

Manual Title

**Single Instructor Part 141 Flight Training Operations**

**Sample Operations Manual**

**Version** 1.0 - Month Year

**Approver** Approver Title

**Review Date** Month Year

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Glossary

Acronyms and abbreviations

|  |  |
| --- | --- |
| Acronym / abbreviation | Description |
| ABN | Australian business number |
| AC | Advisory Circular |
| ACN | Australian company number |
| AFM | aircraft flight manual (same meaning as flight manual) |
| AGL | above ground or water level |
| AIP | Aeronautical Information Publication |
| ALA | aeroplane landing area |
| AOC | air operator’s certificate |
| AOD | alcohol and other drugs |
| ARN | aviation reference number |
| ATC | air traffic control |
| ATIS | automatic terminal information service  |
| CAA | Civil Aviation Act 1988 |
| CAAP | Civil Aviation Advisory Publication |
| CAO | Civil Aviation Order |
| CAR | Civil Aviation Regulations 1988 |
| CASA | Civil Aviation Safety Authority |
| CASR | Civil Aviation Safety Regulations 1998 |
| CEO | Chief Executive Officer |
| DAMP | drug and alcohol management plan |
| ELP | English language proficiency  |
| ELT | electronic locator transmitter |
| ERSA | en route supplement Australia |
| FCM | flight crew member |
| FDP | flight duty period |
| FPC | flight proficiency check (instructor proficiency check) |
| ft | feet |
| HF | human factors |
| HLS | helicopter landing site |
| HOO | head of operations |
| IFR | instrument flight rules |
| IMC | instrument meteorological conditions |
| IRM | immediately reportable matter |
| km | kilometre(s) |
| LAME | licensed aircraft maintenance engineer |
| m | metre(s) |
| MOS | Manual of Standards |
| MR | maintenance release  |
| MTOW  | maximum take-off weight |
| NAIPS | National Aeronautical Information Processing System |
| NOTAM | notice to airmen |
| PIC | pilot in command |
| PICUS | pilot in command under supervision |
| POH | pilot operating handbook |

Definitions

For the meaning of terms used in this document, refer to the CASR Part 1 Dictionary at the end of Volume 5 of CASR, or the CASA-produced Consolidated Dictionary. Sample Aviation specific terminology is included below in the table.

|  |  |
| --- | --- |
| Term | Definition |
|  |  |
|  |  |
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|  |  |
|  |  |
|  |  |

Reference material

|  |  |
| --- | --- |
| Document type | Title |
| Civil Aviation Safety Regulations | *Civil Aviation Safety Regulations 1998* |
| Part 91 of CASR | [General operating and flight rules](https://www.casa.gov.au/search-centre/rules/part-91-casr-general-operating-and-flight-rules) |
| Part 91 MOS | [Part 91 (General operating and flight rules) Manual of Standards](https://www.legislation.gov.au/Details/F2022C00789)  |
| Subpart 61.T | [Pilot instructor rating](https://www.casa.gov.au/licences-and-certificates/pilots/pilot-and-flight-crew-exams/pilot-exams/pilot-instructor-rating-exam-pirc) |
| Part 141 | [Recreational, private and commercial pilot flying training, other than certain integrated training courses](https://www.casa.gov.au/search-centre/rules/part-141-casr-recreational-private-and-commercial-pilot-flight-training-other-certain-integrated-training-courses) |
| Part 61 MOS | [Part 61 Manual of Standards](https://www.legislation.gov.au/Details/F2021C00449) |
| AC 61-08 | [Teaching and Assessing non-Technical Skills for Single-Pilot Operations](https://www.casa.gov.au/sites/default/files/2021-12/advisory-circular-61-08-teaching-assessing-non-technical-skills-for-single-pilot-operations.pdf) |
| AC 61-09 | [Competency-based training and assessment for flight crew](https://www.casa.gov.au/search?keys=AC+61-09) |
| CASA Flight Crew Licensing (FCL) Manual | <https://www.casa.gov.au/flight-crew-licensing-manual> |
| CASA Flight Instructor Manual (Helicopters) | <https://www.casa.gov.au/search-centre/manuals-and-handbooks/flight-instructor-manual-helicopter> |
| CASA Flight Instructor Manual (Aeroplanes) | <https://www.casa.gov.au/search-centre/manuals-and-handbooks/flight-instructor-manual-aeroplane> |
| FAA-H-8083-9A | [Aviation Instructors Handbook](https://www.faa.gov/sites/faa.gov/files/regulations_policies/handbooks_manuals/aviation/aviation_instructors_handbook/aviation_instructors_handbook.pdf) |
| NZCAA | [Flight Instructor Guide](https://www.aviation.govt.nz/licensing-and-certification/pilots/flight-training/flight-instructor-guide/) |
| CASA Website - Pilot Instructor Rating Examination | Pilot Instructor Rating Common (PIRC) – <https://www.casa.gov.au/licences-and-certificates/pilots/pilot-and-flight-crew-exams/pilot-exams/pilot-instructor-rating-exam-pirc> |
| CASA Flight Examiner Handbook | <https://www.casa.gov.au/search-centre/manuals-and-handbooks/flight-examiner-handbook> |

Amendment record

Amendments to this operations manual are dated and a new version number assigned accordingly. In addition to recording the date of change for each section or page of this operations manual, a summary of the changes is recorded in the details column.

Table: Amendment record

|  |  |  |  |
| --- | --- | --- | --- |
| Version no. | Date | Parts / sections | Details |
| 1.0 | [insert date] | All | Initial issue |
| [2.0] | [insert date change is made to each section or page] | [e.g. Section 1.6.3] | [Summary of changes made] |
|  |  |  |  |

Distribution list

A copy of this operations manual is retained in the [insert office location]. If requested, this operations manual is made available to CASA for inspection.

Electronic or printed sections and full copies of this operations manual are distributed as detailed below.

Table: Distribution list

|  |  |  |  |
| --- | --- | --- | --- |
| Copy No. | Operations manual holder | Electronic copy | Hard copy |
| 1 | [insert name, position, organisation] | All / section |  |
| 2 |  |  |  |
| 3 |  |  |  |

[Sample Aviation] makes this manual available to all relevant persons.

Persons printing this operations manual should be aware that any hard copies are uncontrolled and may not be the most up-to-date version.

# Operator information

## Name and details

Name: [Sample Aviation Flight Training Pty Ltd]

Trading Name: [xxx]

ABN: [nn nnn nnn]

ACN: [nn nnn nnn]

## Operations headquarters, bases and facility

|  |  |
| --- | --- |
| **[Sample Aviation Flight Training Pty Ltd]** |  |
| Operational headquarters – address: | [141 Sample Drive][Sample City Airport][Sample NS NNNN] |
| Phone: | [xx-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 details

|  |  |
| --- | --- |
| **Key personnel** | As a single instructor [insert name] assumes the responsibilities of the Chief Executive Officer (CEO) and the Head of Operations (HOO) as required by Part 141 of CASR. Any reference in this manual to the role of the CEO or HOO is taken as references to [insert name]. |
| Name: | [insert name] |
| Mobile: | [04xx-xxx-xxx] |
| Email: | [ceo@sampleaviation.com] |

## Other personnel and details

| **Other personnel and details** |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 and rescue |  | 1800-815-257 |  |  |
| ATSB (notifications) |  | 1800-011-034 |  |  |
| AUSAR |  | 1800-815-257 |  |  |

## Authorised Part 141 flying training activities

[Sample Aviation] conducts the following training in an aircraft: (delete as is not applicable to your Part 141 certificate)

RPL

PPL

CPL (that is not an integrated training course)

aircraft class and type ratings

instrument rating

private IFR rating

night VFR rating

night vision imaging system rating

low-level rating

aerial application rating

flight instructor rating or simulator instructor rating

flight engineer instructor rating.

## Other operational activities

Reserved.

# Organisational structure

## Overview of organisation and operation

[Sample Aviation] is a single person operation fully owned by [insert name]. [Sample Aviation] holds an authorisation to conduct Part 141 flying training.

[Sample Aviation] operates a fleet of aircraft.

## Description and diagram

[Sample Aviation] is a single person operation and as such the responsible person for setting and overseeing the strategic direction and policies of the organisation is [insert name].

To manage the Part 141 flying training activities, [insert name] will fulfill the regulatory responsibilities and accountabilities of the CEO (accountable person) and HOO as they apply to the organisation.

Figure 1: Organisational structure

# Key personnel

## General

As a single instructor, [insert name], assumes the responsibilities of the CEO and the HOO as detailed in this section of the operations manual. For the purposes of this manual all roles have been amalgamated into those of the HOO.

As the HOO, [insert name] is responsible for discharging the following duties:

* 1. Review the planned kind and volume of training, including:
		1. determine and ensure suitable valid qualifications are held to complete the anticipated flying training safely and effectively
		2. on at least a yearly basis or at major changes to operations, review the suitability of the management structure
		3. ensuring that training resources are available to deliver the anticipated flying training
		4. setting the standards for the kind of training and maintaining those training standards.
	2. Ensure flying training records are complete and accurate.
	3. At least annually, or when the operations manual is updated carry out a review of the operations manual and apply the change management procedures described in section 9 if required.
	4. Identify and address deficiencies in feedback from flights.
	5. Manage the DAMP.
	6. Schedule aircraft maintenance if applicable.

## Inability of key personnel to carry out their responsibilities

In the event the HOO cannot carry out their responsibilities for a period of greater than 35 days all flying training activities will cease, and CASA shall be notified within 24 hours.

All training activities will cease when the HOO is absent.

# Facilities

[Sample Aviation] flying training activities are conducted at various ground school locations and aerodromes as required. Wherever flying training activities are conducted the following matters must be considered:

suitable briefing and/or facilities as determined by the HOO are available

aerodrome suitability for the task including dimensions, communications, traffic

HOO familiarity with aerodrome procedures

availability of NOTAM and flight planning facilities if required

access is available to syllabi, lesson plans, operations manual, AIP or equivalent, flight planning software if required and aviation legislation.

# Resources

## Registered aircraft details

A list of aircraft, including their kind and registration mark, currently operated by [Sample Aviation] is detailed on form 4B12 (registered aircraft details). If new or other kinds of aircraft are added to the fleet, act in accordance with the change management process in section 9.

## Flight simulator training devices (FSTD)

[Sample Aviation] operates a [insert].

### Synthetic trainer operations manual (STOM)

The STOM associated with the FSTD forms a part of operations manual suite of [Sample Aviation] and a copy is kept adjacent to instructor console in the FSTD training area.

### FSTD approval and training credits

The device is approved by CASA as a [insert].

The hours and lesson content are contained within the syllabuses found in the associated appendix to this manual.

### FSTD fidelity checks

All FSTDs are subject to a fidelity check to ensure each FSTD continues to comply with the standards, specified by CASA for the FSTD. The fidelity checks are conducted on an annual basis, no later than 12 months from the date of the previous check.

On successful completion of a fidelity check, CASA will issue a new certificate for the device. A copy of the certificate is to be placed on record and placed adjacent to the trainer.

A copy of the most recent CASA Form 0248, used to record the result of the fidelity check, shall also be retained with the STOM.

### FSTD serviceability

Should a deficiency with the trainer be found at any time, details of the deficiency are to be entered into the device’s STOM maintenance release (MR) for repair action.

Once repaired, the FSTD shall be released back into service by making the appropriate endorsement on the STOM MR.

### FSTD software updates

Should any software update, modification to the device, change of location or amendment to the STOM take place, a fidelity check of the device must be successfully completed and CASA notified before it is returned to service.

# Operational documentation

## Operations manual distribution and availability

The operations manual is maintained in electronic format on the server. Uncontrolled/controlled copies may be provided to students.

The manual is distributed as detailed in the following table:

|  |  |  |
| --- | --- | --- |
| Manual holder | Volumes | Format |
|  | 1 | 2 | 3 | 4 | Electronic | Paper |
| CASA | x | x | x | x | x |  |
| Reference library | x | x | x | x | x |  |
| HOO | x | x | x | x | x | x |
| Students(Uncontrolled when in paper format) | x | x | x | x | x | x |

## Issuing of amendments

Amendments to the manual will be updated on the server by the HOO and provided to CASA with a summary of changes contained in the amendment, including background information and details about why the changes were made.

## Requirement to comply with the operations manual

All personnel and students must comply with relevant instructions and procedures contained in this operations manual.

# Reference library

The [Sample Aviation] reference library consists of:

electronic access via [insert company or private] devices to the following documents:

Civil Aviation Legislation via internet https://www.casa.gov.au/rules-and-regulations

Federal Register of Legislation - <https://www.legislation.gov.au/Home>

Aeronautical Information Publications (AIP) via internet <https://www.airservicesaustralia.com/aip/aip.asp>.

electronic access via [insert company or private] devices to the following systems and documents:

flight planning software

flight and duty time software

booking and scheduling software

all operational forms

operations manual.

Paper manuals / secure electronic copies (stored on the server) of:

[insert aircraft type e.g. BE58] AFM and supplements

operating manuals of all navigation systems.

Except for the operations manual, the library is for reference purposes only. Relevant sections may be copied or printed as required, then considered uncontrolled.

## Access to reference library

Printing or saving consumable documents and relevant sections of the manuals including AFM, POH, load sheets and regulations for operational purposes is permitted. However, they are to be considered uncontrolled when printed or saved. It remains the responsibility of personnel to ensure only authorised versions of operational documents are used and that the latest document version is used.

## Amendment and maintenance of the reference library

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

# Record keeping

## Control

Operator records fall into two broad categories:

administrative records

operational records.

## Records and retention periods

### Administrative records

| Record | Format |  | Storage location | Retention time | Disposal method |
| --- | --- | --- | --- | --- | --- |
|  | **Electronic** | **Paper** |
| Incident and accident reports |  | X | Safety file | [7 years] | Shred |
| DAMP testing program records | X | X | DAMP file | [5 years] | \*Shred / delete |

\*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 Alcohol and other drug testing (AOD) testing will be deleted or destroyed.

### Operational records

|  |  |  |  |
| --- | --- | --- | --- |
| Record | Format |  | Retention time |
|  | **Electronic** | **Paper** |  |
| Safety/ incident/accident reports | X | X | 7 years |
| Student flight training records | X | X | 7 years |
| Student flight test reports | X | X | 7 years |
| Flight examiner reports | X | X | 7 years |
| Flight authorisation sheets if any | X | X | 7 years |
| Flight and duty time records | X | X | 5 years |
| Aircraft fuel consumption records | X | X | No period |
| Aircraft maintenance records if required |  | X | No period |

## Electronic copy of material

To avoid doubt, if a document is required, an electronic copy of the material is readily available.

# Change management

Changes to operations, policies or procedures are made by the HOO in accordance with this section.

## Change management process

The following process workflow illustrates the change process:



Figure 2: Change process map

## Actioning the change management process

When actioning a proposed change, the HOO will follow the change management process flow in section 9.1 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 in accordance with CASR 141.100

review (audit) process

new business opportunities or new or different kinds of aircraft.

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.

Draft an operations manual amendment with details of the proposed change.

Refer to CASR 141.025 to determine if the change is significant or non-significant:

if the change is significant, proceed in accordance with section 9.3 and 9.4

if a change is not significant, proceed in accordance with section 9.4.

## Process for seeking approval of a significant change

A significant change requires CASA approval.

The HOO will make a written application to CASA for approval of the change including details of the change and a draft copy of the amended operations manual is required.

When the change is approved, proceed in accordance with section 9.4.

## Process for implementing change

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

Obtain CASA approval of the change if required.

Issue the amended operations manual in accordance with section 6.

Review the operation of the change within 3 months of the change taking effect, to assess its ongoing effectiveness and suitability.

Determine the long-term implications of any changes, and action the continuous improvement process in accordance with section 10.

## Changes of name, contact details and addresses

The HOO shall notify CASA in writing before any changes are made to the following:

a change of name (including any operating or trading name) or contact details

a change to the address of the operational headquarters if different from the mailing address.

The notification must also include a copy of the proposed amendment to the operations manuals with the changes highlighted.

After CASA has been notified, the relevant amendment to the operations manual is to be produced and stored.

# Review (audit) process

## Operations manual review

The HOO will review the operations manual annually to ensure it continues to reflect the current CASA sample operations manual and how the authorised flying training activities are conducted.

## Training standards review

At the completion of each flight test the HOO will seek feedback from the flight examiner and compare the pre-flight test assessment against the flight examiner flight test report to:

identify any training deficiencies

assess the suitability of facilities and resources for the training conducted.

Any identified improvement opportunities are to be actioned as appropriate using the change management process in section 9.

## Regulation review

The HOO will conduct a review at least annually to assess changes to the regulation affecting flying training operations. The review will include:

the applicable regulations including Part 61 MOS

CASA guidance material.

## Safety and incident/accident review

The HOO will conduct a review each 6 months of safety related incident and accident reports.

Any identified improvement opportunities are to be actioned as appropriate using the change management process in section 9.

# Operational personnel

## Designation and responsibilities of the pilot in command

For all flights operated by [Sample Aviation], 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 the PIC in accordance with the flight examiner handbook requirements.

## Flight instructor responsibilities

The flight instructor is responsible for:

safe and efficient conduct of their allocated student’s dual and solo flying training and generating and maintaining associated flight training records

checking flight times against aircraft records and, if necessary, correcting pilot logbooks of their allocated students

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 day’s flying

accurately completing flight and duty time records (form 4B11)

ensuring that only authorised training is performed and that it is conducted in accordance with this operations manual and the Part 141 certificate.

## Supervision of flying training activities

Flying training activities will only be conducted when supervision is available by [insert name].

The HOO will review the planned training for the day and ensure that the weather conditions are suitable to allow successful lesson outcomes. The latest information relevant to the training area, navex routes and any intended landing points must be considered. Where available the information to be considered includes:

area forecasts

terminal aerodrome forecasts (TAFs) and METARs

NOTAMs.

If a scheduled flight lesson must be changed for any reason, the above will need to be reconsidered.

# Rostering and fatigue management

## Rostering policy

Prior to undertaking any instructional duties, the HOO must:

hold a valid instructor proficiency check (FPC)

hold a current medical certificate, that permits the holder to conduct of the training activities required

meet the flying currency requirements

hold appropriate qualifications for the duty (as applicable).

Rosters showing the allocated workdays will be developed to ensure there are appropriate off-duty periods between duties and that the limitations detailed below are met.

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

## Fatigue management limits

The following requirements must be met:

A flight duty period (FDP) commences upon reporting 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 free of all duties.

At home base, an FDP must be preceded by at least eight consecutive hours sleep opportunity in the 12 hours immediately before the FDP.

At away from home base, an FDP must be preceded by at least eight consecutive hours sleep opportunity in the 10 hours immediately before the FDP.

If, for any reason, the required sleep opportunity period is not achieved, the assigned FDP cannot commence.

FDP restrictions:

The earliest an FDP may commence is the earlier of the following:

at or after first light

0700 hours local time

0100 hours (local time at the location where the FDP commenced) on the following day.

The maximum FDP is:

8 hours when the FDP commences prior to 0600 hours

9 hours when the FDP commences between 0600 and 1359 hours

8 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 any one person in any 168 consecutive hours.

The maximum flight time in an FDP is 7 hours.

Off-duty period (ODP) requirements are:

a minimum ODP of at least 12 consecutive hours during any 24 consecutive hours

an off-duty period of at least 36 consecutive hours which includes two local nights (a local night is defined as 8 consecutive hours which must include the time between 2200 and 0500 local time) in any 7 days

at least 6 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:

100 hours (cumulative) flight time limit in any 28 consecutive days

1000 hours (cumulative) flight time limit in any 365 consecutive days.

## Flight and duty time records

The CAO 48.1 – Flight Crew Member Flight and Duty Record must be updated at the conclusion of each FDP.

[Sample Aviation] 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.

Flight and duty records shall be backed up at least weekly. The records and back-up records shall be kept for five years.

## Flight and duty time extensions

The extensions permitted by [Sample Aviation] 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 7 hours of the FDP’s flight time).

These extensions are only permitted, providing the following requirements are met:

the 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

a self-assessment in accordance with section 12.5.2

cumulative flight time limits must not be exceeded and must consider any impact on any subsequent rostered FDP.

If unforeseen operational circumstances arise after take-off on the final sector of the FDP, and this would cause an exceedance of any limit in this manual, the flight may continue to the planned or alternate destination at the discretion of the PIC.

Any extension may result in exposure to elevated fatigue risk a review of the reasons for the extension will be undertaken to ensure the fatigue risk policy has been met and prevent similar extensions being required.

## Fatigue management

### Fatigue risk policy

[Sample Aviation] manages the risk of fatigue by compliance with Civil Aviation Order 48.1 instrument 2019 and Appendix 1 of that CAO.

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

No task for a flight shall be commenced if [insert name], or is likely to be, unfit to perform the task due to fatigue.

### Self-assessment

The use of the ‘I'M SAFE’ tool is recommended. 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.

### ‘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?

### HOO responsibilities

An increased fatigue risk may be caused by any of the following:

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.

Specific personal circumstances may also fatigue risk such as an illness in the family, new baby in the house, moving house etc.

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

additional planned breaks during the duty.

### Sustenance

Low blood sugar levels and dehydration impair brain function and lead to poor decision-making. The taking of regular meal breaks, eating nourishing food and drinking sufficient quantities of water all aid in the reduction of fatigue. In addition, consideration should be given to breaking up long navigational exercises at an enroute aerodrome to take advantage of a meal break.

Where an FDP is to exceed 5 hours, [Sample Aviation] will provide an opportunity for a meal during the first 5 hours, and a further opportunity for a meal (as required) to ensure not more than 5 hours elapse between meals.

### Home base

The home base is the training base location in the city/area in which [insert name] is resident.

### Accommodation away from home base

Accommodation that is fit for purpose must be available to minimise the risks of fatigue prior to commencing a duty period.

## Private operations

The term ‘private operations’ in this section refers to flights that are not a Part 141 flying training activity.

Private operations conducted on the same day as training flights e.g. positioning flights, shall be included for the calculation of flight and duty time limits in accordance CAO 48.1 section 12.

# Drug and alcohol management

No flying training duties or responsibilities shall be undertaken when under the influence of alcohol or drugs.

[Sample Aviation] 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] has committed to adhering to all 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 plans link.

[Sample Aviation] adopts all conditions in the CASA micro-business exemption including completion of the CASA alcohol and other drug (AOD) eLearning and has formally adopted the micro-business DAMP.

# Safety policy

## General

Safety is the first priority in all training activities. This includes developing and implementing strategies to ensure all our aviation activities uphold the highest level of safety performance.

[Sample Aviation’s] safety culture encourages and promotes an accident-free training environment and a culture of open reporting of all safety hazards.

To help [Sample Aviation] continuously improve its safety performance all students are encouraged to report any new safety related events or issues directly to the HOO. Just culture principles will be applied to any report which identifies a newly identified safety issue accurately and in a timely manner.

## Safety management

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

encouraging a healthy safety culture within the organisation

fully supporting a non-punitive reporting culture amongst students

promoting an environment of trust with students based on a clear understanding of acceptable and unacceptable behaviour

actively encouraging the use of the various reporting tools by students

encouraging direct feedback to the authors of the reports

clearly defining for all contractors and students their responsibility for achieving safety outcomes

minimising the risks associated with operating aircraft to a point that is as low as reasonably practicable

striving to continually improve safety performance

conducting internal 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 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

Students must bring any matters that are considered to be a safety hazard to the attention of the HOO.

## Safety investigation

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

improve the 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 aircraft. Certain items that might otherwise be considered dangerous are permitted in accordance with CASR 92.030. The PIC is to refer to this provision to determine if the article can be carried on any flight.

# Aircraft operations

## Documents to be carried on flights

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

for each pilot other than a student pilot

medical certificate (for a recreational pilot who does not hold a medical certificate, the recreational aviation medical practitioner’s certificate or a medical exemption)

flight crew licence or certificate of validation

passport or photographic ID as issued by a Commonwealth state or territory authority or agency that is current and been issued within 10 years of the day of your flight e.g. a state driver’s licence or your ASIC

aircraft flight manual (AFM) and supplements (if applicable)

operating instructions for any computerised navigation systems fitted to the aircraft

minimum equipment list (MEL) if applicable

aircraft checklists (normal and emergency) – see form at section 29.6

aircraft journey log – see form at section 29.7

a map of the training area (if required).

The PIC must also carry weather forecasts and NOTAMs for the route, along with all applicable maps and aeronautical information publication (AIP) documentation and either the aircraft’s flight technical log or its maintenance release unless operating:

under the visual flight rules (VFR) by day within 50 nm of the departure aerodrome

inside a flying training area for an aerodrome

on a route to or from a flying training area which is not adjacent to its associated aerodrome.

A document required to be carried on a flight may be carried as a copy in electronic form.

## Aircraft flight manual (AFM) and use of checklists

The 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 in accordance with the [Sample Aviation] 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 Part 141 operator checklists must be used.

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

[Sample Aviation] does not carry passengers on training flights.

## Carriage of examiners and CASA inspectors

CASA flying operations inspectors (FOIs) may be carried in aircraft for the purposes of checking or observing flight tasks, when authorised by the HOO. A pilot must always be the nominated PIC unless the FOI is conducting a proficiency check or rating issue on operator personnel as a flight examiner.

## Manipulation of propeller – hand starting engines

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

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

## Taxiing

Persons authorised to taxi aeroplanes operated by [Sample Aviation] without supervision of an instructor 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

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

## Carriage of life jackets

For any anticipated flights over water, the PIC will ensure that there are sufficient life jackets that have a whistle for all occupants onboard if the aircraft is a:

seaplane or amphibian

single-engine aircraft which is not a seaplane or amphibian that flies over water beyond the distance from which it could reach an area of land suitable as a forced landing area if the engine failed

multi-engine aircraft which is not a seaplane or amphibian that is flown more than 50 nm from an area of land suitable as a forced landing area.

Each person’s life jacket must be stowed where it is readily accessible from the person’s seat.

Exceptions:

An aircraft does not have to carry life jackets if it flies over water in the normal course of climbing after take-off, or descending to land, or in accordance with a navigational procedure that is normal for climbing from or descending at the aerodrome.

In an aeroplane, a person does not have to wear a life jacket if the flight is higher than 2,000 ft above the water.

A person does not have to wear a lifejacket if the aircraft flies over water while climbing after take-off or descending to land during normal navigational procedure for the aerodrome.

**Note:** A person is wearing a life jacket if it is secured in a way that allows the person to put it on quickly and easily in an emergency.

## Minimum emergency equipment to be carried

All aircraft operated by [Sample Aviation] are equipped with approved emergency locator transmitters (ELTs). If an approved ELT is not serviceable, an approved portable ELT will be carried onboard for cross country flights.

## Weight and balance control

The PIC is responsible for ensuring that the aircraft is loaded in accordance with 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 the aeroplane is secured whenever it is left unattended to prevent damage by means such as:

using throttle locks

locking all control surfaces

setting the park brake on

locking the doors

chocking the aeroplane securely, fitting pitot covers and attaching tie down restraints.

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

## Personal electronic devices

A portable electronic device (PED) is any lightweight, electrically powered equipment. These devices are typically consumer electronic devices capable of communication, data processing and utility. Examples range from tablets, e-readers, and smart phones to electronic games. A portable electronic device might be transmitting or non-transmitting.

No person shall operate a portable electronic device at any time during a flight if it is likely to distract them from performing their duties.

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

The PIC, when giving permission for the operation of a PED on a flight, should consider any limitation that may apply in the AFM, supplementary aircraft manufacturer data or operational experience with the type of PED in question. Considerations should include hazards associated with:

PEDs used during various phases of flight

PEDs used during turbulence

improperly stowed PEDs

PEDs that impede or slow evacuations

passenger non-compliance e.g. not deactivating transmitting functions, not switching off PEDs, or not stowing PEDs properly

disruptive passengers

battery fire.

If a person is directed not to operate a portable electronic device, they must not do so.

Personal electronic devices that have no transmitting capability or can be put in flight mode may be used onboard in-flight. They must be off for take-off and landing.

# Fuel policy

## Purpose

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

## Minimum fuel planning requirements

[Sample Aviation] will carry sufficient fuel to meet the requirements of Division 91.D.6 of CASR in accordance with Chapter 19 of the Part 91 MOS.

The instructor must ensure sufficient fuel is carried to ensure the flying training activity can be conducted safely.

Before a student conducts a solo flying training activity, the instructor must confirm sufficient fuel has been loaded to meet this section.

To determine sufficient fuel is carried the instructor must take into consideration:

the anticipated aircraft weight

all relevant NOTAMS

current meteorological reports and forecasts

relevant ATC procedures, restrictions and anticipated delays

the effects of any deferred maintenance items and configuration deviations [if applicable]

the potential for deviations from the planned flight because of unforeseen factors.

## Fuel flow rates

[Sample Aviation] 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

The HOO will 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:

[45] minutes for training area flights

[60] minutes for cross country navigation flights.

These amounts are revised from time-to-time in the light of experience, as required by the HOO and are promulgated to students via an operations manual amendment.

## Fuel types

All aircraft operated by [Sample Aviation] 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

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 the completed journey log is to be reported to a qualified licenced aircraft maintenance engineer by the HOO for further investigation.

The HOO will monitor 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 will investigate the cause. If a leak or a faulty fuel gauge is suspected, maintenance action is to be initiated. Should the cause be of a more long-term nature, the HOO will amend the planned fuel rates specified in this section of the operations manual.

## Refuelling by students

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

refuelling training

 an assessment as detailed in unit C4 of the PART 61 MOS.

The HOO shall enter written approval to conduct unsupervised refuelling into the student’s training records.

## Aircraft refuelling

All aircraft operated by [Sample Aviation] are refuelled from a bowser or refuelling truck using the following procedures.

Ensure the following safety precautions, external to an aircraft, are present prior to commencing fuelling operations:

the area is clearly signed as ‘no-smoking’ and the limits of this area shall be a sealed building or at least 15 metres (50ft) from the aircraft and ground refuelling equipment

no persons are smoking or using a naked flame within 15 metres (50ft) of the aircraft and ground fuelling equipment

except in the case of aircraft, operation of 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 is not permitted

there are no persons on-board the aircraft

the aircraft is positioned to allow easy movement if there is an emergency.

During fuelling operations, the aircraft and ground fuelling equipment are located so that no fuel tank filling points or vent outlets lie:

within 5 metres (17ft) of any sealed building

within 6 metres (20ft) of other stationary aircraft

within 15 metres (50ft) of any exposed public area

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).

Refuelling or defueling of an aircraft is not conducted in a hangar.

At least two (2) fire extinguishers of approved type and capacity are positioned:

within 15 metres, but not less than 6 metres, from the aircraft and the fuelling equipment or

carried on the fuelling equipment.

Secure static leads.

Remove tank cap.

Refuel aircraft.

Secure tank caps.

Remove static leads.

Complete the required documentation - all fuel added is recorded in the aircraft journey log [Form 4B15].

**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, the PIC will follow this procedure:

The fuelling operation is stopped, and the appropriate airport fire service 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 hazard has been removed.

Mobile power units, vehicles and power operated loading devices operating within 15 metres (50ft) of the spilled fuel are to be shut down.

Maintenance work of any nature on or within the aircraft is to be suspended and not recommenced until the spilled fuel has been removed.

Obtain a fuel spill kit, follow instructions in relation to the spill, and when time permits, fill in a hazard and incident report form.

### Fuel quality check

Before the first flight of the day and after refuelling, the PIC will carry 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 to be drained until all traces are removed from the fuel system before starting engines.

When significant quantities of contamination are found, this is to be:

endorsed on the maintenance release

immediately 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 accordance with the manufacturers 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 to be brought to the attention of the HOO who will notify the maintenance organisation responsible for the maintenance of the aircraft.

Should there be a need to add hydraulic fluid, [Sample Aviation] requires liaison by the HOO with a licenced aircraft maintenance engineer before doing so.

# Aircraft airworthiness

## System of maintenance

The logbook statement details how the aircraft shall be maintained. The maintenance release details what schedule is used in order to issue the maintenance release and control the maintenance in its period of validity.

## Scheduling of maintenance

The HOO shall review the maintenance releases on a daily basis for upcoming routine maintenance items and any entries regarding unserviceabilities made during operations. The HOO 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 shall verify that any maintenance release entry has been appropriately cleared as applicable.

## Maintenance release procedures

[Sample Aviation] uses a standard CASA maintenance release form for its flying training aircraft. This is used for:

notification if maintenance is required to be performed during the period of validity of the MR (Part1)

recording defects or damage to the aircraft (Part 2)

recording flight time (Part 3)

certifications for the conduct of the daily inspection (Part 3).

For any flying training aircraft operated by [Sample Aviation] the PIC must check the MR prior to each flight to ensure:

the date and/or the total time in service (TTIS) when the MR expires will not be exceeded during the intended flight (part 1)

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)

any defects or damage listed on part 2 that are required by aircraft certification or are items that may affect the aircraft’s airworthiness are rectified prior to the intended flight

any equipment listed as unserviceable in part 2 is not required for the intended flight or specified as mandatory equipment in the aircraft flight manual

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 except for VFR flights within 50 nm of the departure aerodrome, within the training area or along the flight path between the departure aerodrome and the flight training area.

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 aircraft maintained to the CASA maintenance schedule is found in CAR Vol 2 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.

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 is cleared by an appropriately authorised or licenced person.

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 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 the HOO 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, 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). For an aircraft where [Sample Aviation] is the registered operator the HOO 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 under the approval of a ferry flight by the issue of a special flight permit. The HOO 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

The PIC may carry out maintenance provided:

they have been approved as specified in CAR Schedule 8

there is approved data and tooling available

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.

## Bird or animal strike

If a bird or animal strike is experienced in flight:

the PIC must report it on part 2 of the maintenance release and report the event to the HOO

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

The HOO is permitted to rectify and certify for the rectification of an unserviceability that is listed in CAR Schedule 8 provided the HOO is trained and approved for such maintenance.

If rectification under CAR Schedule 8 is not applicable, the HOO will 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.

# Instructor training

## Human factors and non-technical skills training

### Overview

[Sample Aviation] 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 section 28.3.

A suitably qualified flight instructor or external organisation approved to deliver HF/NTS training will deliver this training to the HOO. Records of the training will be saved to the records keeping system.

### Refresher program

Refresher HF/NTS training will be conducted on an annual basis coinciding with the Standardisation and Proficiency Check (SPC). The syllabus in section 28.3 sets out topics which may be chosen and is designed to cycle through on a 3-year basis. Training will follow the following guidelines.

The examiner conducting the HOO’s SPC will choose 4 module C topics from the syllabus.

The HOO will pre-read the corresponding chapters from the SB:HF for pilots – Resource Guide.

Where applicable the HOO will watch the SB:HF for pilots - Introduction and Airtime drama video.

The HOO will complete the exercises that correspond to the selected chapters.

#### Syllabus

A syllabus is provided at section 28.3. Conduct of training operations

# Conduct of training operations

A person must not fly the operator’s aircraft unless they are authorised to do so.

## Authorisation of training flights

Before starting a training flight, both the student and authorising instructor will sign form 4B8.

All flying training which involves the causing or simulation of failures will be conducted in accordance with Division 91.D.11 of the CASR and this operations manual.

Also refer to section 21.9 of this manual for last light consideration for solo flights.

### Solo flights

A student pilot must not be authorised to fly solo until they reach the age of 15 years.

For a solo flight, the authorising instructor will only sign the authorisation sheet (form 4B8) when they have confirmed the following items:

Regulations 61.112 are complied with.

The recent experience requirements of regulation 61.115 have been met.

The student pilot must have completed the training mentioned in this operations manual that relates to the conduct of a solo flight of that kind by a student pilot.

The student pilot must have been assessed by their instructor as competent to conduct the solo flight.

If the flight is a cross country flight or a flight at night, the student pilot must have completed at least 2 hours of dual instrument time, 1 hour of which is conducted during dual instrument flight time.

The person must meet the following requirements:

been briefed appropriately for the flight

must be capable of conducting the flight safely

if the person is a student pilot, the following also applies:

* have been assessed by CASA or an examiner as meeting the general English language proficiency standard mentioned in the Part 61 Manual of Standards or
* have completed an approved course of training in English language proficiency.

The student has an ARN, current medical certificate and English Language Proficiency (ELP) as required.

The student has completed all training and examinations as prescribed by the relevant syllabus for the solo flight.

The student flight training records indicate that they have achieved the required standard for all elements of competency for the flight.

(Except for rotorcraft training). 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.

The student has completed 2 hours of dual instrument time including 1 hour instrument flight time if the flight is a first solo at night.

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.

The student is clear on what they are be authorised to do while on their solo flight.

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.

The daily inspection is complete and certified.

The pre-flight inspection confirms the aircraft is serviceable.

All instruments, navigation equipment and lighting are serviceable as required for the flight.

The fuel and oil state is appropriate for the flight.

the student carries all appropriate inflight documentation.

### Supervision of solo flight

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 supervising instructor must maintain awareness of the weather conditions en-route and at the destination aerodrome. They must also maintain awareness of the student pilot’s ETA back at home base. If required, the supervising instructor will inform CENSAR of any concerns regarding the flight’s arrival time.

## Operations within training areas

All training other than navigation exercises must be conducted within the designated training or circuit area.

If conducting training at a new location the HOO will determine a suitable training area and provide details to the student.

## Aerobatics and spinning

Unless authorised by the HOO as part of a flight activity endorsement, students are not to conduct aerobatic manoeuvres or deliberately spin the aircraft.

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 (section 28.1) 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 pre-flight briefing the student shall 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 completed all checks required, to ensure a safe go-around no lower than 500 feet AGL.

## Low flying training

(select ONE of these sample inclusions)

[Sample Aviation’s] authorisation does not permit low flying training. All pilots must ensure they always remain at least 500 feet AGL.

or

[Sample Aviation’s] authorisation includes training for the grant of low-level ratings. Unless authorised by the HOO a student must always remain above 55ft AGL.

## Aerodrome suitability

Except in an emergency, aeroplanes operated by [Sample Aviation] will only be operated to or from aerodromes that are listed in en-route supplement Australia (ERSA) or aeroplane landings areas (ALAs) that conform to the guidance provided in CASA publication CAAP 92‑1(1) and detailed in section 21.7 of this manual.

## Register of suitable ALAs

Form 4B13 (ALA report form) is to be used for compiling a register of suitable ALAs of fixed wing aeroplane landing areas that are not listed in the ERSA, but have been approved 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 to use the ALA 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 in accordance with the syllabus for the relevant course of training and approved by the HOO. The routes may be changed with prior HOO permission who will ensure that revised routes comply with the syllabus outcomes for the exercise.

## Observance of last light limitations – solo flights

Day solo training flights will not be authorised if the anticipated ETA is within 30 minutes of last light. All students are to be made aware of last light and must be capable of completing 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, only operator-issued instrument flight hoods or goggles will be used.

Simulation of IMC is only approved when it is part of a student’s initial, transition, recurrent or remedial training as described in this manual.

The simulation of IMC flight in a [Sample Aviation] aircraft requires an instructor to occupy a control seat with fully functioning controls who has adequate vision forward and to either side of the aircraft and is qualified to fly the aircraft.

The pilot flying under simulated IMC must also occupy a control seat with fully functioning controls.

## 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 SAR should only be used if no other option exists.

## Procedures for night flying training

Night flying operations shall be conducted in accordance with the night flying syllabus in section 30.2 of this manual.

The HOO will ensure that night flying operations are conducted at a suitable airport. To be suitable the HOO will ensure the following:

the airport lighting system is serviceable

the airport has a standby lighting system, or a suitable alternative airport is available

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

a ceiling of 1500 feet

visibility of less than 5 kilometres.

# Flight lesson conduct

## Assessment of student competence

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 the applicable syllabus. 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

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 student's 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

Prior to each training session the HOO will review the students flight training records. Where students fail to meet performance criteria the HOO will take corrective action if the rate of achievement is consistently poor.

## Underperformance of students

If a student consistently fails to achieve competency, the HOO will determine the cause by:

an analysis of the student’s flight training records

discussion with the student.

The HOO will decide on the remedial course of action.

## Evaluation of training outcomes following flight tests

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, and the lesson plans, correcting any deficiencies that may be found.

# Student administration

## Recognition of prior learning

If a student wishes to transfer from another training provider, the HOO will first conduct a flight assessment covering all elements of competency associated with the licence or rating sought, as per Schedule 1 to the CASR Part 61 MOS. For consideration of prior learning credits refer to AC61-06 Competency-based training and assessment for flight crew.

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

## Student records

Student records consist of:

flight training records

flight test results

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.

## Provision of flight training records to students

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

### Request from a student

Students for whom a record of training and checking has been made can request for those records to be made available.

Upon receipt of such a request the HOO must make the records available within 7 days to the person to whom the records relate.

### Request from another operator

[Sample Aviation] shall provide a record of training and checking to another Australian operator upon receipt of a request and if this is authorised in writing by the person to whom the records relate.

Upon receipt of such a request the HOO must make the records available within 7 days.

### Request from CASA

Upon a request from CASA to surrender documents the HOO will:

file the request in the administration file

action the request within the timeframe specified in the request

make a copy of the response and CASA receipt and attach it to the same file

obtain from the CASA officer a receipt detailing the documents surrendered.

## Student logbooks

All students must have an accurate and up-to-date logbook whilst undertaking training.

When required, the instructor 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 student’s training file.

## Student familiarity with relevant operations manual volume

All students undertaking flying training are required to familiarise themselves with the relevant sections of the operations manual as they relate to the activities that the student is undertaking.

# Training courses

## Training plans and syllabuses

[Sample Aviation] has elected to use standard syllabuses, lesson plans and planning matrices prepared by CASA. These syllabuses are reproduced in accordance with those listed in section 30.

# Aeronautical knowledge examinations

## Gaining knowledge to pass aeronautical knowledge examinations

Students must accumulate the knowledge required to pass aeronautical knowledge examinations. This can be done through self-study, through study guided by an instructor, or through an external theory training provider. Instructors must ensure that students have passed their relevant aeronautical knowledge examinations prior to undertaking pre-flight tests.

## Ground examination facility

[Sample Aviation] holds approval by CASA to conduct Pilot Examination Office (PEXO) Exams for RPL and PPL exams only.

Ground examinations will be conducted by [Sample Aviation] as a PEXO provider according to all the required conditions. If at any time it becomes apparent that the minimum requirements in order to conduct these examinations are lacking in any way, the HOO is to rectify the deficiency.

Before conducting an exam, the HOO must always ensure that any learning materials (including posters and maps as well as 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 personnel and students that an exam is in progress and to therefore keep distracting noises and conversations to a minimum.

# Flight tests

## Flight test procedures

Before arranging a flight test, the HOO must check that the applicant meets the requirements in 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, the HOO must certify that all requirements stated on the flight test application form are complied with.

## Booking flight tests

The HOO will book an independent flight examiner to conduct all flight tests and make the following items available:

an appropriately equipped briefing area suitable for the test

a suitable serviceable aircraft with a means of simulating instrument flight

the training records for the applicant including the certification mentioned above

access to briefing materials and a means to carry out flight notification if required.

Note: The HOO will not conduct a flight test on their own students.

## Procedure if a flight test is failed

If a flight test is failed, the HOO will carry out the procedure detailed in section 22.4.

# Flight reviews

[Sample Aviation] 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 is to ensure the candidate continues to maintain competency in accordance with CASR 61.385.

# Appendices

## Training area map

The HOO will select a suitable training area taking into consideration the following:

type of training

terrain

noise sensitive areas

local training areas where available.

The HOO will obtain an image of the area from a suitable source and mark it with any annotations and notes as necessary and save these details in the records management system.

## Drug and alcohol management plan (DAMP)

[Sample Aviation] has opted for a micro-business DAMP.

## Human factors and non-technical skills program

| Flight instructor training in human factors principles and non- technical skillsTraining development |
| --- |
| **Delivery method:*** Facilitated discussion with HOO
 |
| **Training 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 training
* Schedule A is only required for IT2 (Induction training)
* Schedule B – Operational incident and risk profile review
* Review of contributory factors in similar operational training incidents, this schedule is required each cycle.
* Schedule C – HF competency element modules
* For each cycle, 4 modules of training will be selected not repeating any modules from schedule C until these have all been completed\*.
* Induction – Module A, Module B, Module C1, Module C2, Module C3
* Refresher – Module B, Module C4, Module C5, Module C6, Module C7.

\*Variation of the syllabus due to local events may be appropriate. |
| **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.
 |
| **Human factors and non-technical skills training schedule A (induction)** |
| 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 the 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 organisation’s 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 flying training environment. |
| **Human factors and non-technical skills training****Schedule B (operational incident and risk profile 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. |
| **Human factors and non-technical skills training****Schedule C – subjects – (select 3 of the following subjects)**  |
| **Module C1 – fatigue** Determine the participant’s understanding of the following elements:* what fatigue is
* 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 participant’s 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
* identifying available organisational assistance.
 |
| **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 behaviour
* 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.
 |
| **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.
 |
| **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 organisation regarding professionalism.Supporting a reporting culture and positive safety environment. |
| **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 or task fixation – cognitive tunnelling.

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.
 |
| **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 (considering 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.

Discus 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.
 |
| **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:* defining the threats
* 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
* 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’:* requirement to plan
* use of briefings
* allocation of tasks and control authority
* actively checking for understanding
* planning execution and monitoring performance
* ‘avoid, trap and mitigate’
* providing tolerance for error
* enquiry and assertion (instructor and student).
 |
| **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 behaviours of the organisation regarding airmanship.  |

# Forms

|  |  |  |  |
| --- | --- | --- | --- |
| **Form Number** | **Title** | **Rev #** | **Date** |
| Form 4B8 | Flight Training Record |  |  |
| 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 |  |  |

## Form 4B8 Flight Training Record

Personal Details:

|  |  |
| --- | --- |
| Name: |  |
| Address: |  |
| Phone #: | Business: | After hours: | Mobile: |
| Email: |  |

Next of Kin Details:

|  |  |  |  |
| --- | --- | --- | --- |
| Name: |  | Relationship: |  |
| Address: |  |  |
| Phone: | Business: | After hours: | Mobile: |
| 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) |  |
| 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 |  |  |

## Form 4B8 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.

## Form 4B11 CAO 48.1 – Flight Crew Member Flight and 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:

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.

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.

## Form 4B12 Registered Aircraft Details

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Make | Model | Registration | Period of Operation |  |
| From | To |
| [Cessna] | [C152] | [VH-XXX] |  |  |
| [Cessna] | [C172] | [VH-YYY] |  |  |
| [Beechcraft] | [BE76] | [VH-ZZZ] |  |  |
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## Form 4B13 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 OPS | SIGNED: | Date: |  |

## Form 4B14 Aircraft checklists

Reserved

## Form 4B15 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 flying training, syllabus documentation includes:

a planning matrix (a syllabus design tool for mapping Part 61 MOS competencies into individual flight lessons for training and assessment)

a syllabus introduction (providing general information, requirements and contingencies relating to the particular syllabus)

a flight training and theory examination summary (a list of flying training lessons and theory exams in planned sequence).

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 these may vary (for example due to student progress, continuity of training, weather conditions, aerodrome traffic etc.).

#### Competency grading scale – performance standards

[Sample Aviation] 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. Approval for changes shall be in the form of a notation made in the training record by the HOO.

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 depending on 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 record after considering any relevant Part 61 minimum experience requirements.

For instructions regarding the management of underperforming students, refer to section 22.

**Note:** When adjustments to the planned syllabus hours are made, the HOO must ensure that the CASR 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 this 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-flight knowledge

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 and 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.

## Approved Part 141 flight training syllabuses

### RPL syllabus (A)

### PPL syllabus (A)

### NVFR syllabus (A)

### Multi-engine class rating syllabus (A)