[Sample Aviation

Flight Training Pty Ltd]

**CASR PART 141**

**SAMPLE OPERATIONS MANUAL**

**Volumes 1 - 5**

This Operations Manual has been developed in accordance with the Civil Aviation Safety Regulations 1998 (CASR) regulation 141.260 operator manual requirements and is based on CASR Part 141 Sample Operations Manual Version 4.0, November 2024. Operators are required to monitor amendments to the CASA Sample Operations manual and Civil Aviation Legislation and revise their manual accordingly.

**Version [4.1]**

**[December 2024]**

**Uncontrolled when printed.**

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# POLICY AND PROCEDURES

## General

### Preliminary

#### [Sample Aviation Flight Training Pty Ltd] – Part 141 Operations Manual – policy and procedures

#### List of volumes and contents of complete Operations Manual

|  |  |  |
| --- | --- | --- |
| Operations Manual | VOLUME 1 | POLICY AND PROCEDURES |
|  | VOLUME 2 | AIRCRAFT OPERATIONS |
|  | VOLUME 3 | PART 141 FLIGHT TRAINING |
|  | VOLUME 4 | APPENDICES AND FORMS |
|  | VOLUME 5 | TRAINING SYLLABUSES |

#### List of amendments and revision history

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Part/Section | Description of Amendment |
| 4.1 | December 2024 | 3B1.6 and 3B1.13 |  Minor amendments to section 3B1.6 and 3B1.13 |
| 4.0 | November 2024 | Various | Changes to aerodrome requirements for certain training flights. |
| 3.2 | June 2021 | Various | Update CAO 48.1 content to align with CAO 48.1 Instrument 2019; move guidance content from sections 2B to 141 guide; general formatting updates |
| 3.1 | December 2018 | 2B5.2.4 | Update to CAR234 fuel calculations |
| 3.0 | September2018 | 2B | Inclusion of CAR 234 into the Fuel Policy section |
| 2.1 | March 2018 | Various | Updates to:- CAO 48.1 fatigue management text in Part 1B2.1- DAMP references and content- Aeroplane amended to aircraft where applicable |
| 2.0 | October 2016 | 1B2.1, 1B2.1.2 | Align with Civil Aviation Order 48.1 Instrument 2013, as amended by Civil Aviation Order 48.1 Amendment Instrument 2016 (No. 1) |
| 1.0 | March 2016 |  | Initial Issue of this Manual based on CASR Part 141 Sample Operations Manual Version 1.0 March 2016 |

#### Operator information

Regulations 141.260 (1)(a)
141.260 (1)(b)

**Name:** [Sample Aviation Flight Training Pty Ltd]

**Trading Name:** [xxx]

**ABN:** [nn nnn nnn]

**ACN:** [nn nnn nnn]

|  |
| --- |
| [Sample Aviation Flight Training Pty Ltd] |

|  |  |
| --- | --- |
| Operational headquarters – address: | [141 Sample Drive][Sample City Airport][Sample NS NNNN] |
| Phone: | [02-xxxx-xxxx] |
| Fax: | [02-xxxx-xxxx] |
| Email: | [admin@sampleaviation.com] |
| Training base – address: | [Same as operational headquarters] |
| Training base – phone: | [Same as operational headquarters] |
| Registered Office Address | [If required for an ACN holder] |

|  |
| --- |
| Key Personnel |

|  |  |  |
| --- | --- | --- |
|  | **CEO** | **HOO** |
| Name: | [Chris Sample] | [Leslie Sample] |
| Mobile: | [04xx-xxx-xxx] | [04xx-xxx-xxx] |
| Email: | [ceo@sampleaviation.com] | [hoo@sampleaviation.com] |

|  |
| --- |
| Other Personnel & Services |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organisation** | **Name** | **Phone** | **Email/internet** | **Fax** |
| Maintenance | [Mr Maintainer] | [xx-xxxx-xxxx] | [acfixer@nnn.com]  | [xx-xxxx-xxxx] |
| AVFAX |  |  |  | 1800-805-150 |
| CENSAR |  | 1800-814-931 |  |  |
| NAIPS |  |  | <http://www.airservicesaustralia.com/flight-briefing> |  |
| Search & Rescue |  | 1800-815-257 |  |  |
| ATSB (notifications) |  | 1800-011-034 |  |  |
| AUSAR |  | 1800-815-257 |  |  |

#### Organisational structure

##### Overview of organisation and operation

Regulation 141.260 (1)(d)

[Sample Aviation Flight Training Pty Ltd] is a private company fully owned by the Directors, [Leslie and Chris Sample]. [Sample Aviation Flight Training Pty Ltd] holds an authorisation to conduct Part 141 flight training.

The company operates a fleet of aircraft. Instructors are employed either on a full-time, part-time, or casual basis depending on demand and the level of flight training activity.

##### Description and diagram

Regulation 141.260 (1)(c)

[Sample Aviation Flight Training Pty Ltd] is governed by the Directors and they are responsible for setting and overseeing the strategic direction and policies of the organisation.

To manage the Part 141 flight training activities, the company has the following key personnel:

* Chief Executive Officer (CEO)
* Head of Operations (HOO).

**Directors**

**Chief Executive Officer**

**Head of Operations**

**Administration**

**Instructors**

##### Authorised Part 141 Flight Training activities

[Sample Aviation Flight Training Pty Ltd] is only authorised to conduct Part 141 flight training for the issue of an RPL, PPL, SE, NVFR and ME Aeroplane Class ratings.

##### Other operational activities

Regulation 141.260 (1)(q)

**Reserved**

#### Operations headquarters, bases and facilities

Regulation 141.260 (1)(p)

##### Description of school facilities

Regulation 141.130 (3)(e)(iv)

The following facilities are used by [Sample Aviation Flight Training Pty Ltd].

###### Buildings

The school’s facilities consist of two fully air-conditioned de-mountable buildings that are immediately adjacent to each other.

There are several computers in each building. Each computer is installed with current applications, used for managing day-to-day operations of the business, recording flight training operations and managing rosters and flight and duty times.

The computers are all connected to the internet and print services via the network.

Building 1

This building is used for company administration and the management of flight operations. The building contains:

* CEOs office
* Head of Operations (HOOs) office
* office front counter
* operations Room where flight planning and where flight plans are submitted, with the following briefing equipment:
* large desks used to prepare flight plans
* computer with internet access to NAIPS and BOM
* bookshelf for student log books
* notice board
* topographical map of the training area, planning chart Australia (PCA), the relevant Visual Navigation Chart (VNC) for geographical location, safety, and aviation relevant posters
* small scale maps for Navex routes
* large bookcase for the company’s reference library.
* kitchen
* instructor’s lounge

Building 2

This building is used for conducting training, briefing and examination activities. The building contains:

* two classrooms; each accommodating up to five students equipped for training and briefing including:
* desks
* large whiteboard
* instructional aids, including aircraft model and cockpit posters.
* locked filing cabinet for exam results and student flight training records.

##### Care and maintenance of facilities

Regulation 141.130 (3)(e)(v)

All training facilities and classrooms must be kept clean, tidy and in good repair. Any instructor using a briefing facility is responsible for ensuring that it is left clean and tidy. Defects or faults in equipment should be reported to the HOO as soon as possible.

##### Review of facilities

Regulations 141.130 (5)(d)
141.130(5)(e)

A regular audit of the facilities and resources is conducted by the HOO to ensure the training facilities are adequate (see section 1A6.3).

Any issues identified must be recorded on form 4B2 (*Audit of Compliance & Facilities*), under the ‘*what improvements can be made?*’ section. The CEO must be notified immediately by email with a request for funding or other requirement to address the identified issue.

##### Temporary locations

Where flying training activities are required to be conducted at a different location than home base the following matters must be considered:

* instructor familiarity with aerodrome and procedures
* aerodrome suitability for the task, check NOTAM and weather
* suitable briefing area or facilities for the training are available
* access is available to briefing material (possibly iPad)
* communication with the operational headquarters is available.

#### Key personnel

##### Chief Executive Officer (CEO)

Regulation 141.120

###### Name of CEO

|  |
| --- |
| CEO |

|  |  |
| --- | --- |
| CEO: | [Chris Sample]141.260 (1)(e)(iii) |
| Standby CEO: | [Leslie Sample]141.260 (1)(e)(iv) |

###### Duties

Regulations 141.120 (2)
141.260 (1)(e)(ii)

The CEO is responsible for discharging the following duties:

Regulation 141.120 (2)

1. Review the planned kind and volume of training, including:

Regulations 141.120 (1)(a)
141.260 (1)(mb)(iv)

* consulting with the HOO to determine the number and qualifications of instructors required to safely and effectively complete the anticipated flight training
* on at least a yearly basis or at major changes to operations, review the suitability of the company’s management structure
* ensuring that training resources can be provided to deliver the anticipated flight training.
1. Ensure that the HOO has:

Regulation 141.120 (1)(b)

* reviewed recent flight training records and taken necessary corrective action where appropriate in accordance with (IAW) section 3B2.3
* carried out the audits IAW section 1A6

Regulation 141.260 (1)(mb)(i)

* carried out appropriate corrective action on all deficiencies identified at audits and submitted the details on form 4B2.
* Monitored standards of training IAW section 1A7.
1. Carry out the continuous improvement process described in section 1A3.4.1 in conjunction with the HOO. Review the Operations Manual and apply the change management procedures described in section 1A5.

Regulations 141.120 (1)(f)
141.260 (1)(mb)(ii)

1. At least yearly, regularly review key personnel performance by:
2. checking their conduct is IAW the Operations Manual and civil aviation legislation.
3. entering the outcome of this assessment on the person’s file.
4. taking appropriate action where unsatisfactory performance is identified.

Note: While the CEO may delegate any of the duties listed above to suitably qualified, trained, and competent personnel, the responsibility and accountability remains with the CEO.

Regulation 141.120 (1)(g)

##### Head of Operations (HOO)

###### Name of HOO

|  |
| --- |
| HOO |

|  |  |
| --- | --- |
| HOO: | [Leslie Sample]141.260 (1)(e)(iii) |
| Standby HOO: | [Charlie Townsend]141.260 (1)(e)(iv) |

###### Mandatory qualifications

Regulation 141.125 (1)

The HOO must hold the following current qualifications that are the minimum requirements prescribed by legislation:

* commercial pilot licence with aeroplane category rating – CPL(A)
* single and multi-engine aeroplane class rating
* flight instructor rating with Grade 1 aeroplane, night VFR and multi-engine aeroplane class rating training endorsements
* night VFR Rating with an aeroplane night VFR endorsement.

###### Desirable qualifications and experience

Information: Additional attributes are in excess of regulatory requirement

Regulation 141.260 (1)(e)(i)

|  |  |
| --- | --- |
|  | **Information:**Additional attributes are in excess of regulatory requirement. |

In addition to the mandatory requirements listed above, [Sample Aviation Flight Training Pty Ltd] prefers that the appointed HOO have the following experience, capabilities and skills:

* 12 months experience exercising the privileges of a Grade 1 training endorsement
* 50 hours multi-engine training
* ability to communicate effectively in writing and verbally
* able to plan for and monitor the use of training resources and to conduct training activities
* able to supervise and mentor personnel
* ability to apply competency-based training principles and safety principals to pilot training and aircraft operations
* sound knowledge of CASR Part 61 flight crew licensing legislation and CASR Part 141 flight training legislation.

###### Duties

Regulations 141.130 (1)
141.260 (1)(e)(ii)

The HOO is responsible for discharging the following duties:

1. Verify that instructors have received the latest version of the Operations Manual IAW section 1A3.

Regulation 141.130 (2)(f)

1. Maintain the reference library and access to publications, information and data IAW section 1A3.6.3.

Regulations 141.130 (2)(f)
141.160 (1)
141.160 (2)(b)

1. Action the change management process IAW section 1A5 when changes are required.

Regulations 141.130 (5)(b)
141.130 (5)(e)

1. Review compliance and facilities by:
	1. conducting internal audits IAW section 1A6 on at least an annual basis
	2. review audit findings
	3. taking any necessary corrective action to rectify deficiencies as soon as possible.

Regulations 141.130 (2)(a)
141.130 (2)(b)
141.130 (2)(c)
141.130 (4)(a)
141.130 (4)(b)(vi)
141.130 (5)(a)
141.130 (5)(d)
141.260 (1)(mb)(iv)

1. Identify and address deficiencies IAW sections 1A7 and 3B2.5, in:
* training outcomes

**Regulations 1**41.130 (2)(o)
**141.130 (4)(a)**141.130 (5)(c)
141.260 (1)(mb)(iii)

* pre-flight test assessments
* feedback from flight tests.

Regulations 141.130 (2)(o)
141.130 (4)(a)
141.130 (5)(c)
141.260 (1)(mb)(iii)

1. Supervise instructors IAW with the procedures in section 1B1.2.2.

Regulation 141.130 (4)(b)(v)

1. Review scheduling and rostering of instructors to ensure rostering and fatigue management IAW the procedures described in section 1B2.

Regulations 141.130 (2)(e)
141.260 (1)(o)
CAO 48.1

1. Manage induction training IAW section 3A1.

Regulations 141.130 (2)(a)
141.130 (2)(n)
141.130 (4)(b)(iii)

1. Manage the instructor standardisation program IAW section 3A2 and verify standardisation and proficiency checks are up to date.

Regulation 141.130 (4)(b)(iv)

1. Manage the DAMP IAW Appendix 4A2.

Regulation 99.030 (2)(k)

1. Maintain up-to-date records of the qualifications of instructors using form 4B10.
2. Schedule aircraft maintenance IAW section [**2C2**](#_Scheduling_of_Maintenance)

Note: While retaining responsibility, the HOO may delegate any of the duties listed above to suitably qualified, trained, and competent personnel. However, the HOO may not delegate their responsibility IAW CASR 141.210 relating to flight tests.
(see section **3F1**).

Regulation 141.130 (4)(b)(i)

##### Key personnel familiarisation training

Regulation 141.115

[Sample Aviation Flight Training Pty Ltd] will nominate a trainer with suitable knowledge of relevant operational procedures to conduct familiarisation training of key personnel if necessary, before they begin to carry out their responsibilities. This training shall use the topics on form 4B4 as a guide to the material to be covered.

The person conducting the training will complete and store the key personnel familiarisation training records using form 4B4 in the individual’s personnel file as evidence of completion of training.

##### Absence or inability of key personnel to carry out their responsibilities

The [Sample Aviation Flight Training Pty Ltd] standby CEO, {Leslie Sample} will carry out the responsibilities of the CEO when the CEO cannot carry out those responsibilities.

The [Sample Aviation Flight Training Pty Ltd] standby HOO, {Charlie Townsend} will carry out the responsibilities of the HOO when the HOO is on leave or cannot carry out those responsibilities for any other reason.

##### Notification to CASA of inability of a key person to carry out their responsibilities

If [Sample Aviation Flight Training Pty Ltd] becomes aware of a circumstance where a key person cannot carry out their responsibilities for more than 30 days, CASA will be notified by email and if necessary, a follow up phone call within 3 days of becoming aware of the circumstance.

Note: Sufficient time must be allowed for the standby person to re-familiarise themselves with the duties and responsibilities of the key personnel position they are standing in for.

Regulations 141.110
141.260 (1)(e)(iv)
141.260 (1)(e)(v)

#### Definitions and abbreviations

##### Definitions

In the context of this manual, the following terms are defined:

* ‘[Sample Aviation]’ or ‘[Sample Aviation Flight Training Pty Ltd]’ means the Part 141 Certificate holder
* the **“company”** means [Sample Aviation Flight Training Pty Ltd].

This manual uses the following words to convey levels of requirement:

* **‘must’** is used in relation to an obligation or requirement
* **‘should’** is used to signify a recommendation that is not a requirement.

##### Abbreviations

In the context of this manual, the following abbreviations are used:

| Abbreviation | Meaning |
| --- | --- |
| A | **Aeroplane**  |
| ABN | **A**ustralian **B**usiness **N**umber |
| AC | **A**dvisory **C**ircular |
| AFM | **A**ircraft **F**light **M**anual (or Pilot Operating Handbook – POH) |
| AGL | **A**bove **G**round **L**evel |
| AIP | **A**eronautical **I**nformation **P**ublication Australia |
| ALA | **A**eroplane **L**anding **A**rea |
| AOC | **A**ir **O**perator's **C**ertificate |
| AOD | **A**lcohol and **O**ther **D**rugs |
| ARN | **A**viation **R**eference **N**umber |
| ASA | **A**ir**S**ervices **A**ustralia |
| ATSB | **A**ustralian **T**ransport **S**afety **B**ureau |
| CAA | **C**ivil **A**viation **A**ct |
| CAAP | **C**ivil **A**viation **A**dvisory **P**ublication |
| CAOs | **C**ivil **A**viation **O**rders – functional documents enabling practical use to be made of a Civil Aviation Regulation |
| CAR | **C**ivil **A**viation **R**egulations 1988 – statutory aviation regulations of the Commonwealth of Australia |
| CASA | **C**ivil **A**viation **S**afety **A**uthority |
| CASR | **C**ivil **A**viation **S**afety **R**egulations 1998 – statutory aviation regulations of the Commonwealth of Australia |
| CEO | **C**hief **E**xecutive **O**fficer |
| CENSAR | **Cen**tralised database to store **SAR**TIME managed by AirServices Australia |
| CPL | **C**ommercial **P**ilot **L**icence |
| CTA | **C**on**t**rolled **A**irspace |
| CTR | **C**on**tr**ol Zone |
| DAME | **D**esignated **A**viation **M**edical **E**xaminer |
| DAMP | **D**rug and **A**lcohol **M**anagement **P**lan |
| ELT | **E**mergency **L**ocator **T**ransmitter |
| ERSA | **E**n **R**oute **S**upplement**,** **A**ustralia - a CASA/Air Services Australia document listing full information, including layout diagrams, on all licensed (and some unlicensed) aerodromes |
| FCM | **F**light **C**rew **M**ember - FCM has the same meaning as:* *CAO48.1 at 6.1*
* a Part 141 instructor or instructor.
 |
| FDP | **F**light **D**uty **P**eriod - means a period of time which:1. Starts when a person is required by an AOC holder to report for a duty period in which one or more flights as an FCM are undertaken.
2. Ends not less than 15 minutes after the end of the person’s final flight as an FCM.
 |
| Flight Crew | A reference to a company flight instructor and their student in the context of Part 141 Flight Training |
| FOI | **F**lying **O**perations **I**nspector (CASA) |
| FRMS | **F**atigue **R**isk **M**anagement **S**ystem |
| HF | **H**uman **F**actors |
| HOO | **H**ead **o**f **O**perations |
| IAW | **I**n **a**ccordance **w**ith |
| IFR | **I**nstrument **F**light **R**ules |
| MOS | **M**anual **o**f **S**tandards |
| MR | **M**aintenance **R**elease |
| NM | **N**autical **M**ile |
| Navex | **Nav**igation **Ex**ercise |
| Non-Significant change | Any change not otherwise defined as a significant change in relation to Part 141 Flight Training |
| NOTAM | **NOT**ice to **A**ir**M**en – a document issued by CASA or ASA to provide operational information to pilots which supersedes that available in other publications |
| NTS | **N**on-**T**echnical **S**kills |
| NVFR | **N**ight **VFR** |
| ODP | Off-Duty Period |
| PIC | **P**ilot-**i**n-**c**ommand - the pilot responsible for the operation and safety of the aircraft |
| PPL | **P**rivate **P**ilot **L**icence |
| PUS | **P**ermissible **U**n**s**erviceability |
| RPL | **R**ecreational **P**ilot **L**icence |
| S&P | **S**tandardisation and **P**roficiency |
| SAR | **S**earch **a**nd **R**escue |
| SARTIME | **Time** after which a **S**earch **a**nd **R**escue operation is mounted |
| Significant Change | Any change which requires the approval of CASA. Refer to [**CASR 141.025**](https://www.comlaw.gov.au/Details/F2015C00267/Html/Volume_4#_Toc415142004) for more information |
| SMS | **S**afety **M**anagement **S**ystem |
| SSAA | **S**afety **S**ensitive **A**viation **A**ctivity |
| Student | Any person undergoing training at [Sample Aviation Flight Training Pty Ltd] |
| VFR | **V**isual **F**light **R**ules |
| W&B | **W**eight **& B**alance |

### Resources

#### Registered aircraft details

Regulation 141.260 (1)(l)(i)

A list of aircraft currently operated by [Sample Aviation Flight Training Pty Ltd] is detailed on form 4B12 (*Registered Aircraft Details*). If new or other kinds of aircraft are added to the fleet, act IAW the change management process in section 1A5.

#### Flight Simulator Training Devices

**Reserved**

### Operations Manual Administration

#### Operations Manual distribution and availability

The Operations Manual is maintained in electronic format; however, paper copies are provided in the office for use by instructors and students. Form 4B1 is used as a register detailing the manual’s distribution. The register is kept in the company’s administration files.

The manual is distributed to the personnel and entities mentioned in the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Manual Holder** | **Volume 1** | **Volume 2** | **Volume 3** | **Volume 4** | **Format Electronic** | **Format Paper** |
| CASA | ✔ | ✔ | ✔ | ✔ | ✔+ |  |
| Reference Library | ✔ | ✔ | ✔ | ✔ |  | ✔ |
| HOO | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Ops Room | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Instructors | ✔ | ✔ | ✔ | ✔ | ✔ |  |

Regulation 141.160 (3)

#### Issuing of amendments

Amended versions of the manual will be distributed electronically to all instructors. The HOO must provide a summary of changes contained in the amendment, including background information, details about why the changes were made and the implications for instructors and students.

On receipt of the amended version, all instructors must sign form 4B1 to indicate they have read and understood the amendments.

Regulation 141.270

#### Requirement to comply with the Operations Manual

All Key Personnel, Instructors and students must comply with relevant instructions and procedures contained in this Operations Manual.

Regulations 141.130 (4)(b)(vi)
141.165
141.170
141.265

#### Operations Manual review and amendment procedures

##### Continuous improvement process

Regulations 141.120 (1)(f)
141.260 (1)(mb)(ii)
141.260 (1)(mb)(v)

The CEO and HOO must meet at least annually to review the effectiveness, or otherwise, of processes and procedures described in the Operations Manual.

Any identified improvement opportunities are to be actioned as appropriate using the change management process in section 1A5.

#### CASA exemptions

Reserved

#### Company reference library

Regulation 141.160 (1)

##### Composition of reference library

Regulation 141.160 (2)(a)

The reference library includes the following documents:

|  |  |  |
| --- | --- | --- |
| Document Name | Electronic | Paper |
| [Sample Aviation Flight Training Pty Ltd] Part 141 Operations Manual | ✔ | ✔ |
| CAA 1988 | ✔ |  |
| CASR 1998 – complete | ✔ |  |
| CASR Part 61 Manual of Standards | ✔ | ✔ |
| CAR 1988 - complete | ✔ |  |
| CAOs | ✔ |  |
| AIP |  | ✔ |
| ERSA |  | ✔ |
| CAAPs and ACs of relevance |  | ✔ |
| AFMs or POHs – copies for each aircraft operated |  | ✔ |
| Register of landing sites approved for use by company aircraft | ✔ | ✔ |
| Training area map | ✔ | ✔ |
| Access to flight planning websites and [**Airservices Australia**](http://www.airservicesaustralia.com/) | ✔ |  |

##### Access to reference library

Regulations 141.130 (2)(f)
141.160 (2)(b)

All instructors and students have access to publications maintained in the reference library during normal working hours.

With the exception of the Operations Manual, the library is for reference purposes only and no publications may be removed from the company’s premises. However relevant sections including AFMs, POHs, load sheets and regulations, may be copied or printed as required, then considered as uncontrolled.

##### Amendment and maintenance of reference library

Regulation 141.160 (2)(c)

The HOO will review the amendment status of each item in the reference library in accordance with that documents’ amendment cycle and update it as required.

### Record Keeping – Operational & Administrative

#### Control

Company records fall into two broad categories:

1. Administrative records
2. Operational records

The CEO is responsible for the management of administrative records, while the HOO is responsible for the management of operational records.

#### Records and retention periods

##### Administrative records

| **Record** | **Format Electronic** | **Format Paper** | **Storage Location** | **Retention Time** | **Disposal Method** |
| --- | --- | --- | --- | --- | --- |
| General administrative correspondence | ✔ | ✔ | Management file | [7 years] | Shred |
| Internal audit records |  | ✔ | Audit file | [7 years] | Shred |
| Continuous improvement |  | ✔ | Management file | [7 years] | Shred |
| Incident and accident reports |  | ✔ | Safety file | [7 years] | Shred |
| DAMP testing program records | ✔ | ✔ | DAMP file | [5 years] | \*Shred / delete |
| Personnel records | ✔ | ✔ | Management file | [7 years] | Shred |

\*DAMP records for alcohol and drug testing will be retained for a maximum of 5 years. During the 6 month period following this retention time the records will be destroyed or the sections related to AOD testing will be deleted or destroyed.

##### Operational records

Regulation 141.275 (2)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Record** | **Format Electronic** | **Format Paper** | **Storage Location** | **Retention Time** | **Disposal Method** |
| Instructor records: |  |  |  |  |  |
| * Personnel induction records
 | ✔ | ✔ | Personnel records |  | Shred |
| * Standardisation & proficiency checking
 | ✔ | ✔ | Personnel records |  | Shred |
| * Instructor qualifications
 | ✔ | ✔ | Personnel records |  | Shred |
| Student personnel records | ✔ | ✔ | Ops Room |  | Shred |
| Student flight training records | ✔ | ✔ | Student files | 7 years | Shred |
| Student flight test reports | ✔ | ✔ | Student files |  | Shred |
| Flight examiner reports | ✔ | ✔ | HOO Files |  | Shred |
| Flight authorisation sheets |  | ✔ | Operations files |  | Shred |
| Crew flight & duty records | ✔ | ✔ | HOO files | 10 years | Shred |
| Aircraft fuel consumption records |  | ✔ | Operations files |  | Shred |
| Aircraft maintenance records |  | ✔ | Maintenance files |  | Retain |

##### Requests for records made by CASA.

A request from CASA to surrender documents shall be handled by the CEO. The CEO must do the following:

1. File the request in the company administration file titled CASA requests.
2. Action the request within the timeframe specified in the request.
3. Make a copy of the response and CASA receipt and attach it to the same file.

### Change Management

Regulation 141.095

Changes to company operations, policies or procedures are made under the direction of the CEO IAW this section.

#### Change management process

Regulations 141.130 (5)(e)
141.260 (1)(s)

The following process workflow illustrates the change process:



#### Actioning the change management process

Regulations 141.260 (1)(s)(i)
141.260 (1)(s)(ii)

When actioning a proposed change, the CEO, in consultation with the HOO, must follow the change management process flow in section 1A5.1 using the methodology outlined below.

* verify the need for change with reference to the following change instigators:
* new regulatory requirement
* non-compliance notice (CASA)
* audit observation (CASA)
* CASA direction IAW *CASR 141.100*
* continuous improvement process
* new business opportunities or new or different kinds of aircraft
* internal audit results
* change of key personnel.
* assess the risks of the proposed change considering at least, but not limited to:
* resource requirements
* compliance considerations
* urgency of change
* implementation implications and strategy
* impact on safety.
* the HOO will draft an operations manual amendment with details of the proposed change
* the CEO will refer to *CASR 141.025* to determine if the change is significant or non- significant
* if the change is significant, proceed IAW section 1A5.3
* if a change is not significant, proceed IAW section 1A5.4.

#### Process for seeking approval of a significant change

Regulations 141.085 (1)
141.085 (4)(a)
141.085 (4)(b)
141.085 (4)(c)
141.260 (1)(s)(iii)

A significant change requires CASA approval. The CEO, in consultation with the HOO, will prepare and dispatch a written application to CASA for approval of the change including details of the change and a draft copy of the amended Operations Manual. The HOO will deal with CASA in relation to the approval process for the amended Operations Manual.

When the change is approved, proceed IAW section 1A5.4.

##### Change of key personnel

Regulations 141.085 (2)(a)
141.260 (1)(e)(iv)

Changes of key personnel are defined as a significant change. After the company appoints the new key person, the CEO will send an application to CASA for approval:

* within 7 days of the new appointment if the new appointee is named in the Operations Manual as the standby person

Regulation 141.085 (2)(b)

* within 3 days of the new appointment if the new appointee is not named in the Operations Manual as the standby person.

Regulation 141.085 (3)

Once approved, an amended Operations Manual must be issued showing the new key person appointment, including conditions imposed by CASA (if any).

An electronic copy of the manual must be distributed to instructors IAW section 1A3

#### Process for implementing change

Regulation 141.260 (1)(s)

The process for implementing a significant or non-significant change is:

1. Obtain CASA approval of the change if required.
2. The HOO will issue the amended operations manual IAW section 1A3.
3. The HOO will review the operation of the change within 3 months of the change taking effect to assess its ongoing effectiveness and suitability.
4. To determine the long-term implications of any changes, the HOO will action the continuous improvement process IAW section 1A3.4.1.

#### Changes of name, contact details and addresses

Regulation 141.080

Before any change is made, the CEO will notify CASA in writing of the changes. This notification will include a copy of the proposed amendment to the Operations Manual with changes highlighted.

After CASA has been notified, the relevant amendment to the Operations Manual may be affected by the CEO and a new version of the manual distributed IAW section 1A3.1

### Internal Audit Processes

Regulations 141.120 (1)(b)
141.130 (2)(b)
141.130 (4)(b)(vi)
141.130 (5)(a)
141.260 (1)(mb)(i)
141.260 (1)(mb)(iv)

#### Operations Manual compliance

Annually or when required, the HOO will carry out a compliance audit using form 4B2 on a representative sample of processes and procedures against the requirements in the Operations Manual.

This sampling process will review at least:

* Certifications of receipt of the current operations manual by all Key Personnel and Instructors
* aircraft flight times, student log books and flight training records for consistency
* student solo authorisations to ensure they have been carried out correctly
* student flight training records, including instructor comments, to ensure they are up-to-date and compliant with training syllabuses
* examination papers are up to date, relevant and secure
* fuel records to verify appropriate published consumption rates are being achieved.
* Aircraft journey log complete

#### Regulatory compliance

Annually or when required, the HOO will carry out a compliance audit using form 4B2 on training operations against the requirements of civil aviation legislation.

This audit will review at least:

* flight and duty records for accuracy and compliance
* records of instructor standardisation and proficiency checks, recency, medical certifications and qualifications
* recency of drug and alcohol management plan (DAMP) eLearning
* maintenance releases and aircraft flight records (flight authorisation sheet) for consistency.

#### Facilities and resources

Regulations 141.120 (1)(a)
141.130 (3)(e)(iv)
141.130 (3)(e)(v)
141.130 (5)(d)
141.130 (5)(e)

Annually or when required, the HOO will carry out an audit of the facilities and resources, to determine at least:

* a roster of sufficient suitably qualified instructors to deliver flight training to current and projected students for the next period
* the presence of sufficient suitable aircraft available for the delivery of flight training to current and projected students for the next period
* training aids and other physical resources required to deliver flight training to current and projected students for the next period are sufficient and in good condition
* the aerodromes and any associated infrastructure are suitable for the conduct of the flight training
* if any repairs or maintenance are required and carried out.

The HOO will report to the CEO using form 4B2. If additional resources are needed the HOO will inform the CEO and obtain the additional resources as required.

### Monitoring standards of training

Regulations 141.120 (1)(b)
141.120 (1)(cb)
141.130 (2)(a)
141.130 (3)(e)(ii)
141.130 (4)(a)
141.260 (1)(mb)(iii)

On a quarterly basis, the HOO will:

* compare average student hours at the completion of each licence level between the current period and previous periods
* monitor training by conducting training flights with a representative sample of students in various stages of training to assess their actual performance against expected performance
* compare flight training records and course syllabuses to identify any patterns of training deficiencies in accordance with section 3B2.3
* review pre-flight test assessments and examiners’ flight test reports for evidence of training deficiencies.
* review student progress for students trained exclusively by Instructors holding a Grade 3 training endorsement, or after 15 flight training hours have been completed.

The HOO will regularly report to the CEO confirming that the standards of training are being maintained, and that corrective action (if required) is being taken.

## Operational Personnel

Regulation 141.260 (1)(k)

### Duties and Responsibilities

Regulation 141.290 (1)(b)

#### Designation and responsibilities of the pilot in command

Regulation CAR 224

For all flights operated by [Sample Aviation Flight Training Pty Ltd], one pilot shall act as pilot-in-command (PIC). In the case of dual training flights, the flight instructor will act as PIC, while for solo training flights the student will act as PIC. In the case of a flight test, the Flight Examiner will be PIC IAW the Flight Examiner Handbook requirements.

The PIC shall be responsible for ensuring compliance with *CAR 224*.

#### Flight instructor responsibilities

Flight instructors are responsible to the HOO for:

* the safe and efficient conduct of their allocated student’s dual and solo flying training and the generation and maintenance of associated flight training records
* the checking of flight times against aircraft records and, if necessary, correction of the pilot log books of their allocated student’s
* ensuring that daily inspection certifications are entered into the maintenance releases
* ensuring that flight times are correctly entered into the maintenance releases at the completion of each days flying
* the accurate completion of company flight and duty time records (form 4B11)
* ensuring that only authorised training is performed and that it is conducted IAW this Operations Manual and the Part 141 certificate.

##### Flight instructors authorised to approve and supervise solo flights

The HOO will use form 4B10 to maintain a register of the training that each instructor is authorised to conduct and their Part 61 training endorsements. This form includes an authorisation by the HOO for the instructor to send students on their first solo flight.

The responsibilities and duties of a flight instructor authorised to approve and supervise solo flights are listed under section 3B1.1.

##### Supervision of flight training activities and junior instructors

The HOO will nominate an instructor holding a Grade 1 training endorsement (the ‘supervising instructor’) to be rostered for duty on days when the HOO is rostered off duty to supervise flight training activities. This includes the supervision of flight instructors who only hold a Grade 3 training endorsement.

###### Company policy for instructor supervision

To effectively supervise an instructor holding a Grade 3 training endorsement, the HOO or the supervising instructor must:

* be at home base or contactable by electronic means if away from the aerodrome for short periods of time
* be flying within the training area or on a navex and contactable by radio or other electronic means
* be available to provide advice and guidance to the Grade 3 instructor.

###### Supervising instructor related duties

1. Review the planned training for the day and ensure that the weather conditions are suitable to allow successful lesson outcomes. The supervising instructor must consider the latest information relevant to the training area, navex routes and any intended landing points. Where available the information to be considered includes:
* area forecasts
* Terminal Aerodrome Forecasts (TAFS) and METAR
* NOTAMS.
1. Where possible, the supervising instructor will observe briefings and lesson conduct, student interactions and record keeping, and compliance with civil aviation legislation.
2. If a scheduled flight lesson has to be changed for any reason, the supervising instructor will determine whether the revised lesson may take place.

#### Ground instructors

Reserved

### Rostering and Fatigue Management

Regulation 141.260 (1)(o)
Appendix1 of Civil Aviation Order 48.1 Instrument 2013

#### Company rostering policy

The HOO must use form 4B10 to ensure that an instructor is assigned to flight training duties only if they meet the following requirements:

* holds a valid instructor proficiency check (FPC).
* satisfies the instructor standardisation and proficiency check (S&P) requirements.
* holds a current Class 1 Medical Certificate, or a Medical Certificate issued by CASA that permits the instructor to conduct the training activities assigned by the operator.
* the flying currency requirements have been met.
* holds appropriate qualifications for the duty.

The HOO is responsible for developing and making rosters available at least one week prior to the duty. The HOO will publish the roster and make it available to all relevant personnel.

Full-time instructors will be provided rosters showing the allocated days on which they will be expected to work. Regardless of the specified reporting and finish times for the duty, the HOO will ensure there are appropriate off-duty periods between duties, as described below.

As much notice as possible will be given to part-time instructors and, where possible, an e-mail will be sent specifying the days, hours and a description of the planned activities.

The roster may be changed at short notice as required to respond to operational needs.

The HOO will ensure when preparing the roster and assigning duties to the instructors, that the limitations below are complied with.

##### Fatigue management limits

A Flight Duty Period (FDP) commences when an instructor reports for duty.

Any work duty that precedes a flight, such as a period of management duties, administrative tasks, maintenance tasks etc., will be included in the FDP unless it is separated from the flight by an Off-Duty Period (ODP) with a period of time sufficient for a prior sleep opportunity.

The FDP ends when the instructor is free of all duties.

At home base, an instructor commencing an FDP must have had at least eight consecutive hours sleep opportunity in the 12 hours immediately before the FDP.

Away from home base, an instructor commencing an FDP must have had at least eight consecutive hours sleep opportunity in the 10 hours immediately before the FDP.

If, for any reason, an instructor does not achieve the required sleep opportunity period, they cannot commence the assigned FDP. The instructor must inform the HOO as soon as it is known that the sleep opportunity period cannot be achieved.

FDP restrictions:

* An FCM will only be assigned an FDP that is between:
* the earlier of the following:
* at or after first light; or
* 0700 hours local time, and
* 0100 hours (local time at the location where the FDP commenced) on the following day.

The maximum FDP is:

* eight hours when the FDP commences prior to 0600 hours
* nine hours when the FDP commences between 0600 and 1359 hours
* eight hours when the FDP commences at or after 1400 hours.

An FDP that finishes after 2200 is called a ‘late FDP’. No more than three late FDPs will be assigned to an instructor in any 168 consecutive hours.

The maximum flight time in an FDP is seven hours.

Off-Duty Periods (ODP)

An instructor must have a minimum ODP of at least 12 consecutive hours during any 24 consecutive hours.

In any seven consecutive days, an instructor must have an off-duty period of at least 36 consecutive hours which includes two local nights (a local night is defined as eight consecutive hours which must include the time between 2200 and 0500 local time).

An instructor must have at least six days off duty in the 28 consecutive days before an FDP commences (a day is defined as local midnight to the subsequent local midnight).

Cumulative Limits:

* The cumulative flight time limit for an instructor during any 28 consecutive days is 100 hours.
* The cumulative flight time limit for an instructor during any 365 consecutive days is 1000 hours.

##### Flight and duty time records

Each instructor will ensure that form 4B11 (*CAO 48.1 – Flight Crew Member Flight & Duty Record*) is updated at the conclusion of each FDP.

The HOO will ensure that [Sample Aviation Flight Training Pty Ltd] Flight and Duty Records include all details relevant to the rostering and fatigue management and specifically include:

* rosters planned and ~~achieved~~ completed.
* actual flight and duty times including cumulative totals.
* extension reports
* home base assignments
* accommodation lists.

The HOO will back up all Flight and Duty Records at least weekly. The records and back-up records shall be kept for five years.

##### Flight and duty time extensions

An instructor must not exceed a flight time of an FDP limit except when an extension is authorised by the HOO.

The extensions permitted by [Sample Aviation Flight Training Pty Ltd] are:

* An extension to the FDP of up to one hour beyond the limit in this manual
* An extension to flight training of up to 30 minutes (i.e. after the first seven hours of the FDP’s flight time).

The following requirements must be met for the HOO to authorise an extension:

* The instructor’s FDP has commenced
* unforeseen operational circumstances (an unplanned exceptional event that becomes evident after the commencement of the FDP) arise
* the extension is operationally necessary to complete the duty
* the instructor considers himself or herself fit for the extension (refer to section 1B2.2.2 Self-assessment).

The HOO will not authorise an extension that would cause an instructor to exceed the cumulative flight time limits and must consider any impact on the subsequent rostered FDP.

However, if unforeseen operational circumstances arise after take-off on the final sector of the FDP, and this would cause the instructor to exceed any limit in this manual, the flight may continue to the planned or alternate destination at the discretion of the pilot in command.

As any extension may result in exposure to elevated fatigue risk, the HOO will record the reasons and details of any extension. The HOO will study the records of the extension as part of the continuously improving [Sample Aviation Flight Training Pty Ltd]’s fatigue risk management to help develop measures to avoid similar extensions being needed in the future.

#### Fatigue management

##### Fatigue Risk Policy

[Sample Aviation Flight Training Pty Ltd] manages the risk of fatigue in its personnel by compliance with Civil Aviation Order 48.1 instrument 2019 and Appendix 1 of that CAO.

[Sample Aviation Flight Training Pty Ltd] adopts and applies all definitions of relevant terms as in that CAO.

[Sample Aviation Flight Training Pty Ltd] will not assign a duty on a flight to a pilot if [Sample Aviation Flight Training Pty Ltd] reasonably believes the pilot is unfit to perform the duty because of fatigue.

It is a joint company and pilot responsibility to ensure that flight and duty times are not exceeded, and that fatigue risk is managed appropriately.

As such, a pilot must not begin a task for a flight if the pilot is, or is likely to be, unfit to perform the task due to fatigue.

While the company will roster IAW the limits and requirements of Appendix 1 of CAO 48.1 Instrument 2019, it is essential that instructors maintain an awareness of their state of alertness. If an instructor considers their ability to perform their duties is being affected by fatigue, they must alert the HOO.

It is expected that as professional pilots, instructors will endeavour to manage their fatigue and alertness responsibly. However, there may be occasions where unexpected events or circumstances may adversely affect an individual’s alertness.

Each instructor may conduct a self-assessment of their state of fatigue before and/or during an FDP.

Any instructor who considers or assesses themselves as being too fatigued to safely perform the FDP must inform the HOO and not undertake their FDP. [Sample Aviation Flight Training Pty Ltd] is committed to the safety of its operation and supports responsible decisions of this nature. No instructor making such a decision will be exposed to any adverse circumstances as a result.

##### Self-assessment

When conducting a self-assessment, instructors are encouraged to use a self-assessment method such as the ‘I'M SAFE’ tool. This tool incorporates more than just physical tiredness as it considers other factors that may affect the ability of an instructor to safely discharge their duties. If an instructor has any concerns as to their fitness for the duty, they must discuss the matter with the HOO.

##### ‘I’M SAFE’ self-assessment

I'M SAFE:

* (I) llness – Are you suffering from any illness or symptom of an illness which might affect you in flight?
* (M) edication – Are you currently taking any drugs (prescription or over-the-counter)? Are they affecting you?
* (S) tress – Are there any psychological or emotional factors which might affect your performance?

(A) lcohol – Could you be in any way affected by alcohol (including a hang-over)?

* (F) atigue – Have you had sufficient sleep and rest in the recent past?
* (E) ating – Are you well fed and hydrated?

Instructors assessing the fatigue component of their fitness to conduct duty should use an internationally accepted tool such as the Samn-Perelli scale (below) to make a subjective assessment of their level of alertness. Any instructor who rates themselves as either 6 or 7 on the scale below must contact the HOO immediately to discuss removal from the assigned duty.

Samn-Perelli fatigue checklist

1. Fully alert, wide awake.

2. Very lively, responsive, but not at peak.

3. Okay, somewhat fresh.

4. A little tired, less than fresh.

5. Moderately tired, let down.

6. Extremely tired, very difficult to concentrate.

7. Completely exhausted, unable to function effectively.

##### HOO responsibilities

The HOO will consider specific circumstances likely to increase fatigue risk relating to the duties assigned including:

* the type and duration of the mission (e.g. circuits, an extended navigational exercise)
* the aircraft and equipment fit, including any unserviceabilities
* the environmental and weather conditions
* the experience and competence of the instructor and the student.

If the HOO becomes aware that an instructor has specific personal circumstances that may increase their fatigue risk, the HOO must discuss those circumstances with the instructor to determine their impact on the instructor’s state of alertness. The purpose of this discussion is to evaluate if the instructor will be sufficiently alert to accept the FDP assignment. Circumstances may include:

* part-time instructors and casual employees who have additional employment
* a significant personal event.
* Medical considerations.

Strategies to decrease fatigue risk include, but are not limited to:

* a delayed start to the duty to extend the off-duty period
* modification of the assigned duty
* reassignment of the duty to another instructor
* additional planned breaks during the duty.

##### Sustenance

Low blood sugar levels and dehydration impair brain function and lead to poor decision-making. Instructors and students are encouraged to take regular meal breaks, eat nourishing food and drink sufficient quantities of water. In addition, instructors should consider breaking up long navigational exercises at an en-route aerodrome to take advantage of a meal break.

Where an FDP is to exceed five hours, [Sample Aviation Flight Training Pty Ltd] will provide an opportunity for the instructor and student to consume a meal during the first five hours, and a further opportunity for a meal (as required) to ensure not more than five hours elapses between meals.

##### Home Base

[Sample Aviation Flight Training Pty Ltd] has determined the home base of each instructor to be the training base location in the city / area in which each instructor is resident.

The HOO will advise each instructor of their designated home base and note this in the instructor’s records.

A short-term relocation to an alternate training location does not represent a change in the home base determination unless the duration of the assignment to the alternate training destination exceeds 30 days.

Any change to home base will be notified to the instructor at least 28 days in advance of the change becoming effective.

Any change to an instructor’s designated home base will trigger the requirement for three consecutive off-duty days commencing from the day the change becomes effective.

##### Accommodation

An instructor’s home or residence is deemed to be suitable sleeping accommodation and fit for purpose (it is the instructor’s responsibility to ensure their home meets the required standard).

#####  1B2.2.7.1 Accommodation away from home base

In circumstances where instructors are rostered for an ODP away from home base, [Sample Aviation Flight Training Pty Ltd] provides suitable sleeping accommodation which is fit for purpose.

The HOO will retain a list of accommodation facilities assessed as providing suitable sleeping accommodation which is fit for purpose. This list forms part of the flight and duty records.

The HOO may remotely assess three-star (equivalent or higher) commercial motels or hotels as meeting the suitable sleeping accommodation standard unless specific information indicates the need for an on-site evaluation.

If an instructor finds any aspect of away accommodation is not fit for purpose, the instructor must notify the HOO, who will either ensure the required standards are met at that facility or relocate the instructor to a facility which meets the required standards.

##### Private Operations

A recreational private operation means flying conducted by an instructor in a personal capacity and is not a ‘recreational’ private operation if it is conducted for, or on behalf of, any entity.

[Sample Aviation Flight Training Pty Ltd] does not permit an instructor to conduct private flying on days when the instructor is assigned duty without the express permission of the HOO. Should the HOO approve private flying for an instructor, the requirements of CAO 48.1 section 12 apply.

### Medical

#### Medical certificates

The following procedures apply:

1. Each flight instructor must hold a current Class 1 medical certificate, or a Medical Certificate issued by CASA that permits the instructor to conduct the training activities assigned by the operator.
2. At the first available opportunity after being revalidated by a designated aviation medical examiner (DAME), a flight instructor must give a copy of the revalidated medical certificate to the HOO. The HOO will then update the company register of instructor qualifications using form 4B10.
3. At the first available opportunity after receiving their medical certificate from CASA, a flight instructor must give a copy of the revalidated medical certificate to the HOO. The HOO will then update the company register of instructor qualifications using form 4B10.
4. The HOO must keep a copy of the instructor’s medical certificate in the instructor’s personal file.

##### Drug and alcohol management

Instructors are prohibited from performing flight training duties or responsibilities when under the influence of alcohol or drugs.

Sample text –Micro-business DAMP

[Sample Aviation Flight Training Pty Ltd] has elected to adopt the CASA Micro-business DAMP in order to obtain the benefits of the current CASA Micro-business exemption which exempts an eligible DAMP organisation from certain compulsory requirements of *CASR Subpart 99.B*.

By adopting the CASA Micro-business exemption, [Sample Aviation Flight Training Pty Ltd] has committed to adhering to all of the requirements outlined under the DAMP exemption for micro-business, as stated on the CASA website under the ‘Exemptions’ section of the CASA Drug and alcohol management planslink.

[Sample Aviation Flight Training Pty Ltd] adopts all conditions in the CASA Micro-business exemption including completion of the CASA AOD eLearning by all staff who perform SSAA and has formally adopted the Micro-business DAMP.

Sample text - Full Damp

[Sample Aviation Flight Training Pty Ltd] has developed a full drug and alcohol management plan (DAMP) which can be found in Appendix [4A2](#_Drug_and_Alcohol).

## Safety Policy

### General

Regulation 141.260 (1)(ma)

Safety is the first priority to [Sample Aviation Flight Training Pty Ltd] in all our activities. We are committed to developing and implementing strategies to ensure all of our aviation activities uphold the highest level of safety performance. We also strive to provide safe and secure work conditions and to foster positive safety attitudes.

The CEO and management are committed to developing a safety culture in all our activities resulting in an accident free workplace. [Sample Aviation Flight Training Pty Ltd] want to develop a culture of open reporting of all safety hazards and support effective communication throughout the organisation.

To help [Sample Aviation Flight Training Pty Ltd] continuously improve its safety performance all instructors and students are encouraged to report any new safety related events or issues directly to the CEO or HOO. The company will apply just culture principles to any report which identifies a newly identified safety issue accurately and in a timely manner.

### Safety Management

[Sample Aviation Flight Training Pty Ltd’s] commitment is to develop and embed a safety culture in all its activities, acknowledging that safety is paramount. This will be done through:

* student and instructor familiarisation training
* encouraging a healthy safety culture within the organisation
* fully supporting a non-punitive reporting culture
* promoting an environment of trust based on a clear understanding of acceptable and unacceptable behaviour.

Acceptable behaviour; includes honest errors such as unintentional slips and lapses.

Unacceptable behaviour; includes negligent conduct, reckless conduct and intentional wilful unsafe acts and violations.

* actively encouraging the use of the various reporting tools
* encouraging direct feedback to the CEO or HOO
* clearly defining for all instructors and students their responsibility for achieving safety outcomes
* minimising the risks associated with the operation of aircraft to a point that is as low as reasonably practicable
* striving to continually improve safety performance
* conducting management reviews to ensure that relevant action for improvement is taken.

### Accident and Incident Reporting Procedures

#### Accident and serious incident reporting

All accidents and serious incidents must be reported to the CEO or HOO as soon as possible and to the ATSB by telephone toll-free call: 1800 011 034.

#### Incident reporting

Routinely reportable matters must be reported within 72 hours via the ATSB Incident and Accident reporting website.

#### Hazard reporting

Instructors and students must bring any matters that are considered to be a safety hazard to the attention of the CEO or HOO.

#### Safety investigation

The CEO and HOO will carry out investigation of incidents, accidents and hazards if required, aiming to:

* improve the company’s safety culture
* cultivate professionalism in aviation.

#### Supporting legislation

**Section 18 TSI Act 2003 and AIP ENR 1.14:**

“Accidents and serious incidents (commonly called ‘Immediately Reportable Matters’), which affect the safety of aircraft must, in the first instance, be notified to the ATSB by telephone toll-free call: 1800 011 034, and then followed by an online report within 72 hours via the ATSB Incident and Accident reporting website”.

## Dangerous Goods

Dangerous goods are not to be carried on company operated aircraft. Certain items that might otherwise be considered dangerous are permitted IAW CASR 92.030. The PIC is to refer to this provision to determine if the article can be carried on any flight.

## Quality System

**Reserved**

# AIRCRAFT OPERATIONS

## General

### Documents to be carried on flights

The following documents and manuals must be carried in the aircraft during all training flights:

* valid maintenance release
* flight crew licences and medical certificates
* aircraft flight manual (AFM) and supplements (if applicable)
* [Sample Aviation Flight Training Pty Ltd] aircraft checklists (normal and emergency) – see form 4B14
* aircraft journey log – see form 4B15
* a map of the training area (if required).

Instructors must ensure that for any navigation exercise, weather forecasts and NOTAMs for the route are carried, along with all applicable maps and aeronautical information publication (AIP) documentation and a completed weight and balance (W&B) calculation.

### Aircraft Flight Manual (AFM) and use of checklists

The aircraft flight manual (AFM) is integral to the certification of the airworthiness of an aircraft, and contains information and instructions required to operate the aircraft safely. The HOO must ensure each aircraft operated has a current AFM.

Aircraft are to be operated IAW the [Sample Aviation Flight Training Pty Ltd] aircraft checklists (normal and emergency) that are derived from the manufacturer’s documentation. The procedures and limitations contained in the AFM for the aircraft will apply where these checklists do not cover a situation.

Checklist actions by memory must only be conducted in emergency situations; in all other cases the company checklists must be used.

### Carriage of passengers in seats at which dual controls are fitted

If a passenger has to occupy a seat where functioning flight controls are fitted, that person may only do so after being specially briefed by the PIC.

### Carriage of examiners and CASA inspectors

Regulation CAR 262

CASA Flying Operations Inspectors (FOIs) may be carried in aircraft for the purposes of checking company instructors or observation of flight tasks, when authorised by the HOO. It is company policy that a company pilot must always be the nominated PIC unless the FOI is conducting a proficiency check or rating issue on company personnel as a flight examiner.

### Manipulation of propeller – hand starting of engines

Warning: The propeller should always be treated as ‘live’.

If hand starting of an aeroplane is a standard operating procedure, it must be carried out under the supervision of an instructor and IAW the AFM for the aircraft.

### Taxiing

Regulations 61.116
CAR 229

Persons authorised to taxi aeroplanes operated by [Sample Aviation Flight Training Pty Ltd] include:

* student pilots who have completed their first solo flight
* pilots who hold an aircraft class rating for that aeroplane
* persons holding a Part 64 authorisation to taxi an aeroplane.

### Use of seatbelts

Regulations CAR 251
CAO 20.16

All occupants of aircraft operated by [Sample Aviation Flight Training Pty Ltd] must have seat belts or safety harnesses fastened at all times during flight.

### Carriage of lifejackets

For any anticipated flights over water, the PIC will ensure that there are sufficient life jackets for all occupants on board the aircraft.

### Minimum emergency equipment to be carried

Regulation CAR 252 (A)

All aircraft operated by [Sample Aviation Flight Training Pty Ltd] are equipped with approved emergency locator transmitters (ELTs). If an ELT is not serviceable, the company has one portable ELT which will be carried on board for cross country flights.

### Weight and balance control

The PIC is responsible for ensuring that the aircraft is loaded IAW the procedures contained in the relevant AFM and that no limits are exceeded during the flight.

A full weight and balance calculation must be completed by the PIC before each navigation exercise. The record of the calculation forms part of the pre-flight authorisation documentation.

### Securing aircraft

The PIC must ensure that the aeroplane is secured whenever it is left unattended to prevent damage by means such as:

* throttle locks
* locking all control surfaces
* park brake is set on
* doors are locked
* the aeroplane is securely chocked, pitot covers fitted and tie down restraints attached.

Note: If the aeroplane is left in an enclosed hangar, the park brake may be left off, providing the aeroplane is securely chocked.

### Passenger briefings

All passengers must be briefed before take-off by the PIC IAW [Sample Aviation Flight Training Pty Ltd’s] checklists.

### Personal electronic devices

A student is not permitted to use the navigation function on a personal electronic device on a training flight except in an emergency.

## Fuel Policy

### Purpose

This section covers the fuel policy and planning requirements to be followed when conducting authorised Part 141 flight training operations in aircraft operated by [Sample Aviation Flight Training Pty Ltd].

### Minimum fuel planning requirements

At the start of a flight, our PIC always ensure that the fuel quantity carried includes the following (calculated using the relevant fuel flow rates stated in the tables in [2B3]:

1. taxi fuel they expect to use before take-off, taking into account local conditions at the departure aerodrome and auxiliary power unit consumption (if applicable). See tables in [2B3] below for taxi allowances and section [2B2.1] for operating conditions.
2. the trip fuel required to enable the aircraft to fly until landing at the destination aerodrome, taking into account the operating conditions. See cruise fuel flow rates in tables in [2B3] below and considerations listed in [2B2.1], including (as applicable):
3. fuel for take-off and climb from departure aerodrome elevation to initial cruising level/altitude, taking into account the expected departure routing.
4. fuel for cruise from top of climb to top of descent, including any step climb or descent from the initial cruising level/altitude mentioned in paragraph (a) above.
5. fuel from top of the descent to the point where the approach is initiated, taking into account the expected arrival procedure.
6. fuel for executing an approach and landing at the destination aerodrome.
7. alternate fuel (if required) to enable an aircraft to do the following in a sequence, using cruise fuel flow rates listed in tables [2B3] and considering operating conditions in section [2B2.1]:
8. a missed approach at the destination aerodrome.
9. fly the expected routing to the destination alternate.
10. conduct the approach.
11. land at the destination alternate.
12. a fuel fixed reserve covering the amount of fuel:
13. required to fly at 1,500 feet above aerodrome elevation in ISA conditions for the period of time specified below:
14. Small aeroplanes (< 5700kg) – 30 minutes for day-VFR at the holding rate
15. Small aeroplanes (< 5700kg) – 45 minutes for IFR or night-VFR at the holding rate.
16. All turbojets or large (> 5700kg) turboprop aeroplanes – 30 minutes at the holding rate
17. Large piston aeroplanes (> 5700kg) – 45 minutes at the holding rate
18. calculated with the estimated weight on arrival at the destination alternate (or the destination aerodrome when no destination alternate is required)
19. which is usable fuel remaining in the fuel tanks until completion of the final landing.
20. additional fuel (if required – multi-engine operations or pressurized aircraft) which is the supplementary amount of fuel required to allow the aircraft, in the event of engine failure or loss of pressurization, whichever results in the greater subsequent fuel consumption, occurs at the most critical point. See section [2B3.2] one engine fuel flow rate and depressurized fuel flow rate and section [2B2.1] operating conditions:
21. to proceed to an alternate aerodrome
22. to fly for 15 minutes at holding speed at 1,500 feet above aerodrome elevation in ISA conditions
23. to make an approach and landing.
24. holding fuel (if required) covering the amount of fuel required to fly for the period of time anticipated to be required for holding (taking into account the operating conditions) calculated at the holding fuel consumption rate established for the aircraft for the anticipated meteorological conditions or ISA, using holding fuel rates listed in tables [2B3] and considering operating conditions in section [2B2.1]
25. variable fuel (only if the aircraft operated is turbojet, large aeroplane [turboprop or piston]) – 5% of the trip fuel for the flight.
26. fuel required is the sum of numbers (1) to (7) above.
27. discretionary fuel in accordance with section [2B4] below.
28. fuel margin which is the difference between fuel required (item 8), discretionary fuel (item 9) and endurance (item 11) of this section.
29. endurance (the sum of items 8, 9 and 10) of this section.

#### Fuel operating conditions

Due to the fact there are many variables pertaining to operational conditions that influence the determination of usable fuel for a flight, [Sample Aviation Flight Training Pty Ltd] takes into account the following items:

1. anticipated aircraft weight
2. NOTAMS
3. meteorological reports and forecasts
4. ATC procedures, restrictions and anticipated delays
5. the effects of any deferred maintenance items and configuration deviations [if applicable]
6. the potential for deviations from the planned flight because of unforeseen factors

### Fuel flow rates

[Sample Aviation Flight Training Pty Ltd] operates the following aircraft, and fuel flow rates are as follows:

#### Make and Model [Generic One Engine]

|  |
| --- |
| **Aircraft 1** |

|  |  |
| --- | --- |
| Allowance for taxi, departure and arrival | Litres [x Ltr] |
| Cruise fuel flow rate | litres per hour [xx Ltr/hr] |
| Holding fuel flow rate | litres per hour [xx Ltr/hr] |

#### Make and Model [Generic Multi Engine]

|  |
| --- |
| **Aircraft 2** |

|  |  |
| --- | --- |
| Allowance for taxi, departure and arrival | Litres [x Ltr] |
| Cruise fuel flow | litres per hour [xx Ltr/hr] |
| One Engine fuel rate | litres per hour [xx Ltr/hr] |
| Holding fuel flow  | litres per hour [xx Ltr/hr] |

### Discretionary fuel for solo training flights

Instructors working for [Sample Aviation Flight Training Pty Ltd] always ensure that, in addition to the fuel required to safely conduct the flight (including any prescribed fuel reserves), a suitable amount of discretionary fuel is carried on all solo training flights. This amount is based on normal cruise fuel flow rates and is currently set at:

1. **[45] *minutes*** for training area flights
2. **[60] *minutes*** for cross country navigation flights.

These amounts are revised from time-to-time in the light of experience [2B7], as required by the HOO and are promulgated to staff and students via a Manual amendment.

### Fuel related procedures

#### Determining and recording fuel quantity - pre-flight

The pilot in command ensures that a determination of the quantity of usable fuel on board is conducted before flight. Fuel quantity gauge readings are cross checked to ensure accurate fuel calculations against one of the following methods:

* Visual confirmation (e.g. full, tabs or dipstick reading)
* Calculated (e.g. comparing fuel on board from previous flight with fuel added with reference to aircraft journey log Form 4B15).

Any significant fuel quantity discrepancy between actual fuel on-board (gauge) and calculated (journey log) is reported to a qualified licenced aircraft maintenance engineer for further investigation.

If there is a need to defuel prior to flight, then this is carried out by an appropriately approved and qualified person and in the appropriate location as outlined in section [2B8] here.

#### Determining and recording fuel quantity - in-flight

During all flights, at a [XX]-minute interval, our pilots conduct a fuel quantity check whereby the usable fuel remaining is evaluated to compare planned fuel consumption with actual fuel consumption. This is accomplished by cross-referencing the fuel remaining on gauges with an appropriately calculated fuel log covering aircraft endurance – litres and minutes of fuel remaining. Our pilots determine the expected usable fuel remaining on arrival at the destination aerodrome and whether the usable fuel remaining is sufficient to complete the planned flight.

Upon conducting this cross-reference, if there is an unexplained discrepancy between the fuel gauge reading and the fuel log of more than [operator to specify maximum tolerance in minutes and/or litres], the pilot in command takes into consideration the items in section [2B5.2.1] below.

##### In-flight fuel procedures

If, after flight commencement, fuel is used for a purpose other than that originally intended during pre-flight planning, the pilot in command reanalyses and, if applicable, adjusts the planned flight.

If it is determined that the usable fuel expected to be remaining on arrival at the destination aerodrome is less than the fixed fuel reserve (where no alternate aerodrome is required), then the pilot takes appropriate action and proceeds to an en-route alternate so as to perform a safe landing with not less than the fixed fuel reserve remaining.

If it is determined that the usable fuel expected to be remaining on arrival at the destination aerodrome is less than the fixed fuel reserve plus alternate fuel (if applicable), the pilot in command considers the traffic and the operational conditions prevailing at the destination aerodrome, at the destination alternate and at any other en-route alternate, and, if insufficient fuel is available to account for the traffic or operational conditions at the destination aerodrome, then the pilot in command ensures a safe landing can be made at the destination alternate or an en-route alternate with not less than fixed fuel reserve remaining.

If the pilot decides to proceed to an en-route alternate from a decision point, the amount of usable fuel on board includes:

* + 1. trip fuel from the decision point
		2. holding fuel (as required)
		3. variable fuel reserve (if specified in Table 1 in CASA 29/18 Instrument)
		4. alternate fuel (if required)
		5. fixed fuel reserve
		6. additional fuel (if applicable).

At any time during flight, the amount of usable fuel on board to continue a flight safely includes:

* + 1. trip fuel from that time
		2. holding fuel (as required)
		3. alternate fuel (if required)
		4. fixed fuel reserve
		5. additional fuel (if applicable).

The pilot requests delay information from ATC when unforeseen factors may result in landing at the destination aerodrome with less than the following:

(a) if alternate fuel is required — alternate fuel plus fixed fuel reserve

(b) if alternate fuel is not required — fixed fuel reserve.

The pilot in command has been instructed to advise the ATC of a minimal fuel state that when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the fixed fuel reserve for the flight. This will be broadcast as “MINIMUM FUEL”.

The pilot in command has been instructed to declare a situation of emergency fuel when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the fixed fuel reserve for the flight. The pilot in command has been instructed to declare an emergency fuel state by broadcasting “MAYDAY, MAYDAY, MAYDAY FUEL”.

##### Considerations at point of inflight decision-making and/or decision point

Should the need arise to make an inflight decision whether a landing can be made at the destination or any available en-route alternate, the following is taken into account:

* meteorological conditions, both en-route and at the destination, to include hazardous phenomena such as thunderstorms, turbulence, icing and restrictions to visibility
* field conditions, such as runway condition and availability and status of navigation aids
* en-route navigation systems and facilities status, where possible failures could affect the safe continuation or completion of the flight
* en-route fuel supply, including actual en-route consumption compared to planned consumption, as well as the impact of any changes of alternate airport or additional en-route delays
* airborne equipment that becomes inoperative, which results in an increased fuel consumption or a performance or operational decrement that could affect the flight crew’s ability to make a safe landing at an approved airport
* air traffic management concerns, such as re-routes, altitude or speed restrictions and facilities or system failures or delays
* security concerns that could affect the routing of the flight or its airport of intended landing.

The following equi-time point (ETP) and point of no return (PNR) calculation is used to assist pilots in making inflight decisions.

##### Equi-time point (ETP) selection and calculation

[Sample Aviation Flight Training Pty Ltd] calculates its ETP for each aircraft type and each flight using the equation cited below. The selection of aerodromes on which [Sample Aviation Flight Training Pty Ltd’s] ETP calculation is based takes into consideration the characteristics of the route being flown. For long distance routes between suitable en-route alternate aerodromes (ERA), such as in oceanic or remote areas, the planned route of flight is usually examined to identify suitable ERAs based on aircraft requirements, aerodrome capability, and weather.

The ETP formula or equation that [Sample Aviation Flight Training Pty Ltd] uses normally returns the distance along track to the ETP from the departure point with input values of total distance, groundspeed back and groundspeed forward, as shown below:



##### Point of no return (PNR) selection and calculation

[Sample Aviation Flight Training Pty Ltd] calculates its PNR for each aircraft type and each flight using the equation cited below.

While the PNR is usually calculated and specified in the operational flight plan (OFP), such a calculation does not typically take into account any discretionary fuel, or the real-time changes in fuel consumption that may occur after departure. Therefore, the actual PNR for [Sample Aviation Flight Training Pty Ltd’s] flights will sometimes be reached later in that specific flight than the point originally calculated in the previously calculated OFP.

The equation [Sample Aviation Flight Training Pty Ltd] uses when calculating time to a PNR is:

*Safe Endurance X Ground Speed Back*

*Ground Speed Back + Ground Speed Forward*

Time to PNR =

*Total Fuel Quantity – Required Fuel Reserves*

 *Average Fuel Consumption Rate*

Where safe endurance is:

**Note:** When calculating time to PNR, the units (hours or minutes) for endurance and groundspeed must be consistent.

The equation for calculating ground distance to a PNR is:

*Safe Endurance X Ground Speed Back X Ground Speed Forward*

*Ground Speed Back + Ground Speed Forward*

Ground Distance to PNR =

#### Determining and monitoring fuel quantity - post-flight

Upon returning from a flight, pilots are required to complete all relevant fuel documentation including the journey log [Form 4B15] with the amount of fuel at shutdown. Any *significant* fuel quantity discrepancy variation between actual fuel on-board (gauge) and completed journey log is reported to a qualified licenced aircraft maintenance engineer for further investigation.

### Fuel types

All aircraft operated by [Sample Aviation Flight Training Pty Ltd] use:

* AVGAS 100 (Green colour – also known as AVGAS 100/130) or
* AVGAS 100LL (Blue colour)

No other type or grade of fuel is to be used.

### Fuel usage monitoring

The HOO at [Sample Aviation Flight Training Pty Ltd] monitors fuel usage by dividing monthly total fuel usage by monthly total Tacho time to arrive at an average fuel rate per aircraft. If there is a significant variance from previous figures, the HOO investigates the cause. If a leak or a faulty fuel gauge is suspected, maintenance action is initiated. Should the cause be of a more long-term nature, the HOO amends the planned fuel rates specified in section [2B3].

### Aircraft refuelling

All aircraft operated by [Sample Aviation Flight Training Pty Ltd] are refuelled from a bowser or refuelling truck using the following procedure:

1. ensure the following safety precautions, external to an aircraft, are present prior to commencing fuelling operations.
2. ensure the area is clearly placarded as ‘no-smoking’ and the limits of this area shall be a sealed building or at least 15 metres (50ft) from the aircraft of ground refuelling equipment.
3. ensure no persons are smoking or using a naked flame within 15 metres (50ft) of the aircraft and ground fuelling equipment.
4. except in the case of aircraft, operate an internal combustion engine or any electrical switch, battery, generator, motor, or other electrical apparatus within 15 metres (50ft) of the aircraft’s fuel tank filling points or vent outlets, and ground fuelling equipment unless the engine, switch, generator, motor, or apparatus complies with the provisions in Appendix of the *Civil Aviation Order* 20.9.
5. Ensure there are no persons on-board the aircraft.
6. Position the aircraft to allow easy movement if there is an emergency.
7. during fuelling operations, the aircraft and ground fuelling equipment are located so that no fuel tank filling points or vent outlets lie:
8. within 5 metres (17ft) of any sealed building
9. within 6 metres (20ft) of other stationary aircraft
10. within 15 metres (50ft) of any exposed public area
11. within 9 metres (30ft) of any unsealed building in the case of aircraft with a maximum take-off weight not exceeding 5,700 kg (12,566 lb).
12. refuelling or defueling of an aircraft is not conducted in a hangar.
13. at least 2 fire extinguishers of approved type and capacity are positioned:
14. within 15 metres, but not less than 6 metres, from the aircraft and the fuelling equipment, or
15. carried on the fuelling equipment.
16. Secure static leads.
17. Remove tank cap.
18. Refuel aircraft.
19. Secure tank caps.
20. Remove static leads.
21. Complete required documentation - All fuel added is recorded in the aircraft journey log [Form 4B15] and then updated on the flight authorisation sheet in the ops room at the completion of the flight [Form 4B9].

Note: If no means other than refuelling from a drum is available, the HOO approves the procedure.

#### Action in the event of a fire hazard

In the event of a spill or a fire hazard, [Sample Aviation Flight Training Pty Ltd] follows the following procedures:

1. a fuelling operation is stopped, and the appropriate airport fire service is notified when any fuel of a quantity likely to create a fire hazard is spilled within 15 metres (50ft) of the aircraft or ground refuelling equipment and does not recommence until the fire has been removed.
2. mobile power units, vehicles and power operated loading devices operating within 15 metres (50ft) of the spilled fuel are shut down.
3. maintenance work of any nature on or within the aircraft are suspended and not recommenced until the spilled fuel has been removed.
4. if fuel is spilled, the HOO is immediately notified to obtain a fuel spill kit, follow their order in relation to the spill, and when time permits, fill in a hazard and incident report form.

### Refuelling by students

Only students who have completed the following are permitted to conduct unsupervised refuelling:

* successfully completed refuelling training
* been assessed as competent in unit C4 of the PART 61 MOS
* have written approval to conduct unsupervised refuelling entered into their training records by their usual instructor or the HOO.

### Fuel quality check

Before the first flight of the day and after refuelling, the PIC carries out an aircraft fuel drain check.

The fuel quality check is to confirm:

* the absence of water or contamination
* the grade and type of fuel.

If a small quantity of water is detected, the fuel is drained until all traces are removed from the fuel system before starting engines.

When significant quantities of contamination are found, this is:

* endorsed on the maintenance release
* reported to the Operations Officer for aircraft reallocation
* reported to the HOO.

### Engine oil and hydraulic fluid management

Only oil and hydraulic fluid of the types specified in the AFM or manufacturers approved data as detailed on the maintenance release for a particular aircraft may be added to that aircraft’s engine. Oil and hydraulic fluid quantities will be in IAW the manufacturer’s or AFM requirements.

Oil is carried on all navigation exercises. At intermediate landing points, if there is enough time on the ground, the oil quantity is checked and topped up if and as required. Any oil added is recorded on the maintenance release.

Oil consumption that exceeds the manufacturer’s requirements is brought to the attention of the HOO and the maintenance organisation responsible for the maintenance of the aircraft.

Should there be a need to add hydraulic fluid, [Sample Aviation Flight Training Pty Ltd] requires liaison with a licenced aircraft maintenance engineer before doing so.

## Aircraft Airworthiness

### System of maintenance

The log book statement details how the aircraft should be maintained. The maintenance release details what schedule was used in order to issue the maintenance release and control the maintenance in its period of validity.

### Scheduling of Maintenance

The HOO or delegate shall review maintenance releases on a daily basis for upcoming routine maintenance items and any entries regarding unserviceabilities made during operations. The HOO or delegate shall liaise with the maintenance provider to action any outstanding maintenance items or rectify reported defects.

Before releasing the aircraft for flying operations, the HOO or delegate shall verify that any maintenance release entry has been appropriately cleared as applicable.

### Maintenance release procedures

[Sample Aviation Flight Training Pty Ltd] uses a standard CASA maintenance release form. This is used for:

1. Notification if maintenance is required to be performed during the period of validity of the MR (Part1).
2. Recording defects or damage to the aircraft (Part 2).
3. Recording flight time (Part 3).
4. Certifications for the conduct of the daily inspection (Part 3).

Before a flight, the PIC must check the MR to ensure:

1. The date and/or the total time in service (TTIS) when the MR expires will not be exceeded during the intended flight (Part 1).
2. The date and/or any total time in service of any maintenance required to be performed will not be exceeded during the intended flight (Part 1).
3. Any defects or damage listed on Part 2 that are required by aircraft certification or are items that may affect the aircrafts airworthiness are rectified prior to the intended flight.
4. Any equipment listed as unserviceable in Part 2 is not required for the intended flight or is specified as mandatory equipment in the aircraft flight manual.
5. The daily inspection has been certified correctly in Part 3 of the MR showing the date, signature and flight crew licence number of the person who performed the inspection.

The MR must be carried on all flights.

Persons conducting the daily inspection must do so in accordance with the appropriate schedule. Part 1 of the MR will specify the schedule/system of maintenance to which the aircraft is being maintained. The daily inspection for company aircraft maintained to the CASA maintenance schedule is found in Schedule 5 of the Civil Aviation Regulations. If Part 1 of the MR specifies a maintenance schedule other than schedule 5 (i.e. manufacturers schedule or system of maintenance) then the person conducting the daily inspection must have a copy of that inspection at hand prior to conducting the daily inspection.

Pilots are reminded of their responsibilities in recording any defect on the MR IAW CAR 50 (2).

If an endorsement on Part 2 of the MR is a major defect or major damage, the MR becomes invalid until such time as the major defect or damage is rectified and the endorsement cleared by an appropriately authorised or licenced person.

Regulations 47 and 48 of *Civil Aviation Regulations* (*1988)*)

Defects that are not major defects or damage may not render the MR invalid. The PIC will assess whether any such defect is in an item of equipment that is required for the particular flight. For example, if a night flight is planned and instrument lighting is unserviceable, the flight must not be commenced until the lighting is rectified. However, a day VFR flight would not be affected. Some defects may render the aircraft unserviceable as the component or equipment is required by type certification. Where the PIC is unsure, the matter should be referred to the HOO for consultation with the maintenance provider or suitably qualified maintenance engineer. A student acting as PIC is to consult with an Instructor as to the status of a defect under any of these circumstances.

On completion of each flight, the PIC must record the flight time and number of landings for the flight, in the journey log for the aircraft.

On completion of flying operations each day, an instructor nominated by the HOO is to calculate the time in service for the day for each aircraft flown and record the daily time in service and total time in service on the maintenance release. Oil uplift and number of daily landings are also to be recorded on the maintenance release.

### Major defects

A major defect means damage of a kind that may affect the safety of the aircraft (CASR Part 1 - Definitions). The HOO or their delegate must ensure all major defects are investigated and reported to CASA by submission of a Service Difficulty report (CASA form 404 or online).

The raising of a Service Difficulty report is the responsibility of the registered operator of the aircraft.

### Corrective action procedures

Any doubts concerning the airworthiness of an aircraft must be initially referred to the HOO or the supervising instructor.

An aircraft may be flown with an existing defect by use of a permissible unserviceability (PUS) or the approval of a ferry flight by the issue of a special flight permit. The HOO or delegate is to liaise with the maintenance provider to apply for permissions from CASA or a CASA delegate. Permissions must be endorsed on the aircraft’s maintenance release.

### Pilot maintenance

A flight instructor may carry out maintenance provided:

* they have been approved by the HOO as specified in CAR Schedule 8
* there is approved data and tooling available to the instructor
* any parts fitted have been stored, tracked and their installation recorded in an appropriate recording system
* they are trained in the tasks required.

Maintenance other than a daily inspection must be certified on Part 2 of the maintenance release. Induction training for flight instructors may also include maintenance certification requirements.

### Lightning strike

If a lightning strike is experienced in flight:

1. The PICs must report it on Part 2 of the aircraft maintenance release.
2. The PICs must report the event to the HOO.
3. The HOO must report it to the maintenance organisation for investigation.

### Bird or animal strike

If a bird or animal strike is experienced in flight:

1. The PICs must report it on Part 2 of the maintenance release.
2. The PICs must report the event to the HOO.
3. The HOO must inform the maintenance organisation for investigation.

If the strike took place at a registered aerodrome, the PIC must report the event to the ATSB within 72 hours.

### Procedure if an aircraft becomes unserviceable away from home base

An instructor is permitted to rectify and certify for the rectification of an unserviceability that is listed in CAR Schedule 8 provided:

* the instructor is trained and approved for such maintenance
* the HOO has approved the rectification.

If *CAR Schedule 8* is not applicable, the instructor must liaise with the HOO to establish if suitable maintenance resources are available locally.

If local resources are not available, the HOO will make arrangements to secure and protect the aircraft and arrange recovery.

# PART 141 FLIGHT TRAINING

Regulation 141.260 (1)(k)

## Instructor Training

### Instructor Induction Training (IT)

#### Policy

Regulations 141.120 (1)(ca)
141.130 (2)(a)
141.130 (2)(n)
141.130 (4)(b)(ii)
141.175 (1)

Induction training is to be completed by all instructors prior to commencing flight training activities.

The HOO is responsible for planning, scheduling, conducting and recording the results of the training in the instructor’s individual file.

#### Training courses

Regulation 141.200

Instructor induction training will consist of two courses - IT1 and IT2.

1. IT1 is general company induction training.
2. IT2 is human factors principles and non-technical skills (HF/NTS) training.

Regulation 141.130 (4)(b)(ii)

The training is to ensure all newly recruited instructors are equipped with the knowledge to safely and effectively discharge their duties and responsibilities for [Sample Aviation Flight Training Pty Ltd].

##### IT1 training

The new instructor will carry out directed study on the topics outlined in the Instructor Induction Training Course IT1 at form 4B5. The HOO will brief the instructor and carry out practical instruction as required IAW the course topics and ensure adequate knowledge has been acquired.

##### IT2 training

IT2 training is designed to induct the new instructor into the company’s HF and NTS program IAW 3A3

Regulations 141.130 (4)(b)(ii)
141.260 (1)(h)

### Instructor Standardisation and Proficiency Checks

Regulations 141.185 (1)
141.195

#### Conduct

Regulations 141.190 (1)
141.190 (2)
141.195

An instructor must complete a standardisation and proficiency (S&P) check before commencing any flight training activities. Recurrent S&P checks must be completed IAW CASR 141.190.

S&P checks will be conducted by the HOO. The checks will include a review of the instructor’s competency to deliver sample long and pre-flight briefings and flight instruction IAW the syllabus and lesson plans published in this Operations Manual.

The HOO will give sufficient advance notice of the topic to be assessed during the check. During delivery of briefings and flight demonstrations, the HOO will assume the role of a student-under-instruction. The HOO will be PIC for the in-flight component of the check and will brief the instructor on contingencies during a real emergency.

The minimum competency standards in the briefing are the standards as described the Part 61 MOS unit FIR 1 (Conduct aeronautical knowledge training). The minimum competency standards in flight instruction are the standards described in unit FIR 3 (conduct flight training). The results will be recorded on form 4B7 and record the new expiry date on form 4B10.

For the initial S&P check, the HOO will record the results on form 4B3.

Regulation 141.195 (1)

#### Debriefing

The HOO will advise the instructor of the overall result of the check. Any deficiencies are to be recorded with a corrective plan on the instructor’s file. Should the instructor be deemed to be ‘not yet competent’ (NYC), the HOO will arrange a remedial training program to ensure competency before they recommence training duties.

If an instructor has demonstrated marginal performance, the HOO may require a further standardisation and proficiency check to be completed following the completion of remedial training.

### Human Factors and Non-technical Skills Training

#### Overview

The objective of internal training in human factors principles and non-technical skills (HF/NTS) is to provide instructors with an understanding of how and why errors may occur during training, the risk these errors represent and what can be done to manage the risk.

This knowledge can then be applied to minimise the potential for future errors and improve flight safety.

The internal training conducted by [Sample Aviation Flight Training Pty Ltd] is aimed at providing instructors with basic level of human factors knowledge and non-technical skills and maintaining the knowledge and skills over time.

[Sample Aviation Flight Training Pty Ltd] has utilised the Safety Behaviours: Human factors for pilots (SB:[**HF for pilots**](http://shop.casa.gov.au/products/safety-behaviours-human-factors-for-pilots)) kit produced by CASA as a resource for developing the HF/NTS internal training syllabus at 4A3.

#### Induction training

The induction training Course (IT2) is comprised of the following:

1. The HOO will choose three module C topics from the syllabus.
2. The instructor will pre-read the corresponding chapters from the CASA SB:HF for pilots - Resource Guide.
3. Where applicable the instructor will watch the SB:HF for pilots - Introduction and Airtime drama video.
4. The instructor will complete the exercises that correspond to the selected chapters.
5. The HOO will review the completed exercises and discuss with the instructor to ensure adequate awareness of the subjects has been achieved.

#### Refresher program

The Company’s refresher HF/NTS training will be conducted on an annual basis coinciding with the instructor’s Standardisation and Proficiency check. The syllabus sets out topics which may be chosen and is designed to cycle through on a 3-year basis.

The refresher training course will include the following tasks:

1. The HOO will choose 4 module C topics from the syllabus.
2. The instructor will pre-read the corresponding chapters from the SB:HF for pilots – Resource Guide.
3. Where applicable the instructor will watch the SB:HF for pilots - Introduction and Airtime drama video.
4. The instructor will complete the exercises that correspond to the selected chapters.
5. The instructor will plan three HF related hazards that could exist in their operations or similar operations and consider ways for managing the risk (corresponding to the module B topic in the sample syllabus below.

The HOO will review the completed exercises and discuss these and the instructor’s consideration of the three HF hazards with the instructor to ensure adequate awareness of the subjects has been achieved.

#### Syllabus

A syllabus is provided at Appendix 4A3 and covers the following major topics included in the CASA SB: HF for pilots’ toolkit:

* fatigue
* stress
* alcohol and other drugs (AOD)
* communication
* teamwork
* leadership
* situational awareness
* decision making
* threat and error management
* airmanship.

## Conduct of Training Operations

Regulation 141.290 (1)(b)

### General

Regulation 141.130 (3)(e)(i)

#### Authorisation of training flights

Before starting a training flight, both student and authorising instructor will sign form **4B9**

##### Solo flights

For a solo flight, the authorising instructor will only sign the authorisation sheet (form **4B9**) when they have confirmed the following items:

Regulations 61.112
141.305
141.305 (3)(c)
141.305 (6)(b)
141.306
141.306 (2)

1. The student has an ARN, current medical certificate and ELP as required.
2. The student has completed all training and examinations as prescribed by the syllabus for the solo flight.
3. The student flight training records indicate that they have achieved the required standard for all elements of competency for the flight.
4. The student has completed 2 hours of dual instrument time including 1-hour instrument flight time if the flight is a first solo cross-country or night flight.
5. The student has been briefed on the objectives, conditions, and limitations of the intended solo flight, including the task or route to be flown, number of circuits (if applicable), traffic and ATC considerations, and actions to be taken during an emergency.
6. The student is clear on what they are be authorised to do while on their solo flight.
7. The actual and forecast weather conditions including runway crosswind and last light limitations are suitable after considering the student’s previous competence in similar conditions.
8. The daily inspection is complete and certified.
9. The pre-flight inspection confirms the aircraft is serviceable.
10. All instruments, navigation equipment and lighting are serviceable as required for the flight.
11. The fuel and oil state is appropriate for the flight.
12. The student carries all appropriate inflight documentation IAW section 2A1.

##### Supervision of solo flight

Regulation 61.112
141.130 (3)(d)

To supervise a solo flight, the authorising instructor must be:

* at the aerodrome of departure or flying within 15 NM of the departure aerodrome
* contactable during the flight by radio or other electronic means.

During a first solo flight in the circuit, the authorising instructor must be at the airport to actively monitor the progress of the flight visually and if possible, via a VHF radio and able to render assistance if necessary.

When a student is on a solo navigation exercise, the authorising instructor must maintain awareness of the weather conditions en-route and at the destination aerodrome. The instructor must also maintain awareness of the student pilot’s ETA back at home base and must inform the HOO or supervising instructor if the student has not returned when the expected ETA time has elapsed.

#### Operations within training areas

Regulation 141.130 (3)(d)

A training area map is located at Appendix 4A1.

All instructors and students conducting training other than navigation exercises must conduct all training within the training area.

#### Aerobatics and spinning

Aerobatics and spinning by solo students is prohibited. However, dual spin training may be conducted by an appropriately qualified instructor in an appropriate aircraft, to familiarise students with the characteristics of a spin and to introduce them to the basic spin recovery technique.

#### Solo practice forced landings

The training area map (Appendix 4A1) indicates the approved area to conduct solo practice forced landings.

When practicing forced landings, the PIC must not continue the approach below 500 feet above ground level (AGL) unless the approach is to an airfield runway.

During the briefing, the student should be reminded that when practicing forced landings, they must keep the engine warm and to be ready to go around at any time and to have all checks required, to ensure a safe go-around no lower than 500 feet AGL.

#### Low flying training

[Sample Aviation Flight Training Pty Ltd’s] authorisation does not permit low flying training. All pilots must ensure they remain at least 500 feet AGL at all times.

#### Aerodrome suitability

Except in an emergency, aeroplanes operated by [Sample Aviation Flight Training Pty Ltd] will only be operated to or from an aerodrome that has been assessed as suitable by the HOO for the proposed flight training operations.

The HOO will ensure the runway length used is sufficient to provide an adequate margin of safety with consideration of the flight training operations and student pilot competency.

The HOO and flight instructors will refer to AC 91.02 - Guidelines for aeroplanes with a MTOW not exceeding 5,700 kgs - suitable places to take-off and land, to determine if the aerodrome is suitable for the conduct of flight training operations.

#### Company register of suitable non-certified aerodromes

Form 4B13 (*Aeroplane Landings Areas (ALA) Report Form*) is to be used for compiling a company register of suitable non-certified aerodromes that have been approved for use by the HOO.

Information listed in the register is advisory in nature. The HOO should be advised if an amendment is considered necessary.

The PIC must obtain permission of the non-certified aerodrome operator when required and is responsible for determining that the area is suitable for the intended operation.

#### Standard navigation routes

All navigation training flights will be conducted IAW the syllabus for the relevant course of training. The routes may be changed with prior permission of the HOO. The HOO will ensure that revised routes will comply with the syllabus outcomes for the exercise.

#### Carriage of passengers on training flights

Unless expressly approved by the HOO, no passengers are to be carried on any training flight unless it is considered that the carriage of a passenger will provide a training benefit.

Regulation 141.300

Under no circumstances are passengers to be carried on a flight during which it is planned to conduct:

* a simulated engine failure
* a system failure that affects the aircraft’s performance or handling characteristics.

Regulation 141.295 (1)(a)(i)

#### Observance of last light limitations

Authorising instructors of solo training flights conducted late in the afternoon or evening must ensure that students are aware of last light and are able to complete the flight with an adequate margin.

A day solo cross-country flight will not be authorised if the ETA to home base is within 60 minutes of last light. This margin will be increased if adverse weather conditions are likely to bring last light forward.

#### Simulation of instrument flight

When simulating instrument flight, instructors will use company issued instrument flight hood or goggles.

Regulation CAO 29.2 (2.2).

#### Submission of flight plans by student pilots

Before the submission of flight plan details by a student, the authorising instructor must check the flight plan for accuracy. All cross-country flights shall have a SARTIME that is to be held by CENSAR.

The use of a flight note, and the holding of company SAR should only be used if no other option exists.

#### Supervision of night flying operations

The HOO shall nominate and roster an authorised instructor to supervise night flying operations.

The authorised instructor must be familiar with the alternate methods of activating the aerodrome lighting and ensure student pilots are briefed on required actions in the event of a failure of the aerodrome lighting system.

Regulation CAO 29.2 (3)

The home base airport meets the requirements for airport lighting and ground facilities. The authorising instructor shall confirm there are no Notams that reduce these levels. The HOO needs to specifically authorise any other airport for this purpose.

Regulation CAO 29.2 (4)

If an aircraft is to be used for night flying, the authorising instructor will confirm there are no unserviceabilities that prohibit flight at night.

Regulation CAO 29.2 (5)

#### Procedures for night flying training

Flights are conducted in accordance with any alternate aerodrome requirements for aerodrome lighting.

Instructors will ensure solo night circuit flights are conducted with sufficient fuel reserves to enable the supervising instructor to activate or deploy alternative or emergency runway lights.

Night flying operations shall be conducted IAW the night flying syllabus in Vol. 5. Additionally, night circuit operations shall be conducted:

* within a radius of 3 NM of the aerodrome reference point and not less than 1000 feet and up to 1500 feet above aerodrome elevation

Regulation CAO 29.2 (2.2)

* night circuit operations shall not be conducted in weather conditions less than:

Regulation CAO 29.2 (2.3)

* a ceiling of 1500 feet
* visibility of less than 5 kilometres.

### Flight Lesson Conduct

Regulation 141.130 (3)(e)(i)

#### Assessment of student competence

Regulations 141.130 (3)(b)
141.130 (3)(e)(ii)

Evidence of satisfactory knowledge is obtained through the results of examinations and assessment of underpinning knowledge at pre-flight briefings. The standards for skills are expressed in terms of performance criteria for each element of competency in syllabuses. Evidence of competency in flying skills is obtained by reviewing actual student performance against the standards detailed in the relevant syllabus.

The flight training record is attached to the lesson plan. It includes the standard of performance needed to be demonstrated for each element of that lesson. The instructor will record student performance in the flight training record, highlighting elements where the student is not yet considered to be competent. This will allow future lessons to revisit those items and rectify them.

#### Flight lesson debriefing and recording

Regulations 141.130 (3)(e)(iii)
141.275 (1)

As soon as possible after the flight the instructor must debrief the student. The purpose of the debrief is to review the flight in relation to the students’ performance against the competencies on the lesson plan. In particular, the student needs to be made aware of:

* aspects that meet the criteria
* aspects that need improvement or further training to achieve competency.

The debriefing should also identify items that need to be repeated or that will be introduced in the next lesson.

Immediately after the debriefing, the instructor must complete and file the flight training record.

#### Reviewing flight training records

Regulations 141.130 (2)(c)
141.130 (2)(o)
141.130 (3)(e)(ii)

The HOO will regularly review the recent flight training records of students. The review must consider, but not be limited to:

* the quality of flight training records, particularly detail where students fail to meet performance criteria standards and recommendations by instructors
* if the lessons given conform to the sequence outlined in the syllabus and take into account previous recommendations
* the details of any standards not initially achieved, but subsequently met within the next few lessons
* recommendations on the need for corrective action if the rate of achievement is consistently poor.

#### Underperformance of students

Regulation 141.130 (3)(c)

If a student consistently fails to achieve competency, this must be investigated by the HOO to determine the cause. Investigation should include, but not be limited to:

* an analysis of the student’s flight training records
* discussion with the relevant instructor and student.

The HOO will decide on the remedial course of action.

#### Evaluation of training outcomes following flight tests

Regulation 141.130 (5)(c)
141.260 (1)(mb)(iii)

The HOO will review all flight test feedback.

If a student fails a flight test assessment, the HOO, based on the feedback, may develop and implement a remedial training program designed to help them achieve competency in those elements previously assessed as not yet competent.

The HOO will also look for deficiencies in the training syllabus, the instructors and the lesson plans, correcting any deficiencies that may be found.

## Student Administration

### Student Administration

#### Recognition of prior learning

If a student wishes to transfer from another training provider, the HOO will first conduct an assessment of the person’s knowledge and skills covering all elements of competency associated with the licence or rating sought, as per Schedule 1 to the CASR Part 61 MOS.

The HOO will prepare a training plan based on this assessment before the student commences any training.

#### Student records

Regulations 141.130 (3)(e)(iii)
141.180 (1)

Student records consist of flight training records, flight test results and the results of examinations.

On return from a solo training flight, the student and the authorising instructor will review the conduct of the flight and training outcomes and make any comments on the flight training records.

Where a flight test has been conducted by a visiting examiner, the HOO must obtain a comprehensive written report detailing the outcome of the test and enter the results and comments into the flight training records before their departure.

The flight training records must be maintained in a locked filing cabinet accessible to all instructors at all times.

##### Provision of flight training records to students

Regulation 141.280 (1)(b)

The instructor will provide students with a copy of their flight training record after each flight.

##### Transfer of student flight training records

If another Part 141 operator requests a copy of a student’s flight training records, it must be supplied within 7 days provided the student agrees and has provided written authority.

Regulation 141.280 (2)(c)

#### Student log books

All students must have an accurate and up to date log book prior to conducting a solo flight or whilst undertaking any other training.

When required, the flight instructor assigned to a student must check and certify the accuracy of entries in the student’s logbook. This is done by cross referencing the hours entered against the aircraft flight log and the students’ training file.

#### Student familiarity with relevant Operations Manual volume

All students undertaking flight training with the company are required to familiarise themselves with the relevant sections of the company operations as they relate to the activities that the student is undertaking. By signing form **4B9**), the students agree they will act IAW the Operations Manual requirements.

## Training Courses

### Training Plans and Syllabuses

[Sample Aviation Flight Training Pty Ltd] has elected to use standard syllabuses, lesson plans and planning matrices prepared by CASA. These syllabuses are reproduced IAW those listed in Vol. 5.

### Ground training courses

Reserved

##

## Ground Examinations

### Gaining knowledge to pass aeronautical knowledge examinations

Students will be required to self-study to gain the knowledge required to pass aeronautical knowledge examinations.

Instructors must ensure that students have passed their relevant aeronautical knowledge examinations prior to undertaking pre-flight tests.

### Authority for the conduct of ground examinations

Regulation 61.210 (2)(b)

During the induction process, the HOO will train and assess instructors in the conduct of [Sample Aviation Flight Training Pty Ltd’s] ground examinations and complete the relevant section on form 4B10to acknowledge this authorisation.

### Ground examination facility

[Sample Aviation Flight Training Pty Ltd] holds approval by CASA to conduct Pilot Examination Office (PEXO) Exams.

Ground examinations will be conducted when required using the facilities in Building 2. The facilities are used on the basis that they meet minimum CASA specifications for the conduct of PEXO exams. If at any time it becomes apparent that they are lacking in any way, the HOO is to be advised immediately so that the deficiency can be rectified.

Before conducting an exam, invigilating staff must always ensure that any learning materials (including posters and maps) including personal electronic devices, that may assist students are removed from the room and walls.

While an exam is in progress, invigilators are to place a sign on the classroom door to remind other staff and students that an exam is in progress and to therefore keep distracting noises and conversations to a minimum.

## Flight Tests and Flight Reviews

### Flight Tests

Regulation 141.210

#### Flight test procedures

Regulation 61.235 (2)

Before arranging a flight test, the HOO must check that the applicant meets the requirements under CASR 61.235 to take the test. Following this, the HOO will certify that these requirements have been complied with in the student’s flight training records.

Before booking a flight test for a flight crew licence or rating, the HOO must certify that all requirements specified on the flight test application form have been met.

#### Booking flight tests

Regulation 141.285

The HOO will book the flight examiner and make the following items available:

* an appropriately equipped briefing room suitable for the test
* a suitable serviceable aircraft with a means of simulating instrument flight
* the training records of the applicant including the certification mentioned above
* access to briefing materials and a means to carry out flight notification.

#### Procedure if a flight test is failed

If a flight test is failed, the HOO will carry out the procedure detailed in section 3B2.5.

### Flight Reviews

Regulation 61.400

[Sample Aviation Flight Training Pty Ltd] conducts flight reviews in single and multi-engine aircraft.

The objective of the flight review is to ensure the holder of the rating is competent in each unit of competency of the Part 61 MOS for the rating.

The flight review should be designed to refresh the pilots knowledge and skills to ensure the pilot continues to maintain competency to exercise the privileges of the rating in an aircraft safely .

# APPENDICES AND FORMS

## APPENDICES

### Training Area Map

Regulation 141.260 (1)(l)(v)

### Drug and Alcohol Management Plan (DAMP)

Sample text – Micro-business DAMP

[Sample Aviation Flight Training Pty Ltd] has opted for a Micro-business DAMP. Refer to Part 1B3.2 of this manual.

Sample text - Full DAMP

The full DAMP for [Sample Aviation Flight Training Pty Ltd] is attached.

### Human Factors and Non-Technical Skills Program

|  |
| --- |
| Flight Instructor training in Human factors principles and non- technical skills: Training development |
| Delivery Method:Facilitated Discussion with HOOTraining structure:The Training syllabus is presented against a three-year cycle, delivering selected modules during the calendar year. Training structure should incorporate the following approach:**Schedule A** – Induction trainingSchedule A is only required for IT2 (Induction training) **Schedule B** – Operational incident and risk profile reviewReview of contributory factors in similar operational training incidents, this schedule is required each cycle.**Schedule C** – HF competency element modulesFor each cycle, the HOO will select 4 modules of training not repeating any modules from schedule C until these have all been completed\*.**Induction –** Module A, Module B, Module C#, Module C#, Module C#**Refresher –** Module B, Module C#, Module C#, Module C#, Module C#.\*Variation of the syllabus due to local events may be appropriate if directed by the HOO.**Assessment Methodology:** Facilitator assessment of appropriate level of engagement during interactive question and answer session. | **Training Materials:****Safety behaviours: Human factors for Pilots/ Engineers.****Organisation incident reports****A selection of relevant events that relate to specific HF elements and NTS countermeasures for consideration and review.** **AC 61-09 – Competency based training and assessment for flight crew** **AC 61-08 – Teaching and assessing non-technical skills for single pilot operations****AC 61-07 – Flight Instructor training****AC61-16 – Spin avoidance and stall recovery training****AC 61-05 – NVFR** **AC 61-20 – Pilot supervision and mentoring** |

|  |  |
| --- | --- |
| Human Factors and Non-technical skills training Schedule A (Induction) | Notes |
| Module A. Induction and introduction to Human factors* Refresh and further develop the need to address human factors in aviation operations:
	+ Highlight that human performance issues continue to dominate aviation accidents statistics
	+ The challenge of managing error and safe operations in the training environment.
* Identify the sources and interactions that influence human performance:
	+ Present either (or both) the PEAR model or SHELL model
	+ Outline the human factor elements associated to each element of the models used
	+ Illustrate how improved technical and non-technical skills can positively support safety and performance.
* Outline the organisations development of procedures and the use of human factors knowledge to enhance the safe undertaking of training activities
* Explain the format of the course and the expected outcomes in enhancing existing HF knowledge in the flight training environment.
 | **Session A** **(To be delivered for Instructor induction and as an introduction to HF and NTS)** |

|  |  |
| --- | --- |
| Human Factors and Non-technical skills trainingSchedule B (Operational incident and risk profile review) | Notes |
| Module B. Safety incident HF Risks review * Review a sample of recent relevant safety incidents. (For example, Ground strikes, heavy landings, incorrect configurations.)
	+ Determine key HF elements that contributed to the events
	+ Discuss the likelihood or potential of these incidents within your operation
	+ Determine potential solutions and non-technical skills and behaviours that may have reduced the potential of the event
 | **Conducted on induction and each cycle** |

|  |  |
| --- | --- |
| Human Factors and Non-technical skills trainingSchedule C – subjects – (select 3 of the following subjects)  | Notes |
| Module C1 - Fatigue * Determine the participants understanding of the following elements:
	+ What is fatigue?
	+ The impact of fatigue impairment
	+ The causes of fatigue.
		- personal factors that may increase the impact
		- organisational factors
		- operational factors.
* Identify strategies to manage fatigue:
	+ Personal management
	+ Fitness to fly – Student and Instructor.
* Identify the relevant processes and reporting requirements to manage fatigue within your organisation.
 |  |
| Module C2 – Stress * Determine the participants understanding of stress as a contributor to degraded human performance and safety incidents.
* Workload –
	+ Overload and underload
	+ Personal stress – Instructor fitness to fly
		- Domestic Stress
	+ Student stress – student fitness to fly.
* Describe the influence of stress on flight training and learning (consider the areas of overload and underload on flight training activities).
* Identify steps to manage the stress:
	+ Managing personal stress
	+ Managing the instructional and training environment to minimize student stress.
* Identify available organisational assistance.
 |  |

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| Module C3 – Alcohol and other drugs (AOD) (Effects on Human performance)* Determine the participants understanding of the influence of AOD on human performance in the training environment. Consider reviewing the following elements:
	+ your organisational AOD policy
	+ your organisational AOD testing program
	+ your organisational AOD response program
	+ the influence of drugs and alcohol on brain and behavior
	+ depressants, Stimulants and Hallucinogens
	+ metabolising Alcohol.
* Identify your organisational expectations and processes to manage AOD and safety
* Identify the relevant support and assistance available to employees.
 |  |
| Module C4 - Communication* Determine the participants understanding of Communication models, methods, and barriers to communication. Consider including discussion points such as:
	+ One way and two-way models
	+ Methods including:
		- Verbal, non-verbal
		- Phrases and jargon
		- Written communication
		- Information transfer (use of other mediums).
* Discuss the relevance to safety (consider using examples of communication failures)
* Discuss the relevance to flight training activities:
	+ The importance of briefings
	+ Overcoming barriers to communication.
		- The influence of authority gradients
		- Unfamiliarity of formal language
		- Communication errors.
 | **Note: Ideally utilise examples of flight instruction incidents** |

|  |  |
| --- | --- |
| Module C5 - Teamwork* Determine the participants understanding of teamwork and how this relates to the flight training environment
* Identify the positive characteristics of teams and supporting conditions for teamwork
* Discuss how the characteristics and conditions may relate to:
	+ The local aerodrome environment and training locations
		- Single pilot operations
		- Dual and instruction activities.
	+ The instructor and student in the operating environment
		- Instructor to student briefings
		- Student to instructor briefings
		- Control handover
		- Read-back and radio communications.
 | **Note: Ideally utilise examples of flight instruction incidents** |
| Module C6 – Leadership * Identify any gap in participants understanding of leadership
* Describe the role of leadership and followership concepts to the flight instruction environment. Consider refreshing participants understanding of the following subjects:
	+ Styles and adaptability
	+ Authority and Assertiveness
	+ Planning and prioritising
	+ Monitoring and managing workload
	+ Creating an appropriate operating climate – setting the tone
	+ Leadership under stress
	+ Managing conflict.
* Practical safety leadership practices
* Airmanship
	+ Outline and discuss the expected behaviours of the organization regarding professionalism
	+ Supporting a reporting culture and positive safety environment.
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| Module C7 – Situation awareness* Determine the participants understanding of Situation awareness as a process and product and what differences may be relevant in the training environment. Consider reviewing the following:
	+ Perception, comprehension, projection Communication: expectation and meaning
	+ Impact of workload and stress
	+ Goal/ task fixation – cognitive tunneling.
* Describe and discuss potential situations and personal events that were influenced by a ‘loss of situation awareness’. (Note if there are no issues raised, use examples from industry reports that relate to your operating environment).
	+ Review factors that may have reduced SA in the discussed scenarios
	+ Identify countermeasures that could have been applied.
* Identify practical strategies to maintain and enhance situational awareness:
	+ Aviate, navigate, communicate
	+ Planning and briefing
	+ Seek information
	+ Plan before you communicate, Active listening, read-back, and review
	+ Eyes out, eyes in
	+ Making time.
 | **Note: Ideally utilise practical examples of flight instruction incidents.** |

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| Module C8 – Decision Making* Determine the participants understanding of Decision making as a process and product and what differences may be relevant in the training environment.
* Discuss decision making strategies.
	+ Consider the influence of the training environment and the level of capability of the student
	+ The risk of assumptions
	+ Communication and sourcing information
	+ Decision making and problem solving
		- Skill based
		- Rule based
		- Knowledge based.
* Practical approaches to enhancing decision making performance and opportunity.
	+ If you can… make time or remove the risk
	+ Application of the tools in an operational environment.
 | **Note: Ideally utilise practical examples of flight instruction incidents.** |

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| Module C9 – Threat and Error Management* Determine the participants understanding of human error. Consider reviewing:
	+ Error vs performance variability
	+ Types of error.
* Determine the participants understanding of Threat and Error management as a countermeasure. Discuss the following components of the threat and error management approach and the contribution of the flight training environment:
	+ Define threats and discuss
		- External and internal threats
		- Threats associated to your operating environment (i.e. ab initio vs advanced training and student performance).
	+ Define errors and discuss.
		- Skills based error
		- Action error
		- Knowledge based error.
	+ Review undesired aircraft states
	+ Apply the discussion points to an operational scenario, to illustrate deviations from an optimum training flight. Determine how these could be managed using a threat and error management approach.
* Identify practical Threat and Error Management counter measures that relate to single and dual pilot training activities.
	+ Discuss and identify the use of ‘thinking ahead’:
		- The requirement to plan
		- The use of briefings
		- Allocation of tasks and control authority
		- Actively check for understanding
		- Plan execution and monitoring performance
		- Avoid, Trap and Mitigate
		- Providing tolerance for error
		- Enquiry and assertion (Instructor and Student).
 | **Note: Ideally utilise practical examples of flight instruction incidents.** |
| Module C10 Airmanship* Determine the participants understanding of airmanship and discuss scenarios of ineffective airmanship
* Discuss the qualities of effective airmanship
* Discuss the models of airmanship
* Look at examples of how to improve airmanship and outline the expected behaviors of the organisation regarding airmanship.
 |  |

## Forms

|  |  |  |  |
| --- | --- | --- | --- |
| **Form Number** | **Title** | **Rev #** | **Date** |
| **Form 4B1** | Company Operations Manual Acknowledgement Record |  |  |
| **Form 4B2** | Audit of Compliance & Facilities |  |  |
| **Form 4B3** | Initial Instructor Employee Record |  |  |
| **Form 4B4** | Key Personnel Familiarisation Training Record |  |  |
| **Form 4B5** | Instructor Induction Training – Course IT1 |  |  |
| **Form 4B6** | Instructor Induction Training – Course IT2 |  |  |
| **Form 4B7** | Instructor Standardisation & Proficiency Check Report |  |  |
| **Form 4B8** | Student Personal Details & Flight Training Record |  |  |
| **Form 4B9**  |  Flight Authorisation Sheet |  |  |
| **Form 4B10** | Instructor Qualifications & Approvals Register |  |  |
| **Form 4B11** | CAO 48.1 – Flight Crew Member Flight & Duty Record |  |  |
| **Form 4B12** | Registered Aircraft Details |  |  |
| **Form 4B13** | Aeroplane Landings Areas (ALA) Report Form |  |  |
| **Form 4B14** | Aircraft Checklists |  |  |
| **Form 4B15** | Aircraft Journey Log |  |  |

### Company Operations Manual Acknowledgement Record

Instructions:

1. All instructors must sign this sheet in the paper master copy of the Operations Manual. The master copy is held by the HOO.
2. By signing this acknowledgement record, instructors are certifying that they have read the manual, understood, and agreed to comply with the procedures, instructions and data contained within.
3. Each person required to sign must do so initially before commencing operations with the company and after any amendment to the manual.

|  |  |  |  |
| --- | --- | --- | --- |
| **Version number** | **Name** | **Signature** | **Date** |
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### Audit of Compliance & Facilities

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| --- | --- | --- | --- | --- |
| **Date of Audit:** |  | **For period****(Dates):** | **From:** | **To:** |
| **Conducted by:** |  |

|  |  |  |
| --- | --- | --- |
| **COMPLIANCE** | Comments | **Compliant?** |
| **Fuel records** |  | **Y/N** |
| **Maintenance releases** |  | **Y/N** |
| **Instructor records** |  | **Y/N** |
| **Flight & duty records** |  | **Y/N** |
| **DAMP recurrency** |  | **Y/N** |
| **A/C journey log** |  | **Y/N** |
| **Examinations**  |  | **Y/N** |
| **Student flight training records** |  | **Y/N** |
| **Student log books** |  | **Y/N** |

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| --- | --- | --- |
| **FACILITIES & RESOURCES** | Comments | **Adequate?** |
| **Class rooms & briefing areas:** |  | **Y/N** |
| **Ops Room:** |  | **Y/N** |
| **Training aids:** |  | **Y/N** |
| **Instructors:** |  | **Y/N** |
| **Aircraft:** |  | **Y/N** |

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| --- | --- |
| **Any identified deficiencies?**  | **YES / NO** |
| **What, if any, improvements can be made?** |         |

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| --- | --- | --- |
| **CEO** |  |  |
| **Acknowledgement:** |  No Further Action ❑ | Discuss with HOO ❑ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Signed:** |  | **Date:** |  |

### Initial Instructor Employee Record

**Personal Details:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **ARN:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Phone:** | **Business:** | **After hours:** | **Mobile:** |

|  |  |
| --- | --- |
| **Address:** |  |
| **Email:** |  |

**Next of Kin Details:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **Relationship:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Phone:** | **Business:** | **After hours:** | **Mobile:** |

|  |  |
| --- | --- |
| **Address:** |  |
| **Email:** |  |

**Qualifications:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Licence type:** |  | **Aeroplane Category Endorsements:** | **A** | **H** | **G** | **Other** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Operational Ratings:** | **FIR** | **NVFR** | **PIFR** | **IR** | **LL** | **Class Ratings:** | **SEA** | **MEA** | **Other** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Design Feature Endorsements:** | **MPPC** | **TWU** | **RU** | **GTE** | **PXS** | **Other** |

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| **Flight Activity Endorsements:** | **SPIN** | **AERO** | **FF** | **FAERO** | **Other** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FI Training endorsements:** | **1** | **2** | **3** | **NVFR** | **SPIN** | **DF** | **Aero** | **Other** |

**Induction Process Sign-off: (certification of all items is required to conduct authorised flight training)**

|  |  |  |
| --- | --- | --- |
| **Requirement** | **Sighted/Completed (signature)** | **Date** |
| **Medical Certification:** |  |  |
| **Company Induction Training (IT1):** |  |  |
| **HF/NTS Training (IT2):** |  |  |
| **Initial S&P Check:** |  |  |

### Key Personnel Familiarisation Training Record

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **ARN:** |  |
| **Position:** |  | **Date of Training:** |  |

|  |  |
| --- | --- |
| **Subjects / Discussion points** | **Complete** |
| Overview of company operation and scope of training conducted | **Y/N** |
| Company Operations Manual content, structure, and amendment processes  | **Y/N** |
| Regulatory authorisation and compliance procedures | **Y/N** |
| Outline of Company structure and governance | **Y/N** |
| Internal reporting and communication procedures | **Y/N** |
| Outline of company administration systems | **Y/N** |
| Change management processes | **Y/N** |
| Company DAMP  | **Y/N** |
| Company Safety policy and management principles | **Y/N** |
| Responsibilities & duties of position, supporting processes and procedures | **Y/N** |
| Summary of relevant *CASR Parts 61* and *141* | **Y/N** |
| Introduction to Company HF/NTS principles | **Y/N** |
| Rostering and fatigue management | **Y/N** |
| **The following items are not required for the CEO position** | **Y/N** |
| Training management | **Y/N** |
| Instructor training, standardisation, and proficiency checks |  |
| Training record management | **Y/N** |
| Flight testing | **Y/N** |
| Flight reviews | **Y/N** |
| Comments:       | **Y/N** |
| **Trainer’s signature:** |  |
|  |  |

### Instructor Induction Training – Course IT1

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **ARN:** |  |
| **Position:** |  | **Date of Training:** |  |

|  |  |
| --- | --- |
| **Subjects / Discussion points** | **Complete** |
| Outline of Company structure and governance | **Y/N** |
| Authorised Part 141 training conducted by the company | **Y/N** |
| Company Operations Manual content, structure, and amendment processes | **Y/N** |
| Company Safety policy and management principles  | **Y/N** |
| Principles of CBT | **Y/N** |
| Syllabuses and lesson plans | **Y/N** |
| Training record management | **Y/N** |
| Company standardisation program | **Y/N** |
| Individual responsibility to only conduct training authorised | **Y/N** |
| Instructor responsibility to maintain qualifications & recency | **Y/N** |
| Aircraft refuelling | **Y/N** |
| Aircraft maintenance certification | **Y/N** |
| Rostering and fatigue management | **Y/N** |
| Change management processes | **Y/N** |
| Company DAMP  | **Y/N** |
| Completion of CASA ‘Alcohol and other Drugs’ eLearning | **Y/N** |
| Outline of company administration systems | **Y/N** |
|  |  |
|  |  |
|  |  |
| Comments:         |

|  |  |  |  |
| --- | --- | --- | --- |
| **IT1 completed?** | **Name:** | **Signed:** | **Date:** |

### Instructor Induction Training – Course IT2

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **ARN:** |  |
| **Position:** |  | **Date of Training:** |  |

|  |  |
| --- | --- |
| **Subjects / Discussion points** | **Complete** |
| Fatigue | **Y/N** |
| Stress | **Y/N** |
| Alcohol and other drugs | **Y/N** |
| Communication | **Y/N** |
| Teamwork | **Y/N** |
| Leadership | **Y/N** |
| Situational awareness | **Y/N** |
| Decision making | **Y/N** |
| Threat and error management | **Y/N** |
| Airmanship | **Y/N** |
|  | **Y/N** |
|  | **Y/N** |
|  | **Y/N** |
|  | **Y/N** |
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|  | **Y/N** |
|  | **Y/N** |

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| --- |
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| Comments:         |

|  |  |  |  |
| --- | --- | --- | --- |
| **IT2 completed?** | **Name:** | **Signed:** | **Date:** |

### Instructor Standardisation & Proficiency Check Report

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Instructor name:** |  | **ARN:** |  | **Date of check:** |  |

|  |  |
| --- | --- |
| **Briefing topic:** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Followed lesson plan?** | **YES / NO** | **Review questions?** | **YES / NO** | **At standard?** | **YES / NO** |

|  |
| --- |
|  Comments:         |

|  |  |  |  |
| --- | --- | --- | --- |
| **Lesson flown:** |  | **Flight time** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Pre-flight brief to standard?** | **YES / NO** | **Review questions?** | **YES / NO** | **At standard?** | **YES / NO** |

|  |
| --- |
|  Comments:         |

|  |  |
| --- | --- |
| **Check Pilot’s Signature** | **Date** |
|  |  |
| **Instructor’s Signature** | **Date** |
|  |  |

### Student Personal Details & Flight Training Record

**Personal Details:**

|  |  |
| --- | --- |
| **Name:** |  |
| **Address:** |  |
| **Email** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Phone #:** | **Business:** | **After hours:** | **Mobile:** |

**Next of Kin Details:**

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| --- | --- | --- | --- |
| **Name:** |  | **Relationship:** |  |
| **Phone:** | **Business:** | **After hours:** | **Mobile:** |

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| --- | --- |
| **Address:** |  |
| **Email** |  |

**Credentials & Past Training Experience:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ARN:** |  | **Medical:** | **Class:** | **Validity:** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Last medical:** | **Place:** | **Date:** | **Doctor's name:** |
| **Previous training organisation/s:** |  | **Previous training records received?** | **YES / NO / N/A** |
| **Hours Last 12 mths:**(if applicable) |  | **Last Flight:(if applicable)** | **Date:** |

|  |  |
| --- | --- |
| **A/C Types Flown:** |  |

**Previous Flying Summary:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ALL FLYING (hrs)** |  | **NAV (hrs)** |  | **INSTRUMENT (hrs)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PIC DAY** | **PIC NGT** | **DUAL DAY** | **DUAL NGT** | **TOTAL** |  | **DUAL X/C** | **PIC X/C** |  | **A/C I.F.** | **SIM I.F.** | **TOTAL I.F.** |
|  |  |  |  |  |  |  |  |  |  |  |  |

**Training Milestones:**

|  |  |  |
| --- | --- | --- |
| **AERONAUTICAL KNOWLEDGE** |  | **FLYING TRAINING** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SUBJECT** | **DATE** | **CERTIFIED BY** |  | **EVENT** | **DATE** | **CERTIFIED BY** |
| **Pre-Solo Air legislation** |  |  |  | **ELP** |  |  |
| **T/A Solo Air legislation** |  |  |  | **First Flight** |  |  |
| **BAK** |  |  |  | **First Solo** |  |  |
| **NAV** |  |  |  | **First T/A Solo** |  |  |
| **Radio** |  |  |  | **RPL** |  |  |
| **CTA/CTR** |  |  |  | **First Solo NAV** |  |  |
| **PPL Theory** |  |  |  | **PPL** |  |  |
|  |  |  |  | **NVFR** |  |  |

### Student Personal Details & Flight Training Record

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Student** | **Route/Flight Details** | **D/S** | **Fuel on board at start** | **VDO Out** | **VDO In** | **Total** | **Student Signature\*** | **Instructor Signature\*** |
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**\*Signature indicates student and instructor will comply with Operations Manual requirements.**

### Instructor Qualifications & Approvals Register

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pilot Name** | **Pilot ARN** | **Due date****S&P** | **Due date MED** | **Due date****FPC** | **Due date IPC** | **Due date****DAMP** | **Due date****HF/NTS** | **Due date ASIC** | **Training Endorsements and Company Approvals** | **Additional Approvals\*** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Blogs | 999999 | 01/01/16 | 01/01/16 | 22/12/16 | 01/01/16 | 01/01/16 | 01/01/16 | 01/01/16 | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS | Senior Instructor |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
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|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |
|  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | SP | NV | AE | DF | SEA | MEA | FS |  |

**Legend:** **S&P** Standardisation & Proficiency Check, **MED** Medical Certificate, **FPC** Flight Proficiency Check, **IPC** Instructor Proficiency Check, **DAMP** Drug & Alcohol Management Plan, **HF/NTS** Human Factors/Non-technical Skills, **ASIC** Aviation Security Identification Card, **SP** Spin; **NV** Night VFR, **AE** Aerobatics, **DF** Design Feature, **SEA** Single-engine aircraft, **MEA** Multi-engine aircraft, **FS** First Solo

**\***Additional approvals may include design feature endorsement, conduct of ground examinations, etc.

### CAO 48.1 – Flight Crew Member Flight & Duty Record

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FCM:** | **NAME** | **From:** | **SUNDAY:** | **INSERT DATE** | **Until:** | **SATURDAY:** | **INSERT DATE** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **FDP start** | **FDP finish** | **Total Duty** | **FDP extended?** | **Total Flight** | **Flt time extended?** | **28 Day Flt Time** | **365 Day Flt Time** | **Remarks** | **Signature** |
|  |  |  |  |  | **Brought Forward** |  |  |  |  |
| **SU** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **MO** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **TU** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **WE** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **TH** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **FR** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
| **SA** |  |  |  | **Y/N** |  | **Y/N** |  |  |  |  |
|  |  |  |  |  |  | **Carried Forward** |  |  |  |  |

**EXTENSIONS:**

1. Was your FDP extended - YES/NO? (Annotate column as appropriate). If "YES" please provide a brief summary or reasons for the extension in the remarks section.
2. Did your flight time exceed 7 hours - YES/NO? (Annotate column as appropriate). If "YES" please provide a brief summary and reasons for the extension in the remarks section.

### Registered Aircraft Details

The aircraft listed below have been or are currently being operated for Part 141 flight training.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Make** | **Model** | **Registration** | **Period of operationFrom** | **Period of operationTo** |
| [Cessna] | [C152] | [VH-XXX] |  |  |
| [Cessna] | [C172] | [VH-YYY] |  |  |
| [Beechcraft] | [BE76] | [VH-ZZZ] |  |  |
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### Aeroplane Landings Areas (ALA) Report Form

|  |
| --- |
| **ALA Survey Report** |

|  |  |
| --- | --- |
| **Name of ALA:** |  |

|  |  |  |
| --- | --- | --- |
| **Location:** | **BRG & DIST:** | **LAT/LONG:** |
| **Owner information:** |  | **TELEPHONE:** |
|  |  | **EMAIL:** |

|  |  |
| --- | --- |
| **Facilities** | **TELEPHONE MOBILE PHONE FUEL SHELTER PAVED ROAD RECEPTION** |
| **Nearest town or city:** |  |
| **Landing Area Diagram** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  **LENGTH:** |  **DIRECTION:** |  **WIDTH:** |  **SLOPE:** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Elevation:** |  | **Lighting** | **YES / NO** |
| **Surface** |  | **Markings:** |  |
| **Obstructions:** |  | **Identification Features:** |  |

|  |  |
| --- | --- |
| **Comments:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Reported by (Pilot):** |  | **Date of report:** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Approved for company OPS** | **SIGNED:** | **Date:** |  |

### Aircraft Checklists

Reserved

### Aircraft Journey Log

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Instructor** | **Student** | **Route** | **VDO Out** | **VDO In** | **Total** | **Tacho Out** | **TachoIn** | **Total** | **Fuel start** | **Fuelend** | **Fuel added** |
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# TRAINING SYLLABUSES

## Guide to use of flight training syllabuses

### Syllabus documentation

For each approved course of Part 141 flight training, syllabus documentation includes:

1. A planning matrix (a syllabus design tool for mapping Part 61 MOS competencies into individual flight lessons for training and assessment).
2. A syllabus introduction (providing general information, requirements and contingencies relating to the particular syllabus).
3. A flight training and theory examination summary (a list of flight training lessons and theory exams in planned sequence).
4. A lesson plan and training record for each flight (a single document providing a lesson overview, briefing topics, underpinning knowledge items, performance criteria and a means for recording training and assessment outcomes).

**Note:** Syllabus documentation must be read in conjunction with CASR Parts 61 and 141, and the Part 61 Manual of Standards.

### Training and assessment plan

#### Training plan

The training plan for each course is set out in the planning matrix, flight training and theory examination summary and syllabus introduction.

Each syllabus is planned to ensure students receive training in the units of competency mentioned in the Part 61 MOS for the licence, rating, or endorsement in a structured manner.

The briefing and flight training hours represented in each syllabus are recommended training times, however in practice thesemay vary (for example due to student progress, continuity of training, weather conditions, aerodrome traffic etc.).

#### Competency grading scale – Performance Standards

[Sample Aviation Flight Training Pty Ltd] uses a numeric competency grading scale. The grading scale is applied during course development to represent proposed progress under the training plan, and ensure certain items are assessed prior to significant milestones (such as the first solo flight). It then provides a benchmark against which a student’s actual progress may be monitored and recorded.

The grading scale is set out in the ‘performance standard’ table below:

|  |
| --- |
| Performance Standard |

|  |  |  |
| --- | --- | --- |
| 3 | 2 | 1 |
| Has received training in the element, however, is not able to consistently demonstrate competency to the standard required for qualification issue  | Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision | Achieves competency to the standard required for qualification issue |

**Performance standard** **3** represents the introduction of the specified performance criteria via instructor demonstration, followed by guided student practice. The student demonstrates a basic level of ability.

**Performance standard** **2** represents the ability to safely conduct a flight for the purposes of practising a sequence or sequences solo. For sequences where solo practice is not required or is not permitted, performance standard 2 is used to represent a developing level of proficiency.

**Note:** The word "safe" used in performance standard 2 means that the student may achieve the required standard on the majority, but not necessarily on all occasions. The student must be able to recognise a situation where the desired outcome of a manoeuvre may be in doubt and take appropriate corrective action to recover.

**Performance standard** **1** represents proficiency to the standard required for the issue of the qualification, and therefore constitutes a ‘competent’ assessment. Assessment should be based on the technique used by the student, as well as the ability to perform manoeuvres within the tolerances specified in schedule 8 of the Part 61 MOS. Sound judgement and decision making should be displayed.

**Note:** Technique involves smooth and accurate control application when adjusting power, attitude, trim and balance in a timely and coordinated fashion, whilst following correct procedures. On some occasions, flight conditions (e.g. turbulence) may be such that even though the student's technique is sound, the aircraft may deviate outside specified tolerances for short periods. On these occasions the assessment of technique should be the determining factor.

#### Assessment plan

A student may be deemed competent to conduct a solo flight, be recommended for a flight test or issued a qualification when competency is demonstrated on at least two occasions (each occasion being on a separate flight).

Pre-solo and end of course assessments have been planned on this basis.

End of course assessments take into account all of the units of competency mentioned in the Part 61 MOS for the licence, rating, or endorsement.

#### Variations to the training and assessment plan

**Lesson sequence**

Where variations to the planned lesson sequence are permissible, these are noted in the syllabus introduction.

Any other lesson sequencing deviations or lesson content changes are to be made only with the prior approval of the HOO or the nominated supervising instructor. Approval for changes shall be in the form of a notation made in the training record by the HOO or the nominated supervising instructor.

**Time to achieve competency**

The accumulation of the planned hours specified in a syllabus does not necessarily guarantee achievement of the required standard. The achievement of competency will vary dependent upon individual training and assessment outcomes.

Students may require flight time in excess of planned syllabus totals or may achieve competency ahead of the documented schedule.

Where accelerated student learning occurs, significant deviations from the planned syllabus durations are to be clearly notated in the student’s training records, including an approval by the HOO after considering any relevant Part 61 minimum experience requirements.

For instructions regarding the management of underperforming students, refer to section **3B2.4.**

**Note:** When adjustments to the planned syllabus hours are made, instructors and the HOO must ensure that theCASR Part 61 minimum aeronautical experience requirements are met.

### Using the syllabus documents

#### Planning matrix

It is not a requirement that a copy of the planning matrix be retained on a student’s training file.

#### Flight training and theory examination summary

A copy of the flight training and theory examination summary may be provided to each student at commencement of training. A copy should be retained on the student’s file.

#### Syllabus introduction

The syllabus introduction contains specific requirements to be met during training (for example prior to first solo). It must be read in conjunction with Parts 61 and 141 and [Sample Aviation Flight Training Pty Ltd’s] operations manual.

#### Lesson plan and training record form

Training records are to be maintained for all students.

The lesson plan and training record form is to be completed immediately following the debriefing and retained on the student’s training file. The record should contain sufficient information to ensure that the student’s current competencies, any areas of deficiency and recommendations for the next flight are immediately evident.

Instructions for the use of the lesson plan and training record form are summarised below.

**Flight details**

Enter the date, student, instructor, and other flight details as prompted.

The flight number should normally be recorded as ‘1’, for example, the RPL stalling lesson is to be recorded as flight number ‘RPL (A) 5.**1**’.

If a lesson is repeated it is to be numbered sequentially, for example a repeated RPL stalling lesson would be assigned flight number ‘RPL (A) 5.**2**’.

**Lesson overview**

Refer to the overview for a summary of lesson content. For detailed practical flight training content, refer to the ‘flight training’ section of the form.

**Pre*-*flightknowledge**

Students are to be thoroughly briefed prior to each flight lesson. The pre-flight knowledge section contains:

* suggested briefing duration
* long briefing topics (briefing content should not necessarily be limited to these items. Instructors should refer to their briefing notes for full briefing content)
* underpinning knowledge items, including those relating to HF & NTS (instructors should introduce, review, or assess underpinning knowledge to a level of detail that is applicable to the stage of training. Some adjustments to suggested content may be necessary to meet the requirements and conditions during the particular flight)
* a pre-flight briefing checklist.

The instructor is to sign off at the foot of the pre-flight knowledge section to confirm the pre-flight briefings have been carried out and the underpinning knowledge items addressed.

**Note:** Underpinning knowledge is assessed via oral questioning, and also through in-house written examinations such as the pre-solo and pre-area solo examinations.

**Performance standards**

The table containing the performance standard grading scale is included in each lesson plan and training record.

**Flight training**

The flight training section sets out the suggested flight time and performance criteria to be covered during the lesson.

The performance standards 3, 2 or 1 appearing in the ‘performance standard required’ column represent target student progress under the training and assessment plan. They also indicate the following instructor and student actions:

|  |  |  |
| --- | --- | --- |
| Performance Standard | Instructor | Student |
| **3** | DemonstrateDirectMonitor | ObservePerform tasks with guidancePerform tasks with monitoring |
| **2** | Assess | Perform tasks |
| **1** | Assess | Perform tasks |

Instructional elements which have already been introduced or assessed may appear in subsequent lessons for the purposes of student consolidation. In this situation the performance standard required is the same as that on the previous occasion. The instructor should monitor the student as they perform the tasks to ensure the previous standard is maintained, providing guidance if required.

Performance standard 3, 2 or 1 is to be entered in the ‘performance standard achieved’ column to represent the student’s actual performance during the flight. In the interests of reducing repetitive data entry by the instructor, if progress matches that in the ‘performance standard required’ column, no entry is necessary (i.e. a ‘nil entry’ indicates the standard achieved is the same as that required).

When making entries in the ‘performance standard achieved’ column:

* Enter the standard achieved (if different to that required).
* If the standard achieved is lower than that required, carry the relevant performance criteria over into the next lesson by writing them in the ‘consolidation and/or remedial training’ box of the subsequent lesson’s training record. The items are to be addressed during the next lesson.
* Performance criteria which were not able to be introduced during the lesson should be marked as ‘NI’ (not introduced). Enter the relevant performance criteria in the ‘consolidation and/or remedial training’ box of the training record for the next lesson. This will ensure these items are captured during future training.
* Performance criteria which were not able to be assessed should be marked as ‘NA’ (not assessed). Enter the relevant performance criteria in the ‘consolidation and/or remedial training’ box of the training record for the next lesson. This will ensure the items are captured for future assessment.
* If a student is progressing ahead of the syllabus schedule and assessments are conducted in advance (i.e. for performance criteria not included in the lesson plan and training record), record the assessed performance criteria and standard achieved on the ‘accelerated competency’ form. Attach this form to the lesson plan and training record for the lesson in which the early assessment was made.

**Note:** Competency must be demonstrated by the student on two separate flights.

In lesson plan and training record documents, the first assessment to a higher performance standard lists both the element and relevant performance criteria.

Only the element is listed for the second assessment; however, the instructor must ensure the assessment is conducted against the same performance criteria.

**Debriefing**

Students are to be thoroughly debriefed following each flight lesson. A debriefing checklist is provided in each lesson plan and training record.

**Comments and outcome**

Instructor comments and recommendations for the next lesson should be entered into the ‘comments and outcome’ box.

**Instructor and student sign-off**

On completion of the lesson the instructor and student are to sign at the end of the form, as an acknowledgment that the student has been appropriately briefed, debriefed and the lesson was conducted in accordance with the training record. The student’s signature is also an acknowledgement of their agreement with the comments and recommendations for future training. The student will be provided with a copy of the record IAW **3C1.2.1**.

* 1. **Approved Part 141 flight training syllabuses**

(Attach syllabuses)

### RPL Syllabus (A)

### PPL Syllabus (A)

### NVFR Syllabus (A)

### Multi-engine Class Rating Syllabus (A)