



Guide to Part 141 Sample Operations Manual (Sample Flight Training Aviation)

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Owner Branch Manager Flight Standards

Responsible Aera Manager Senior Standards Officer

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Guide to Part 141 Sample Operations Manual (Aviation Flight Training)

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This is an internal CASA policy manual. It contains guidance material intended to assist CASA officers and delegates in carrying out their regulatory responsibilities and is available to the public for information purposes only.

You should not rely on this manual as a legal reference. Refer to the civil aviation legislation—including the Civil Aviation Act 1988 (Cth), its related regulations and any other legislative instruments—to ascertain the requirements of, and the obligations imposed by or under, the law.

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Revision History

Amendments/revisions of this guide are recorded below in order of the most recent first.

| Version No. | Date | Parts/Sections | Details |
|-------------|----------------|------------------------|---|
| 3.2 | June 2021 | 1B2, 1B2.1 | CAO 48.1 fatigue management updates; inclusion of Fuel policy guidance etc |
| 3.0 | September 2018 | 2B - Fuel Policy | Update to meet new CAR 234 fuel policy requirements |
| 2.0 | October 2016 | Administrative Changes | align with Version 2.0 of Sample Exposition |
| 1.0 | August 2016 | All | First issue |

Introduction

There are significant differences introduced in CASR Part 141 compared to previous legislation regulating Flying Schools and their operation. For example, Part 141 states clearly what content has to be in an operations manual in CASR 141.260. It imposes prescriptive responsibilities on the key personnel (CEO in CASR 141.120 and HOO in CASR 141.130) as well as requiring arrangements for their replacement or relief. It also requires the operator to carry out their own proficiency checking, audit and monitoring functions, and to use change management processes and advise CASA accordingly. Greater rigour is placed around Instructor and Student supervision and control with training activities conducted in accordance with the principles of Competency Based Training and Assessment (CBTA).

Consequently, the development of an operations manual that meets the requirements for the issue of a Part 141 certificate requires a different approach than previously accepted by CASA. It is no longer sufficient to just paraphrase legislation in an operations manual. CASA requires an operator to demonstrate their means of compliance with each legislative requirement. Generally this entails making clear to CASA and the operator's personnel what will be done to achieve compliance, how often and by whom. Also, the method of carrying out the process, and recording of the results needs to be described. Finally, any process or procedure must be effectively monitored.

CASA has developed a sample Part 141 Operations Manual (Part 141 SOM) to assist industry in developing a compliant manual and also to provide an opportunity for greater standardisation and efficiency in assessment of the manual by CASA. The Part 141 SOM has been developed to meet the requirements described in CASR 141.260 (and other relevant regulations) and is intended to be used by an non-complex Flying Training Organisation (FTO) that conducts Part 141 flying training with up to 10 regular safety sensitive employees, which are likely to be rostered on a given day. Such an operator is considered "in scope".

Notwithstanding the above, an operator with more than 10 regular safety sensitive employees may still use the Part 141 SOM format; however this would require CTM peer review and an assessment of the suitability of the SOM format for the size and complexity of the operator.

What this guide covers

This guide is intended to be used in conjunction with the Part 141 SOM by industry and the CASA assessor. The guide will assist an operator "in scope" to readily adopt or customise the SOM material to compile their manual. The guide briefly expands on each SOM heading and provides explanations and the rationale behind the sample text. By using these explanations the applicant can determine the type of material that is required to demonstrate compliance. It also indicates where operator generated content is needed to supplement or replace the CASA text and provides an indication of what alternative means of compliance may be acceptable.

This guide will also allow an assessor to review the operator's submitted content by comparing it to the SOM text. It will reduce the time required for an assessor to determine whether operator submitted manual content is acceptable or not by aiding in the decision-making process. It will also indicate the areas that more complex operators or those with different circumstances will need to customise the manual or add additional material.

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The section headings and numbering in the Sample Manual have been followed in the guide. For some sections with no regulatory reference this guide outlines where the operator needs to populate the manual with their unique details such as names, addresses and structures. In these circumstances CASA will obviously automatically accept the details if they are sufficient to convey the intent.

This section may also be used to assist in the assessment of Operations Manuals that either do not strictly follow the SOM format or are submitted by applicants outside the scope of the sample scenario. By reviewing the intent of the SOM text and the rationale behind the means of compliance detailed, an assessor can determine if operator submissions of a more complex or detailed nature can achieve regulatory compliance.

Guidance on assessing a SOM based manual

The SOM contains different styles of material. They are:

1. Part 141 specific content

An applicant may submit unedited content from the SOM in response to a Part 141 regulatory requirement and this material will be automatically accepted by the assessor. Should the applicant amend content in response to a Part 141 regulatory requirement it will be reviewed for consistency and accuracy with regard to the Part 141 provision, and if suitable, will be accepted.

2. Unique operator details required by the SOM

Areas of the Part 141 SOM where content is required to be inserted by the operator, will be reviewed for consistency and accuracy, e.g. contact or aircraft details, and if suitable, will be accepted.

3. Content related to other CASA legislation

CASR 141.260(1) (k) requires an applicants' operations manual to describe the procedures by which the operator conducts and manages the training. If training is done in an aircraft, CASA views this CASR provision as a requirement to include aircraft operating procedures in the applicant's operations manual.

Existing AOC holders transitioning to Part 141 will have operations manuals previously accepted by CASA. The aircraft operating content of these existing manuals can be adapted into the SOM where required and will be subject to an abbreviated assessment process to verify their accuracy, currency and relevance.

New applicants will need to either review and adapt SOM material to suit their operation, or generate and insert new material into the relevant sections of the SOM. CASA will assess this content using existing guidance material such as AOCM, AC's, CAAP and the like.

SOM text in these sections outlines a means of compliance with other CASA legislation, such as a CAR or CAO. The text demonstrates one example of an acceptable means of compliance in relation to the Sample Aviation scenario. Other means may be acceptable, and more complex operations will require additional material.

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4. Content not required by CASA legislation – "Standard Practice"

Sections in the SOM with no regulatory reference are populated with guidance, advice or policy to illustrate "standard practice". The CASA concept of the phrase "standard practice" when used in this guide, means procedures and concepts derived from collective aviation knowledge and experience gained by the inspectorate in training operations. Within the context of the sample scenario the sample material should result in a satisfactory standard of operations in most cases. Unaltered SOM content of this type that is adopted by an FTO conforming to the scope of the Part 141 SOM will be accepted provided it is relevant to the individual operators' circumstances.

Operators are free to add to or modify content not required by legislation. This style of material is used to inform personnel and students of procedures or processes unique to an individual operator, in excess of regulatory requirements, or to expand on procedures not reflected adequately in manufacturers' documentation. If operators populate these sections with this style of material CASA assessment will be limited to reviewing the material for errors or inconsistencies with legislation or the operators own material.

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General

The SOM states time periods and the frequency of internal audits and reviews. It is intended that an operator will customise the timing of these activities in response to the size and scope of the operation and the operational tempo at the time. It is expected that very active training organisations involving significant numbers of instructors and students will set appropriately compressed time frames for these audits, whereas less busy organisations will have more relaxed time frames. The robustness of these procedures and their timeliness will be reviewed by CASA at site inspections during entry control or surveillance.

CASA acknowledges that the development of conforming competency based training syllabuses may be difficult and time consuming, and have published sample syllabuses for some licenses and ratings. It is acceptable for an operator to use these syllabuses without alteration. Should additional training courses be offered that are not issued by CASA as samples, the format of the CASA samples may be freely adapted. However, any operator generated or amended syllabuses submitted will be subject to assessment.

For the purposes of the SOM, Sample Aviation relies on individual aircraft flight manuals for operating procedures for the aeroplane types that are operated. It is not necessary to replicate these manuals in an operator submission. It is expected that an operator will generate their own cockpit checklists derived from manufacturers' material and include these documents in the operations manual suite.

These checklists and the CASA sample syllabuses for particular courses of training will outline procedures such as pre-take off briefings, hand over/take over drills and the like. If the syllabus covers these items there is no need to replicate them in the manual. If the syllabus does not cover these items they will need to be added to the manual. Operators with large, complex and diverse fleets or additional authorisations such as charter, for example, may need to include additional material in their manual.

VOLUME 1 POLICY AND PROCEDURES

PART 1A General

1A1 Preliminary

1A1.1 [Sample Aviation Flight Training] – Part 141 Operations Manual – policy and procedures

1A1.2 List of volumes and contents of complete Operations Manual

The headings and layout here are suggested; however, other styles may be acceptable.

1A1.3 List of amendments and revision history

A table is suggested; however, other means including electronic would be acceptable. This should include a history of the amendments and revisions made to the Operations Manual, indicating exactly what was changed and when.

1A1.4 Operator information

These details will need to be populated. The table format is not mandatory; however, it is a simple solution.

141.260(1)(a)(b)

1A1.5 Organisational structure

1A1.5.1 Overview of organisation and operation

These details will need to be populated.

1A1.5.2 Description and diagram

These details will need to be populated. Company structure will be individual. The diagram is one method – others may be used if they clearly show the structure.

141.260(1)(c)(d)

1A1.5.3 Authorised Part 141 Flight Training activities

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

1A1.5.4 Other operational activities

Reserved

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1A1.6 Operations headquarters, bases and facilities

141.260(1)(p)

1A1.6.1 Description of school facilities

These details will need to be populated. CASA must issue a certificate if the facilities are "sufficient". This will be dependent on the scale and scope of the intended operation. The HOO is responsible for ensuring the operator has procedures to continually keep the facilities and resources at a suitable level in order to provide the training. At entry control, details in the manual will be relevant; however, a site visit will be required to confirm they are sufficient.

141.060(1)(f) and 141.130(3)(e)(iv)

1A1.6.2 Care and maintenance of facilities

The HOO is responsible for ensuring the operator has procedures to maintain the facilities and resources. This process delegates a duty to the Instructors. Other means may be acceptable, such as contractors etc.

141.130(3)(e)(v)

1A1.6.3 Review of facilities

The regular audit and the improvement recommendation processes referred to in the manual are acceptable for assessing the suitability of the facilities and resources. Other options such as third-party audits may be acceptable.

141.130(5)(d)(e)

1A1.6.4 Temporary Locations

Previous CASA practice was to issue conditions on AOC's for operations at temporary locations. Temporary is taken to mean less than 45 days P.A. This section outlines a simple process to enable an operator to assess whether training can be carried out safely at such a location.

1A1.7 Key personnel

1A1.7.1 Chief Executive Officer (CEO)

Name of CEO

In the sample manual, the CEO and HOO are two different individuals and the scenario is that the CEO does not possess the aviation qualifications to be the HOO. The HOO can stand in for the CEO. A CEO is required at all times.

141.260(1)(e)(iii)(iv)

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Duties

If the CEO carries out these duties, or ensures someone else carries them out effectively, their regulatory responsibilities will be met.

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

Duty 1 - This takes into account the fact that the CEO may not be qualified to determine numbers and qualifications of personnel, therefore requires the assistance of the HOO. If the CEO is qualified, this can be altered. The manual is required to describe the process and it exists here. Other means may be acceptable.

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

Duty 2 - The HOO has audit and monitoring functions for compliance and standards, and this text requires the CEO to ensure the HOO carries them out, including taking corrective action. The reporting procedure is captured. The manual is required to describe the process and it exists here. Other means may be acceptable.

141.120(1)(b) and 141.260(1)(mb)(ii)

Duty 3 - The HOO has an operations manual review function, and this text requires the CEO to ensure the HOO carries it out. If required, this will trigger the Change Management process. The manual is required to describe the process and it exists here in the sample. Other means may be acceptable.

141.120(1)(f) and 141.260(1)(mb)(i)

Duty 4 - The CEO requirement to ensure key personnel performance is dealt with here.

141.120(1)(g)

Note: The CEO's duties in the sample manual do not include methods of compliance with 141.120(c) since Turbine of Foreign aircraft operations are not carried out by Sample Aviation. These sections would need to be populated if these operations are contemplated.

The CEO's duties in the sample manual do not include methods of continued compliance with 141.120(ca) and (cb) since the requirement for these procedures to be in the manual is covered by 141.260(1)(ma) and (mb) and would be assessed at entry control.

1A1.7.2 Head of Operations (HOO)

Name of HOO

In the sample manual, Sample Aviation has named a standby HOO.

141.260(1)(e)(iii)(iv)

Mandatory qualifications

These are the regulatory minimums; however, an operator may choose to have a higher standard, including hourly experience etc.

141.125(1)

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Desirable qualifications and experience

Additional attributes are in excess of regulatory requirements. This will require customisation. Previous CASA practice has been to prescribe minimum levels of prior experience in particular roles at the approval stage for CFI's. The size, scope and complexity of the intended training will determine what additional experience is required for the HOO. The sample manual assumes a basic level of experience for the sample scenario.

141.260(1)(e)(i)

Duties

If the HOO carries out these duties, or ensures someone else carries them out effectively, their regulatory responsibilities will be met.

141.130(1)

Duty 1 - The HOO needs to verify that the operator's processes for manual distribution is effective. Paper-based or electronic processes are acceptable.

141.130(2)(f)

Duty 2 - The HOO needs to verify that the operator's process for maintaining the library are effective.

141.130(2)(f), 141.160(1) and 141.160(2)(b)

Duty 3 - This refers to a process and in the SOM there is a flow chart. The HOO would be the appropriate person to carry out the technical aspects in relation to change management in Sample Aviation. Other processes could be acceptable.

141.130(5)(b)(e)

Duty 4 - In Sample Aviation, the HOO actions the process themselves. Larger or more complex operators may require more rigorous methods. The timing of these events would depend on the size and scope of activities and the operational tempo.

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

Duty 5 – In Sample Aviation, it would be expected that the HOO would action these processes themselves. In larger or more complex organisations, more robust processes would be expected.

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

Duty 6 - The process in the SOM requires a Grade 1 instructor to supervise training operations and Grade 111 instructors when the HOO is absent. A definition of "supervise" in the Sample Aviation context is provided. More complex operations may require additional layers of supervision.

141.130(4)(b)(v)

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Duty 7 - The duty in the SOM refers to processes that could be carried out by the HOO themselves or appropriately trained person or persons. An IT solution may be acceptable if suitable.

141.130(2)(e), 141.260(1)(o), and CAO 48.1

Duty 8 – The sample process could be conducted by the HOO; however, other means may be suitable.

141.130(2)(a), 141.130(2)(n) and 141.130(4)(b)(iii)

Duty 9 – The HOO needs to personally carry out the standardisation checks unless another person is approved. Nevertheless, management of the program and keeping records could be delegated or electronic.

141.130(4)(b)(iv)

Duty 10 - The SOM nominates the HOO; however, another permanent employee could be nominated.

99.030(2)(k)

Duty 11 – Electronic means could be substituted for the paper-based process referred to in the SOM.

141.130(4)(b)(i)

Duty 12 – The HOO is responsible in the Sample Aviation case for scheduling maintenance. Individual operators would need to customise this.

141.130(4)(b)(i)

1A1.7.3 Key personnel familiarisation training

The SOM outlines a simple process using the form as a syllabus of training. However, the scope of training and the delivery method will depend on the individual operator and the candidate.

141.115

1A1.7.4 Absence or inability of key personnel to carry out their responsibilities

Sample Aviation has nominated the HOO to act as standby CEO and another individual to act as standby HOO. Operators may nominate standbys and name them in this section if required. However, the SOM assumes the CEO cannot act as the HOO since they do not have the required qualifications in this instance. Individual operator circumstances may be different.

141.260(1)(e)(iv)(v)

1A1.7.5 Notification to CASA of inability of key personnel to carry out their responsibilities

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The SOM circumstance nominates a standby and the notice period is three days. If an operator does not nominate a standby, the notice period is 24 hours.

141.110

1A1.8 Definitions and abbreviations

1A1.8.1 Definitions

The definitions for levels of requirement make clear what is mandatory or not in the SOM.

1A1.8.2 Abbreviations

The table available in the SOM is an example. Sample Aviation needs to include its own table with relevant and common abbreviations used throughout the manual.

1A2 Resources

1A2.1 Registered aircraft details

The SOM uses a table separate from the body of the manual for ease of amendment. The details will need to be populated.

141.260(1)(I)(i)

1A2.2 Flight Simulator Training Devices

Reserved

1A3 Operations Manual Administration

1A3.1 Operations Manual distribution and availability

This process can be customised to suit operator requirements and electronic means are suitable. A site inspection will verify if the system is sufficiently robust.

141.160(3)

1A3.2 Issuing of amendments

This process can be customised to suit operator requirements. A site inspection will verify if the system is sufficiently robust.

141.270

1A3.3 Requirement to comply with the Operations Manual

This section reinforces the regulatory requirement.

141.130(4)(b)(vi), 141.165, 141.170 and 141.265

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1A3.4 Operations Manual review and amendment procedures

1A3.4.1 Continuous improvement process

This section mandates consideration of continuous improvement and refers to a simple process. This will require expansion and customisation for larger operators.

141.120(1)(f), 141.260(1)(mb)(ii) and 141.260(1)(mb)(v)

1A3.5 CASA exemptions

This section should be populated to reflect exemptions held by the operator if applicable.

1A3.6 Company reference library

1A3.6.1 Composition of reference library

The table in the SOM is populated with what is considered the minimum.

141.160(2)(a)

1A3.6.2 Access to reference library

The SOM provides a sample method of access and this could be customised by the operator.

141.130(2)(f) and 141.160(2)(b)

1A3.6.3 Amendment and maintenance of reference library

The SOM established that the HOO should carry out the process. If it is delegated, the procedure detailing how this is to be achieved should be outlined here.

141.160(2)(c)

1A4 Record Keeping – Operational & Administrative

1A4.1 Control

This section details a sample process. Operators can customise at their discretion.

1A4.2 Records and retention periods

1A4.2.1 Administrative records

This section details a sample process. Operators can customise at their discretion.

1A4.2.2 Operational records

The only regulatory requirements in the sample table are: retention of student flight training records; flight and duty records. Operators can customise the rest at their discretion.

141.275 (2)

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1A4.2.3 Requests for records made by CASA

This is a process for compliance with CASA's requests.

1A5 Change Management

This mandates use of the process.

141.095

1A5.1 Change management process

The SOM illustrates the Sample Aviation's process using a flow chart. This is one means of compliance and other methods may be acceptable.

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

Form 395 – Application for Significant and Non-significant change

Form 141-001 – Application for CASR 141 flight training certificate

1A5.2 Actioning the change management process

The SOM shows process and presents risk assessment guidelines for change management.

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

1A5.3 Process for seeking approval of a significant change

This states the minimum requirement for seeking approval.

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

1A5.3.1 Change of key personnel

This reinforces the regulatory requirement.

141.085(2)(a)(b)(3), 141.260(1)(e)(iv)

1A5.4 Process for implementing change

This process mandates reissuing the manual and refers to continuous improvement process.

141.130(2)(f) and 141.260(1)(s)

1A5.5 Changes of name, contact details and addresses

This reinforces the regulatory requirement.

141.080

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1A6 Internal Audit Processes

This section is referred to from the CEO and HOO duties. Timing of the audits depends on the size and scope of the individual operator and would be assessed at a site visit. The annual cycle proposed in the SOM is considered a realistic minimum.

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

1A6.1 Operations Manual compliance

The audit items in the SOM are considered standard practice minimums and operators may add further items as necessary. Third-party audits may be acceptable if processes appear here to ensure they are carried out correctly.

1A6.2 Regulatory compliance

The audit items in the SOM are considered standard practice minimums and operators may add further items as necessary. Third-party audits may be acceptable if processes appear here to ensure they are carried out correctly.

1A6.3 Facilities and resources

The listed items are required by CEO duty. They may be extended if required. Third-party audits may be acceptable if processes appear here to ensure they are carried out correctly.

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

1A7 Monitoring standards of training

The monitoring function could be carried out by the HOO or a delegate. If delegation is permitted, the methods to standardise monitoring functions and the reporting process would need to be outlined here. Timing of monitoring is at operator discretion; however, quarterly is considered a realistic minimum.

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

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PART 1B OPERATIONAL PERSONNEL

1B1 Duties and Responsibilities

141.260(1)(k) and 141.290(1)(b)

1B1.1 Designation and responsibilities of the pilot in command

This section outlines a means of compliance with CAR 224 in the operators' context.

CAR 224

1B1.2 Flight instructor responsibilities

Duty statements including terms of employment etc. are an operator-specific requirement and not assessable by CASA. Operators are free to populate this section as required; however, operations manual compliance should be reinforced.

141.165, 141.170 and 141.290(1)(b)

1B1.2.1 Flight instructors authorised to approve and supervise solo flights

The SOM mandates using a form to assist with compliance with rostering requirements. This section also reinforces compliance with company authorisation processes.

1B1.2.2 Supervision of flight training activities and junior instructors

This section provides a definition of effective supervision otherwise absent from regulatory material, while establishing a definition of a supervising instructor in the operator's context. It outlines a sample policy and duties. This provides a sample means of compliance with the regulations and IAW HOO Duty 6. Operators may choose to adopt stricter supervision regimes if appropriate.

141.130(4)(b)(v) and 141.260(1)(k)

1B1.3 Ground instructors

This section should be populated if these personnel are employed.

1B2 Rostering and Fatigue Management

This combines rostering policies from both a fatigue and an operational authorisation perspective. Other approaches are acceptable. This process is referred to from HOO Duty 7.

141.260(1)(o) and Appendix 1 of Civil Aviation Order 48.1 Instrument 2019

1B2.1 Company rostering policy

The SOM adopts Appendix 1 to CAO 48.1 for simplicity. An operator may also elect to use Appendices 4 or 6 as applicable. The section complies with the operations manual inclusions mandated by CAO 48.1 Instrument 2019; however, additional material will be required for further appendices. Provision of rosters to flight crew is mandatory to provide FCMs with

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reasonable opportunity to obtain adequate rest prior to an FDP. Compliance may be achieved by electronic means if suitable. Actual distribution of rosters may be at operator discretion.

1B2.1.1 Fatigue management limits

These limits are mandatory unless another CAO 48.1 Appendix is used

1B2.1.2 Flight and duty time records

This section mandates the completion and retention period of records.

1B2.1.3 Flight and duty time extensions

This process sets out a sample means when extending an FDP to comply with the mandatory requirements of Appendix1.

1B2.2 Fatigue management

1B2.2.1 Fatigue Risk Policy

This policy is a sample and operators are free to customise it at their discretion provided compliance with sections 14.1,14.4 and 16.1 of the CAO is maintained.. Inclusion of some guidance is required by section 14..

1B2.2.2 Self-assessment

This material is a sample derived from CASA guidance material and operators are free to customise it at their discretion. Inclusion of some guidance is considered standard practice.

1B2.2.3 'I'M SAFE' self-assessment

This material is a sample derived from CASA guidance material and operators are free to customise it at their discretion. Inclusion of some guidance is considered standard practice.

1B2.2.4 HOO responsibilities

This material is a sample derived from CASA guidance material and operators are free to customise it at their discretion. Inclusion of some guidance is considered standard practice.

1B2.2.5 Sustenance

This material is a sample derived from CASA guidance material and operators are free to customise it at their discretion. However provision of access to sustenance at least every 5 hours during an FDP is mandatory.

1B2.2.6 Home Base

The provided procedure in the SOM ensures compliance with section 14.9 of the CAO.

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1B2.2.7 Accommodation

1B2.2.7.1 Accommodation away from home base

Complete this section if it is applicable to your operation. If not, enter text such as NOT APPLICABLE, RESERVED etc.

1B2.2.8 Private Operations

The provided sample procedure in the SOM ensures compliance with section 12 of the CAO.

1B3 Medical

1B3.1 Medical certificates

The SOM provides a process to assist compliance with HOO Duty 11 and the regulation.

141.130(4)(b)(i)

1B3.2 Drug and alcohol management

This section refers to optional use of Micro-DAMP. If operator cannot take advantage of this, the full DAMP compliance material required under CASR Part 99 should be included here.

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PART 1C SAFETY POLICY

1C1 General

This material is a sample adapted from CASA's published SMS Toolkit (<u>Safety management system resource kit</u>) and the SMS evaluation tool - <u>Form 1591 - Safety Management System (SMS) evaluation tool</u>. Operators are free to customise this section at their discretion; however, CASA expects an operator to produce and publish material that provides evidence that it takes its safety responsibilities seriously.

141.260(1)(ma)

1C2 Safety Management

This section should outline how the safety policy will be actioned and how the operator will maintain appropriate levels of safety. Formalised hazard and incident reporting processes might be appropriate for some operators.

1C3 Accident and Incident Reporting Procedures

1C3.1 Accident and serious incident reporting

This section reinforces mandatory reporting requirements. Section 18 TSI Act 2003

1C3.2 Incident reporting

This section reinforces mandatory reporting requirements. Section 18 TSI Act 2003

1C3.3 Hazard reporting

This section encourages employee interaction in Safety Management.

1C3.4 Safety investigation

This section outlines who will conduct investigation related to incidents, accidents and hazards and any means or tools that will be employed to do so.

1C3.5 Supporting legislation

This section cites the legislation referred to as support for safety-related decisions. The SOM cites Section 18 TSI Act 2003 and AIP ENR 1.14 as an example.

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PART 1D DANGEROUS GOODS

Should the operator hold approval to carry DG's or are seeking approval, the details should be populated here.

PART 1E Quality System

Reserved

VOLUME 2 AIRCRAFT OPERATIONS

PART 2A General

CASR 141.260(1)(k) requires an applicant's operations manual to describe the procedures used to conduct and manage training, including the use of aircraft. The SOM includes means to comply with legislation related to aircraft operations. Where an operator has previously approved operations manuals for other activities, there is no need to 'double up' on this information provided all flight crew members have access to and are aware of policies.

2A1 Documents to be carried on flights

This section outlines a means to comply with regulation and includes some standard practice.

CAR 139

2A2 Aircraft Flight Manual (AFM) and use of checklists

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice. Operators will need to outline their checklist usage philosophy and any specific instructions in this section. Precedence of the AFM is considered relevant. Aircraft with no AFM will require operator generated procedures and checklists.

2A3 Carriage of passengers in seats at which dual controls are fitted

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

CAO 20.16.3 (11)

2A4 Carriage of examiners and CASA inspectors

This reinforces the intent of the CAR.

CAR 262

2A5 Manipulation of propeller – hand starting of engines

This material is a sample and operators can customise it at their discretion. Certain handstarted aeroplanes will require additional material. Including some guidance is considered standard practice.

2A6 Taxiing

This section reinforces the legislation and sets a slightly higher standard in that the student is not considered authorised until they have conducted their first solo.

61.116 and CAR 229

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2A7 Use of seatbelts

This section reinforces the legislation and mandates standard practice.

CAR 251 and CAO 20.16.4

2A8 Carriage of lifejackets

This section reinforces the legislation and mandates standard practice.

CAO 20.11.5

2A9 Minimum emergency equipment to be carried

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

CAR 252(A) and CAO 20.11.6

2A10 Weight and balance control

This section reinforces the legislation and mandates standard practice.

CAR 235

2A11 Securing aircraft

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

2A12 Passenger briefings

This section reinforces the legislation and mandates standard practice. The operator will need to include passenger briefings in their checklist or as a separate document at entry control.

CAO 20.11.14

2A13 Personal electronic devices

This section mandates standard practice. If operators have an EFB policy, it should be entered here.

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PART 2B Fuel Policy

This fuel policy has been prepared within a context of aeroplanes. If operating other types of aircraft and/or helicopters, operators will need to detail company and aircraft-specific procedures in relation to this section. This section was revised in 2018 to comply with the changes made to CAR Part 234 and relies on the following documents to meet new requirements: CAAP 235; CAAP 215: CAR 234.

CAR 234, CAR 234 Legislative Instrument; CAAP 234-1; CAAP 215-1

2B1 Purpose

Operators will need to detail company-specific procedures in relation to this section.

2B2 Minimum fuel planning requirements

Operators will need to detail company-specific procedures in relation to this section.

The SOM outlines a fuel policy for basic training aircraft. Operators are free to customise it to their specific needs. The section provides a means of compliance with the regulation.

CAR 234, CAR 234 Legislative Instrument; CAAP 234-1; CAAP 215-1

2B2.1 Fuel operating conditions

Not all items mentioned in the SOM are legal requirements.

Operators must expand on the points in the SOM outlining procedures and requirements specific to their operation. Operators may need to include more points depending on the nature of their operations; sample text provided are the minimum requirements.

2B3 Fuel flow rates

The SOM has adopted a table format for each aircraft listed which should be adjusted and multiplied to suit the number, make and model of all the different types of aircraft that the operator is using.

If an operator is to prescribe fuel amounts and / or fuel flow rates in the table provided, the fuel data on which the figures are based must be sourced from, in order of priority, a current aircraft-specific fuel consumption monitoring system, original equipment manufacturer fuel consumption data (from an original equipment manufacturer's aircraft flight manual or pilot's operating handbook), engine manufacturer's fuel consumption data or, if all of the preceding are not available for the precise conditions for the flight, known or estimated fuel consumption data.

Other methods would be acceptable. The details will need to be populated.

2B4 Discretionary fuel for solo training flights

Operators will need to detail company-specific procedures in relation to this section.

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This section outlines discretionary fuel that may be required by some operators. This is not defined in legislation and is an optional element.

CAAP 234-1; CAAP 215-1

2B5 Fuel related procedures

This section outlines fuel related procedures, such as pre-flight, inflight and post-flight. Operators can customise this to suit their operation.

CAR 234, CAR 234 Legislative Instrument; CAAP 234-1; CAAP 215-1

2B5.1 Determining and recording fuel quantity - pre-flight

This section outlines fuel related procedures prior to take off. The sample text outlines procedures, such as cross-checking gauge readings with calculations and visual confirmation.

It also takes into consideration the fuel quantity discrepancy minimum, which Operators should establish in the Operations Manual.

If defueling is part of the operators standard operations, provisions should outline the appropriate location as per section 2B8. Operators can customise this to suit their operation.

Operators will need to detail company-specific procedures in relation to this section.

Operators must specify instructions and procedures for recording two matters. Firstly, before flight commencement, the quantity of usable fuel on board. Secondly, after each fuel quantity check conducted during a flight, the fuel quantity data evaluated and determined in accordance with the procedures specified.

2B5.2 Determining and recording fuel quantity - in-flight

The time intervals for regular fuel quantity checks during a flight are not established in legislation; however, 30 minutes is an industry standard. Operators should clearly state what the standard interval is in their operations, and how they establish such timeframes.

Specific in-flight procedures are outlined in the sub-section 2B5.2.1 and operators should outline their policies and procedures accordingly.

The sample text in the Sample Operations Manual also provides some situations and considerations that need to be taken into account when making in-flight decisions. Besides this, methodology is provided for ETP and PNR calculations. It is important that the relevant staff have access to these formulas. Operators can customise this to suit their operation.

Operators will need to detail company-specific procedures in relation to this section.

There is no specific timeframe established as a legislative requirement for regular fuel checks. The legislative requirement is solely that fuel quantity checks are conducted at regular intervals. The 30-minute interval is a standard that will be accepted by CASA. Operators may propose alternative intervals with reasoning for their selection.

2B5.2.1 In-flight fuel procedures

Operators will need to detail company-specific procedures in relation to this section.

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The sample text in the Sample Operations Manual identifies different fuel procedures that can be conducted during flight, including alternate usage, shortages in the fixed fuel reserves, considerations for the amount of usable fuel on-board, contact procedures with ATCs. Operators can customise this to suit their operation.

2B5.2.2 Considerations as point of in-flight decision-making and/or decision point

Operators will need to detail company-specific procedures in relation to this section.

The sample text in the Sample Operations Manual lists specific considerations to be taken into account when making in-flight decisions. Operators can customise this to suit their operation.

2B5.2.3 Equi-time point (ETP) selection and calculation

The sample text in the Sample Operations Manual establishes how the operator calculates the ETP for each of its flights and aircraft types. Operators will need to customise this to suit their operations.

ETP is defined as being a point along the planned route that is located at the same flight time from two points. The ETP calculation is often required in order to determine fuel requirements for certain points of a planned flight or in-flight, as applicable.

The ETP is not necessarily the midpoint by distance between the two selected points, as the distance will be influenced by the wind component in each direction. ETPs provide pilots with decision making aids in the event the aircraft needs to proceed to a landing aerodrome as soon as possible.

In common practice, the selection of aerodromes to which an ETP calculation would be applied is based upon the characteristics of the route being flown. Routes where long distances between suitable en-route alternate aerodromes (ERA) prevail, such as in oceanic or remote areas, the planned route of flight should be examined to identify suitable ERAs based on aircraft requirements, aerodrome capability, and weather.

The commonly used equation or ETP formula returns the distance along track to the ETP from the departure point with input values of total distance, groundspeed back and groundspeed forward.

Ground Distance to ETP =
$$\frac{Total\ Distance \times Ground\ Speed\ Back}{Ground\ Speed\ Back+Ground\ Speed\ Forward} = Nm$$

Operators may need to consider adding in one-engine inoperative ETP strategy and off-track ETP method, if required.

2B5.2.4 Point of no return (PNR) selection and calculation

The sample text in the Sample Operations Manual establishes how the Operator calculates the PNR for each of its flights and aircraft types. Operators will need to customise this to suit their operations.

PNR is the last possible geographic point at which an aircraft can proceed to an available enroute alternate aerodrome for a given flight. It is the point beyond which diversion to the en-

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route alternate aerodrome is no longer possible and the aircraft is committed to proceeding to the destination aerodrome.

While the PNR can be calculated and specified in the operational flight plan (OFP), such a calculation does not typically take into account any discretionary fuel, or the real-time changes in fuel consumption that may occur after departure. The actual PNR will often be reached later in the flight than the point originally calculated in the OFP.

The equation for calculating time to a PNR is:

Time to PNR = Safe Endurance X Ground Speed Back

Ground Speed Back + Ground Speed Forward

Where safe endurance is: Total Fuel Quantity – Required Fuel Reserves

Average Fuel Consumption Rate

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

The equation for calculating ground distance to a PNR is:

Ground Distance to PNR = Safe Endurance X Ground Speed Back X Ground Speed
Ground Speed Back + Ground Speed Forward

2B5.3 Determining and monitoring fuel quantity - post-flight

The sample text in the Sample Operations Manual states how fuel documentation can be recorded and raises the issue of the minimum for fuel quantity discrepancy variation, which operators should establish and justify.

Operators will need to detail company-specific procedures in relation to this section.

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2B6 Fuel types

This will need to be populated according to the type of aeroplane/aircraft operated and their AFM requirements.

Operators to confirm if the fuel types in the SOM sample text are correct for their aircraft.

CAO 20.9

2B7 Fuel usage monitoring

This section outlines a monitoring process for fuel usage. Operators can customise it to suit their operation.

Operators will need to detail company-specific procedures in relation to this section.

CAR 234, CAR 234 Legislative Instrument; CAR 220; CAAP 234-1; CAAP 215-1

2B8 Aircraft refuelling

The sample text in the Sample Operations Manual outlines procedures for refuelling, taking into consideration:

- External safety precautions
- People on-board
- Aircraft positioning

This would also apply to mobile fuelling equipment if used.

- Static leads
- Required documentation.

Operators are free to customise this section at their discretion. It is assumed fixed installations would comply with the Order. Inclusion of some guidance is considered standard practice.

Operators will need to detail company-specific procedures in relation to this section.

If the operator opts for drum fuelling, these procedures should be outlined here.

CAO 20.9

2B8.1 Action in the event of a fire hazard

The sample text in the Sample Operations Manual offers some procedures to be followed in the event of a spill or fire hazard. Operators can customise this to suit their operations.

Operators will need to detail company-specific procedures in relation to this section.

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2B9 Refuelling by students

Operators are free to customise this section at their discretion. Inclusion of some guidance is considered standard practice.

2B10 Fuel quality check

This section reinforces the legislation and mandates standard practice. More stringent methods may be included if circumstances warrant. Operators can customise this to suit their operations.

Operators will need to detail company-specific procedures in relation to this section.

CAO 20.2(5)

2B11 Engine oil and hydraulic fluid management

Operators are free to customise this text at their discretion. Individual aeroplane AFM or maintenance limitations should be included here if different. Inclusion of some guidance is considered standard practice.

Operators will need to detail company-specific procedures in relation to this section.

CAR 138(1); CAR 234; CAR 234A; CAR 234 Legislative Instrument; CAAP 234-1; CAAP 215-1; CAO 20.9

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PART 2C AIRWORTHINESS

This section contains an acceptable means of complying with basic airworthiness aspects of operating simple aircraft in a flying school context. Operators can customise this section.

2C1 System of maintenance

This section may require customisation.

2C2 Scheduling of maintenance

The SOM assigns responsibility for daily airworthiness assurance to the HOO or delegate. Sample Aviation is not the registered operator of the aircraft. If the applicant is the registered operator their responsibilities should be mentioned in the manual in this section.

If the applicant is not the registered operator contractual arrangements must be made with the registered operator to ensure the airworthiness control is maintained. The contractual arrangements should cover the following matters:

- Responsibilities of registered operators to pass on airworthiness information in a timely fashion
- Responsibilities for defect reporting as required by regulations
- Responsibilities for monitoring maintenance schedules to ensure they remain appropriate.
- · Responsibilities for correcting defective maintenance schedules
- Responsibilities for scheduling maintenance and nominating appropriate maintenance providers
- Where required responsibilities relating to trend monitoring
- In accordance with CAR 213 requirements, responsibilities and actions taken by the operator to ensure nominated maintenance providers can properly maintain the aircraft, equipment and accessories.

2C3 Maintenance release procedures

This section provides a means of compliance with the applicable CAR's. In addition, some simple flight time recording policy is detailed.

CAR 47, 48 and 50

2C4 Major defects

This section provides a means of compliance with the applicable CAR.

CAR 50

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2C5 Corrective action procedures

This section offers a means to seek relief under regulation and mandates standard practice.

CAR 42ZR

2C6 Pilot maintenance

This section reinforces the legislation and mandates standard practice.

CAR Schedule 8

2C7 Lightning strike

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

2C8 Bird or animal strike

This section reinforces the legislation and mandates standard practice.

CAR 50 and TSI Act

2C9 Procedures in the event of unserviceability away from home base

This section reinforces the legislation and mandates standard practice.

CAR Schedule 8

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VOLUME 3 PART 141 FLIGHT TRAINING

PART 3A INSTRUCTOR TRAINING

This volume outlines the processes for managing the training.

141.260 (1)(k)

3A1 Instructor Induction Training

3A1.1 Policy

This section is referred to from CEO and HOO duties to ensure training has been delivered and the knowledge standard of instructors is satisfactory.

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

3A1.2 Training courses

This section captures mandatory training requirements. For convenience HF/NTS training is segregated from other induction training.

141.130(4)(b)(ii), 141.200

3A1.2.1 IT1 training

This section outlines a training methodology for a small school. Customisation will be required for more complex or larger operators.

3A1.2.2 IT2 training

This section outlines a training methodology for a small school. Customisation will be required for more complex or larger operators. The HF/NTS training syllabus is suggested from other CASA publications and is suitable for a small flying school.

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

3A2 Instructor Standardisation and Proficiency Checks

This section reinforces the regulatory requirement.

141.185(1) and 141.195

3A2.1 Conduct

This section reinforces the regulatory requirement and refers to the appropriate standards to be achieved. A process to record the outcome and track currency is outlined. If the operator requires another person to carry out the checks, the process for managing their activities needs to be outlined here.

141.190(1), 141.190(2) and 141.195

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3A2.2 Debriefing

This section is considered standard practice.

3A3 Human Factors and Non-technical Skills Training

This section refers to CASA produced HF/NTS syllabus material with training and assessment required at induction and at each annual check (refresher programs). Operator developed material may be acceptable.

141.260(1)(h)

PART 3B CONDUCT OF TRAINING OPERATIONS

141.290(1)(b)

3B1 General

141.130(3)(e)(i)

3B1.1 Authorisation of training flights

This section encapsulates all the regulatory requirements related to solo flight training and some non-regulatory safety aspects such as weather conditions that are considered standard practice. It mandates instructor verification of essential criteria prior to solo.

61.112, 141.130(3)(e)(i), 141.290(1)(b), 141.305, 141.305(3)(c)(6)(b), 141.306, 141.306(2)

3B1.1.1 Solo flights

This section reinforces the conditions required for authorisation to conduct a solo flight.

Helicopter operations - for non-integrated helicopter flight training for the PPL H or CPL H licences, there is no requirement for the instructor to confirm instrument time for students undertaking their first cross-country solo flight.

3B1.1.2 Supervision of solo flight

This section reinforces supervisory criteria for the authorising instructors.

61.112, and 141.130(3)(d)

3B1.2 Operations within training areas

This section reinforces the regulation.

141.130(3)(d)

3B1.3 Aerobatics and spinning

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.4 Solo practice forced landings

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.5 Low flying training

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.6 Aerodrome suitability

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

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3B1.7 Company register of suitable ALAs

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.8 Standard navigation routes

Student Navex routes have to include the appropriate syllabus elements. The SOM states that Sample Aviation includes standard conforming navex routes in its syllabuses. To maintain integrity of these routes, the SOM states the HOO is to be consulted prior to a change.

3B1.9 Carriage of passengers on training flights

This section allows observation flights if approved and reinforces the regulation.

141.295(1)(a)(i),141.300

3B1.10 Observance of last light limitations

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.11 Simulation of instrument flight

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3B1.12 Submission of flight plans by student pilots

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice. Should company SAR be considered as an option, operators will need to include details on the management of this process in their manual.

3B1.13 Supervision of night flying operations

This section reinforces the regulatory requirement. It is assumed the airport and aircraft are suitable. If restrictions exist for either, they should be outlined here.

CAO 29.2(3)(4)(5)

3B1.14 Procedures for night flying training

This section reinforces the regulatory requirement.

CAO 29.2 (2.2)(2.3)

3B2 Flight Lesson Conduct

141.130(3)(e)(i)

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3B2.1 Assessment of student competence

This section includes an explanation of a sample competency assessment technique that is suitable for instructional flights. Operator generated text is acceptable as long as the concepts of competency assessment are articulated correctly.

141.130(3)(b) and 141.130(3)(e)(i)(ii)

3B2.2 Flight lesson debriefing and recording

This section outlines a process to generate appropriate records.

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

3B2.3 Reviewing flight training records

This section contains a sample process to meet the regulatory requirement. It may require customisation or expansion.

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

3B2.4 Underperformance of students

This process is a means to comply with the regulatory requirement. It may require customisation or expansion.

141.130(3)(c)

3B2.5 Evaluation of training outcomes following flight tests

This process is referred to from HOO duty 5.

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

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PART 3C STUDENT ADMINISTRATION

3C1 Student Administration

3C1.1 Recognition of prior learning

This process outlines an entry method for a student from elsewhere. It may require customisation.

3C1.2 Student records

This process formalises production of solo flight records and flight test records otherwise not mandated.

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

3C1.2.1 Provision of flight training records to students

This process reinforces the regulatory requirement.

141.280(1)(b)

3C1.2.2 Transfer of student flight training records

This process reinforces the regulatory requirement.

141.280(2)(b)(c)(d)

3C1.3 Student log books

No regulatory requirement exists for students to keep a log book; however, this section is considered standard practice

3C1.4 Student familiarity with relevant Operations Manual volume

No regulatory requirement exists for students to comply with operations manuals; however, this section is considered standard practice.

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PART 3D TRAINING COURSES

3D1 Training Plans and Syllabuses

This refers to CASA Sample Syllabuses.

PART 3E GROUND EXAMINATIONS

3E1 Gaining knowledge to pass aeronautical knowledge examinations

This material is a sample and operators can customise it at their discretion. Including some guidance is considered standard practice.

3E2 Authority for the conduct of ground examinations

This process mandates training to conduct examinations to satisfy the regulation.

61.210(2)(b)

3E3 Ground examination facility

This section assumes operators have the facilities to conduct exams under the PEXO system.

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PART 3F FLIGHT TESTS AND FLIGHT REVIEWS

3F1 Flight Tests

This section addresses recommendations and procedures for tests.

141.210

3F1.1 Flight test procedures

This section formalises a check that requirements have been met prior to the test.

61.235(2)

3F1.2 Booking flight tests

This section formalises the regulatory requirement.

141.285

3F1.3 Procedure if a flight test is failed

This section mandates action to comply with the HOO duty in the referred section.

3F2 Flight Reviews

This section provides a place for the operator to outline specific flight review procedures if required.

61.400

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VOLUME 4 APPENDICES AND FORMS

PART 4A APPENDICES

4A1 Training Area Map

Insert appropriate map.

141.260(1)(I)(v)

4A2 Drug and Alcohol Management Plan

If the individual operator does not fall into the criteria for use of the exemption, DAMP compliance material will need to be inserted here.

4A3 Human Factors and Non-Technical Skills Program

The SOM content is derived from CASA material. Other suitable material may be submitted as a syllabus and will be assessed by the relevant qualified assessor.

PART 4B FORMS

Sections 4B1 to 4B15 contain forms that are part of record keeping practices.

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VOLUME 5 TRAINING SYLLABUSES

PART 5A GUIDE TO USE OF FLIGHT TRAINING SYLLABUSES

5A1 Syllabus documentation

The SOM outlines syllabus documentation to be included. Insert the CASA syllabuses with the company name added which will not require additional assessment or operator generated syllabuses for assessment.

CASR Part 61, 141.130(3)(a) and 141.260(1)(j)

5A2 Training and assessment plan

5A2.1 Training plan

Operators should include training plans for each course.

Part 61 MOS

5A2.2 Competency grading scale – Performance Standards

Operators should include the grading scale and performance standards used to assess students in each course.

5A2.3 Assessment plan

Operators should include the assessment plan used to assess students in each course.

Part 61 MOS

5A2.4 Variations to the training and assessment plan

Operators should include foreseen variations (sequencing or time factors), for the courses.

5A3 Using syllabus documents

This section offers guidance on how to best use the documents outlined in section 5A.

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PART 5B APPROVED PART 141 FLIGHT TRAINING SYLLABUSES

The following syllabuses are recommended as attachments to the SOM.

- RPL Syllabus (A)
- PPL Syllabus (A)
- NVFR Syllabus (A)
- Multi-engine Class Rating Syllabus (A)