	12	54	78	4	27	31
090	Communications	18	---	20	38	3	10	13
100	Knowledge, Skills, Attitudes	---	18	---	18	3	---	3
<b>Total</b>		90	156	550	796	41	268	309
PAN	Procedures for Air Navigation Services Aircraft Operations		12	---	12	2	---	2
MCC	Theoretical Instruction for MCC		25	---	25	4	---	4
<b>Total</b>		283		550	833	47	268	315

## 4.2 Lesson plan

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.

Basic Training						
Training Day	Exemplary Date		Type	Subject	Number	Hours
1		Mo	CR	Airframes and Systems / Powerplant	021	6
2		Di	CR	Instrumentation / Electrics	022	6
3		Mi	CR	Principles of Flight	081	6
4		Do	CR	Principles of Flight	081	6
5		Fr	CR	General Navigation	061	6
6		Mo	CR	General Navigation	061	6
7		Di	CR	Radio Navigation	062	6
8		Mi	CR	Meteorology	050	6
9		Do	CR	Meteorology	050	6
10		Fr	CR	Air Law and ATC Procedures	010	6
11		Mo	CR	Performance	032	6
12		Di	CR	Flight Planning and Monitoring	033	6
13		Mi	CR	Communications	090	6
14		Do	CR	Communications	090	6
15		Fr	CR	Communications	090	6
					Total:	90

*Note: This timetable serves as a guideline; the Head of Training or the Assistant Head of Training if deemed necessary due to special circumstances (weather, operational reasons, availability of a/c may approve changes of this Timetable ...). Change however, the minimum required hours according Part-FCL and the maximum duty time limitations must be observed.*

Advanced Training					
Exemplary Date		Type	Subject	Number	Hours
		CR	Human Performance	040	6
		CR	Human Performance	040	6
		CR	Airframes and Systems / Powerplant	021	6
		CR	Airframes and Systems / Powerplant	021	6
		CR	Airframes and Systems / Powerplant	021	6
		CR	Instrumentation / Electrics	022	6
		CR	Instrumentation / Electrics	022	6
		CR	Mass and Balance	031	6
		CR	Principles of Flight	081	6
		CR	Principles of Flight	081	6
		CR	Operational Procedures	070	6
		CR	General Navigation	061	6
		CR	General Navigation	061	6
		CR	Radio Navigation	062	6
		CR	Radio Navigation	062	6
		CR	Meteorology	050	6
		CR	Meteorology	050	6
		CR	Meteorology	050	6
		CR	Air Law and ATC Procedures	010	6
		CR	Performance	032	6
		CR	Performance	032	6
		CR	Flight Planning and Monitoring	033	6
		CR	Flight Planning and Monitoring	033	6
		CR	Knowledge, Skills, Attitudes	100	6
		CR	Knowledge, Skills, Attitudes	100	6
		CR	Knowledge, Skills, Attitudes	100	6
				Total	156

*Note: This timetable serves as a guideline; the Head of Training or the Assistant Head of Training if deemed necessary due to special circumstances (weather, operational reasons, availability of a/c may approve changes of this Timetable ...). Change however, the minimum required hours according Part-FCL and the maximum duty time limitations must be observed.*

#### 4.3 Teaching Material

For the Cumberter Based Training, the ATO uses software solutions of Boeing Courseware (former Peters Software)). Additionally, for theoretical instruction, a variety of deranged spare parts is used and stored in the respective classroom.

#### 4.4 Student Progress

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.

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 form in the student's file. 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; ADMIN or HT).

*Reference: Chapter 1.9.3 - Theoretical knowledge – Pre-requisites for applicants undergoing a skill test.*

#### 4.5 Progress Testing

Before being released for any official exam at NAA the student has to prove that he has sufficient required knowledge by passing a Progress Test for any subject by at least 90%. Tests are conducted online, and the result will automatically be transmitted into the student's database together with a timestamp.

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

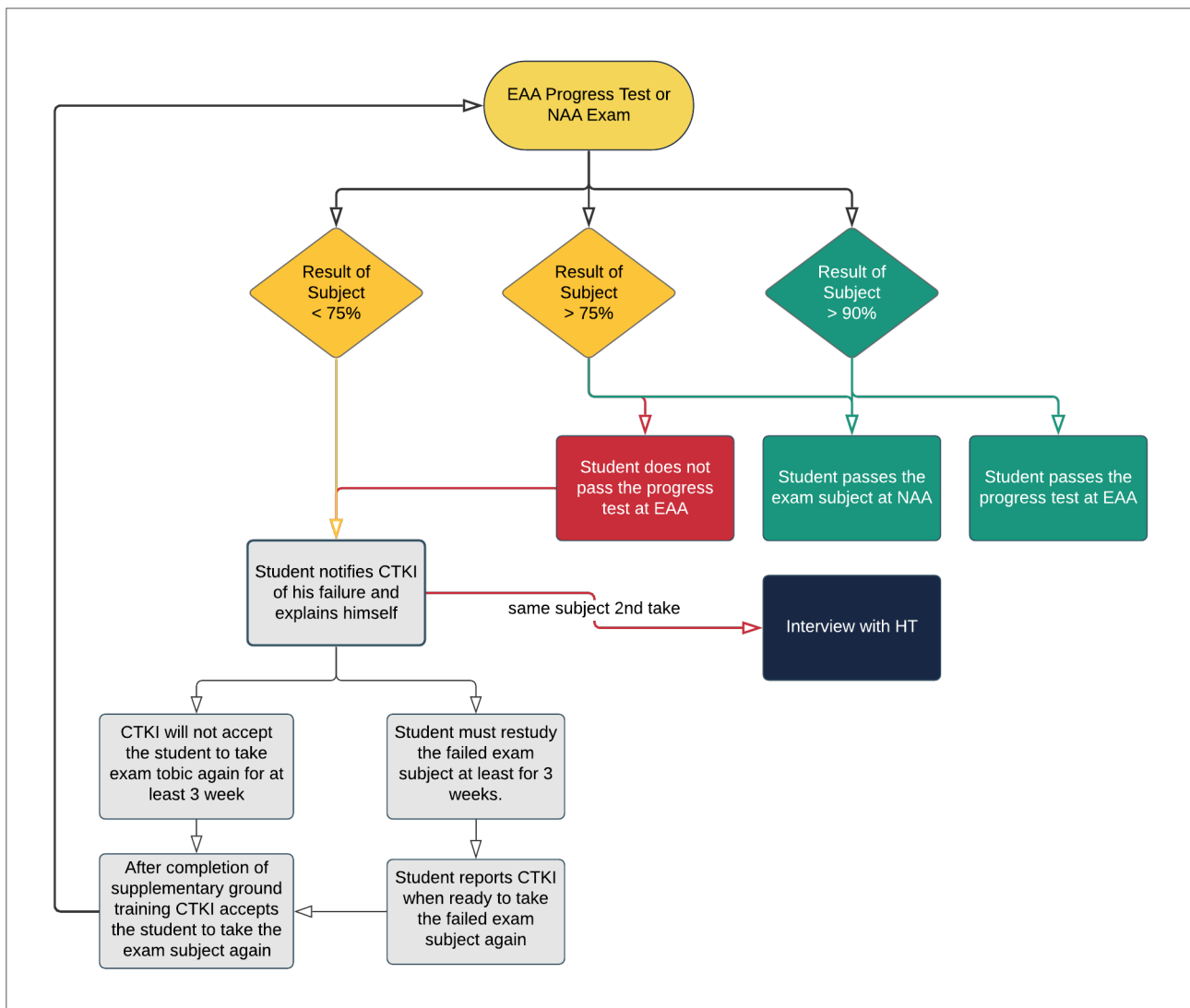
This is achieved by checking various reports for CBT and classroom training once a month. This is done by the CTKI.

Theoretical Progress Tests
<ul style="list-style-type: none"> <li>• Progress Test Basic Training</li> <li>• Progress Test SEP POH</li> <li>• Progress Test PANS-OPS</li> <li>• Progress Test G1000</li> <li>• Progress Test SEP IFR POH</li> <li>• Progress Test in all subject of the NAA Examination</li> <li>• Progress Test MEP IFR POH</li> </ul>

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.

4.6 Review Procedures



This page has been left intentionally blank