

**Template: Operations Manual (OM)**

Appendix 01 to FOCA GM/INFO «Operations and Training Manual Certification Leaflet»



OM

Source: imago GmbH, 13127 Berlin

|  |  |
| --- | --- |
| Scope | Operations Manual (OM) published as a template in Word format, based on AMC1 ORA.ATO.230(b). |
| Applies to | Training organisations wishing to establish a manual system in order to become an Approved Training Organisation (ATO) |
| Valid from | 30.05.2023 |

|  |  |
| --- | --- |
| Business object | 331.01-1/3 |
| Prepared by | SBFL: F. Rhyn, M. Siegenthaler, M. Mayer, L. Huber |
| Released by | AFS 30.05.2023 |
| Distribution | Internal / External |

**Completion guidance**

The information provided solely represent a possible means of how to provide the required information. An organisation must add further information or adapt the template to **their specific needs**.

* The content of this template is typically established for a non-commercial Pilot Licence ATO, either for Aeroplane or Helicopter including instrument flight. The content can easily be adjusted to any category of Aircraft (Sailplane and/or Balloon) and/or amended with specific topics, such as Area 100 KSA, TRI, SFI, etc. as required by a commercial Pilot Licence ATO.
* The first two pages of this Word template is to be deleted by the organisation when adapting this template. This can be done by clicking the red button below.
* Text shown in blue italic indicates where the organisation needs to provide its own specific information or data.
* In addition, all references to manuals, chapters and sub-chapters are shown in blue and are to be verified to ensure compliance with the ATO specific and own documentation.
* This template is regularly revised, based on recent regulatory changes and identified improvements and/or corrections. Prior submission to FOCA prospective training organisations applying for an initial certification are required to set the change ident and list of effective chapters according to the initial issue– Issue 1, Revision 0.

Log of revision

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Issue** | **Revision** | **Highlight of Revision** |
| 08.02.2022 | 1 | 2 | Update of completion guidance, responsibilities of PIC amended, implemented digital logbook possibilities, updated RCC contact details, implemented upset prevention and recovery techniques, revised initial training, revision of refresher training, |
| 28.06.2022 | 1 | 3 | Implementation of the new fuel policy, selection of aerodromes, volcanic ash considerations, terminology changes |
| 30.05.2023 | 1 | 4 | Replaced CTKI and CFI with HT |

****

Cover Page

Name of organisation

Address

Contact information

LEFT BLANK

LoR Log of Revision

LoR REV0 / TBD

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Issue | Revision (REV) | Changes |
| dd.mm.yyyy | 1 | 0 | First Issue |
| … |  |  |  |

LoC List of Effective Chapters

LoC REV0 / TBD

[LoR REV0 / TBD](#_Toc134430092)

[LoC REV0 / TBD](#_Toc134430093)

[LoApp REV0 / TBD](#_Toc134430094)

[ToC REV0 / TBD](#_Toc134430095)

[LoA REV3 / TBD](#_Toc134430096)

[0 REV0 / TBD](#_Toc134430097)

[Part A REV0 / TBD](#_Toc134430098)

[1.1 REV2 / TBD](#_Toc134430099)

[1.2 REV0 / TBD / APP](#_Toc134430100)

[1.3 REV0 / TBD / APP](#_Toc134430101)

[1.4 REV2 / TBD](#_Toc134430102)

[1.5 REV2 / TBD](#_Toc134430103)

[1.6 REV3 / TBD](#_Toc134430104)

[1.6.1 REV3 / TBD](#_Toc134430105)

[1.7 REV0 / TBD](#_Toc134430106)

[1.8 REV3 / TBD](#_Toc134430107)

[1.9 REV0 / TBD](#_Toc134430108)

[1.9.1 REV0 / TBD](#_Toc134430109)

[1.10 REV0 / TBD](#_Toc134430110)

[1.10.1 REV0 / TBD](#_Toc134430111)

[1.10.2 REV3 / TBD](#_Toc134430112)

[1.11 REV0 / TBD](#_Toc134430113)

[1.12 REV0 / TBD](#_Toc134430114)

[1.12.1 REV0 / TBD](#_Toc134430115)

[1.12.2 REV0 / TBD](#_Toc134430116)

[1.13 REV0 / TBD](#_Toc134430117)

[1.14 REV0 / TBD](#_Toc134430118)

[1.15 REV0 / TBD](#_Toc134430119)

[1.16 REV0 / TBD](#_Toc134430120)

[1.17 REV0 / TBD](#_Toc134430121)

[1.18 REV2 / TBD](#_Toc134430122)

[1.19 REV3 / TBD](#_Toc134430123)

[1.20 REV0 / TBD](#_Toc134430124)

[1.20.1 REV0 / TBD](#_Toc134430125)

[1.20.2 REV0 / TBD](#_Toc134430126)

[1.20.3 REV2 / TBD](#_Toc134430127)

[1.20.4 REV0 / TBD](#_Toc134430128)

[1.20.5 REV0 / TBD](#_Toc134430129)

[1.20.6 REV0 / TBD](#_Toc134430130)

[1.20.7 REV0 / TBD](#_Toc134430131)

[1.20.8 REV0 / TBD](#_Toc134430132)

[1.20.9 REV0 / TBD](#_Toc134430133)

[1.20.10 REV2 / TBD](#_Toc134430134)

[1.21 REV3 / TBD](#_Toc134430135)

[Part B REV0 / TBD](#_Toc134430136)

[2.1 REV0 / TBD / APP](#_Toc134430137)

[2.1.1 REV0 / TBD](#_Toc134430138)

[2.2 REV2 / TBD](#_Toc134430139)

[2.2.1 REV0 / TBD](#_Toc134430140)

[2.2.2 REV0 / TBD](#_Toc134430141)

[2.2.3 REV0 / TBD](#_Toc134430142)

[2.2.4 REV0 / TBD](#_Toc134430143)

[2.2.5 REV0 / TBD](#_Toc134430144)

[2.2.6 REV2 / TBD](#_Toc134430145)

[2.3 REV2 / TBD](#_Toc134430146)

[2.3.1 REV0 / TBD](#_Toc134430147)

[2.3.2 REV0 / TBD](#_Toc134430148)

[2.3.3 REV0 / TBD](#_Toc134430149)

[2.3.4 REV2 / TBD](#_Toc134430150)

[2.3.5 REV3 / TBD](#_Toc134430151)

[2.4 REV0 / TBD](#_Toc134430152)

[2.5 REV0 / TBD / APP](#_Toc134430153)

[2.5.1 REV0 / TBD](#_Toc134430154)

[Part C REV0 / TBD](#_Toc134430155)

[3.1 REV0 / TBD](#_Toc134430156)

[3.2 REV3 / TBD](#_Toc134430157)

[3.2.1 REV3 / TBD](#_Toc134430158)

[3.2.2 REV0 / TBD](#_Toc134430159)

[3.2.3 REV3 / TBD](#_Toc134430160)

[3.2.4 REV3 / TBD](#_Toc134430161)

[3.2.5 REV0 / TBD](#_Toc134430162)

[3.2.6 REV0 / TBD](#_Toc134430163)

[3.3 REV0 / TBD](#_Toc134430164)

[3.4 REV3 / TBD](#_Toc134430165)

[3.4.1 REV3 / TBD](#_Toc134430166)

[3.4.2 REV2 / TBD](#_Toc134430167)

[3.5 REV3 / TBD](#_Toc134430168)

[3.6 REV0 / TBD](#_Toc134430169)

[3.6.1 REV3 / TBD](#_Toc134430170)

[3.6.2 REV0 / TBD](#_Toc134430171)

[3.6.3 REV0 / TBD](#_Toc134430172)

[Part D REV0 / TBD](#_Toc134430173)

[4.1 REV0 / TBD](#_Toc134430174)

[4.2 REV0 / TBD / APP](#_Toc134430175)

[4.2.1 REV0 / TBD](#_Toc134430176)

[4.2.2 REV2 / TBD / APP](#_Toc134430177)

[4.2.3 REV2 / TBD](#_Toc134430178)

[4.3 REV2 / TBD](#_Toc134430179)

[4.3.1 REV4 / TBD](#_Toc134430180)

[4.3.2 REV4 / TBD](#_Toc134430181)

[4.3.3 REV4 / TBD](#_Toc134430182)

[4.3.4 REV0 / TBD](#_Toc134430183)

[4.4 REV0 / TBD](#_Toc134430184)

[4.4.1 REV0 / TBD](#_Toc134430185)

[4.5 REV0 / TBD](#_Toc134430186)

[4.6 REV0 / TBD / APP](#_Toc134430187)

[4.7 REV0 / TBD](#_Toc134430188)

[4.7.1 REV0 / TBD](#_Toc134430189)

[4.7.2 REV0 / TBD](#_Toc134430190)

[4.7.3 REV4 / TBD](#_Toc134430191)

[4.7.4 REV4 / TBD](#_Toc134430192)

[4.7.5 REV0 / TBD](#_Toc134430193)

LoApp List of Appendices

LoApp REV0 / TBD

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Index | Name/Labelling | Version | Revision | Effective Date |
| 01 | Solo flight authorisation form | 01 | 00 | dd.mm.yyyy |
| 02 | Reporting – analysis form | 01 | 00 | dd.mm.yyyy |
| 03 | List of aircraft used for training | 01 | 00 | dd.mm.yyyy |
| 04 | Navigation flight plan VFR | 01 | 00 | dd.mm.yyyy |
| 05 | Navigation flight plan | 01 | 00 | dd.mm.yyyy |
| 06 | Fuel calculation form | 01 | 00 | dd.mm.yyyy |
| 07 | Mass and balance calculation form | 01 | 00 | dd.mm.yyyy |
| 08 | FTL record form | 01 | 00 | dd.mm.yyyy |
| … |  |  |  |  |

LEFT BLANK

ToC Table of Contents

ToC REV0 / TBD

[0 Introduction 1](#_Toc123816768)

[1 Operations Manual A (OM Part A) 2](#_Toc123816769)

[1.1 A list and description of all parts/volumes in the Operations Manual 2](#_Toc123816770)

[1.2 Administration (function and management) 2](#_Toc123816771)

[1.3 Responsibilities (all management and Administrative staff) 2](#_Toc123816772)

[1.4 Student discipline and disciplinary action 3](#_Toc123816773)

[1.5 Approval/authorisation of flights 5](#_Toc123816774)

[1.6 Preparation of flying programme 5](#_Toc123816775)

[1.6.1 Restriction of numbers of aircraft in poor weather 6](#_Toc123816776)

[1.7 Command of aircraft 7](#_Toc123816777)

[1.8 Responsibilities of pilot-in-command (PIC) 7](#_Toc123816778)

[1.9 Carriage of passengers 9](#_Toc123816779)

[1.9.1 Title of transport (Beförderungsschein, Titre de transport, Titolo di transporto) 9](#_Toc123816780)

[1.10 Aircraft documentation 9](#_Toc123816781)

[1.10.1 Technical Log System and Journey Log 9](#_Toc123816782)

[1.10.2 Documents to be carried on Board 10](#_Toc123816783)

[1.11 Retention of documents 11](#_Toc123816784)

[1.12 Flight crew qualification records (licences and ratings) 11](#_Toc123816785)

[1.12.1 Instructor’s records 11](#_Toc123816786)

[1.12.2 Student’s records 12](#_Toc123816787)

[1.13 Revalidation (medical certificates and ratings) 13](#_Toc123816788)

[1.14 Flying duty period and flight time limitations (Instructors) 14](#_Toc123816789)

[1.15 Flying duty period and flight time limitations (Students) 16](#_Toc123816790)

[1.16 Rest periods (Instructors) 16](#_Toc123816791)

[1.17 Rest periods (Students) 16](#_Toc123816792)

[1.18 Pilot’s log books 17](#_Toc123816793)

[1.19 Flight planning (general) 18](#_Toc123816794)

[1.20 Safety (general) 19](#_Toc123816795)

[1.20.1 Equipment 19](#_Toc123816796)

[1.20.2 Emergency Equipment 20](#_Toc123816797)

[1.20.3 Emergency Locator Transmitter (ELT) accidental activation 20](#_Toc123816798)

[1.20.4 Radio Communication and listening watch 21](#_Toc123816799)

[1.20.5 Policy on the disposition of communication equipment 21](#_Toc123816800)

[1.20.6 Aircraft equipped with one radio communication transceiver 21](#_Toc123816801)

[1.20.7 Listening Watch 21](#_Toc123816802)

[1.20.8 Pilot’s position reports and broadcast 22](#_Toc123816803)

[1.20.9 Recommended broadcasts in the vicinity of non-controlled aerodromes 22](#_Toc123816804)

[1.20.10 Occurrence Reporting 23](#_Toc123816805)

[1.21 Introductory flight – trial lesson 29](#_Toc123816806)

[2 Operations Manual B (OM Part B) 30](#_Toc123816807)

[2.1 Aircraft descriptive notes, operational and technical details 30](#_Toc123816808)

[2.1.1 Aircraft used for training 30](#_Toc123816809)

[2.2 Aircraft handling 31](#_Toc123816810)

[2.2.1 Normal Checklist 31](#_Toc123816811)

[2.2.2 Limitations 32](#_Toc123816812)

[2.2.3 Preflight 32](#_Toc123816813)

[2.2.4 Preflight Check 32](#_Toc123816814)

[2.2.5 Flight profiles 32](#_Toc123816815)

[2.2.6 Upset prevention techniques 32](#_Toc123816816)

[2.3 Emergency procedures 32](#_Toc123816817)

[2.3.1 Definition of abnormal and emergency condition 33](#_Toc123816818)

[2.3.2 Abnormal and emergency checklists 33](#_Toc123816819)

[2.3.3 Abnormal and emergency flight profiles 33](#_Toc123816820)

[2.3.4 Upset recovery techniques 33](#_Toc123816821)

[2.3.5 Decision-making and Emergency Management 33](#_Toc123816822)

[2.4 Radio and radio navigation aids 35](#_Toc123816823)

[2.5 Allowable deficiencies 35](#_Toc123816824)

[2.5.1 Minimum Equipment List 35](#_Toc123816825)

[3 Operations Manual C (OM Part C) 37](#_Toc123816826)

[3.1 Performance (legislation, take-off, route, landing etc.) 37](#_Toc123816827)

[3.2 Flight planning (fuel / energy, oil, minimum safe altitude, navigation) 38](#_Toc123816828)

[3.2.1 Completion of a navigation flight plan 38](#_Toc123816829)

[3.2.2 Submission of an Air Traffic Services (ATS) flight plan 39](#_Toc123816830)

[3.2.3 Selection and use of aerodromes 39](#_Toc123816831)

[3.2.4 Determination of fuel / energy and oil quantities 41](#_Toc123816832)

[3.2.5 Oil quantity 43](#_Toc123816833)

[3.2.6 Minimum Safe Altitude 43](#_Toc123816834)

[3.3 Loading (load sheets, mass, balance and limitations) 43](#_Toc123816835)

[3.4 Weather minima (flying instructors) 45](#_Toc123816836)

[3.4.1 VFR Flights 45](#_Toc123816837)

[3.4.2 IFR Flights 45](#_Toc123816838)

[3.5 Weather minima (students – at various stages of training) 46](#_Toc123816839)

[3.6 Training routes or areas 47](#_Toc123816840)

[3.6.1 Training areas and aerodromes used for training 47](#_Toc123816841)

[3.6.2 Training area 48](#_Toc123816842)

[3.6.3 Standard navigation/cross-country flights 48](#_Toc123816843)

[4 Operations Manual D (OM Part D) 49](#_Toc123816844)

[4.1 Appointment of persons responsible for standards/competence of flight personnel 49](#_Toc123816845)

[4.2 Initial training 49](#_Toc123816846)

[4.2.1 Flight instructor organisation conversion 49](#_Toc123816847)

[4.2.2 Flight instructor initial evaluation and training 50](#_Toc123816848)

[4.2.3 Theoretical knowledge instructor organisation conversion 50](#_Toc123816849)

[4.3 Refresher/ recurrent training 51](#_Toc123816850)

[4.3.1 Determination of required refresher training 51](#_Toc123816851)

[4.3.2 Refresher seminar 52](#_Toc123816852)

[4.3.3 Individual refresher training 54](#_Toc123816853)

[4.3.4 Instructor Selection 56](#_Toc123816854)

[4.4 Standardisation Training 57](#_Toc123816855)

[4.4.1 Standardisation training overview 58](#_Toc123816856)

[4.5 Proficiency checks 59](#_Toc123816857)

[4.6 Upgrading training 59](#_Toc123816858)

[4.7 ATO personnel standards evaluation 60](#_Toc123816859)

[4.7.1 Accountable Manager (ACM) 60](#_Toc123816860)

[4.7.2 Head of Training (HT) 60](#_Toc123816861)

[4.7.3 Instructors for flight instructions all categories 62](#_Toc123816862)

[4.7.4 Theoretical Knowledge Instructors (TKI) 63](#_Toc123816863)

[4.7.5 Other ATO Personnel 63](#_Toc123816864)

LEFT BLANK

LoA List of Abbreviations

LoA REV3 / TBD

The following abbreviations are used within this document:

| Abbreviation | Definition |
| --- | --- |
| (A) | Aeroplane |
| A/C | Aircraft |
| ACM | Accountable Manager |
| AeMC | Aero-medical Centres |
| AFIS | Aerodrome flight information service |
| AFM | Aircraft Flight Manual |
| AI | Airspace Infringement |
| AIP | Aeronautical Information Publication |
| AMC | Acceptable Means of Compliance |
| AMDT | Amendment |
| AME | Aero Medical Examiner |
| AOC | Air Operator Certificate |
| APP | Appendices |
| ARM | Armed |
| Art. | Article |
| ASD | Accelerate Stop Distance |
| ATC | Air Traffic Control |
| ATIR | Air Traffic Incident Report |
| ATIS | Automatic terminal information service |
| ATO | Approved Training Organisation |
| ATS | Air Traffic Service |
| ATT | Attachment |
| AVGAS | Aviation gasoline |
| BBL | Bundesamt für Bauten und Logistik |
| CAM | Continuing Airworthiness Manager |
| CDL | Configuration Deviation List |
| CG | Centre of Gravity |
| CH | Confoederatio Helvetica (Switzerland) |
| CL | Certification Leaflet |
| CoA | Certificate of Airworthiness |
| COM | Communications |
| CPL | Commercial Pilot Licence |
| CR | Class Rating |
| CRI | Class Rating Instructor |
| CRM | Crew Resource Management |
| CV | Curriculum Vitae |
| D | Difference Training |
| DABS | Daily Airspace Bulletin Switzerland |
| dd.mm.yyyy | Date format - Day-Month-Year |
| DDL | Deferred Defect List |
| e.g. | exemplī grātiā, for example |
| EASA | European Aviation Safety Agency |
| ELT | Emergency Locator Transmitter |
| ENR | En route |
| ERA | En Route Alternate |
| FATO | Final Approach and Take-Off Area |
| FCL | Flight Crew Licence |
| FDP | Flight Duty Period |
| FI | Flight Instructor |
| FOCA | Federal Office of Civil Aviation |
| FRF | Final Reserve Fuel |
| ft | feet |
| FTI | Flight Test Instructor |
| GAFOR | General Aviation Forecast |
| GAMET | General Aviation Meteorological Information |
| GEN | General |
| GM | Guidance Material |
| GND | Ground |
| GNSS | Global navigation satellite system |
| H24 | Continuous day and night service |
| HB | Switzerland (aircraft registration) |
| HIGE | Hovering in Ground Effect |
| HIL | Hold Item List |
| HOGE | Hovering out of Ground Effect |
| HT | Head of Training |
| ICAO | International Civil Aviation Organisation |
| ID | Identity Document |
| IFR | Instrument Flight Rules |
| IR | Instrument Rating |
| IRI | Instrument Rating Instructor |
| kg | Kilogram |
| km | Kilometre |
| kt | Knots |
| LAPL | Light Aeroplane Pilot Licence |
| LD | Landing Distance |
| LDG | Landing |
| LM | Landing Mass |
| LoA | Log of Abbreviations |
| LoAPP | List of Appendices |
| LoC | List of Effective Chapters |
| LoR | Log of Revisions |
| MCCI | Multi Crew Coordination Instructor |
| MEL | Minimum Equipment List |
| METAR | Meteorological Air Report |
| MHz | Megahertz |
| MI | Mountain Instructor |
| MMEL | Master Minimum Equipment List |
| NM | Nautical Miles |
| No. | Number |
| NOTAM | Notice To Airmen |
| OBST | Obstacle |
| OEI | One Engine Inoperative |
| OFCOM | Federal Office of Communications |
| OM | Operations Manual |
| OMM | Organisation’s Management Manual |
| OPR | Operating |
| ORO | Organisation Requirements for Air Operations |
| PED | Portable Electronic Device |
| PIC | Pilot in Command |
| POH | Pilot’s Operating Handbook |
| PPL | Private Pilot Licence |
| PPR | Prior permission required |
| RAC | Rules of the air and air traffic control |
| RCC | Rescue Coordination Centre |
| RCR | Runway Condition Report |
| REGA | Swiss Air Rescue Service |
| REV | Revision |
| ROC | Rate of climb |
| SAR | Search and rescue |
| SBFL | BAZL Abteilung Sicherheit Flugbetrieb (SB), Sektion Flugschulen und Leichtaviatik |
| SDR | Special Drawing Rights |
| SEP | Single Engine Piston |
| SFI | Synthetic Flight Instructor |
| SIGMET | Significant Meteorological information |
| SNOWTAM | Snow Warning To Airmen |
| STBY | Stand-by |
| STI | Synthetic Training Instructor |
| SUST | Schweizerische Unfalluntersuchungsstelle |
| T/O | Take-off |
| TAF | Terminal Aerodrome Forecast |
| TAS | True Air Speed |
| TBD | To Be Defined |
| TKI | Theoretical Knowledge Instructor |
| TM | Training Manual |
| TMG | Touring Motor Glider |
| TOM | Take-off Mass |
| TOR | Take-off Run |
| TRI | Type Rating Instructor |
| VFR | Visual Flight Rules |
| VMC | Visual Meteorological Conditions |
| ZFM | Zero Fuel Mass |

LEFT BLANK

# Introduction

0 REV0 / TBD

This Approved Training Organisation’s (ATO) Operations Manual (OM) of *ATO* Name takes into account all aspects of the ATO. It contains instructions to enable personnel to perform their duties and gives guidance to students on how to comply with course requirements. It is available to all staff and students if necessary.

It has been developed with considerations of the applicable Annexes to the Regulation on Air Crew, Air Operations and relevant Acceptable Means of Compliance (AMC) and Guidance Material (GM). Refer to OMM, Chapter 1.6 «Relevant Standards and Requirements».

# Operations Manual A (OM Part A)

Part A REV0 / TBD

## A list and description of all parts/volumes in the Operations Manual

1.1 REV2 / TBD

|  |  |  |
| --- | --- | --- |
| OM | Operations Manual | **Part A** - describes in addition to the OMM the essential basics of the ATO, including general requirements, policies, procedures, instructions and guidelines for safe and effective flight training.  **Part B** - describes the technical part in the ATO, such as handling and operation of the aircraft (procedures, use of communication and navigation equipment) and the appropriate documents (checklists, MEL), defines operational limits and describes emergency procedures.  **Part C** - describes flight operation, especially the training routes or areas. Special emphasis is laid on flight planning including performance and fuel / energy calculation, mass and balance and weather minima for flights with and without instructor.  **Part D** - regulates the different responsibilities for training, refresher and proficiency checks as well as the ATO staff standard evaluation. |

## Administration (function and management)

1.2 REV0 / TBD / APP

Refer to OMM Chapter 3 «Organisational Structures, Duties, Responsibilities and Accountabilities».

## Responsibilities (all management and Administrative staff)

1.3 REV0 / TBD / APP

Refer to OMM Chapter 3 «Organisational Structures, Duties, Responsibilities and Accountabilities».

## Student discipline and disciplinary action

1.4 REV2 / TBD

If disciplinary action is to be taken, the Head of Training may follow the process mentioned below:

|  |  |
| --- | --- |
| Discipline | Expectations of student’s behaviour are:   * compliance with the procedures; * following the instructions from instructor, OM and TM; * understanding and applying time management, taking into account of unforeseen situations; * appropriate judgement, learning interests and commitment; * accurate preparation for each training session; * clarifying doubts or confusions; * providing information as early as possible if a lesson cannot be attended; * remaining in good health (influence of alcohol, narcotics, drugs, medicines, blood donation, smoking, diving, ...). * … |

| Step | | Remarks | | Action |
| --- | --- | --- | --- | --- |
| Identification | | Possible inadmissible behaviours are:   * irresponsible attitude * clear and distinct lack of attitude * violation of legal requirements and/or provisions of the organisation’s documentation * any other behaviour not consistent with the qualities required of a pilot * any behaviour or attitude that endangers safety * influence of alcohol or drugs * medication whether prescribed or not, unless approval has been given by an Aero-Medical Examiner (AME) * ...   Unsatisfactory performance;   * Continued failed tests and examinations; * Continued learning disabilities or heavy difficulties; * Long term interruption(s) of the applicable training course; * Repeated absences without communication; * Continued missing interests and commitment * … | | Detection  Report by third party  Self-declaration |
| Root cause | Classification |
| Analysis of the ATO system | Procedure | Was the procedure clearly and correctly defined?  Was the task, procedure or action understood? | Failure of the provided provision, procedure and guideline | Review and correct provisions and procedures  Preventive action and awareness |
| Training | Was the learning subject including objective, instructional method and technique complete, accurate and appropriately defined? | Review the training effectiveness and enhance the training course standard.   * Refer to TM Part 1, Chapter 1.10. «Training effectiveness» |
| Analysis of student discipline and performance | Inadmissible behaviour or violation | Was the action intended?  Were the results as intended? | Sabotage or malevolent act | Severe sanction required  Exclusion;  Regress;  Initiate legal action; |
| Was the violated procedure understood?  Knowingly violated? | Reckless violation | Final Warning and impose actions |
| Could this happen to anybody else?  Did it already occur? | Negligent/careless error | Provide additional explanation and/or instruction |
| Unsatisfactory performance | Refer to:   * TM Part 4, Chapter 4.6 «Review procedures»; * TM Part 2, Chapter 2.5 «Student progress»; * TM Part 1, Chapter 1.9 «Assessments, tests and examinations» | | Suspend student from training if:  tests and examinations are failed continuously;  any remedial training remains unsatisfactory;  the learning interest and commitment of the student does not improve;  … |
| For reporting, refer to the reporting scheme, OMM Chapter 6 «Feedback and reporting system» and hazard identification and risk management | | | | |

## Approval/authorisation of flights

1.5 REV2 / TBD

The registration for the flight training is a basic approval for dual training flights. Solo flights require a special «flight authorisation» issued by the responsible flight instructor. This authorisation includes full details of the intended training flight and the limits thereof.

Insert a comprehensive reference to the solo flight authorisation form.

The authorisation has to be signed before each solo flight. Before signing it, the instructor has to check that the student:

* has a valid Medical;
* is able to apply basic navigation;
* can use R/T communication and operate the required systems and equipment;
* is able to divert to an alternate; and
* knows and understands the intended flight programme and training targets.

A FI with restricted privileges is not allowed to sign the flight authorisation for:

* the first solo flight by day or by night; and
* the first solo navigation/cross-country flight by day or by night.

In this case, the supervising flight instructor of the FI with restricted privileges shall issue the authorisation.

If the student has not done any flights within the last 2 weeks, a flight at dual control is mandatory first.

The Flight Assignment has to be carried out by the student during the specific flight.

For weather limitations, refer to OM Chapter 3.5 «Weather Minima (students - at various stages of training».

## Preparation of flying programme

1.6 REV3 / TBD

The flying programme is to be considered as the daily course of flight activity. For the coordination and monitoring of flight instructors, students and aircraft scheduling and flight training operations and the daily flight activity, the following process applies:

| Step | Remark | Responsible | Tool |
| --- | --- | --- | --- |
| Entry data | Appointment Schedule   * Aircraft * Student * Instructor * Training Session * … | Flight Instructor | Training Organisation Planning Excel-File  I://Org/Planning/... |
| Monitoring/Supervising | Maintain and update data   * Modification * Annulment * Termination * … | Administration |
| Poor weather including volcanic ash conditions   * Verify the need to reduce the maximum number of aircraft for the defined areas. * Limit number of aircraft or reroute to another area. * Consider and prevent high environmental pollution in the same area * Inform instructors, students and administration * *…* | Head of Training |
| Store Data | * Archive * … | Head of Training |

Describe here your own means for planning and monitoring the daily flying programme by mentioning the agenda including timetable, aircraft registration, nature of reservation (flight, maintenance, etc.), student, instructor etc.

These means may consist of a simple paper agenda up to a sophisticated electronic application.

### Restriction of numbers of aircraft in poor weather

1.6.1 REV3 / TBD

Difficult meteorological conditions including volcanic ash will restrict the operation of aircraft, flights might be cancelled, delayed or rerouted to another training area.

The ATO ensures that not too many aircraft are airborne within the same area (training area or traffic pattern).

The pollution in the same areas should be considered and avoided, especially for nature reserves (quiet nature, peaceful nature and quiet wildlife areas), and noise emissions in this area should be limited.

|  |  |  |  |
| --- | --- | --- | --- |
| Condition | Traffic Pattern | Training Area xy | Training Area xy |
| Normal weather | X | X | X |
| Poor weather conditions and special weather phenomena, including volcanic ash | X | X | X |
| FI with restricted privileges | For an FI with restricted privileges the above mentioned numbers of aircraft are decreased by X. | | |

## Command of aircraft

1.7 REV0 / TBD

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

|  |  |  |
| --- | --- | --- |
| Nature of Flight | PIC | Provision |
| Dual Instructional Flight | Instructor | * Valid licence, medical, instructor rating including associated rating * Listed on the current instructor table |
| Solo Flight | Student | * Valid Medical * Written authorisation for student solo flight |
| Check Flight | Applicant | * Applicant performs the function as PIC under the evaluation and supervision of the Instructor/Examiner |

## Responsibilities of pilot-in-command (PIC)

1.8 REV3 / TBD

The pilot-in-command shall be responsible for:

* the safety of the aircraft and of all crew members, passengers and cargo on board during aircraft operations;
* the initiation, continuation, termination or diversion of a flight in the interest of safety;
* ensuring that all operational procedures and checklists are complied with, in accordance with the Operations Manual, AFM, POH, etc. and common practices of good airmanship;
* ensuring that the weather forecast and reports for the proposed operating area and flight duration indicate that the flight may be conducted without infringing ATO operating minima;
* the aircraft being refuelled with particular attention to:
* the correct grade and amount of fuel;
* fuel water checks;
* fire safety precautions;
* checking filler caps for security and correct replacement after refuelling;
* ensuring the pre-flight inspection has been carried out;
* deciding on acceptance of the aircraft with unserviceability in accordance with the configuration deviation list (CDL) or minimum equipment list (MEL), as applicable;
* only commencing a flight if all operational limitations are complied with, as follows:
* the aircraft is airworthy;
* the aircraft is duly registered;
* instruments and equipment required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or list of deficiencies;
* the mass of the aircraft and the centre of gravity are such that the flight can be conducted within limits;
* all equipment, baggage and cargo are properly loaded and secured and an emergency evacuation remains possible;
* the aircraft operating limitations as specified in the aircraft flight manual (AFM) will not be exceeded at any time during the flight;
* navigational database required for PBN is suitable and current; and
* any NOTAMs or pilot-in-command briefing materials that could adversely affect the aircraft operation along its flight plan including any alternate aerodrome.
* not commencing a flight if incapacitated to perform any duties by any cause such as injury, sickness, fatigue or the effects of any psychoactive substance;
* not continuing a flight beyond the nearest weather-permissible aerodrome or operating site when the capacity to perform duties is significantly reduced from causes such as fatigue, sickness or lack of oxygen;
* checking at regular intervals that the amount of usable fuel / energy remaining in flight is not less than the fuel / energy required to proceed to a weather permissible aerodrome or operating site and the planned reserve fuel / energy required;
* recording of the termination of the flight, or series of flights, in the aircraft technical log or journey log for the aircraft
* utilisation data (fuel / energy, oil, de-icing fluid, etc.)
* all known or suspected defects in the aircraft.
* ensuring that, prior to and during taxiing, take-off and landing, and whenever deemed necessary in the interest of safety (e.g. in turbulent conditions), each passenger on board occupies a seat or berth and has his/her safety belt or restraint device properly secured and all cabin baggage is stowed in the approved stowage;
* reporting, as soon as possible, to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft;
* taking any action considered necessary under the circumstances in an emergency situation that requires immediate decision and action. In such cases deviation from any rules, operational procedures and methods in the interest of safety may be possible;
* ensuring that during critical flight phases (Taxi, Take-off, Final Approach, Landing, Air Exercises, etc.) or whenever deemed necessary in the interest of safety, all persons on board are seated and secured at their assigned station and do not perform any activities intervening with the safe operation of the aircraft;
* ensuring that the aircraft is controlled at all times;
* any occurrences being reported according to the ATO reporting scheme (refer to OMM Chapter 6 «Feedback an Reporting System»);
* the notification by the quickest available means of any accident involving the aircraft that results in serious injury or death of any person or substantial damage to the aircraft or property;
* being familiar with national and international aviation legislation and agreed aviation practices and procedures in those areas/States where operations are conducted;
* being familiar with the provisions of the ATO manuals;
* ensuring that all training and flight briefings are completed before each flight and all persons on board are fully briefed, including about emergency equipment and procedures;
* ensuring that the aircraft’s documentation is complete and carried on board;
* ensuring that no portable electronic device (PED) being used, including an electronic flight bag (EFB), which could adversely affect the performance of the aircraft systems and equipment or the ability of the flight crew members to operate the aircraft.

## Carriage of passengers

1.9 REV0 / TBD

The carriage of additional persons during dual flights is possible. Whereas the carriage of additional students might be encouraged for training benefit, the carriage of any other persons, not having a direct interest in the flight, shall be arranged in a restrictive manner.

Passengers have to be briefed on safety procedures before the flight.

The instructor as well as the student has to agree to accept the passenger. Additionally, FOCA inspector on duty may be carried on dual instructional flight.

A pilot in command shall not carrying passenger(s) unless having made 3 take-off and landings within the preceding 90 days of the flight.

The following table summarises the carriage of passengers:

|  |  |  |
| --- | --- | --- |
| Nature of flight | Passengers allowed | |
| Yes | No |
| Dual instructional flight | X |  |
| Student solo flight (flight on which a student pilot is the sole occupant of an aircraft) |  | X |
| Flights with abnormal or emergency procedure training, including critical manoeuvres |  | X |
| Training with Maximum Operating Mass | X |  |

### Title of transport (Beförderungsschein, Titre de transport, Titolo di transporto)

1.9.1 REV0 / TBD

If applicable, describe the requirements and form to be used for the issue of the title of transport.

## Aircraft documentation

1.10 REV0 / TBD

### Technical Log System and Journey Log

1.10.1 REV0 / TBD

Describe here your technical log system, journey log or equivalent used. Refer also to CL OM/TM Chapter 3.1.10 «Aircraft documentation»

### Documents to be carried on Board

1.10.2 REV3 / TBD

* The following documents, manuals and information shall be carried on each flight:

|  |  |
| --- | --- |
| **Aircraft Blue Booklet** | * The Registration Certificate * The Airworthiness Certificate or Permit to Fly * Airworthiness Review Certificate or the Inspection Confirmation * The third party Liability Insurance Certificate for aircraft (in SDR) * The insurance certificate in respect of liability for passengers, if applicable * Extract of the AOC, if applicable * The scope of utilisation of the aircraft in commercial operation, if applicable * The noise certificate, if applicable * The certificate for aero-towing of gliders, if applicable * The aircraft radio station operating licence issued by OFCOM, if applicable |
| **Aircraft Documentation**  **Manufacturer provided Documents** | * Current AFM, POH * Journey Log Book/Technical Log or equivalent, including Maintenance Release or equivalent * Checklists * MEL and CDL, if applicable * Hold Item List (HIL) or Deferred Defect List (DDL) |
| **Planning and Operational Documents** | * Operational/Navigation Flight Plan including Fuel / Energy Planning * Mass and Balance Documentation * Details of the filed ATS flight plan, if applicable * Current Weather Information and Forecast * NOTAM’s and DABS |
| **AIP**  **VFR Manual & Guide**  **Other commercially produced Route and Aerodrome Information and Documentation** | * Current and suitable aeronautical charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted * Procedures and visual signals information to use by intercepting and intercepted aircraft * Any other documentation that may be pertinent to the flight or is required by the States concerned with the flight |
| **ATO and pilot’s relevant documents** | * Operations Manual of the ATO * Pilot’s Licence (except for students of a LAPL, PPL or integrated CPL Course) * Temporary Permission to act as pilot (if applicable) * Medical * ID or Passport * Syllabus * Pilot’s Logbook * Authorisation for Student Solo Flight |

* The Pilot in Command shall make these documents available within a reasonable time frame when requested by the competent authority (FOCA or the respective national authority).
* In case of loss or theft of one of the listed documents, the operation may continue until the flight reaches its destination or a place where replacement documents can be provided.

## Retention of documents

1.11 REV0 / TBD

Refer to OMM Chapter 9 «Record keeping».

## Flight crew qualification records (licences and ratings)

1.12 REV0 / TBD

The validity of the instructor’s licence, ratings, medical certificate and qualifications are monitored as well as student data, entry qualifications and training progress. Individual records for instructors and students are maintained.

Instructors only get or are to accept a training assignment, if they have the necessary and valid licence, instructor certificate, rating and medical certificate for the respective training.

The assigned instructor shall ensure that the student meets the prerequisites, has the necessary licence, rating and medical certificate, as applicable, for the intended training.

### Instructor’s records

1.12.1 REV0 / TBD

|  |  |  |
| --- | --- | --- |
| Folder | * Contract/Agreement * Copy of ID or Passport * Copy of Licence and Ratings * Copy of Medical * Personal Data File * Training/Checking/Assessment Evidence * Competence and Skill Records * Correspondence * Feedback * ... | Administration Office |

#### Processes for monitoring instructor’s licence and qualifications

| Step | Task | Frequency | Responsibility |
| --- | --- | --- | --- |
| Data collection | * Establish instructor file | Upon employment/ contracting | Administration |
| Verification | * Check file for accurateness and completeness | Prior to starting any instructional task | Head of Training |
| Supervision and  Staff Training | * Organise/conduct training and checking/assessment according to training plan (staff training) and expiry dates | Plan yearly  Individual training, checking and assessment according to expiry date | Head of Training |
| File Management | * Amend and revise file timely according to revalidation or renewal and upon receiving evidence; and * Medical, Licences and Qualifications validity changes, as applicable | Continuously | Head of Training |
| Monitoring/Supervising Training Organisation Instructor Supervision Excel-File  (I://Org/Supervision/...) | * Maintain and update data * Supervision of data * Monitor advisory system for expiry dates | Continuously and prior to instructional assignment Latest advisory marker | Administration |
| Closing | * Store file according to Record Keeping OMM, Chapter 9 «Record Keeping» | Leaving organisation | Head of Training |

### Student’s records

1.12.2 REV0 / TBD

|  |  |  |
| --- | --- | --- |
| Folder | * Copy of ID or Passport * Copy of Medical * Personal Data File/Registration * Results of Progress Tests * Copy of Theory Exam Results * Copy of Radiotelephony Exam Results * Copy of LPC Exam Results * Correspondence * Feedback * ... | Administration Office |
| Current Training Documentation | * Syllabus * Progress Log * Flight Assignment for Student solo Flight * Lessons and Briefings Working Paper * ... | Student |

#### Processes for monitoring student’s licence and qualifications

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Task | Frequency | Responsibility |
| Student’s pre-requisites | * Verification that the student meets all the pre-requisites for the intended training | First enquiry | Head of Training |
| Data collection | * Establish student file | Upon registration | Administration |
| Verification | * Check student file for accurateness and completeness | Prior to starting training | Head of Training |
| File Management | * Amend and revise file in accordance with student progress; and * Medical, Licences and Qualifications validity changes, as applicable | Continuously | Instructor |
| Closing | * Store file according to Record Keeping OMM, Chapter 9 «Record Keeping and Archiving» | Completion of Training  Training stop | Head of Training |

## Revalidation (medical certificates and ratings)

1.13 REV0 / TBD

The Head of Training is responsible that only instructors with valid licence and qualifications are assigned for flight training. However, instructors hold the ultimate responsibility for the validity of their licence, ratings and certificates.

The following process specifies the action to be taken:

| Step | Task | Tool | Responsibility |
| --- | --- | --- | --- |
| Notification | Informs the instructor that a rating or the medical expires (within 3 months) | * Instructor Supervision Excel-File * (I://Org/Supervision/...) * E-Mail * … | Administration |
| Organisation | Makes appointment with Examiner or AeMC/AME | * Telephone/by the best practicable means * FOCA Examiner-List * List of AeMC/AME | Instructor |
| Conducted by | Performs revalidation   * Proficiency check * Medical examination * 1h training flight, required minimum flight experience, application for revalidated rating (SEP/TMG only) * Assessment of competency * ... | | Instructor |
| Administration and Notification of FOCA | Submission of the forms and documents related to the conducted check/examination | * FOCA administrative requirements, forms and documents * FOCA homepage | Examiner  AME |
| Reception of the new Licence or Certificate | Check for correctness and completeness  Sign where required | * Licence * Certificate | Instructor |
| Information | Informs Head of Training  Submission of the relevant copy | * Copy of new Licence/Medical | Instructor |
| File Management | Amend and revise Instructor Supervision Excel-File timely according to revalidation or renewal and upon receiving evidence/copy | * Instructor Supervision Excel-File * (I://Org/Supervision/...) | Administration |

## Flying duty period and flight time limitations (Instructors)

1.14 REV0 / TBD

The following extract of definitions applies:

|  |  |  |
| --- | --- | --- |
| Annex III Subpart FTL Flight and Duty time Limitations and Rest time Requirements | Break | «Break» means a period of time within a flight duty period, shorter than a rest period, counting as duty, and during which a crew member is free of all tasks. |
| Duty | «Duty» means any task that a crew member performs for the operator, including flight duty, administrative work, giving or receiving training, and checking, positioning, and some elements of standby. |
| Duty Period | «Duty Period» means a period, which starts when a crew member is required by an operator to report for or to commence duty and, which ends when that person is free of all duties, including post-flight duty. |
| Flight Duty Period | «Flight Duty Period (FDP)» means a period that commences when a crew member is required to report for duty, which includes a sector or a series of sectors, and finishes when the aircraft finally comes to rest and the engines are shut down at the end of the last sector on which the crew member acts as an operating crew member; |
| Flight Time  (Block Time) | «Flight Time» for aeroplanes and touring motor gliders means the time between when an aircraft is first moving from its parking place for the purpose of taking off, until it comes to rest on the designated parking position, and all engines or propellers are shut down. |
| Rest Period | «Rest Period» means a continuous, uninterrupted and defined period of time, following duty or prior to duty, during which a crew member is free of all duties, standby and reserve. |
| Working Time | «Working Time» means any period during which employees are working at the employer’s discretion and they are carrying out their activities or duties in accordance with national laws and/or practice. |

* The provisions related to flight and duty time regulation including rest requirements are established for instructors and students in compliance with Air Crew Regulation, which refers to Part-ORO.
* Both, the organisation and the instructor/student are responsible for the observance of the flight time limitations.
* No instructor or student shall start a duty period if it is foreseeable that the duty time limitation or rest period requirement will be violated.

Overview relation: Duty/Duty Period/Flight Time and Flight Duty Period

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Duty | | | | | |
| Any activity on behalf of the training organisation | Theoretical Knowledge Instruction | Synthetic Flight Instruction | Session Briefing and/or Pre-Flight Duty | Flight instruction or  Any commercial flight duty | Post-Flight Duty and/ or Session Debriefing |
| Flight Time (Block Time) |
| **\*** | | | Flight Duty Period | |
| Duty Period – Working Time | | | | | |

\*) All of the time spent for activities on behalf of the training organisation, theoretical knowledge and synthetic flight instruction is to be cumulatively counted in full towards the flight duty period of any subsequent commercial air operation.

* Instructors engaged in other approved training organisations and/or commercial air operations shall additionally consider the flight and duty time limitations and rest requirements of the concerned organisation/operator.
* In general, for pre-flight duty, 1 hour shall be calculated and for post-flight duty 30 minutes, which both fully count towards the duty period.
* On the same day, no combination of commercial duty and instruction, and/or examination in any ATO is allowed.

The following restrictions for instructors shall not be exceeded:

|  |  |
| --- | --- |
| Flight time | 7 flight hours on any day;  100 flight hours of flight time in any 28 consecutive days;  900 flight hours of flight time in any calendar year; and  1000 flight hours of flight time in any 12 consecutive calendar months. |
| Duty period/Flying duty Hours | 12 duty hours on any day;  60 duty hours in any 7 consecutive days;  110 duty hours in any 14 consecutive days; and  190 duty hours in any 28 consecutive days, spread as evenly as practicable throughout that period. |
| Working Time | The maximum annual working time shall be 2000 hours in which the flight time (block time) shall be limited to 900 hours.  The maximum annual working time shall be spread as evenly as practicable throughout the year. |
| Sectors/Landings | There are no limitations restricting the number of sectors/landings for flight training sessions.  In addition to the observation of the achievement of the respective training target, the instructor is to monitor the fitness and to identify the fatigue hazards within the current flight/duty period, and to decide upon the maximum number of sectors/landings. And, moreover, to decide proactively according to the situation and to reduce duty period, and/or to increase the rest period when necessary. |

Unforeseen circumstances - instructor’s/pilot in command’s discretion

Under unforeseen circumstances the instructor/pilot in command may modify the limits on duty period, flying hours or rest requirements by complying with the following:

* The maximum duty per day may be increased by a maximum of two hours, and the flight continued to the planned destination or alternate, if on the final sector within a duty period the allowed increase duty is exceeded because of unforeseen circumstances after take-off.
* The rest period following the duty period may be reduced, but can never be less than 10 hours.
* The instructor/pilot in command shall submit a report to the organisation when a duty is increased or a rest period is reduced at the instructor’s/pilot in command’s discretion.
* Where the increase of duty period or reduction of a rest period exceeds 1 hour, a copy of the occurrence report filed to <http://www.aviationreporting.eu> shall be sent to the assigned inspector within 28 days.

Recording of duty, flight duty and rest periods

The instructor and student must ensure that all record relevant data are in compliance with the flight time limitations by using the “FTL record form”.

Copies of these records shall be delivered to the Head of Training on a monthly basis.

Where a flight instructor is engaged in more than one organisation and/or operator, the instructor concerned shall maintain a personal record, including:

* Flight times;
* Start, duration and end of each duty period and/or flight duty period; and
* Rest periods and days free from all duties.

The instructor shall make such records available to all the concerned organisations/operators.

## Flying duty period and flight time limitations (Students)

1.15 REV0 / TBD

In general, for students undergoing a course of flight training the following limitations apply:

* Without exemption from an approved syllabus, students should not fly more than 3 flight training sessions/units in any flight duty period; and
* Student pilots should not exceed 6 hours of flight time in any flight duty period.

## Rest periods (Instructors)

1.16 REV0 / TBD

* Instructors shall not start a training flight if they know that they are suffering from, or are likely to suffer from fatigue, or if they feel unfit to the extent that the flight may be endangered and/or the training target is in question.
* The minimum rest period provided before undertaking flying duty, shall be at least as long as the preceding duty period, or 12 hours, whichever is greater.

## Rest periods (Students)

1.17 REV0 / TBD

* Students should use their rest periods properly prior to a flight and should report for flight training well rested and fit for duty.
* Students shall not start a training flight if they know that they are suffering from, or are likely to suffer from fatigue, or if they feel unfit to the extent that the flight may be endangered and/or the training target is in question.
* The minimum rest period provided before undertaking flying duty, shall be at least as long as the preceding duty period, or 12 hours, whichever is greater.

## Pilot’s log books

1.18 REV2 / TBD

Describe the log book form used by the organisation.

For example:

The organisation uses paper format and provides/sells to students the official means provided by FOCA which is the Pilot Log Book Art. No. 803.001 as published by BBL (Bundesamt für Bauten und Logistik, 3000 Bern) Bundespublikationen für Privatkunden.

At the beginning of a training course, the instructor explains to the assigned student:

* the format and content of the pilot log book and how relevant data and information are to be entered;
* the significance of the log book and its content as evidence;
* the importance of the use of ink or indelible pencil with a proper and clear handwriting;
* the relevance to make entries as soon as practicable after any flight undertaken;
* the importance to carry the pilot log book during all flights or at least during all solo cross-country flights;
* the requirement to present the pilot log book for inspection upon request by an authorised representative of FOCA or other national aviation authority (competent authority);
* acts which are considered as violation against the provisions, notably the entry of false information in the pilot log book and the prosecution thereof according to article 92 and 92 of the Swiss Air Navigation Decree (Luftfahrtgesetz) or article 251-255 of the criminal code (Strafgesetzbuch) for falsification of documents.

The instructor regularly checks the accuracy and completeness of the student’s entries.

On completion of a course of training the instructor signs off the respective training.

For digital format, insert a traceable reference to the applicable user manual of the concerned application. As the student may still have paper format, the following guidance may still apply:

|  |  |
| --- | --- |
| Nature of Flight | Endorsement Text/Stamp |
| Variants of a class rating – difference training (D) | * Difference training to ... (aircraft type and variant) successfully completed * Location and date * Instructor data * Signature |
| Variants of a class rating – familiarisation training | * Familiarisation training to ... (subject, aircraft type and variant) successfully completed * Location and date * Instructor data, if/as applicable * Signature |
| ... | ... |
| Training flight for class rating touring motor glider or single engine piston | * FOCA Examiner Guide EASA Part FCL AEROPLANE / HELICOPTER   Refer to the sample for the candidate log book entries  [on-line] Available (09.05.2016) <https://www.bazl.admin.ch/dam/bazl/de/dokumente/F%C3%BCr_Fachleute/Ausbildung_und_Lizenzen/Ausbildungsorganisationen/examiner_guide_easapartfclaeroplane.pdf.download.pdf/examiner_guide_easapartfclaeroplane.pdf>  [on-line] Available (03.01.2018) <https://www.bazl.admin.ch/dam/bazl/it/dokumente/Fachleute/Ausbildung_und_Lizenzen/Ausbildungsorganisationen/examiner_guide_easapartfclhelicopter.pdf.download.pdf/examiner_guide_easapartfclhelicopter.pdf> |
| Completion of a course of training for licence issue or rating |
| ... | * ... |

## Flight planning (general)

1.19 REV3 / TBD

No flight shall commence without a complete and adequate planning for the intended flight.

Both, the instructor/examiner and the student/applicant, must be familiar with the planning and the actual data as relevant for the intended flight.

As part of the briefing, the instructor shall evaluate the student’s flight planning prior to commencing a flight.

A complete and adequate flight planning shall include at least:

|  |  |
| --- | --- |
| Organisation | Check of the availability of the aircraft  Sunrise/Sunset – OPR hours  Current charts and maps/ AIP/ VFR Manual/Other commercially produced route and aerodrome / operating site information  ... |
| Navigation | VFR/IFR navigation flight plan  Flight announcement  ATC flight plan  NOTAMs  DABS  ... |
| Weather | METAR  TAF  GAFOR  Significant Weather Chart  Wind Chart  GAMET  SIGMET  SNOWTAM  Weather Radar  Webcam  ... |
| Volcanic ash | the degree of known or forecast volcanic ash contamination  hazards associated with the volcanic ash contaminated area (odour, haze or cloud)  any additional aircraft operating and / or maintenance considerations as provided by the manufacturer, if applicable  operational requirements for re-routing / diversion, including fuel / energy considerations  recognition and avoidance of volcanic ash and procedures after encounter  ... |
| Airport | PPR – Aerodrome / operating site condition of availability  Ground services incl. Fuel / Energy  ... |

|  |  |
| --- | --- |
| Performance | Elevation/Density  Mass and Balance  **Runway**  available length  surface  strength  condition  **Take-off**  Ground roll  T/O distance  Climb performance  **Landing**  LDG distance  Ground roll  **Missed approach**  Climb performance  **Fuel / Energy**  Trip  Reserve  Alternate  Additional  ... |

## Safety (general)

1.20 REV0 / TBD

It is everyone’s responsibility to provide a safe and secure operation. Adherence to the safety policy, established operating policies, procedures and instructions as published in the organisation’s documentation, including the use of the reporting schemes, and an in-depth knowledge of comprehensive emergency response procedures are essential aspects for a safe and secure operation.

The purpose of the safety management of the organisation is to maintain and, where practicable, improve safety levels in all its activities, and to minimise its contribution to the risk of an aircraft accident as far as is reasonably practical.

Besides the responsibility of the training organisation's management, instructors are an important driving force to demonstrate their commitment to safety, to promote safety in an everyday activity during training and to operate any aircraft by example.

### Equipment

1.20.1 REV0 / TBD

All instructors/pilot in command shall operate the aircraft according to the respective flight manual (AFM)/pilot’s operating handbook (POH) and where applicable, for specific equipment, manufacturer provided operating instructions. The equipment should always be used to the fullest and optimum capacity and must be handled with care.

The instructor/pilot in command shall ensure that instruments and equipment required for the execution of a flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or list of deficiencies (refer also to OM, Part B, Chapter 3.3.4 «Allowable deficiencies»). The utmost care as described in the relevant checklist/procedure should be taken.

### Emergency Equipment

1.20.2 REV0 / TBD

In accordance with the pre-flight procedure for the concerned aircraft, the emergency equipment is to be checked for availability and serviceability.

The standard emergency equipment of the organisation’s training aircraft consists of:

|  |  |
| --- | --- |
| Equipment | Check if available |
| Fire Extinguisher | Check that located in the designated place;  Check easy accessibility;  Check pressure gauge reading or indicator in the operable range or position;  Check expiry date/last inspection. |
| Emergency escape equipment  (e.g. emergency safety hammer) | Check that correctly fitted and secured;  Check that easy accessible. |
| First Aid Kit | Check that correctly fitted and secured;  Check the seal |
| Torches | Check that correctly fitted and secured;  Check functionality. |
| Supplemental Oxygen | Check that correctly fitted and secured;  Check functionality;  Check amount of oxygen. |
| ... | ... |

### Emergency Locator Transmitter (ELT) accidental activation

1.20.3 REV2 / TBD

After each flight, the ELT has to be checked for an accidental activation by selecting frequency 121.5 MHz on the respective radio equipment. In case of an accidental activation unless otherwise instructed by the manufacturer operating manual:

* reset ELT or switch the ELT off;
* then switch back to position ARM;
* in case of a PLB, switch off the transmitter according to the user manual;
* call Rescue Coordination Centre (RCC):

|  |  |
| --- | --- |
| Swiss Air Force  RCC / OP Zen LW  Flugplatz Dübendorf / OZD  CH-8600 Dübendorf  Switzerland  Tel H24: +41 58 484 10 00  e-mail: rcc.lw@vtg.admin.ch | Refer also to VFR Manual Switzerland, VFR Guide, SAR1, SAR2 |

### Radio Communication and listening watch

1.20.4 REV0 / TBD

Pilots are required to hold a radio telephony operator's licence as evidence that they are able to master the standard ICAO phraseology for communication with air traffic control. In addition, they also have to demonstrate that they possess the necessary proficiency in the languages used in flight radio communication.

No radio telephony operator's licence is required for communication:

* between aircraft and AFIS;
* between student pilots and the control tower of the aerodrome at which instruction is taking place, when supervised by the flight instructor;
* with the air traffic services units used, when carrying out the navigation/cross-country flight during final instruction.

Student pilots without a radio telephony certificate shall be guided and trained by the instructor according to the stage of the course of training.

### Policy on the disposition of communication equipment

1.20.5 REV0 / TBD

The following general setting may be applied on aircraft equipped with two independent radio communication transceivers:

|  |  |  |  |
| --- | --- | --- | --- |
| COM 1 | | COM 2 | |
| Frequency in Use | Frequency STBY | Frequency in Use | Frequency STBY |
| Active Air – Ground Frequency | Previous/Next Air –Ground Frequency | 121.5 | ATIS |

### Aircraft equipped with one radio communication transceiver

1.20.6 REV0 / TBD

The following general setting may be applied on aircraft equipped with one single radio communication transceiver:

|  |  |
| --- | --- |
| COM 1 | |
| Frequency in Use | Frequency STBY |
| Active Air – Ground Frequency | Previous/Next Air –Ground Frequency |

### Listening Watch

1.20.7 REV0 / TBD

Where an aircraft is equipped with radio communication equipment, the pilot in command/instructor/student shall ensure that a listening watch is maintained.

VFR flights operating in uncontrolled airspace shall maintain continuous air-to-ground voice communication watch on the appropriate communication frequency.

IFR and VFR flights operating in controlled airspaces shall establish continuous two-way communication with the appropriate air traffic control unit on the respective communication channel/frequency.

### Pilot’s position reports and broadcast

1.20.8 REV0 / TBD

A pilot is to make a position report whenever it is reasonably necessary to do so to avoid a collision, or the risk of a collision, with another aircraft. A position report includes:

* aircraft call sign;
* type of aircraft;
* position of the aircraft; and
* the pilot’s intentions.

In addition to the position reports, pilots should listen to other broadcasts to increase situational awareness.

### Recommended broadcasts in the vicinity of non-controlled aerodromes

1.20.9 REV0 / TBD

In the vicinity of a non-controlled aerodrome, pilots must make a broadcast whenever it is reasonably necessary to avoid a collision, or the risk of a collision, with another aircraft:

|  |  |  |  |
| --- | --- | --- | --- |
| Phase of Flight | Radio Broadcast | Example | Refer also to Official VFR Guide to Basic AIP, Chapter RAC 1.3 |
| Aircraft first moving for a flight | Immediately before, or during, taxiing | HB-ABC taxiing to holding point runway 10 |
| At the holding area of the active runway | prior to lining up on the active runway | H-BC ready for departure runway 10 |
| In take-off position | when starting the take-off roll | H-BC taking off runway 10 |
| Inbound of a non-controlled aerodrome | 5 minutes, or further, from the aerodrome with an estimated time of arrival for the aerodrome | HB-ABC position sample-village 5000 ft for landing in model aerodrome |
| Overhead and ready to join the circuit | Immediate before joining the circuit | H-BC overhead, will join downwind runway 20  H-BC base runway 20  H-BC final runway 20 |
| flight through the vicinity of, but not land at, a non-controlled aerodrome | When the aircraft enters the vicinity of the aerodrome | HB-ABC overhead 4500 ft, crossing direction sample village |

### Occurrence Reporting

1.20.10 REV2 / TBD

The main target of the occurrence reporting system is to avoid any re-occurrence and to learn from reported events.

All persons involved in the organisation or in civil aviation are to report any occurrence endangering or potentially endangering aviation safety. The following two reporting systems are in place within the organisation:

* Mandatory reporting; and
* Voluntary reporting.

#### Definitions

|  |  |
| --- | --- |
| Incident | «Incident» means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation; |
| Serious incident | «Serious incident» means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft, which in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down. |
| Accident | «Accident» means an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:   * a person is fatally or seriously injured as a result of:   being in the aircraft, or,  direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or,  direct exposure to jet blast,  except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or   * the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes) or minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike; or * the aircraft is missing or is completely inaccessible; |
| Hazard | Condition or object with the potentialof causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function. |
| ATIR | Air Traffic Incident Reports result from incidents in connection with ATC services.   * Refer to AIP Switzerland, ENR 1.14 |
| Occurrences | Occurrences are incidents that pose a significant risk to aviation safety |

#### Mandatory reporting

|  |  |
| --- | --- |
| Accident and Serious Incident | ⇨ Refer to 1.20.10.3  «Reporting of a serious incident or accident» |

|  |  |
| --- | --- |
| Laser attack | ⇨ Refer to 1.20.10.4.1  «Specific report for laser attack» |

| Reportable occurrences | ⇨ Refer to 1.20.10.4  «Occurrence reporting» |
| --- | --- |
| Air operations   * Unintentional loss of control; * Landing outside of intended landing area; * Inability or failure to achieve required aircraft performance expected in normal conditions during take-off, climb or landing; * Runway incursion; * Runway excursion; * Any flight which has been performed with an aircraft which was not airworthy, or for which flight preparation was not completed, which has or could have endangered the aircraft, its occupants or any other person; * Unintended flight into IMC (Instrument Meteorological Conditions) conditions of aircraft not IFR (Instrument flight rules) certified, or a pilot not qualified for IFR, which has or could have endangered the aircraft, its occupants or any other person. | |
| Technical occurrences   * Abnormal severe vibration (for example: aileron or elevator ‘flutter’, or of propeller); * Any flight control not functioning correctly or disconnected; * A failure or substantial deterioration of the aircraft structure; * A loss of any part of the aircraft structure or installation in flight; * A failure of an engine, rotor, propeller, fuel system or other essential system; * Leakage of any fluid which resulted in a fire hazard or possible hazardous contamination of aircraft structure, systems or equipment, or risk to occupants; | |
| Interaction with air navigation services and air traffic management   * Interaction with air navigation services (for example: incorrect services provided, conflicting communications or deviation from clearance) which has or could have endangered the aircraft, its occupants or any other person; * Airspace infringement. | |
| Emergencies and other critical situations   * Any occurrence leading to an emergency call; * Fire, explosion, smoke, toxic gases or toxic fumes in the aircraft; * Incapacitation of the pilot leading to inability to perform any duty. | |
| External environment and meteorology   * A collision on the ground or in the air, with another aircraft, terrain or obstacle (or vehicle); * A near collision, on the ground or in the air, with another aircraft, terrain or obstacle (or vehicle) requiring an emergency avoidance manoeuvre to avoid a collision; * Wildlife strike including bird strike which resulted in damage to the aircraft or loss or malfunction of any essential service; * Interference with the aircraft by firearms, fireworks, flying kites, laser illumination, high powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means; * A lightning strike resulting in damage to or loss of functions of the aircraft; * Severe turbulence encounter which resulted in injury to aircraft occupants or in the need for a post-flight turbulence damage check of the aircraft; * Icing including carburettor icing which has or could have endangered the aircraft, its occupants or any other person | |
| For additional information refer to <http://www.aviationreporting.eu> [On-line] Available (21.10.2016) | |

#### Reporting of a serious incident or accident

|  |  |  |  |
| --- | --- | --- | --- |
| Responsibility | Notification to | Dispatch time | Means/Address |
| Pilot in Command  or  any person directly involved in, or becoming aware of an accident or serious incident | Air Traffic Control | Immediately | Current frequency |
| Swiss Air Rescue Service (REGA) | Phone: **1414**  (from abroad: +41 333 333 333) |
| Head of Training | Initial notification:   * by best practicable means   *Phone:*  Written report:   * Reporting/Analysis Form   E-Mail: |
| Swiss Air Rescue Service (REGA) | Schweizerische Unfalluntersuchungsstelle SUST | Immediately | Schweizerische Sicherheitsuntersuchungsstelle SUST  Bereich Aviatik  Aéropôle 1  CH-1530 Payerne  Tel. +41 58 466 33 00  Fax +41 58 466 33 01  info-av@sust.admin.ch |
| Head of Training | Activation of the organisation’s emergency response | Immediately | Refer to OMM Chapter 8 «Emergency Response Planning» |
| FOCA | Within 72 Hours of becoming aware of the occurrence, unless exceptional circumstances prevent this | **Aviation Safety Reporting**  [On-line] Available (20.05.2016)  <http://www.aviationreporting.eu> |
| To assigned inspector by the best practicable means; or  [sbfl@bazl.admin.ch](mailto:sbfl@bazl.admin.ch) |
| Safety Manager | As soon as practicable | Phone:  E-Mail: |
| ⇨ Refer to OMM, Chapter 6.2.2 «Follow-up process for handling occurrence reports» | | | |

#### Occurrence Reporting

|  |  |  |  |
| --- | --- | --- | --- |
| Responsibility | Notification to: | Dispatch time: | Means/Address |
| Pilot in Command/  Instructor | * Local broadcast   or   * Air Traffic Control | Immediately | Current frequency |
| If an aerodrome is affected:   * Aerodrome Operator * Airport Authority | * Ground frequency * C-Office of the aerodrome concerned |
| Head of Training | As soon as practicable | Initial notification:   * by best practicable means   *Phone:*  Written report:   * Reporting/Analysis Form   *E-Mail:* |
| Head of Training | FOCA | Within 72 Hours of becoming aware of the occurrence, unless exceptional circumstances prevent this | **Aviation Safety Reporting**  [On-line] Available (20.05.2016)  <http://www.aviationreporting.eu> |
| To assigned inspector by the best practicable means; or  [sbfl@bazl.admin.ch](mailto:sbfl@bazl.admin.ch) |
| Safety Manager | As soon as practicable | Reporting/Analysis Form |
| ⇨ Refer to OMM, Chapter 6.2.2 «Follow-up process for handling occurrence reports» | | | |

##### Specific report for laser attack

|  |  |  |  |
| --- | --- | --- | --- |
| Responsibility | Notification to: | Dispatch time: | Address: |
| Pilot in Command/  Instructor | * Local broadcast   or   * Air Traffic Control | Immediately | Current frequency |
| Cantonal Police | Schweizer Polizei  [On-line] Available (21.10.2016): <https://polizei.ch/> |
| In case of canton Zurich | E-Mail: [fp.ezf@kapo.zh.ch](file:///C:\Users\U80837882\AppData\Local\Temp\Fabasoft\Work\fp.ezf@kapo.zh.ch)  Form:  «Eilmeldung Laserattacke»  [On-line] Available (20.05.2016)  <https://www.bazl.admin.ch/dam/bazl/de/dokumente/Fachleute/Ausbildung_und_Lizenzen/Laserblendungen/laserattacke_kantonspolizeizuerich.pdf.download.pdf/laserattacke_kantonspolizeizuerich.pdf> |
| Head of Training | As soon as practicable | Initial notification:   * by best practicable means   *Phone:*  Written report:   * Reporting/Analysis Form   *E-Mail:* |
| Head of Training | FOCA | Within 72 Hours of becoming aware of the occurrence, unless exceptional circumstances prevent this | **Aviation Safety Reporting**  [On-line] Available (20.05.2016)  <http://www.aviationreporting.eu> |
| To assigned inspector by the best practicable means; or  [sbfl@bazl.admin.ch](mailto:sbfl@bazl.admin.ch) |
| Safety Manager | As soon as practicable | Phone:  E-Mail: |
| ⇨ Refer to OMM, Chapter 6.2.2 «Follow-up process for handling occurrence reports» | | | |

#### Voluntary reporting

|  |  |  |
| --- | --- | --- |
| Responsibility | Notification to: | Address: |
| Any employee/freelance of the organisation, instructors and students | Safety Manager / Head of Training | Written report:   * Reporting/Analysis Form   E-Mail: |
| ⇨ Refer to OMM, Chapter 6.2.2 «Follow-up process for handling occurrence reports» | | |

## Introductory flight – trial lesson

1.21 REV3 / TBD

An introductory flight is a trial lesson for potential students in which the qualified instructor gives a demonstration of the controls, and some exercises are conducted with the participant handling the aircraft. It should represent a typical flight training session.

For this trial lesson, the following provisions apply:

| Step | Remark | Responsible | Reference |
| --- | --- | --- | --- |
| Organisation | Appointment schedule:   * reservation of an aircraft; * designate the instructor; * prepare promotional products; * inform Head of Training (HT). | Administration | * OM Part A, Chapter 1.6 «Preparation of flying programme» |
| Trial lesson | Prerequisite: | Instructor |  |
| * start and end at the same aerodrome / operating site; * VFR by day; |  | * OM Part C, Chapter 3.6 «Training routes or areas» |
| * meteorological conditions; |  | * OM Part C, Chapter 3.5 «Weather minima (students – at various stages of training» |
| Content:   * introduce facility; aircraft fleet, airport/aerodrome environment; * outline pilot training concepts and requirements; |  |  |
| * conduct the trial lesson on the basis of the first phase of LAPL/PPL syllabus containing exercises:   effects of controls;  straight level flights;  climbing and descending;  turning;  …   * Debriefing/closing   listen attentively to the participants impressions;  name the major strengths;  motivate the participants interests;  …   * provide the HT with a feedback |  | * LAPL/PPL syllabus lesson plans * TM Part 2, Chapter 2.6 «Instructional methods» |
| Flight time may count towards the grant of the proposed category of licence if the trial lesson is conducted with a flight instructor (FI). | | | |

# Operations Manual B (OM Part B)

Part B REV0 / TBD

## Aircraft descriptive notes, operational and technical details

2.1 REV0 / TBD / APP

Aircraft type specific operating procedures and technical details of aircraft used for training can be found in the manual provided by the manufacturer as stated on the list of aircraft used for training. Together with other documents, such as working checklists, abnormal/emergency checklists and other documents used for the operation of the aircraft they constitute the Operations Manual Part B.

Aircraft are to be operated in accordance with the relevant aircraft flight manual and other manuals provided by the manufacturer, such as POH including associated checklists and aircraft type specific operating procedures provided by the training organisation.

Where any conflict is found between the documentation provided by the training organisation and those provided by the manufacturer, the content of the Aircraft Flight Manual (AFM) prevails. Any conflict found, is to be reported without delay to the Head of Training (HT) according to OM Chapter 1.20.10 «Occurrences Reporting».

It is the responsibility of the organisation, that instructors are supplied with the latest version of the aircraft type specific information (Operations Manual Part B) or parts thereof as relevant to their field of activity.

The latest version of the relevant aircraft type specific information (Operations Manual Part B) is made available to students during their course of studies.

Different units of measurements are used for the various aircraft types. For conversion tables, refer to VFR Manual Switzerland, VFR Guide, Chapter GEN 1-4.

### Aircraft used for training

2.1.1 REV0 / TBD

Refer to the App XY «*List of aircraft used for training*»

## Aircraft handling

2.2 REV2 / TBD

Aircraft handling and operating procedures provide guidance to instructors and students to ensure safe, efficient, logical and predictable means of carrying out flight procedures and students’ practical training.

Aircraft type specific operating procedures, technical details and checklists of aircraft used for training can be found as follows:

|  |  |  |
| --- | --- | --- |
| Subject | Reference | |
| General information/descriptive notes | OM Chapter 2.1 «Aircraft Descriptive Notes» | For the applicable aircraft type specific documentation, refer to the «List of aircraft used for training» column «Operations Manual Part B Reference» of the concerned aircraft type |
| Normal checklist | OM Chapter 2.2 «Aircraft Handling» |
| Limitations |
| Normal procedures, including upset prevention techniques |
| Performance | OM Chapter 3.1 «Performance» |
| OM Chapter 3.2 «Flight Planning» |
| Mass and balance | OM Chapter 3.3 «Loading» |
| Loading |
| Minimum equipment for flight | OM Chapter 2.5 «Allowable Deficiencies» |
| Aircraft systems | Applicable aircraft type specific documentation and/or theoretical knowledge training documentation |
| … | … |

### Normal Checklist

2.2.1 REV0 / TBD

The correct completion of normal checklists is essential for safe operation during all phases of flight and an effective method for preventing omissions of actions or inappropriate actions.

Safety critical aspects of system and aircraft configuration settings should be cross-checked with normal checklists. Normal checklist actions are intended to check and verify actions that were accomplished from memory in accordance with the defined flow pattern.

Time and workload management are key factors in the initiation and effective conduct of normal checklists. Normal checklists should be accomplished in a timely manner during low workload periods within the concerned phase of flight to prevent any rush or interruption that could impact the safety purpose of the normal checklists.

Following an interruption of a checklist flow element, the pilot in command/student should restart the checklist element flow, as a measure to prevent any item from being omitted and to ensure that the actions already completed are re-verified.

* For the aircraft type specific normal checklist, refer to the «List of aircraft used for training» column «Operations Manual Part B Reference».
* For detailed instruction on how to use a normal checklist, refer to the introductory text of the aircraft type specific normal checklist and the explanatory text provided by the manufacturer.

### Limitations

2.2.2 REV0 / TBD

Aircraft are to be operated in compliance with the terms of its Certificate of Airworthiness (CoA), Scope of Utilisation and within the limitations contained in the Aircraft Flight Manual (AFM) and/or other manuals provided by the manufacturer, such as the Pilot’s Operating Handbook (POH).

* For the applicable aircraft type specific documentation, refer to the «List of aircraft used for training» column «Operations Manual Part B Reference» of the concerned aircraft type.

Should any limitation be exceeded, the fact is to be recorded in the technical log system (or equivalent) and reported without delay in accordance with OM Chapter 1.21 «Occurrence reporting».

If any structural or engine operating limitation is exceeded, the aircraft is to be landed as soon as practicable and/or not to be flown until maintenance check/action is carried out and the aircraft is released for service again.

### Preflight

2.2.3 REV0 / TBD

Refer to OM Chapter 1.19 «Flight Planning»

### Preflight Check

2.2.4 REV0 / TBD

The accomplishment of a safe flight begins with a careful preflight inspection. The preflight inspection determines that the aircraft is airworthy and that the aircraft is in a condition to perform a safe flight.

Each aircraft has a specific preflight procedure designed by the manufacturer.

* For the applicable aircraft type specific documentation, refer to «List of aircraft used for training» column «Operations Manual Part B Reference» of the concerned aircraft type.

### Flight profiles

2.2.5 REV0 / TBD

Insert aircraft type specific normal flight profiles or a comprehensive reference to the applicable flight profiles.

### Upset prevention techniques

2.2.6 REV2 / TBD

Insert aircraft type specific upset prevention techniques or a comprehensive reference to the applicable documentation, compliant and consistent with the aircraft flight manual or other manufacturer manual of the aircraft concerned.

## Emergency procedures

2.3 REV2 / TBD

Aircraft type specific abnormal and emergency procedures including checklists of aircraft used for training can be found as follows:

|  |  |  |
| --- | --- | --- |
| Subject | Reference | |
| Abnormal and/or emergency procedures, including upset recovery techniques | Applicable aircraft type specific abnormal and emergency procedures and checklists | For the applicable aircraft type specific documentation, refer to the «List of aircraft used for training» column «Operations Manual Part B Reference» of the concerned aircraft type |
| Abnormal and emergency checklist |
| Emergency equipment | OM Chapter 1.20 «Safety (general)» |
| Emergency evacuation procedure | Applicable aircraft type specific checklist |
| … | … |

### Definition of abnormal and emergency condition

2.3.1 REV0 / TBD

|  |  |
| --- | --- |
| Abnormal Procedure | Procedures that require actions to maintain safe flight, and prevent further incidents from occurring |
| Emergency Procedure | Procedures that require immediate action in relation to situations that threaten physical safety of people and/or damage to the aircraft. |

### Abnormal and emergency checklists

2.3.2 REV0 / TBD

For the aircraft type specific abnormal and emergency checklist, refer to the «List of aircraft used for training» column «Operations Manual Part B Reference».

It is both the instructors’ and/or students’ responsibility to ensure that the checklists are on board before each flight.

The emergency and abnormal checklist documents should be stowed in a readily accessible location in the cockpit. In addition, the checklists should be protected from possible damage or destruction and spillages in order to remain usable at all times.

Prior to moving any switch or configuration control that could adversely affect the flying qualities of the aircraft, disable/shut down/degrade all non-vital system:

* perform the checklist item step by step;
* be aware of the circumstance and the effect the action/measure will have;
* ensure that the correct control or switch is being selected;
* verify the action/measure taken and that the result is correct and as expected.

Following an interruption during a checklist element execution, it is strongly recommended that the actions already completed are re-verified.

### Abnormal and emergency flight profiles

2.3.3 REV0 / TBD

Insert aircraft type specific abnormal and emergency flight profiles or a reference to the applicable flight profiles in the same methodology as the description for normal flight profiles, compliant and consistent with the aircraft flight manual or other manufacturer manual of the aircraft concerned.

### Upset recovery techniques

2.3.4 REV2 / TBD

Insert aircraft type specific upset recovery techniques or a comprehensive reference to the applicable documentation, compliant and consistent with the aircraft flight manual or other manufacturer manual of the aircraft concerned.

### Decision-making and Emergency Management

2.3.5 REV3 / TBD

Emergency or abnormal situations are often very time critical and complex and cause high stress levels and workload.

An emergency situation is a situation in which the safety of the aircraft or of persons on board or on the ground is endangered.

An abnormal situation is one in which it is no longer possible to continue the flight using normal procedures but the safety of the aircraft or persons on board or on the ground are not in danger.

Emergency or abnormal situations may develop as a result of one or more factors within or outside an aircraft, for example:

* Fire on board the aircraft;
* Aircraft technical failure (e.g. engine failure, landing gear malfunction);
* Shortage of fuel / energy;
* Loss of situational awareness;
* Worsening weather;
* Aircraft damage (e.g. as a result of collision, bird strike or extreme weather);
* ...

An emergency or abnormal situation may result in a situation where it will be impossible to continue the flight as planned, resulting in one or more of the following outcomes:

* Loss of altitude;
* Diversion to a nearby aerodrome;
* Forced landing;
* ...

Whenever confronted with an emergency or abnormal situation, the highest priority lies in the control and successful flying and navigating of the aircraft. Therefore, it is vital that such situations are handled in a structured manner. A common methodology is used for:

Aeroplanes:

|  |  |  |
| --- | --- | --- |
|  | **P** – Power | Check or set power according to situation; |
| **P** – Performance | Check Configuration (propeller, gear and flaps) according to given situation. |

Helicopters:

|  |  |  |
| --- | --- | --- |
|  | **R** – Rotor RPM |  |
| **P** – Power | Check or set power according to situation; |
| **P** – Performance | Check Configuration (propeller, gear and flaps) according to given situation. |

As first step, the guideline PP resp. RPP shall ensure, that first measures are taken in regard to aircraft performance in order to clear obstacles and to stabilise the aircraft in regard to aircraft altitude, speed and track.

When the aircraft is stabilised and clear of all obstacles, the analysis and the decision-making process can be started using the well-known:

Analyse / Action:

|  |  |  |
| --- | --- | --- |
|  | **A** – Analyse | Check instruments and warnings, try to identify source of trouble; analyse different possible actions, decide; |
| **A** – Action | According AFM or safe best practice. |

or SPORDEC guideline:

|  |  |  |
| --- | --- | --- |
|  | **S** ituation catch | Situation shall be analysed, carefully, taking into account all available information; |
| **P** reliminary actions | Time critical actions shall be executed (e.g.: by heart items, inform ATC); |
| **O** ptions | Search for options (e.g.: landing, continue back to home base); |
| **R** ating | Evaluate options for risk and benefit; |
| **D** ecision | Decide which option to choose; |
| **E** xecution | Take the actions for the option chosen; |
| **C** ontrolling | Monitor the situation carefully. If the situation changes for any reason start again with the situation catch. |

## Radio and radio navigation aids

2.4 REV0 / TBD

The organisation only operates aircraft with the required radio and radio navigation equipment as required by the approved syllabi.

* For the aircraft type specific scope of utilisation, refer to the «List of aircraft used for training» column «Scope of utilisation».

The responsibility of the instructor/PIC is to ensure, that before departure navigational equipment is checked for serviceability as relevant to the intended flight session.

## Allowable deficiencies

2.5 REV0 / TBD / APP

A flight shall not be commenced when any of the aircraft instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless:

* the aircraft is operated with a minimum equipment list, if established; or;
* the aircraft is subject of a permit to fly issued by FOCA.

The instructor is not to accept an aircraft for a flight unless the concerned aircraft is fully airworthy and the equipment for the intended flight session is installed and serviceable.

### Minimum Equipment List

2.5.1 REV0 / TBD

Refer to the «List of aircraft used for training» column «Operations Manual Part B Reference» to identify aircraft for which a specific MEL is provided.

A Minimum Equipment List (MEL) provides guidance to the pilot in command/instructor when particular equipment is inoperative and enables the pilot in command/instructor to determine whether a flight session may be commenced or continued from any intermediate stop.

The MEL takes into consideration the aircraft specific equipment, configuration, scope of utilisation and conditions for the serviceability relevant to the scope of the training activity.

The provisions of the MEL are applicable until the aircraft first moves by its own power, after which, it is down to the pilot in command’s/instructor’s judgement whether a flight session should continue if the failure of an unserviceable item becomes apparent after a flight has commenced.

Generally, the MEL is based on a Master Minimum Equipment List (MMEL), developed by the Type Certificate Holder and approved by the Certification Authority. The following conditions apply:

* The MEL and any amendment thereto shall be notified to the Federal Office of Civil Aviation (FOCA) prior to use and will not deviate from the Aircraft Flight Manual (AFM) limitations or emergency procedures or from any applicable airworthiness directives and will not be less restrictive than the MMEL, if applicable.
* All items, related to the airworthiness of the aircraft, but not listed on the MEL, are automatically required to be complete and in absolute operational condition.
* For detailed instruction on how to use a Minimum Equipment List, refer to the preamble and the subchapters of the MEL concerned.

# Operations Manual C (OM Part C)

Part C REV0 / TBD

## Performance (legislation, take-off, route, landing etc.)

3.1 REV0 / TBD

No aircraft shall be operated unless prior to each flight, the performance of the aircraft for the conditions to be expected for the intended flight, at the place of departure, the intended destination and the intended route, are in compliance with the aircraft flight manual (AFM).

Both, the instructor/examiner and the student/applicant are familiar with the performance calculation and the actual data of the aircraft used.

As part of the briefing, the instructor shall evaluate the student’s performance calculation prior to commencing the flight.

The following data has to be available when calculating the performance of the aircraft:

General meteorological conditions, in particular special weather phenomena, wind and temperature, for the time between the estimated time of departure and the estimated time of arrival, actual take-off mass, airport elevation, runway length, runway characteristics, runway condition and actual landing mass.

For airport elevation, runway length and runway characteristics, refer to VFR Manual Switzerland, «Aerodromes».

To facilitate some calculation, rule of thumb may be applied, but it may not replace any calculation supplied in any of the documentation provided by the manufacturer.

At least the following performance data has to be calculated before each flight:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Aeroplanes | | **VFR** | | **IFR** | |
| **Phases of flight** | **Required calculations** | **Single engine** | **Multi engine** | **Single engine** | **Multi engine** |
| **Take-off** | Take-off run (TOR) | X | X | X | X |
| Accelerate stop distance (ASD) (where available) | (X) | (X) | (X) | (X) |
| Take-off distance/performance (50 ft OBST) | X | X | X | X |
| Climb performance/rate of climb (ROC) | X | X | X | X |
| Climb performance/rate of climb (ROC) one engine inoperative (OEI) |  | X |  | X |
| Minimum climb gradient in %. |  |  | X | X |
| **En-route** | True air speed (TAS) | X | X | X | X |
| Service ceiling one engine inoperative (OEI) |  | X |  | X |
| **Landing** | Landing distance/performance (50 ft OBST) flaps normal operation | X | X | X | X |
| Landing distance/performance (50 ft OBST) flaps malfunction (where available) | (X) | (X) | (X) | (X) |
| Landing distance (LD) and landing ground roll | X | X | X | X |
| Climb performance/rate of climb (ROC) during missed approach |  |  | X | X |
| Climb performance/rate of climb (ROC) one engine in-operative (OEI) missed approach |  |  |  | X |
| Minimum climb gradient in % |  |  | X | X |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Helicopters | | **VFR** | | **IFR** | |
| **Phases of flight** | **Required calculations** | **Single engine** | **Multi engine** | **Single engine** | **Multi engine** |
| **Take off** | Climb performance/rate of climb (ROC) | X | X | X | X |
| Climb performance/rate of climb (ROC) one engine inoperative (OEI) |  | X |  | X |
| Take off decision point (TDP) |  | X |  | X |
| Minimum climb gradient in % |  |  | X | X |
| **En route** | VNE at current temperature at planned altitude | X | X | X | X |
| Service ceiling one engine inoperative (OEI) |  | X |  | X |
| True air speed (TAS) | X | X | X | X |
| **Landing** | Hovering in ground effect (HIGE) | X | X | X | X |
| Hovering out of ground effect (HOGE) | (X) | (X) | (X) | (X) |
| Landing decision point (LDP) |  | X |  | X |
| Climb performance/rate of climb (ROC) during missed approach / Go Around | X | X | X | X |
| Climb performance/rate of climb (ROC) one engine in-operative (OEI) missed approach / Go Around |  | X |  | X |
| Minimum climb gradient in % |  |  | X | X |

## Flight planning (fuel / energy, oil, minimum safe altitude, navigation)

3.2 REV3 / TBD

For provisions related to flight planning in general:

* Refer to OM Chapter 1.19 «Flight planning (general)»

### Completion of a navigation flight plan

3.2.1 REV3 / TBD

The basic principles of air navigation includes the process of planning, recording and controlling the movement of aircraft from one place to another

A navigation flight plan should be compiled and used for VFR en-route and for all IFR flights. During flight, all navigation data are to be utilised and the associated entries in the navigation flight plan form are to be made concurrent with the progress of the flight.

For the applicable flight plan form, refer to *AppXY* «*Navigation flight plan VFR*» *and/or AppXY* «*Navigation flight plan IFR*».

The compiling of navigation data and the associated completion of a navigation flight plan is a major part of the flight-planning phase. The completion of a navigation flight plan includes the following main steps:

* Selection of aerodromes / operating sites and planning of the route and compiling the navigation data;
* Calculation of the amount of fuel / energy required;
* Calculation of mass and balance;
* Calculation of performance data;
* Preparation of an ATC flight plan if required.

### Submission of an Air Traffic Services (ATS) flight plan

3.2.2 REV0 / TBD

For procedures related to the submission of an ATS flight plan, refer to:

* AIP Switzerland, ENR 1.10 «Flight Planning»;
* AIP Switzerland, VFR Manual, VFR RAC 1; or
* other commercially produced Route and Aerodrome Information and Documentation.

### Selection and use of aerodromes

3.2.3 REV3 / TBD

As a requisite for the intended flight, the planning includes the selection of adequate destination and, if required, alternate aerodromes.

Before commencing a flight, the instructor and student/pilot in command shall ascertain by every reasonable means available that the space based and ground facilities, including communication facilities and navigation aids available and directly required on such a flight, are suitable and available for the intended flight and the safe operation of the aircraft. Associated with meteorological condition and determination of minimum fuel / energy quantity required, the selection of aerodromes should take into account the following definitions and provisions:

|  |  |  |
| --- | --- | --- |
| 1 | General Policy | The organisation uses only aerodromes that are adequate for the type of aircraft used and course of training provided |
| 2 | Adequate aerodrome | Means an aerodrome on which the aircraft can be operated, taking into account the applicable performance requirements, runway characteristics and course of training provided |
| 3 | Weather-permissible aerodrome | Means an adequate aerodrome where, for the anticipated time of use, meteorological reports or forecasts, or any combination thereof, indicate that the meteorological conditions will be at or above the required aerodrome operating minima, and the runway surface condition reports indicate that a safe landing will be possible; |

|  |  |  |
| --- | --- | --- |
| Alternate aerodrome definitions | | |
| An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or to land at the aerodrome of intended landing where the necessary services and facilities are available and where aircraft performance requirements can be met and which is operational at the expected time of use. Alternate aerodromes include the following: | | |
| Take-off alternate | En Route Alternate (ERA) | Destination alternate |
| An alternate aerodrome at which an aircraft would be able to land if it becomes necessary shortly after take-off and it is not possible to use the aerodrome of departure. | An alternate aerodrome at which an aircraft would be able to land in the event that a diversion becomes necessary while en route.  **Fuel/energy ERA**  Means an ERA aerodrome that is required at the planning stage for use in the calculation of fuel/energy. | An alternate aerodrome at which an aircraft would be able to land should it become either impossible or inadvisable to land at the aerodrome of intended landing. |
| Note: The aerodrome from which a flight departs may also be an en route or a destination alternate aerodrome for that flight. | | |

|  |  |  |
| --- | --- | --- |
| Selection and planning minima of aerodrome (A/H) | | |
| VFR Day and night | | Planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned. |
| IFR Destination alternate | Instrument approach operations | The pilot-in-command shall only select an aerodrome as a destination alternate aerodrome if either:   * an IAP that does not rely on GNSS is available either at the destination aerodrome or at a destination alternate aerodrome, or * all of the following conditions are met:   the onboard GNSS equipment is SBAS-capable;  the destination aerodrome, any destination alternate aerodrome, and the route between them are within SBAS service area;  ABAS is predicted to be available in the event of the unexpected unavailability of SBAS;  an IAP is selected (either at destination or destination alternate aerodrome) that does not rely on the availability of SBAS;  an appropriate contingency action allows the flight to be completed safely in the event of unavailability of GNSS. |
| Aeroplane (A) | |
| Selection | The pilot-in-command shall specify at least one destination alternate aerodrome in the flight plan, unless the available current meteorological information for the destination indicates:   * for the period from 1 hour before until 1 hour after the estimated time of arrival; **or** * from the actual time of departure to 1 hour after the estimated time of arrival;   whichever is the shorter period:   * a ceiling of at least 1 000 ft above the DH/MDH for an available instrument approach procedure (IAP); and * a visibility of at least 5 000 m. |
| Planning minima | An aerodrome shall not be specified as a destination alternate aerodrome unless the available current meteorological information indicates:   * for the period from 1 hour before until 1 hour after the estimated time of arrival; **or** * from the actual time of departure to 1 hour after the estimated time of arrival;   whichever is the shorter period:   * for an alternate aerodrome with an available instrument approach operation with DH **less than 250 ft:**   a ceiling of at least 200 ft above the decision height (DH) or minimum descent height (MDH) associated with the instrument approach operation; and  a visibility of at least 1 500 m; or   * for an alternate aerodrome with an instrument approach operation with DH or MDH **250 ft or more**:   a ceiling of at least 400 ft above the DH or MDH associated with the instrument approach operation; and  a visibility of at least 3 000 m; or   * for an alternate aerodrome **without an IAP**,   a ceiling of at least the higher of 2 000 ft and the minimum safe IFR height; and  a visibility of at least 5 000 m. |

|  |  |  |
| --- | --- | --- |
| Selection and planning minima of aerodrome | | |
| IFR Destination alternate | Helicopter (H) | |
| Selection | The pilot-in-command shall specify at least one destination alternate aerodrome in the flight plan, unless the available current meteorological information for the destination indicates:   * for the period from 1 hour before until 1 hour after the estimated time of arrival; **or** * from the actual time of departure to 1 hour after the estimated time of arrival;   whichever is the shorter period:   * a ceiling of at least 1 000 ft above the DH/MDH for an available IAP; and * a visibility of at least 3 000 m. |
| Planning minima | An aerodrome shall not be specified as a destination alternate aerodrome unless the available current meteorological information indicates:   * for the period from 1 hour before until 1 hour after the estimated time of arrival; **or** * from the actual time of departure to 1 hour after the estimated time of arrival;   whichever is the shorter period:   * for an alternate aerodrome **with an IAP**:   a ceiling of at least 200 ft above the DH or MDH associated with the IAP; and  a visibility of at least 1 500 m by day or 3 000 m by night; or   * for an alternate aerodrome **without an IAP**:   a ceiling of at least the higher of 2 000 ft and the minimum safe IFR height; and  a visibility of at least 1 500 m by day or 3 000 m by night. |

### Determination of fuel / energy and oil quantities

3.2.4 REV3 / TBD

The pilot-in-command shall ensure that the quantity of fuel / energy and oil that is carried on board is sufficient, taking into account:

* the meteorological conditions;
* elements affecting the performance of the aircraft;
* delays that are expected in flight; and,
* contingencies that may reasonably be expected to affect the flight.

The pilot-in-command shall plan a quantity of fuel / energy to be protected as Final Reserve Fuel (FRF) / energy to ensure a safe landing.

The planned FRF / energy should be protected as a reserve in normal operations. If the fuel / energy on board falls below the FRF / energy, the pilot-in-command should consider this to be an emergency. The FRF / energy should not be used as contingency fuel in normal operations.

The pilot-in-command shall take into account all of the following, and in the following order of priority, to determine the quantity of the final reserve fuel/energy:

* the severity of the hazard to persons or property that may result from an emergency landing after fuel/energy starvation; and
* the likelihood of unexpected circumstances that the final reserve fuel/energy may no longer be protected.

The quantity of the FRF / energy should be planned before flight and be an easily recalled figure against which the pilot-in-command can assess the current fuel/energy state of the aircraft.

When planning the fuel / energy quantity, in case of holding, and if the aircraft documentation does not provide approved data for the holding regime, the pilot should derive the fuel / energy flow data from the long-range / best-range cruise data or, if this is not provided, from the lowest available cruise data in power setting tables.

A flight shall only be commenced, if the aircraft carries sufficient fuel / energy and oil for the following:

| Aeroplanes | | | |
| --- | --- | --- | --- |
| Type of flight | | Minimum amount of fuel | |
| Condition | Final Reserve Fuel / energy |
| VFR day | Visual circuits | * taking-off and landing at the same aerodrome and always remaining in sight of that aerodrome * time to fly the number of visual circuits | * thereafter to fly for at least **10** minutes at maximum continuous cruise power at 1500 ft (450m) above the aerodrome |
| En route flight and air exercise | * to fly to the aerodrome of intended landing; and/or * the time to complete the air exercise(s) | * thereafter to fly for at least **30** minutes at holding speed at 1500 ft (450m) above the destination |
| VFR night | Visual circuits | * taking-off and landing at the same aerodrome | * time to fly the number of visual circuits; and * thereafter to fly for at least **45** minutes at holding speed at 1500 ft (450m) above the destination or destination alternate |
| En route flight | * to fly to the aerodrome of intended landing | * thereafter to fly for at least **45** minutes at holding speed at 1500 ft (450m) above the destination or destination alternate |
| IFR | Destination alternate required | * to fly to the aerodrome of intended landing and to an alternate aerodrome | * thereafter to fly for at least **45** minutes at holding speed at 1500 ft (450m) above the destination or destination alternate |
| No destination alternate required | * to fly to the aerodrome of intended landing |

| Helicopters | | | |
| --- | --- | --- | --- |
| Type of flight | | Minimum amount of fuel | |
| Condition | Final Reserve Fuel / energy |
| VFR | Visual circuits day | * taking-off and landing at the same aerodrome / landing site * time to fly the number of visual circuits | * thereafter to fly for at least **10** minutes at best range speed |
| All other VFR flights, including night | * to fly to the aerodrome/operating site of intended landing | * thereafter to fly for at least **20** minutes at best range speed |
| IFR | Destination alternate required | * to fly to the aerodrome of intended landing and to an alternate aerodrome | * thereafter fly for **30** minutes at holding speed at 450m (1500ft) above the destination or destination alternate aerodrome / operating site |
| No destination alternate required | * to fly to the aerodrome of intended landing |

Aircraft type specific,

* information and data for fuel consumption;
* detailed instruction on how to use the provided data;
* unit of fuel measurement; and
* fuel icing protection requirements

are to be found in the manual provided by the manufacturer. Refer to the «List of aircraft used for training» column «Operations Manual Part B Reference».

For the applicable fuel calculation form, refer to *AppXY «Fuel calculation form».*

Both the instructor/examiner and the student/applicant are familiar with the fuel / energy calculation and the actual fuel / energy data of the aircraft used.

As a part of the pre-flight planning, the pilot in command/student shall make a careful calculation of the required amount of fuel / energy specific to the intended flight session. In addition, the following shall be taken into consideration:

* the correct and consistent application of the fuel / energy consumption data including associated unit of measurement as applicable for the concerned aircraft;
* the actual and forecast meteorological conditions;
* the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned;
* possible traffic delays for the anticipated ATC routings and aerodromes;
* any other condition that may delay the landing of the aircraft (e.g. temporary operating restriction or closing of a runway, FATO and/or aerodrome, required re-routing);
* procedures specific to the type of aircraft, such as failure of one engine while en route, loss of pressurisation or any other condition that may increase the fuel / energy and oil consumption.

As part of the briefing, the instructor shall evaluate the student’s fuel / energy calculation prior to commencing the flight.

### Oil quantity

3.2.5 REV0 / TBD

As part of the pre-flight inspection and always prior to starting an engine, the pilot in command/student is to ensure that the engine oil quantity and level is in compliance with the limitations stated in the aircraft flight manual or equivalent manual provided by the manufacturer.

### Minimum Safe Altitude

3.2.6 REV0 / TBD

* For VFR, refer to the AIP Switzerland, VFR Guide;
* For IFR, refer to the AIP Switzerland, ENR 1; or
* Refer to commercially produced Route and Aerodrome Information and Documentation.

## Loading (load sheets, mass, balance and limitations)

3.3 REV0 / TBD

No aircraft shall be operated with a mass greater than the maximum mass indicated and a centre of gravity different from the limitation detailed in the respective aircraft flight manual (AFM) or equivalent.

Both, the instructor/examiner and the student/applicant are familiar with the mass and balance calculation and the actual data of the aircraft used.

Before each flight, a mass and balance calculation shall be compiled in the calculation form provided and carried on board. For the mass and balance calculation form, refer to *AppYX «Mass and balance calculation form».*

As part of the briefing, the instructor shall evaluate the student’s mass and balance calculation prior to commencing the flight.

The following points shall be adhered to:

* only actual mass for crew (instructor/student/pilot in command), passengers and baggage shall be used;
* only mass limitations specified in the aircraft flight manual (AFM) or equivalent shall be used;
* the calculation of the position of the centre of gravity (CG) for:
* zero fuel mass (ZFM);
* take-off mass (TOM);
* landing mass (LM);
* the mass of fuel shall be calculated with following standard density values:

|  |  |
| --- | --- |
| Type of fuel | Standard density values |
| JET A1 | 0.8 kg/litre |
| AVGAS 100LL | 0.72 kg/litre |
| … | … |

This provides monitoring of the movement of the centre of gravity during flight and assures being within the envelope for both, take-off and landing.

The pilot is responsible that all the mass and balance limitations contained in the AFM or POH are respected during the entire flight.

## Weather minima (flying instructors)

3.4 REV3 / TBD

General provisions for weather requirements and minima can be found in the AIP and associated charts/maps or commercially produced route and aerodrome documentation - insert product name of the accepted documentation of the organisation.

Minimum weather requirements and the actual meteorological conditions are standard elements of the briefing and have to be constantly considered during flight.

A flight session shall only commence or continue if the latest available meteorological information indicates, that the meteorological conditions along the route and at the intended destination and, if applicable, destination alternate aerodrome, at the estimated time of use, will be at or above the applicable operating minimum.

Both, the instructor/examiner and the student/applicant, are to be familiar with the minimum weather requirements and the actual meteorological conditions at the time of use.

### VFR Flights

3.4.1 REV3 / TBD

* For the minimum values to conduct VFR flights, refer to:
* VFR Manual, VFR RAC 4; and
* VFR Guide RAC 1-1.
* When determining the minimum weather required for the intended flight session, the following shall be at least considered:
* A VFR flight shall only be commenced or continued if the latest available meteorological information indicates that the meteorological conditions along the route and at the intended destination at the estimated time of use will be at or above the applicable VFR operating minimum.
* the dimensions and characteristics of the instruction;
* traffic pattern (circuits);
* air exercise and en-route;
* pilot’s competence and experience;
* the equipment available on the aircraft for the purpose of navigation;
* the aircraft performance;
* level of progress of the student pilot (refer also to weather minima for students);
* ... .

### IFR Flights

3.4.2 REV2 / TBD

For flights under instrument flight rules (IFR), aerodrome operating minima and procedures for each take-off, departure, destination and alternate aerodrome, if applicable, shall be selected and used as published in the AIP of the respective State or commercially produced route and aerodrome documentation - insert product name of the accepted documentation of the organisation.

When selecting the aerodrome operating minima, the following shall be taken into account:

* type, performance and handling characteristics of the aircraft;
* student competence and experience;
* dimensions and characteristics of the runways / FATO and final approach;
* adequacy and performance of the available visual and non-visual ground aids;
* available equipment on the aircraft for the purpose of navigation and/or control of the flight path, during take-off, approach, flare, landing, rollout and missed approach;
* obstacles at take-off, departure, approach, missed approach and climb-out areas necessary for the execution of contingency procedures;
* obstacle clearance altitude/height for the instrument approach procedures;
* means to determine and report meteorological conditions; and
* flight technique to be used during final approach.
* The minima for a specific type of approach and landing procedure shall be used if:
* the ground equipment required for the intended procedure is operative;
* the aircraft systems required for the type of approach are operative;
* the required aircraft performance criteria are met.

Before commencing an approach to land, the following shall not prevent a safe approach, landing or missed approach:

* the weather at the aerodrome or operating site; and
* the condition of the final approach and take-off area (FATO).

## Weather minima (students – at various stages of training)

3.5 REV3 / TBD

In general, the published minimum weather requirements apply. Depending on the type of training the following provisions for students are applicable:

|  |  |  |
| --- | --- | --- |
| General | | |
| * Depending on the level of performance and the fitness of the student, weather requirements may be modified by the instructor. * Weather requirements must never be lower than the applicable minimum weather requirements. * Aircraft are to be operated within the limitations contained in the aircraft flight manual (AFM).Special consideration should be given to: * Maximum demonstrated cross wind; * Temperature; * Icing conditions; * Density altitude * Volcanic ash cloud, haze or odour; * ... | | |
| Type of training | | Requirements |
| Introductory flights – trial lesson | | * Applicable VFR minimum weather requirements, no gusts and turbulences * Density altitude: maximum xxxx ft * ... |
| Dual instruction | Circuit | * Applicable VFR minimum weather requirements |
| Air exercise |
| Cross-country |
| IFR | * Applicable IFR minimum weather requirements |
| Solo flight | Circuit | * Ceiling: minimum xxxx ft * Visibility: minimum x km * Wind: maximum xx kt * … |
| Cross-country | * Ceiling: minimum xxxx ft * Visibility: minimum x km * Wind: maximum xx kt * … |

## Training routes or areas

3.6 REV0 / TBD

For instructions and information related to aerodromes/airfields, charts and navigation aids including routes and communication, refer to:

* AIP Switzerland and/or VFR Manual; or
* insert product name of the accepted documentation of the organisation Route and Aerodrome Information and Documentation.

For restricted and danger areas as well as temporary reserved areas, refer to the Daily Airspace Bulletin Switzerland (DABS) issued by Skyguide.

### Training areas and aerodromes used for training

3.6.1 REV3 / TBD

In conformity with the training specification detailed in the syllabi and adequate for the type of aircraft used for training, the organisation uses the following aerodromes / operating sites:

|  |  |  |  |
| --- | --- | --- | --- |
| IFR | | | |
| VFR Night | | | * … |
| VFR | | * … |
| VFR Air Exercise | * LSxx sample name |
| Training area:   * … |

* For provisions related to the selection and use of the aerodromes / operating sites during the flight-planning phase, refer to OM Chapter 3.2 «Flight planning (fuel / energy, oil, minimum safe altitude, navigation)».
* For selection and reconnaissance of operating sites, the well-known «WAHIBELU» may be used:
* **W**ind
* **A**nflugachse
* **Hi**ndernisse
* **Bel**euchtung
* **U**mgebung

In addition, nature protection areas (quiet nature, peaceful nature and quiet deer zones) should be avoided and noise emissions in the same area should be limited.

### Training area

3.6.2 REV0 / TBD

The following training areas are defined and may be selected specific to the intended flight session:

|  |  |  |
| --- | --- | --- |
| Area | Range | Altitude Restrictions |
| … | … | … |
| … | … | … |
| … | … | … |
| … | … | … |

* For training area restrictions concerning the planning of the daily training programme, refer to OM Chapter 1.6 «Preparation of flying programme».

### Standard navigation/cross-country flights

3.6.3 REV0 / TBD

Experience requirements include cross-country flights. Cross-country, means a flight between a point of departure and a point of arrival following a pre-planned route using standard navigation procedures. The course of training for the concerned type of licence requires the minimum range, duration, and number of landings. The following standard routes apply:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Licence | Minimum  Range | Number of Landings | Route | Minimum Duration |
| LAPL | 80 NM | 1 |  | x hours |
| PPL | 150 NM | 2 |  | x hours |
| … | … |  | … | … |

# Operations Manual D (OM Part D)

Part D REV0 / TBD

## Appointment of persons responsible for standards/competence of flight personnel

4.1 REV0 / TBD

Each management function is responsible for supporting, evaluating and improving the competence of their subordinates/direct reports and has the obligation to actively standardise the activity within their area of accountability.

* Refer to OM Chapter 4.7 «ATO personnel standards evaluation».

For flight instructors of all categories, the Head of Training/Chief flight instructor is the appointed person responsible for the standardisation of all flight instructions and the evaluation of the instructor’s individual performance. This, to ensure that all instructors remain qualified and competent to conduct their duties.

* For the nominated person *«Head of training»/«Chief Flight Instructor»,* refer to OMM, Chapter 3.2 «Management Personnel – Name and contacts».

## Initial training

4.2 REV0 / TBD / APP

An initial training programme is specified for:

* *Qualified instructors joining the organisation;*
* *Instructor candidate gaining an initial instructor certificate;*
* *Theoretical knowledge instructor gaining the initial qualification or joining the organisation.*

Requirements, prerequisites and details of an instructor training course is specified in the respective syllabus of the concerned instructor category.

### Flight instructor organisation conversion

4.2.1 REV0 / TBD

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Step | Subject | Reference | Record |
| 1 | Evaluation of an instructor | * Evaluation | * Application documents and CV assessment and interview | * Organisation conversion record form |
| * Practical and theoretical instructor competence test | * Theoretical knowledge oral examination and practical flight test |
| 2 | Organisation conversion | * Management system basic training | * OMM Chapter 8.1 «Management system basic training» |
| 3 | Practical introduction | * Practical introduction and standardisation | * OM Chapter 4.4 «Standardisation training»; * Experience record of the concerned instructor category. |

### Flight instructor initial evaluation and training

4.2.2 REV2 / TBD / APP

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Step | Subject | | Reference | Record |
| 1 | Evaluation of an instructor | * Evaluation | | * Application documents, CV evaluation and interview | * Organisation conversion record form * Qualifications-rapport FI-Trainee |
| 2 | Organisation conversion | * Management system basic training | | * OMM Chapter 9.x «Management system basic training» |
| 3 | Instructor training course | FI | * Part 1 «Theoretical knowledge, including the teaching and learning instruction» * Part 2 «Flight instruction» | * Syllabus «Teaching and learning»; or * Contracted – refer to the list of contractors and sub-contractors, OMM, Chapter 11.x «Contracting and monitoring of contractors»; * Syllabus of the concerned instructor category; * For FI, IRI and CRI – refer to SR 748.03 «Verordnung über die Finanzhilfen für Ausbildungen im Bereich der Luftfahrt (VFAL)» |
| IRI, CRI,TRI SFI, MCCI, FTI | * Part 1 «Theoretical knowledge, including the teaching and learning instruction» * Part 2 Technical theoretical knowledge instruction (technical training) * Part 3 «Flight instruction» |
| STI | * «Flight instruction» |
| 4 | Assessment of competence | * Assessment of the instructor against performance standards | | * FOCA Examiner Guide EASA Part FCL * Assessment of competence form |
| 5 | Supervision and completion | * Instruction under supervision as applicable to the category of instructor * Practical introduction and standardisation | | * Experience record of the concerned instructor category |

### Theoretical knowledge instructor organisation conversion

4.2.3 REV2 / TBD

| # | Step | Subject | Reference | Record |
| --- | --- | --- | --- | --- |
| 1 | Evaluation of an instructor | * Evaluation | * Application documents, CV evaluation and interview | * Organisation conversion record form |
| * Teaching skills/capabilities and knowledge transfer * Use of teaching material and means of demonstration | * Test lecture in the subject on which they will provide theoretical knowledge instruction |
| 2 | Organisation conversion | * Management system basic training | * OMM Chapter 9.x «Management system basic training» |
| 3 | Practical introduction | * Practical introduction and standardisation in teaching and knowledge transfer; and * Syllabi and associated lesson plans | * OM-D, Chapter 4.4 «Standardisation training» * Experience record of the concerned instructor category |
| Specific TKI requirements, as applicable | Insert specific training, as applicable, such as:  Distance learning concept, Area100 KSA instruction and assessment course etc.  … | * TM , Chapter 4.1.1 «Distance learning» * Area 100 KSA instructors initial training xy * OM-D,Chapter 4.4 «Standardisationtraining» * … |

## Refresher/ recurrent training

4.3 REV2 / TBD

The refresher training is to refresh and expand knowledge as well as to maintain the abilities in order to remain qualified and competent to execute the duties of an instructor.

The refresher training is a major element of the revalidation and renewal requirements for instructor certificates or qualifications. Additionally, the refresher training may also be a corrective measure of an individual instructor standard evaluation.

### Determination of required refresher training

4.3.1 REV4 / TBD

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Subject | Reference | Responsibility |
| Monitor | Instructor certificate validity | OM Chapter 1.12 «Flight crew qualification records» | Head of Training |
| Individual instructor standards evaluation | OM Chapter 4.7 «ATO standards evaluation» |
| Define | Refresher seminar | OM Chapter 4.3.2 «Refresher seminar» |
| Individual refresher training programme | OM-D, Chapter 4.3.3 «Individual refresher training programme» |
| Insert specific training, as applicable, such as:  Recurrenttraining and standardisationfor instructors involvedin Area 100 KSA instruction | OM-D, Chapter 4.3.x «Recurrent training and standardisation for instructors involvedin Area 100 KSA instruction» | Chief Theoretical Knowledge Instructor / Head of Training |

### Refresher seminar

4.3.2 REV4 / TBD

Refresher seminars should be provided to the following instructor certificates:

|  |  |  |
| --- | --- | --- |
| Instructor Category | Seminar provisions for the individual instructor category revalidation/renewal requirement | |
| Revalidation | Renewal (see Note) |
| FI | X | X |
| IRI | X | X |
| CRI | -- | -- |
| SFI | X | -- |
| FTI | -- | -- |
| TRI | X | -- |
| STI | -- | -- |
| MCCI | -- | -- |
| MI | The MI certificate is based on FI, TRI, CRI | |
| Note: as required by the individual refresher training program based on the result of the canditate’s assessment | | |

| Development and organisation of refresher seminars | | | | |
| --- | --- | --- | --- | --- |
| ***#*** | ***Step*** | ***Task*** | ***Reference*** | ***Responsibility*** |
| 1 | Evaluation of the  content | * Review innovation and changes; * Include topic selected by FOCA if available; * Review previous seminar content and ensure sequential and logical arrangements of the subjects; * Consider feed-backs of the previous seminar; * Define break-out groups and work- shops; * ... | * Aviation publications; * Legislation publications; * Refresher seminar detailed programme; * Speaker presentations; * Hand-outs; * Feedback forms; * ... | Head of Training |
| 2 | Evaluation and  selection of speakers | * Identify and select the speakers by subject, qualification and experience; * Arrange and coordinate; * ... | * List of instructors; * List of examiners; * ... | Head of Training |
| 3 | Development of the  programme | * Establish agenda, programme and course administration; * ... | * Standard IT-applications * Refresher seminar detailed programme template; * I://TNG/Seminar/... * ... | Head of Training |
| * Prepare presentations; * Break-out groups and workshops; * Develop hand-outs; * ... | Speaker |
| 4 | Organise the course | * Booking of infrastructure/facilities; * Prepare teaching, demonstration and hand-out material; * ... | * Seminar Organisation Planning Excel-File * I://Org/Seminar/... * ... | Administration |
| 5 | Notification FOCA | * Submit to assigned FOCA inspector: * the seminar agenda; * the programme; * details of the content. | * Written form:   Federal Office of Civil Aviation (FOCA)  SBFL  CH-3003 Bern  or   * E-Mail:   [sbfl@bazl.admin.ch](mailto:sbfl@bazl.admin.ch) | Head of Training |
| 6 | Information | * External announcement; * Administrate invitation and registration; * ... | * Internet; * Web-page; * Invitation and registration form; * ... | Administration |
| 7 | Conduct the seminar | * Lead through the seminar. | * Seminar agenda and programme | Moderator |
| 8 | Administration  (subject to prior approval) | * Issue «Attendance Form» to participants only who attended the whole seminar; | * Certificate template; * I://Org/Certificate/... | Administration |
| * Sign the attendance form/seminar completion certificate. |  | Head of Training |
| * Collect feedback forms. |  | Moderator |
| * Complete file management; * ... |  | Head of Training |

#### Refresher seminar overview

Insert seminar overview for all instructor categories, as applicable:

Instructor Category FI/IRI

|  |  |  |  |
| --- | --- | --- | --- |
| # | Training subject | Conditions and methods | Tools and media |
| 1 | Rules and regulations (EU and national, as applicable), emphasis on Part-FCL and operational requirements | * At least 2 days; * 6 hours per day excluding brakes; * In general 45 minutes session; * With 15 minutes for questions; * Break-out groups and workshops; * Topics shall focus on innovations and changes; * Presentations, visual aids, interactive videos and other teaching aids; * ... | * Refresher seminar detailed programme template; * (I://TNG/Seminar/...); * PPT * ... |
| 2 | Teaching, learning and instructional techniques including instrument flying |
| 3 | Role of the instructor |
| 4 | Human factors |
| 5 | Flight safety, incident and accident prevention |
| 6 | Airmanship |
| 7 | Legal aspects and enforcement procedures |
| 8 | Navigational skills including new or current radio navigation aids |
| 9 | Weather related topics including methods of distribution |
| 10 | Any additional topic selected by FOCA |

Instructor Category TRI/SFI

…

Instructor Category FI(S)/(B)

…

### Individual refresher training

4.3.3 REV4 / TBD

For the fulfilment of the candidate’s instructor category revalidation and/or renewal requirements, an individual refresher training programme may be required. The training programme shall be developed on a case by case basis based on the candidate’s assessment as specified below:

|  |  |  |
| --- | --- | --- |
| Instructor Category | Individual refresher training provisions for the revalidation/renewal requirement | |
| Revalidation and renewal | Renewal |
| FI | -- | X |
| IRI | -- | X |
| CRI | X | X |
| SFI | -- | X |
| FTI | X | X |
| TRI | -- | X |
| STI | X | X |
| MCCI | X | X |
| MI | The MI certificate is based on FI, TRI, CRI | |

| # | Step | Task | Reference | Responsibility |
| --- | --- | --- | --- | --- |
| 1 | Assessment of candidate | * Consider to perform a simulated training session; * Verify and determine the individual deficiencies:   Theoretical knowledge;  Teaching and learning capabilities;  Flight instruction and associated skills. | * OM, Chapter 4.7 «ATO Personnel standard evaluation»; * Training course syllabus of the respective instructor category. | Head of Training |
| 2 | Determine training programme | Define the needs, content and amount of training considering:   * The experience; * Previous performance; * Whether the training is for revalidation or renewal; * In the case of renewal the amount of training needed should be increased with the time lapsed; * ... | * OM, Chapter 4.7 «ATO Personnel standard evaluation»; * Content of the refresher seminar; * Licence; * Competence and skill records and forms; * Pilots log book; * Part FCL Subpart J, content of the training course of the relevant instructor category; * .... | Head of Training |
| 3 | Select instructor | * Verify entitled instructor category; * Assign instructor; * Verify qualification and validity; | * Table instructor selection; * List of instructors; * Instructor file and licence; | Head of Training |
| 4 | Develop training programme | * Establish individual training programme according to needs and prepare record form; * ... | * Refresher training template (I://TNG/Instructor/...); * Training course syllabus of the respective instructor category; * ... | Assigned Instructor |
| 5 | Information to FOCA | * Inform assigned inspector. | * Any practical communication means. | Head of Training |
| 6 | Organise and conduct the training | * Perform the training according to the defined training programme; * Fill in refresher training record and sign off log book of the instructor, as required by the training provided. | * Refresher training record; * Pilot’s log book. | Assigned Instructor |
| 7 | Record keeping and information | * Complete refresher training record; * Issue «Training completion certificate» which specifies/lists the content of the refresher training; * Provide instructor trainee with the original form; * Submit a copy to the Head of Training for file management; | * OM, Chapter 1.12 «Flight crew qualification records»; * ... | Assigned Instructor |
| * Sign log book of the instructor, as required by the training provided. | * Pilot’s log book | Head of Training |
| 8 | Verify effectiveness | Verify the achievement of the standards in:   * Theoretical knowledge; * Teaching and learning capabilities; * Flight instruction and associated skills. | * Assessment of competence; * Proficiency checks; * OM, Chapter 4.7 «ATO Personnel standard evaluation»; * ... | Head of Training |

### Instructor Selection

4.3.4 REV0 / TBD

The instructor providing flight instruction for a refresher training shall hold the valid privileges for the issuance, revalidation or renewal of the respective instructor category certificate:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Instructor category providing training for | | |
| Instructor trainee | FI | TRI | FTI |
| FI | X |  |  |
| IRI | X |  |  |
| CRI | X |  |  |
| STI | X |  |  |
| TRI |  | X |  |
| SFI |  | X |  |
| FTI |  |  | X |

## Standardisation Training

4.4 REV0 / TBD

The purpose of having standardisation training is so that safety and organisation goals can be achieved in a directed and effective manner. Competence is the ability to do something successfully and/or efficiently and includes the power to deal with particular matters. As a result, the student shall receive an effective and regulatory compliant training within a safe flight operation environment.

The standardisation training will take place twice a year during the scheduled instructor meeting.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Step | Task | | Reference | Responsibility |
| 1 | Evaluation of the  content | * Consider results of the management system and ATO personnel standard evaluation; * Review innovation and changes; * Analyse student performance; * Review training activities and aircraft reliability; * Review economic and financial aspects; * Review previous meeting; * Consider feed-backs * ... | | * Aviation publications; * Legislation publications; * Standardisation training detailed programme; * Economic and financial key indicators; * Status of the organisation documentation; * OMM Chapter 8.3 «Management system continuous training»; * OM Chapter 4.7 «ATO personnel standards evaluation» * ... | Head of Training |
| 2 | Development of the  programme | * Establish agenda, programme and course administration; * Prepare presentations; * Develop hand-outs; * ... | | * Standard IT applications * Standardisation training detailed programme template; * (I://TNG/Standardisation/...) * ... | Head of Training |
| 3 | Organise the course | * Booking of infrastructure/facilities; * Prepare hand-out material; * ... | | * Seminar Organisation Planning Excel-File * I://Org/Standardisation/... | Administration |
| 4 | Information to FOCA | * Inform assigned inspector. | | Any practical communication means. |
| 5 | Information | * External announcement; * Administrate invitation and registration. | | * Internet; * Web page; * Invitation and registration form; * ... |
| 6 | Conduct the training | * Lead through the standardisation training. | | * agenda and programme | Head of Training |
| 7 | Administration | | * Issue «Certificate of Attendance» to all participants. | * Certificate template * I://Org/Certificate/... | Administration |
| * Sign the certificates of attendance. | | Head of Training |
| * Complete file management; | * Instructor File | Head of Training |

### Standardisation training overview

4.4.1 REV0 / TBD

|  |  |
| --- | --- |
| Subject | Reference |
| Continuous management system training  Summary and matters of:   * Overall safety standards; * Economic and financial aspects;   realisation of the organisation’s targets;   * Overall image of the organisation, relationship with third parties, authorities and contractors; * Occurrences, reporting and feedback system; * internal/external audit inspection; * record keeping and information system; * Student feedback an satisfaction; * ... | * OMM Chapter 9.3 «Management system continuous training»; * ... |
| Standard and competence of ATO personnel   * Adherence to prescribed training programme, syllabi and lesson/session plans; * Adherence to standard operating procedures; * Decision making, threat and error management; * Social skills and crew resources; * Students performance and process; * ... | * OM Chapter 4.7 «ATO personnel standards evaluation»; * ... |
| Changes   * Changes in approvals, terms and conditions of the organisation; * Amendment, changes and improvement of the organisation documentation; * Changes in manuals provided by aircraft manufacturer; * Operating procedures and checklists; * Rules and regulations; * Innovation in the aviation industry; * ... | * ATO approval certificate and appendix; * Aviation legislation; * Organisation documentation; * ... |
| Training activities   * Review of training activities conducted; * Changes and improvement in training programme, syllabi and associated documentation and forms; * Teaching material; * Planned and ongoing training activities – theoretical and practical; * human resources, facility and infrastructure; * Aircraft fleet and dispatch reliability; * Coordination and assignment of instructors and students; * ... | * Training manual; * ... |

## Proficiency checks

4.5 REV0 / TBD

Proficiency check denotes the demonstration of skill to revalidate or renew ratings and is an element of the instructor’s refresher and standardisation training for flight instructions of all categories.

For procedures, instructions and guidance to conduct proficiency checks, refer to:

* «EASA Part FCL Examiner Guide AEROPLANE / HELICOPTER» issued by FOCA:

[on-line] Available (09.05.2016) <https://www.bazl.admin.ch/dam/bazl/de/dokumente/F%C3%BCr_Fachleute/Ausbildung_und_Lizenzen/Ausbildungsorganisationen/examiner_guide_easapartfclaeroplane.pdf.download.pdf/examiner_guide_easapartfclaeroplane.pdf>

[on-line] Available (03.01.2018) <https://www.bazl.admin.ch/dam/bazl/it/dokumente/Fachleute/Ausbildung_und_Lizenzen/Ausbildungsorganisationen/examiner_guide_easapartfclhelicopter.pdf.download.pdf/examiner_guide_easapartfclhelicopter.pdf>

## Upgrading training

4.6 REV0 / TBD / APP

|  |  |
| --- | --- |
| Term | used for: |
| Upgrading training | * gaining further instructor privileges. |

In order to extend privileges, the instructor has to undergo an upgrading training. The upgrading training will be successfully completed after following a training course according to the approved syllabus for the respective category of rating or certificate.

* For training courses and associated syllabi, refer to the Training Manual.

## ATO personnel standards evaluation

4.7 REV0 / TBD

### Accountable Manager (ACM)

4.7.1 REV0 / TBD

The competence of the Accountable Manager is supported and evaluated by the board of directors:

| Key Element | Reference | Frequency |
| --- | --- | --- |
| Organisation overall performance:   * Safety standard; * Effectiveness of the management system; * economic success; * … | * «Management evaluation» Organisation Management Manual (OMM), Chapter 6,   results out of:   * Safety key indicators; * Internal external audit/inspection; * Occurrence reporting and feedback; * Financial key indicators; * ... | Yearly |

### Head of Training (HT)

4.7.2 REV0 / TBD

The competence of the Head of Training is supported and evaluated by the Accountable Manager:

| Key Element | | Reference | Frequency |
| --- | --- | --- | --- |
| * Status of: * Overall safety standards; * realisation of the organisation’s vision and philosophy; * development and implementation of the training programme including continued improvement; * management of occurrences, including error management; * implementation of corrective and preventive action; | | * «Management evaluation» Organisation Management Manual (OMM), Chapter 6; * Yearly employee qualification; * ... | Yearly |
| * Management skills: * Aptitude, knowledge, practice, organisation, decision-making, involvement, controlling, time management, direct and information management; * internal and external impact for   the organisation and individuals;   * performance of subordinates; * Subordinate, employee and student satisfaction; * … | | * «Management evaluation» Organisation Management Manual (OMM), Chapter 6; * Feedback and reporting; * Yearly employee qualification; * … |
| * Status of the planned and ongoing training activities - theoretical and practical - including coordination and monitoring of instructors, students and aircraft dispatch reliability; * ... | | * Monthly meeting; * OM Chapter 1.6 «Preparation of flying programme»; * Occurrence and feedback reporting; * Aircraft technical status: * Aircraft technical log system; * Maintenance reporting. * ... | Monthly |
| * Student’s overall performance and progress; * Student behaviour, discipline and disciplinary action; * ... | | * Reporting of student results and pass grades; * OM Chapter 1.4 «Student discipline and disciplinary action»; * ... |
| * Representation of the organisation; | | * Student satisfaction and feedback; * Financial key indicators; * Overall Image of Organisation; * … | Monthly |
| * Safety performance of the daily flight training activity; * Implementation and improving of standard operating procedures; * Development, implementation and improvement of flight session plans; * Adherence to prescribed training programme, syllabi and associated flight session plans; * Standardisation and improving of flight instructor knowledge and skills; * ... | * «Management evaluation» Organisation Management Manual (OMM), Chapter 6; * Occurrence reporting; * instructor and student satisfaction and feedback; * Yearly employee qualification; * … | | Yearly |
| * Management skills; * Aptitude, knowledge, practice, organisation, decision making, involvement, controlling, time management, direct and information management; * internal and external impact for   the organisation and individuals;   * performance of instructors; * … |
| * Status of the planned and ongoing flight training activities - including coordination and monitoring of instructors, students and aircraft dispatch reliability; * … | | * OM Chapter 1.6 «Preparation of flying programme»; * Instructor’s training activity reporting; * Occurrence and feedback reporting; * Aircraft technical status: * Aircraft technical log system; * Maintenance reporting. | Bi-weekly |
| * Student’s individual performance and progress; * Student behaviour and discipline; * ... | | * Instructor’s reporting of individual student's performance and progress: * Instructor’s weekly briefing. * OM Chapter 1.4 «Student discipline and disciplinary action»; * ... |
| * Development, implementation and improving of theoretical knowledge lesson plans including associated teaching material; * Adherence to prescribed training programme, syllabi and associated lesson plans; * Standardisation and improving of classroom teaching skills/capabilities and knowledge transfer of theoretical knowledge instructor; * … | | * «Management evaluation» Organisation Management Manual (OMM), Chapter 6 * Yearly employee qualification; * Theoretical knowledge instructor feedback; * Student’s performance, pass ratio, feedback and satisfaction; * … | Yearly |
| * Status of the planned and ongoing theoretical knowledge instruction activity – including scheduling, coordination and monitoring of instructors, facilities and teaching material; * ... | | * Training Organisation Planning Excel-File I://Org/Planning/...; * Instructor’s training activity, reporting; * Student notification and feedback; * ... | Bi-weekly |
| * Student’s individual performance and progress; * Student behaviour and discipline; * ... | | * Instructor’s reporting of individual student’s performance and progress; * Instructor’s weekly briefing * OM Chapter 1.4 «Student discipline and disciplinary action»; * ... |

### Instructors for flight instructions all categories

4.7.3 REV4 / TBD

The competence of the instructors for flight instructions are supported, standardised and evaluated by the Head of Training:

| Key Element | Reference | Frequency |
| --- | --- | --- |
| * Basic Aeronautical and technical knowledge; * Flying skills; * Threat and error management, decision-making; * adherence to standard operating procedures as described in the operations manual, checklists and manual provided by the aircraft manufacturer; * Adherence to the prescribed training programme, syllabi and associated flight session plans; * Effective and efficient instructional technique/skills; * the accuracy and adequacy during the evaluation/analysis of student performance and learning process; * ascertaining and support of student needs; * social skills and crew resource management; * record keeping and information management; * ... | * Training organisation Documentation, forms and records; * Proficiency checks; * Instructor assessment of competence; * Standardisation training; * Refresher training; * Occurrence reporting; * Weekly Briefing; * … | Continuously |
| * Student’s individual performance and progress; * Student behaviour and discipline; * ... | * Syllabus and flight session targets, students training forms and records; * Student’s performance, pass ratio, feedback and satisfaction; * OM Chapter 1.4 «Student discipline and disciplinary action»; * ... |

### Theoretical Knowledge Instructors (TKI)

4.7.4 REV4 / TBD

The competence of Theoretical Knowledge Instructors is supported, standardised and evaluated by the Head of Training:

|  |  |  |
| --- | --- | --- |
| Key Element | Reference | Frequency |
| * Classroom teaching skills/capabilities and knowledge transfer; * Use of teaching material and means of demonstration; * Adherence to prescribed training programme, syllabi and associated lesson plans; * Record keeping and information management; * … | * Training organisation Documentation; * Weekly Briefing; * … | Continuously |
| * Student’s individual performance and progress; * Student behaviour and discipline; * ... | * Student training forms and records; * Student’s performance, pass ratio, feedback and satisfaction; * OM Chapter 1.4 «Student discipline and disciplinary action»; * ... |

### Other ATO Personnel

4.7.5 REV0 / TBD

The competence of other ATO personnel (e.g. secretary, accounting etc.) is standardised based on:

* the Management System Training, OMM Chapter 8:
* «Basic Training – All Employees»;
* «Continuous Training»; and
* evaluated by means of yearly employee qualification by the Accountable Manager.