Australian Government
Civil Aviation Safety Authority

ANNEX B TO MULTI-PART AC 119-11 AND AC 138-02 V6.0

Part 133, 135 and 138 training and checking

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Contents

Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and their continuing connection to land, water and community, and pays respect to Elders past, present and emerging.

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1 Overview

1.1 Purpose of this Annex

1.1.1 The purpose of this Annex is to provide specific guidance relating to:

- Part 133 training and checking activities
- Part 133 training and checking personnel
- Part 135 training and checking activities
- Part 135 training and checking personnel
- Part 138 training and checking activities
- Part 138 training and checking personnel.

1.1.2 It is intended that this information complements the general information available in Chapters 2, 3 and 4 of the main Multi-Part AC 119-11 and 138-02 document.

1.1.3 It is recommended that persons read the Multi-Part AC document first, before reading this Annex.

1.1.4 It is recommended that operators intending to take advantage of CASA's transitional recognition of past training and checking events instruments read Annex C which complements this Annex.

1.2 Why have a combined 133, 135 and 138 Annex?

1.2.1 The training and checking rules in Parts 133, 135 and 138 of CASR have a very high degree of similarity. This was deliberately designed given the high number of operators who conduct operations across either 2 or 3 of these CASR Parts.

1.2.2 In most cases for these rules, the wording of the rules is identical, but the way an operator complies with the rules might be different.

For example:

Compare the Part 133 requirement for a flight crew member proficiency check and the Part 138 requirement for an operator proficiency check for a flight crew member.

The requirements are found in Chapter 12 of the Part 133 MOS, and Chapter 23 of the Part 138 MOS.

For this example, the kind of flight crew member being discussed is a pilot.

In both cases, the checks are an assessment of whether the pilot is competent to safely carry out the person's duties as a pilot in the aircraft they can be assigned to fly for the operator in the air transport operation or aerial work operation (as applicable).

However, the kinds of competencies that need to be assessed could be very different between these 2 check flights. If the aerial work operation requires specialist skills beyond baseline Part 61 pilot competencies, then these specialist competencies need to be assessed to an appropriate degree. Two examples of an operation that requires specialist competencies might be winching operations and sling load operations, but there are many others.

More information is available on this topic further in this Annex.

1.3 Aerial work operations in large, complex aeroplanes

1.3.1 In addition to the guidance throughout this section of the Annex, operators are recommended to consider whether their training and checking procedures for larger and more complex aeroplanes should adopt requirements from the Part 121 training and checking rules, such as:

- systems refresher training
- human factors and non-technical skills related to multi-crew operations
- upset prevention and recovery training (UPRT).

2 Part 133, 135 and 138 training and checking activities

2.1 Flight crew training and checking events (except proficiency checks)

2.1.1 General emergency training and check of competency

2.1.1.1 The Part 133, 135 and 138 MOS[1] list the required elements for this training. Operators should design their training course and check to meet the requirements in the respective MOS. The scope of training required will depend on the knowledge and experience level of the individual candidate entering the program and RPL may be applied.

2.1.1.2 Flight crew members operating more than one type will be required to meet the general emergency training competencies and carry out a check for each type flown. The HOTC may apply RPL for some items of the training course and check for one type where the competence has been successfully demonstrated on another type.

2.1.2 Conversion training

2.1.2.1 The Part 133, 135 and 138 MOS[2] list the required elements for this training. Operators should design their training course to meet these requirements. The scope of conversion training required will depend on the knowledge and experience level of the individual candidate entering the program.

2.1.2.2 If an operator has a recognition of prior learning (RPL) process, this may be used to allow candidates to enter or exit the conversion training program at varying places based on their assessed knowledge.

2.1.2.3 Operators may choose to incorporate the command training requirement mentioned in the respective MOS[3] into the conversion training program as this requirement is an expansion of the conversion training requirement.

2.1.2.4 Flight crew members operating more than one type will be required to meet the conversion training competencies for each type flown. The HOTC may apply RPL for some items of the training course for one type where the competence has been successfully demonstrated on another type.

2.1.2.5 If the flight crew member is to be assigned to carry out VFR flights at night, or carry out IFR flights, the conversion training should include a night component to enable the operator to be satisfied that the flight crew member is competent for a flight that may occur at night.

2.1.2.6 The Part 138 MOS requires operators to carry out training specific to the 'kind' of aerial work operation being conducted (or contemplated to be conducted) by the flight crew member. The broad scope of 'kinds' of aerial work operation are mentioned in the regulation[4] and comprise external load operations, dispensing operations and task specialist operations.

[1] Section 12.04 of the Part 133 MOS and Part 135 MOS, and section 23.02 of the Part 138 MOS.

[2] Section 12.05 of the Part 133 MOS and Part 135 MOS, and section 23.03 of the Part 138 MOS.

[3] Section 12.14 of the Part 133 MOS and section 12.13 of the Part 135 MOS.

[4] Regulation 138.010 (1) of CASR.

2.1.2.7 In addition, the regulations[5] require Part 138 operators to ensure their flight crews are competent to perform the specific duty that they are assigned to. The combination of these two provisions means that operators will have to complete conversion training and a proficiency check that deals with the specific competencies for any aerial work task that the pilot has not previously carried out for the operator.

2.1.3 Line training and the flight crew member line check (133 and 135 only)

2.1.3.1 Parts 133 and 135 of CASR follow the same format for both line training and the flight crew member line check. The respective MOS details the requirements for line training[6] which will prepare the flight crew member for unsupervised line operations. The flight crew member line check is the final part of the conversion training program.

2.1.3.2 The number of hours and sectors are not specified in the regulations; however, line training can be used by the operator to provide flight crew members with the flying experience needed to qualify as a PIC under regulations 133.385 and 135.395 of CASR. This is often referred to as supervised line flying.

2.1.3.3 The operator should consider the nature and complexity of their operations to determine the minimum hours and sectors required for line training. The operator's exposition may detail when the number of hours and/or sectors may be varied by the HOTC when considering a flight crew member's previous experience.

2.1.3.4 Flight crew members operating more than one type will be required to meet the line flying competence for each type flown. The HOTC may apply RPL for some items of the line check for one type where the competence has been successfully demonstrated on another type.

2.1.4 Differences training

2.1.4.1 Differences training may be required to comply with regulation 61.200, where a pilot is to operate a different model of aircraft that has a type rating[7] . Differences training for this purpose is a Part 141 or 142 activity.

2.1.4.2 Differences training may also be required for familiarisation purposes where the aircraft to be flown has differences not covered by the regulation 61.200 requirement. This training may be conducted by a person approved by the operator. However, if the training is inflight training, then the person conducting the training must be appropriately authorised. The operator must determine what differences exist and develop a training program to ensure personnel are competent. The program will need to include, where relevant:

- emergency and safety equipment
- system or equipment differences
- engine differences
- weight and balance differences
- performance differences.

[5] Regulation 138.485 (1) (b) of CASR.

[6] Section 12.06 of the Part 133 and Part 135 MOS.

[7] Refer to Part 61 aircraft and ratings instrument for models of type rated aircraft that require differences training.

2.2 Flight crew recurrent training - ways of merging multiple requirements

2.2.1 Example 1 below is based on a Part 133 or 135 pilot who conducts IFR only operations, or a mix of IFR and VFR operations, but the concept can be used for Part 138 checks as well.

2.2.2 As a reminder, this kind of Part 133 or 135 pilot must complete a:

- Part 133 or 135 general emergency check every 12 months
- Part 133 or 135 flight crew member proficiency check every 6 months
- Part 61 IPC needs to be completed every 12 months.

Note: The Part 61 and 133/135 rules specify different periods in which the relevant event can be completed and have the day of the completed event remain the same from year to year.

Example 1

Part 133 or 135 pilot who conducts only IFR operations, or a mix of IFR and VFR

To ensure a pilot met the Part 133/135 flight crew PC requirement, the Part 133/135 general emergency check requirement, and the Part 61 IPC requirement, an operator could structure their checks as follows:

- Proficiency check 1
  - conducted by a flight examiner, flight instructor or check pilot which combines the:
    - » flight crew member proficiency check
    - » flight crew member general emergency check.

Note: Operators are reminded that if life raft or HUET competencies are required, the general emergency check will need to include these items at least once every 3 years.

- Proficiency check 2
  - conducted by a flight examiner which combines the:
    - » instrument proficiency check
    - » flight crew member proficiency check.

Notes:

1. This example is not mandatory and is just one example of how the IFR Part 133 and 135 recurrent requirements could be met. The listed events could be split up and conducted on separate occasions. The responsible operator must as always keep track of their pilots' competencies to ensure the requirements remain met.
2. Part 133 and 135 operators are reminded that there is no requirement for a recurrent annual line check. For Part 138 operators there is no requirement for an initial or recurrent line check.
3. If a flight examiner or flight instructor is used for the conduct of any operator proficiency check, they must meet any requirements in the operator's exposition or training and checking manual (as applicable) for the conduct of the check.

2.2.3 Pilots solely conducting VFR operations

2.2.4 Example 2 below is based on a Part 133 or 135 pilot who only conducts VFR operations, but the concept can be used for Part 138 checks as well.

2.2.5 The operator is responsible to ensure that their pilots complete the following:

- Part 133 or 135 general emergency check every 12 months
- Part 133 or 135 flight crew member proficiency check within 6 months after commencing unsupervised line operations for the operator and then every 12 months.

2.2.6 Separately, the pilot is responsible under Part 61 to ensure they have a valid flight review if they wish to act as pilot-in-command for a flight outside the air operator.

2.2.7 Operators are pilots are reminded that one method of meeting the requirement for completing a flight review is for the pilot to successfully complete an operator proficiency check. A Part 133 or Part 135 flight crew member proficiency check can meet this requirement provided the requirements in regulation 61.745 or 61.800 (as applicable) are met.

Example 2

Part 133 or 135 pilot who only conducts only VFR operations

To ensure a pilot met the Part 133/135 flight crew PC requirement, the Part 133/135 general emergency check requirement, and the Part 61 flight review requirement, an operator could structure their 12 monthly check as follows:

- Proficiency check
  - conducted by a flight examiner, flight instructor or check pilot which combines the:
    - » flight crew member proficiency check, where this check meets the requirements of regulation 61.745 or 61.800 (as applicable
    - » flight crew member general emergency check.

Notes:

1. Operators are reminded that if life raft or HUET competencies are required, the general emergency check will need to include these items at least once every 3 years.
2. Part 133 and 135 operators are reminded that there is no requirement for a recurrent annual line check. Part 138 operators are reminded that the Part 138 MOS does not require either an initial or recurrent line check, and the reference in paragraph 138.130(5)(h) of CASR to a line check can be satisfied by the completion of the Part 138 proficiency check as the crew member's competency in performing their aerial work operation will be assessed as part of the proficiency check.
3. If a flight examiner or flight instructor is used for the conduct of any operator proficiency check, they must meet any requirements in the operator's exposition or training and checking manual (as applicable) for the conduct of the check.

2.3 Flight crew proficiency checks

2.3.1 Holding a valid proficiency check (PC)

Notes:

1. Parts 133 and 135 call these checks 'flight crew member proficiency checks', whereas Part 138 calls them 'operator proficiency checks'. CASA is reviewing the inconsistency in the rules for the naming of these events.
2. CASA has published transitional relief instruments CASA EX77/24, CASA EX78/24 and CASA EX79/24 to permit Part 133, Part 135 and Part 138 operators respectively, to be able to consider a flight review conducted before 28 February 2025 to substitute for a PC (VFR) after 28 February 2025, for a period of either up to the expiry date of the flight review or 15 months. These instruments also allow an IPC to be considered equivalent to a PC (IFR) for a period of either up to the expiry date of the IPC or 12 months. Refer to Annex C of this AC for more details.

2.3.1.1 Operators must ensure their flight crew members have successfully completed a PC:

- before the flight crew member conducts any actual air transport operation, or an unsupervised aerial work operation (remembering that an aerial work PC will probably be considered an aerial work operation), as an active flight crew member for the operator
- on a recurrent basis:
  - For Part 133 and 135 operations: 6 months after their initial PC then every 12 months thereafter for VFR pilots, every 6 months for IFR pilots.
  - For Part 138 operations: 6 months after their initial PC then every 12 months thereafter for day VFR pilots, every 6 months for IFR or night VFR pilots.

Note: The recurrent requirements for a Part 138 pilot flying for an aerial work operator not required to have a training and checking system are slightly different. Refer to section 23.05 of the Part 138 MOS for further information. This AC and its Annexes is focused on operators required to have training and checking systems. For more training and checking guidance for an aerial work operator not required to have a training and checking system, refer to AC 138-01.

2.3.1.2 The purpose of a PC is to assess whether a flight crew member is competent to safely carry out their duties as a flight crew member in the aircraft they are assigned to fly for the operator.

2.3.1.3 A PC expires on its due date. If a flight crew member has not completed their PC before the due date, they cannot conduct air transport or aerial work operations for the operator until a PC is successfully completed.

2.3.1.4 To enable easier record keeping for operators, a PC conducted within the following specified period before or after the due date can have its completion date recorded as the due date:

- for a PC required to be completed every 6 months, within 30 days before or after
- for a PC required to be completed every 12 months, within 90 days before or after.

Note: As per the previous paragraph, this record keeping flexibility does not mean that a flight crew member can keep conducting air transport or aerial work operations after the expiry date of the PC.

2.3.1.5 Operators are reminded that Part 61 also uses the term 'operator proficiency check' (OPC), which is specifically defined in regulation 61.010 of CASR. In Part 61, some check events can be achieved through the completion of an OPC conducted by the operator.

2.3.1.6 Due to the variable nature of operations under these Parts, the relevant MOS does not prescribe the contents of a PC; this is left to the operator to determine and requires the operator to consider the specific competencies required for their operations. The operator's obligation is to ensure the flight crew member is competent to perform the assigned duties for the flight whether by day or night, as applicable.

2.3.1.7 A PC will need to cover:

- duties and responsibilities for the flight crew member's (FCM) position
- procedures relating to the operator's operations
- aircraft standard operating, normal and emergency procedures, including any procedures specific to:
  - operations for which the operator is required to hold a specific legal approval (such as low visibility operations)
  - a particular aerial work activity (for aerial work pilots).

2.3.1.8 As a minimum, a PC should encompass the competencies as stated in the Part 61 MOS flight review schedule[8] for the relevant category, type or class, and include IFR competencies as applicable.

2.3.1.9 The standards that the check pilot will use to assess a check should be, as a minimum, the flight tolerances for the check elements as appropriate, at the professional level as stated in the Part 61 MOS[9].

2.3.1.10 If a PC is conducted by a person who is authorised by Part 61[10] to conduct a flight review in the relevant aircraft, that person may certify for a flight review for the relevant class or type in the pilot's licence if required.

2.3.1.11 If a PC is conducted by a person who does not hold a Part 61 authorisation to conduct a flight review, or is not a flight examiner, such as an operator trained and appointed check pilot, then the operator could have a system where records of the successful completion of the PC can be used as evidence of completion of a flight review for the pilot for use in private operations if desired.

Note: A pilot for an air operator who only conducts VFR flights and who is participating in the operators training and checking system or holds a valid proficiency check for a Part 138 operator does not require a flight review to exercise the privileges of their class or type rating for the operator. Refer to section 5.2 of the body of the AC.

2.3.1.12 In developing their training and checking system, the operator should consider what Part 61 proficiency checks (61PC) are required, for example, IPC, APC, NPC.

2.3.1.13 An IFR 61PC conducted in accordance with Schedule 6 of the Part 61 MOS by a flight examiner will meet the requirements for an IFR flight crew member PC, as well as the Part 61 IPC, provided any additional requirements of the operator's exposition or training and checking manual are also met.

[8] Part 61 MOS Schedule 2.

[9] Part 61 MOS Schedule 8.

[10] Subregulation 61.1175 (6) of CASR.

Note: A pilot for an air operator who conducts IFR flights will require a valid IPC **and** a valid proficiency check to exercise the privileges of their instrument rating for the operator. Refer to section 5.2 of the body of this AC.

2.3.1.14 Whether the exposition or training and checking manual includes additional requirements compared to, for example, an IPC, depends on the characteristics of the operations being conducted by the operator and therefore the competency requirements for their pilots.

2.3.1.15 A typical example would be where an operator is likely to roster pilots for IFR operations at night and is therefore required to ensure pilot competency in night operations. In order to assess night competency a PC must include a night component.

2.3.1.16 In the case of IFR operations where a second annual PC is required, the operator can use the Part 61 MOS as guidance for the development of that check. Where a flight crew member PC is used to meet a 61PC, the operator will need to schedule the check to comply with the Part 61 '*valid to'* date and the flight crew member PC '*due by date'*, as well as ensuring the check is conducted by a person permitted by Part 61 to conduct the 61PC.

2.3.1.17 If a flight crew member's PC only assessed their competency in relation to certain aerial work activities, then if the pilot is required to conduct a different aerial work activity that they have not conducted before, the operator will need to determine which elements of the existing PC are relevant to the new activity, and whether any extra training or checking needs to be done for competency elements not covered in the existing PC.

2.3.1.18 A Part 138 operator who also holds a Part 141 authorisation to conduct flight training for a rating or endorsement required for the aerial work activities may conduct the Part 141 flight training and Part 138 conversion training concurrently, provided that the training is conducted by a flight instructor and, if a flight test is required, a flight examiner authorised under Part 61.

Example

If the flight training for the grant of a low-level rating with a helicopter low level endorsement was conducted using the Part 138 operator standard operating procedures for power line inspections; then the Part 61 flight test could also fulfil the requirement for the proficiency check under Part 138.

2.3.2 Flight crew operating multiple types – proficiency checks

2.3.2.1 Subsection 12.08 (1) of the Part 133 and 135 MOS outlines the requirement to successfully complete the initial and recurrent training and checking 'for the rotorcraft' or 'for the aeroplane'.

2.3.2.2 The phrase 'for the rotorcraft' and 'for the aeroplane' in this context means the rotorcraft or aeroplane type they will be assigned to fly for the air transport operation. A check of competency involves a check pilot assessing multiple discrete competency elements and determining pilot performance against specified performance criteria. If the pilot will be assigned to more than one type, the operator must be satisfied that they are competent in each type.

2.3.2.3 If all the aircraft rostered to be flown by a flight crew member have similar performance envelopes and handling characteristics, then an operator could decide that these competencies need not be checked on each individual type.

2.3.2.4 Operators would normally list the individual competencies on a single form which is also used to record performance for each element during the check.

2.3.2.5 Some sample forms operators could use to customise their PC content are provided in the CASA Sample T&C manual for a variety of circumstances. These forms list multiple competences, some of which are generic, and as such can be successfully demonstrated in any aeroplane. Some examples (from sample forms 6A and 6C) are:

- steep turns
- cross wind operations
- confined area operations
- circuit re-join and 1 full circuit
- comply with airspace and radio procedures
- low flying at 500 ft AGL and reversal turn.

2.3.2.6 However, some competencies may be platform-specific, such as where there are significant differences in aircraft systems or the execution of abnormal or emergency procedures. Some examples (from forms 6A and 6C) are:

- pre-flight, loading and performance planning
- start, lift-off, hover and taxi
- manage autopilot or AFCS
- manage all other aircraft systems
- autorotation to touchdown or power termination
- simulated engine failure and forced landing
- operations using Category A procedures
- aircraft system malfunctions other than engine failure.

2.3.2.7 Operators would need to review the competency check requirements for a pilot who is to operate more than one aircraft type and establish what elements could be successfully demonstrated in one type. They should then design a process to assess the remaining elements to allow rostering across multiple types.

2.3.2.8 If it is decided that a complete check flight is not conducted in each different rotorcraft or aeroplane type to be flown, the operator's exposition would need to specify how check competencies were verified across each of the types. Operators could use the sample forms and tailor them to suit the specific mix of types a particular pilot may need checking in. Examples of different mix and match options are provided in the following sections.

2.3.2.9 Generically, operators could choose to:

- carry out a full PC in each type of rotorcraft or aeroplane that the pilot would be rostered to fly
  - these checks do not need to be coincident, but the operator has to track the expiry of the check in each type to ensure that the pilot meets any check requirements prior to being rostered to fly the particular type.

  or
- carry out a PC that covers multiple types of rotorcraft or aeroplanes
  - operators choosing this option will need to consider the similarities and differences between aircraft types, as well as the engine type, number of engines, aircraft systems [such as auto-pilots/automatic flight control systems (AFCS)], the flight management system (FMS) cockpit configuration and whether the rotorcraft aeroplane falls under class or type rating distinctions.

Note: Operators of R22 and R44 aircraft should refer to section 2.3.10 for information on PC's for these types.

2.3.3 Part 133 - number of PCs required for pilots of mixed fleets

2.3.3.1 The examples below use the check content forms in the CASA sample training and checking manual.

Example 1

A pilot required to fly an R22 and a R44 by day under the VFR

The operator's proficiency check form is based on Form 6A from the CASA sample T&C manual.

The HOTC has determined, for each of the rotorcraft types, what check items are general operational and generic rotorcraft operations check items and what items are rotorcraft type specific.

When reviewing the rotorcraft type specific items, they identify that most of the systems present in the R22 and R44 are similar and could be assessed in either type. In addition, instrument CASA 62/20 allows a flight review in either the R22 or R44 to meet the flight review requirement for both the R22 and the R44.

The HOTC assesses that if the check is conducted in the R22, the type specific items that are different in the R44, such as weight and balance and performance, can be assessed by the check pilot on the ground using a combination of briefings and a written examination.

The operator schedules the proficiency check in the R22 and the check pilot carried out the additional items on the ground.

Example 2

A pilot required to fly an AS350 by day and an AS355 by day and night under the VFR

The operator's proficiency check form for the AS350 single engine VFR proficiency check content is based on Form 6A from the CASA sample T&C manual and operator's multi-engine flight VFR proficiency check form is based on Form 6B.

The HOTC has determined, for each of the rotorcraft types, what check items are general operational and generic rotorcraft operations check items and what items are aeroplane type specific.

When reviewing the type specific items, they identify that competence in the multi-engine and night flying items required for the AS355 could **not** be assessed during a single flight conducted in the AS350. However, a check in the AS355 including a night component would satisfy most of the competencies required to fly the AS350.

The operator schedules a full PC including a night component in the AS355, and the candidate is successful. *[continues next page]*

The HOTC designs an abbreviated proficiency check program to assess the pilot's competence in procedures unique to the AS350 and the check pilot completes this check using a combination of briefings and a written examination.

The operator would need to consider the pilot's IFR proficiency check or an IPC schedule to confirm they continue to meet the requirement to have an instrument rating for a night VFR flight.

Example 3

A pilot required to fly an AS355 under the VFR and a H135 under the IFR

The HOTC recognises that rotorcraft such as the H135 are sufficiently different and more complex than other rotorcraft in the multi-engine class and that they require type-specific flight training and a flight review.

In this case, the additional complexity relates to increased performance, differing category A performance capabilities and profiles, autopilots, different EFIS and caution and warning systems.

The HOTC considers it would **not** be appropriate to consider a check of competency in the AS355 as fully meeting the requirements for the H135 due to these differences. A check carried out in either rotorcraft may be considered to meet only some of the general and generic rotorcraft competencies required for the other.

For this reason, the operator chooses to do two separate full PCs, one in each type, with the H135 IFR proficiency check required to be completed every 6 months and the AS355 every 12 months. In this instance the checks need not be coincident nor proximate, and the operator schedules these independently.

2.3.4 Part 135 - number of PCs required for pilots of mixed aeroplane fleets

For pilots of piston-engine aeroplanes only

2.3.4.1 If multiple types in the same class rating are operated, a PC may only be required in one of the types provided that the operator is satisfied that a check on one aeroplane type would sufficiently ensure the competency of the flight crew member on the other types used by the operator within the same class.

2.3.4.2 Some examples of this are:

- A pilot who would operate a mixed single engine fleet of C210, C206 and PA32 aeroplanes:
  - A PC in any of these types could satisfy the requirement for all these types.
  - The operator would need to be satisfied that, for instance, a primary check in the C206 (fixed gear) would satisfy the primary requirements for competence in the PA32 and C210 (retractable gear), with an additional check (may be on the ground) on the retractable undercarriage system competencies only in the C210.
- A pilot who would operate a mixed multi-engine fleet of C402, BE58 and PA31 aeroplanes:
  - A PC in any of these types could satisfy the requirement for all these types.
  - The operator would need to be satisfied that, for instance, a check in the C402 would satisfy the requirement for competence in the others in relation to systems knowledge such as emergency gear extension or management of the fuel selection system (since all are different in these cases). This may need a ground or aircraft component on undercarriage and fuel systems to be added for the BE58 and PA31 to satisfy the PC requirement for all three types.

2.3.4.3 If multiple types in different class ratings are operated, a PC is required for each class. As above, it may only need to be in one of the types in each particular class. An example would be:

- A pilot who would operate a mixed fleet of C210, C206 and PA32 single-engine aeroplanes, and C310, BE58 and PA31 multi-engine aeroplanes:
  - A PC in any of the types in the single engine class and a PC in any of the types in the multi-engine class is needed to operate all the aeroplanes in the fleet (i.e., two OPC's).

Note: The comments in the examples before this example, regarding establishing competency across differing aeroplane equipment, systems and configurations, are also relevant to this example.

For pilots of turbine-engine and piston-engine aeroplanes (class-rated)

2.3.4.4 If both the piston-engine and turbine-engine aeroplanes are class rated, then a PC in the turbine-engine aeroplane could satisfy the requirement for the other types in that class, provided

that the operator is satisfied that a PC on one aeroplane type (and kind of engine) would sufficiently ensure the competency of the flight crew member on another type (and kind of engine) within the same class.

2.3.4.5 However, in relation to emergency procedures such as the performance of engine failure shut-down drills, it is unlikely that an operator could consider a check in a multi-engine *turbine-engine* aeroplane would also satisfy the requirement for competence in a multi-engine *piston-engine* aeroplane.

2.3.4.6 Similarly, in relation to emergency procedures such as performance of engine failure shut-down drills, it is unlikely that an operator could consider a check in a multi-engine *piston-engine* aeroplane would also satisfy the requirement for competence in a multi-engine *turbine-engine* aeroplane.

2.3.4.7 In this circumstance, if operators wish to conserve resources and minimise the length of check flights for pilots who would fly this mix of types, the processes described in paragraph 2.3.2 should be employed to construct appropriate additional check elements that could be assessed on a separate flight in the aeroplane with the other engine type.

For pilots of turbine-engine aeroplane (type rated)

2.3.4.8 A PC is required for each turbine-engine type operated. For type-rated aeroplanes subject to differences training requirements, operators should construct PCs that reflect the composition of a fleet where variants of the same type are operated.

For pilots of aeroplanes of the same type with different configurations

2.3.4.9 Aeroplanes of the same type may have significantly different equipment, instrumentation and systems, and many operators may have more than one configuration in use at any one time. Typical differences include:

- fuel systems with varying usable amounts and drain systems
- variations in loading systems
- different instrument and avionics fitment
- mechanical differences such as unfeathering accumulators or optional systems such as auto-feather or rudder boost.

2.3.4.10 The presence or absence of these features should be considered when operators construct PC content. It may not be necessary or possible to carry out a full PC in each variant in a fleet. However, operators should consider formal differences training, accounting for the differences during competency checking, to ensure that the competency demonstrated in one airframe is transferable to another airframe of the same type but a different configuration.

2.3.5 Part 135 - managing PCs for pilots of mixed aeroplane fleets

Example 1

A pilot required to fly a C210 and a C172 under the VFR

The operator's proficiency check form is based on Form 6C from the CASA sample T&C manual.

The HOTC has determined, for each of the aeroplane types, what check items are general operational and generic aeroplane operations check items and what items are aeroplane type specific.

When reviewing the aeroplane type specific items, they identify that competence in managing a significant number of systems present in the C210 including fuel injection, constant speed propeller and retractable undercarriage, **cannot** be assessed during a flight conducted in the C172.

Option 1

The operator schedules the PC in the C210 and the candidate is successful.

The HOTC assesses that the C172 different type specific items, such as fuel system/carburettor, different abnormal and emergency procedures, and weight and balance/flight planning matters, can be assessed by the check pilot on the ground using a combination of briefings, a written examination, and direct demonstration in the aeroplane on the ground.

The operator schedules the conduct of the additional items by the check pilot and the candidate is successful.

The pilot is then considered to be proficient for both types. *[continues next page]*

The operator records the expiry date for the pilot's VFR proficiency check as 12 months after the successful demonstration of the emergency procedures in the C210 as this is the most critical perishable skill.

Option 2

The operator schedules the proficiency check in the C172 since the C210 is unavailable, and the candidate is successful.

The HOTC assesses that some C210 different type specific items, such as fuel and propeller systems, retractable undercarriage, and weight and balance / flight planning, could be assessed on the ground using briefings, a written examination, and direct demonstration in the aeroplane.

However, the HOTC assesses that some of the type specific abnormal and emergency procedures cannot be assessed during a flight conducted in the C172.

The HOTC considers that the differences are such that the pilot will need to be assessed for competence in-flight in the more critical items including simulated engine failure and designs an abbreviated check flight program to assess these matters in-flight.

The operator schedules the conduct of the additional items by the check pilot when the C210 is available, and the candidate is successful.

The pilot is then considered to be proficient for both types. The operator records the expiry date for the pilot's VFR proficiency check as 12 months after the successful demonstration of the emergency procedures in the C210 as this is the most critical perishable skill.

Example 2

A pilot required to fly a C210 VFR and C402 IFR:

The operator's VFR single-engine proficiency check form is based on Form 6C from the CASA sample T&C manual and the operators IFR multi-engine proficiency check form is based on Form 6D.

The HOTC has determined, for each of the aeroplane types and flight rules, what check items are general operational and generic aeroplane operations check items and what items are aeroplane type specific.

When reviewing the aeroplane type specific items, they identify that competence in the multi-engine and IFR aspects could **not** be assessed during a single flight conducted in the C210.

The operator therefore schedules an IFR check flight in the C402, and the pilot is successful.

The HOTC assesses that the pilot who has demonstrated competence in all the items on form 6D in the C402 (including the IFR items) could also be considered competent in many of the general items specified for the C210 under the VFR since they have sufficient experience and recency in the C210.

However, they determine that competence in multi-engine abnormal or emergency procedures does not automatically indicate competence in dealing with these situations in a single-engine aeroplane. *[continues next page]*

The HOTC designs an abbreviated proficiency check flight program to assess the pilot's competence in the abnormal and emergency procedures unique to single engine aeroplane in the C210.

Example 3

A pilot required to fly a C402 and a C441 under IFR

The operator's IFR multi-engine proficiency check form is based on Form 6D of the CASA sample T&C manual.

The HOTC has determined, for each of the aeroplane types, what check items are general operational and generic aeroplane operations check items and what items are aeroplane type specific.

When reviewing the aeroplane type specific items, they identify that the normal operations IFR aspects of the checks could be satisfactorily completed in either aeroplane. With respect to the IFR manoeuvres where emergency situations simulations are required, the check pilot would have to assess the pilot's performance in relation to the specific emergency procedures and checklists applicable to the engine/propeller installation and aeroplane platform differences including issues such as pressurisation and oxygen systems.

The HOTC assesses that the pilot would need to demonstrate their performance in the critical emergency situations and systems in both aeroplanes. They would have the 2 options listed below.

Option 1

The pilot carries out a full PC in the C441 and is successful.

The HOTC designs an abbreviated proficiency check flight program to assess the pilot's competence in the abnormal and emergency procedures unique to the piston-engine aeroplane in the C402.

The operator schedules an additional flight in the C402 to check these items.

Option 2

The pilot carries out a full PC in the C402 and is successful.

The HOTC designs an abbreviated proficiency check flight program to assess the pilot's competence in the abnormal and emergency procedures and systems unique to the turbine-engine aeroplane in the C441.

The operator schedules and additional flight in the C441 to check these items.

Since the C441 is an aeroplane that is sufficiently different and more complex than other aeroplane in the multi-engine class, the pilot requires type-specific flight training and a flight review to qualify as pilot-in-command. Operators should pay particular attention to the differences that exist between this kind of aeroplane and those that are covered by the multi-engine class rating and design any combined check flight processes accordingly.

2.3.6 Part 135 - management of PCs in different operational categories or at different times

2.3.6.1 Operators could choose to schedule checks in different aeroplane types that are operated in different operational categories at different times based on the availability of either the aeroplane, a suitably qualified check pilot, or a seasonal requirement for a particular type of operation.

2.3.6.2 Checks in different types or categories do not have to be coincident as long as the interval between checks on a particular type does not exceed the 6 or 12-month period, as appropriate for the check.

Example 4

A flight crew member is required to fly a VFR C208 during the summer tourist season and an IFR C441 during the winter.

The operator can elect to carry out the annual VFR PC for the flight crew member in the C208 immediately prior to the summer season, and this will have a 12-month validity period. They may also then elect to carry out the C441 IFR PC and Part 61 IPC immediately prior to the winter season.

If no further C441 check is carried out in the 6-month validity period of the PC, the flight crew member could not be rostered for this aeroplane until a check is completed.

However, the operator could decide to allow this state of affairs to continue until the next winter requirement. Provided any refresher training and all other T&C requirements are met, carrying out another PC prior to the next winter will restore the flight crew member to active status.

2.3.7 Part 135 - management of PCs if using more than one check pilot and/or not at the same time or place

2.3.7.1 Operators may choose to utilise more than one check pilot to carry out a particular check based on the availability of a suitably qualified check pilot. Additionally, some parts of a check could be carried out by one check pilot, and some parts by another check pilot if this process is managed by the HOTC.

2.3.7.2 Operators could carry out checks over more than one flight, and not necessarily on the one day. In relation to the expiry of checks that are carried out in stages in different types at different times, expositions or training and checking manuals will need to set appropriate validity periods for the checks. Since pilot performance in dealing with critical abnormal and emergency procedures competencies degrades with time between practice, it is recommended that the date the check is carried out successfully in these items resets the expiry period.

2.3.7.3 A suggested reasonable timeframe would be the checks should have occurred within 14 to a maximum of 30 days of each other for checks which are to be carried out by different check pilots. For checks carried out by the same check pilot the timeframe should not be longer than the recurrency requirement for the check being undertaken.

Example 5

A pilot is required by an operator in a remote area fly a VFR C210 and an IFR Baron.

A senior pilot with the operator holds a flight instructor rating with a S/E class rating training endorsement but does not hold a M/E class or IR training endorsement.

The operator's HOTC has trained and approved the senior pilot to be a check pilot to carry out the PC in the VFR C210 and to carry out only the normal operations aspects of the PC in the Baron.

When the flight crew member's PC for the Baron is due, the in-house check pilot may carry out any normal operations aspects of the flight called up by the operators TCS, and the operator elects to use a visiting FER holder to carry out only the remaining aspects of the OPC for the flight crew member when this is due.

The operator schedules the two flights in the Baron no more than two weeks apart, and the system records the flight crew member PC as having been completed after the successful completion of the non-normal procedures element of the Baron PC.

2.3.7.4 Operators may choose to utilise their check pilots to carry out a PC at any suitable location. It is not a requirement for the PC to be carried out at an operator's location.

2.3.7.5 Operators may also utilise their check pilots to carry out a PC in any suitable aeroplane. It is not a requirement for the PC to be carried out in an operator's aeroplane. However, any differences in configuration/equipment would need to be assessed and accounted for.

Example 6

A pilot is required by an operator in a remote area fly a VFR DH82 on scenic flights. This is the pilot's only role in the organisation.

The HOTC is qualified as PIC for the DH82 however is not sufficiently experienced or qualified to conduct the PC for this type. The HOTC is the only other pilot for the DH82 and the operation runs year-round.

The operator's HOTC has trained and approved a flight instructor with significant experience in the DH82 to be a check pilot to carry out the PC in this type for the operator. The flight instructor is based near a capital city and has access to a DH82.

The operator sends their pilot to the capital city and the check pilot carries out the PC in the local aeroplane. The check pilot carries out the check in accordance with the operators' exposition procedures and utilises the operators' check and reporting forms.

2.3.8 Part 138 - management of PC's for pilots who carry out more than one type of aerial work operation and/or in more than one type of aircraft

2.3.8.1 For convenience, particularly with newly engaged pilots, operators may choose to carry out initial conversion training and a proficiency check on a pilot on one type of aircraft and one type of task. Should the pilot be required to operate additional aircraft types and/or on additional aerial work tasks, operators can use RPL concepts to determine what additional training and proficiency checks are required in each individual case.

Example 7

A flight crew member is hired to fly a B206 to carry out aerial platform shooting tasks. The operator carries out the conversion training and proficiency check which involves generic B206 competencies and specific platform shooting competencies.

After three month's employment, the operator then requires this pilot to carry out sling load operations in the B206. The HOTC assesses that most of the generic competencies in the B206 that the pilot has previously demonstrated will continue to apply to the proposed sling load operations, with the exception of some different emergency procedures.

The operator then elects to apply RPL for the common generic competencies and develops a training and proficiency check program specific to the pilot to deliver the required additional emergency procedures training and the elements of sling load training and to carry out a proficiency check in sling operations. This is acceptable since the pilot's previous aerial platform shooting and generic proficiency check is still current.

The operator will have to manage the recurrent expiry dates of this pilot's proficiency checks since they were done at two different times as each task-specific check will need to be carried out at 12-month intervals.

Example 8

A flight crew member operates a B206 on aerial platform shooting tasks and sling load operations and holds a current proficiency check. The operator then requires this pilot to carry out the same operations in the AS350. The HOTC assesses that most of the task-specific competencies that the pilot has previously demonstrated in the B206 will continue to apply to the proposed AS350 operations, with the exception of some different aircraft handling and emergency procedures.

The operator then elects to apply RPL for the common task competencies and develops a training and proficiency check program specific to the pilot to deliver the required additional aircraft emergency procedures training and to carry out a proficiency check in the new type.

The operator will have to manage the recurrent expiry dates of this pilot's proficiency checks should they be done at two different times as each aircraft-specific check will need to be carried out at 12-month intervals.

2.3.9 Part 138 - management of PC's for pilots who also are required to carry out air transport operations

2.3.9.1 For pilots who fly mixed Part 138 and air transport operations in the same aircraft type, operators may choose to carry out combined proficiency checks on these flight crew members to maximise the use of resources.

2.3.9.2 Operators need to be mindful of the requirement to carry out a line check for air transport operations. This check need only be carried out once for the pilot and the aircraft, and is not required for aerial work operations, and is replaced by the Part 138 requirement to carry out a task-oriented proficiency check annually.

2.3.10 Part 133 and 138 - management of PC's for pilots who are required to operate R22 or R44 rotorcraft

2.3.10.1 Section 8 of CASA 62/20 requires a flight review to have been conducted in an R22 or R44 helicopter before carrying out operations in an R22 or R44.

2.3.10.2 After the expiry of transitional relief instruments CASA EX77/24[11] and CASA EX79/24[12] the pilot will need to successfully complete a PC for the operator in the R22 or R44 if this type is to be operated by the pilot for 133 or 138 operations. Refer to Annes C for details.

2.3.10.3 For the operator, this PC will have a validity period of 12 months, however since the Part 61 regulations[13] allow a PC to meet the requirements of a flight review, the pilot may exercise the class rating privilege and fly the R22 or R44 in private operations for the period of the validity of their flight review, which is 2 years.

2.3.10.4 If a pilot is required to fly a type of rotorcraft in the single engine class other than an R22 or R44, the methodology for an operator to maximise resources by conducting combined PC's as described in previous sections needs to be modified. Operators must carry out a complete PC in either the R22 or R44, and if desired, any additional check elements in the other type.

2.3.10.5 A PC carried out in another type in the single-engine class cannot substitute for all of the elements required to meet the Part 61 requirement in the R22 or R44.

2.4 Cabin crew (Part 133 only)

2.4.1 Chapter 13 of the Part 133 MOS prescribes that cabin crew training and checking is to be conducted in accordance with Divisions 1 and 2 of Chapter 14 of the Part 133 MOS, as if references to air crew members were references to cabin crew members.

2.4.2 Part 133 operators should therefore refer to section 2.5 of this Annex (air crew member and medical transport specialist) for cabin crew training and checking requirements.

[11] CASA EX77/24 –Transitional Training and Checking Requirements for Crew Members in Part 133 Operations – Exemption Instrument 2024.

[12] CASA EX78/24 –Transitional Training and Checking Requirements for Crew Members in Part 135 Operations – Exemption Instrument 2024.

[13] Subregulation 61.745(3)(e)(i) of CASR.

2.4.3 Personnel who conduct cabin crew member training and/or checking must be nominated by the operator. Nominated training and checking cabin crew must[14] be included in the exposition.

2.5 Air crew member and medical transport specialist training and checking events

2.5.1 Proficiency check

2.5.1.1 Each person performing the role of air crew member or medical transport specialist requires a proficiency check at the completion of their conversion training, and again during recurrent training and checking annually.

2.5.1.2 The content of the proficiency check must be designed to test the competency of personnel in the performance of their duties and cover the elements of the conversion training.

2.5.1.3 The exposition must detail the process to remove a person from line operations in the event of a fail assessment.

2.5.2 Line training and line check

2.5.2.1 Each person performing the role of air crew member or medical transport specialist requires line training, and must successfully complete a line check in the areas mentioned in the respective MOS.

2.5.2.2 The operator must review each role and determine what training is required to ensure the person is competent to perform their duties.

2.5.3 Recurrent training and checking

2.5.3.1 Air crew members and medical transport specialists are required to complete a proficiency check and general emergency check every 12 months. There is no recurrent line check requirement.

2.5.3.2 A PC, assuming it does not involve the conduct of sequences not typically conducted during an actual air transport or aerial work operation, could be conducted on an actual air transport or aerial work operation.

2.5.3.3 A PC expires on its due date. If the crew member has not completed their PC before the due date, they cannot conduct air transport or aerial work operations for the operator until a PC is successfully completed.

2.5.3.4 To enable easier record keeping for operators, a PC conducted within 90 days before or after the due date can have its completion date recorded as the due date.

> **Note:** As per the previous paragraph, this record keeping flexibility does not mean that a flight crew member can keep conducting air transport or aerial work operations after the expiry date of the PC.

2.5.3.5 The PC should be designed to cover the elements of conversion training. The operator may choose to conduct the proficiency check and general emergency check concurrently.

[14] Subsection 13.03 of the Part 133 MOS.

Note: If life rafts or HUET are required, the general emergency check will need to include these items at least once every 3 years.

2.5.4 Differences training

2.5.4.1 Differences training is required when variants of an aircraft of the same type are operated.

2.5.4.2 The operator must determine what differences exist and develop a training program to ensure personnel are competent. The program will need to include, where relevant:

- equipment location and usage differences
- systems or limitations differences
- normal and emergency procedures differences.

2.6 Remedial training

2.6.1 Remedial training is required when a crew member fails a PC.

2.6.2 If a flight crew member fails a PC including a Part 61PC (such as an IPC), and the remedial training is conducted in-flight then the person conducting the training needs to be appropriately qualified such as being a flight instructor, check pilot or authorised pilot. This is **not** a Part 141 or 142 activity.

2.6.3 Where any crew member fails a PC, the exposition must detail the process used to remove them from unsupervised line operations.

2.6.4 The exposition should detail the process to determine the remedial training required, the delivery method, and the subsequent PC. At the completion of the training, individuals must successfully complete a PC prior to commencing unsupervised line operations.

2.7 Operational safety-critical personnel

2.7.1 Operators are reminded that they may also have obligations under regulations 119.170 and 138.135 of CASR (as applicable) to ensure the competency of other, non-crew member, operational safety-critical personnel[15].

2.7.2 Operational safety-critical personnel who are not crew members might include:

- ground handling personnel
- passenger handling agents
- livestock handlers, such as grooms etc.

2.7.3 Each operator will need to consider the definition of operational safety-critical personnel to determine who falls within that category.

2.7.4 Unlike the Part 133, 135 and 138 training and checking requirements for crew members, no specific details of initial and recurrent training events for operational safety-critical personnel are listed in the rules. Operators are required to develop and include the methods of ensuring the competency of these personnel in their exposition or training and checking manual (as applicable).

[15] See the definitions section of the main Multi-Part AC 119-11 and 138-02 document for the definition of operational safety-critical personnel.

2.7.5 Operational safety-critical personnel may be employed by a third-party, with one example being a ground handling company. In many cases the third-party company will have established initial and recurrent training programs for their personnel.

2.7.6 An operator's exposition or training and checking manual could directly refer to a document of the third-party organisation for how the competency of these personnel is managed, provided the operator is able to provide a copy of that document to CASA on request. Where training is provided by a third-party contractor, the operator remains responsible for ensuring that the training meets their operational needs.

2.7.7 Operators will need to determine whether additional training and checking, on top of the third-party organisation generic requirements, needs to be provided to cover operator-specific matters, such as:

- operator-specific communications with flight and cabin crew:
  - cockpit-to-ground communications
  - protocols for opening and closing cabin or cargo doors
  - provision of load sheets and passenger manifests
  - load rejection policy.
- safety reporting between the contractor and the operator
- process for reporting defects.

2.7.8 As the operator remains responsible for the competence of operational safety-critical personnel involved with their aircraft operations, it is recommended that operator establish a robust process to ensure they are satisfied any required training and checking has been completed before third-party organisation personnel are involved in their operations.

3 Part 133, 135 and 138 trainers and checkers

3.1 Overview

3.1.1 The regulations place no restrictions on the employment arrangements between a Part 133, 135 or 138 operator and the training and checking personnel it uses. Personnel may be permanent employees of the operator, part-time or casual, or engaged under a temporary arrangement for multiple activities, just one activity, or part of an activity.

3.1.2 Training and checking staff can work as trainers and checkers for more than one operator; provided they have met each specific operator's exposition/training and checking manual requirements (as appropriate) to conduct the training or check.

3.1.3 For crew member trainers and checkers, it should be noted that unless the trainer or checker is going to be conduct an actual air transport operation or aerial work operation for the operator, they are not required by the Part 133, 135 or 138 regulations to meet the same requirements as a line crew member.

Example

A Part 133 operator is not required, under the Part 133 regulations and MOS, to have an instructor conducting a Part 133 flight crew member proficiency check complete the operator's general emergency check of competency. This is because the general emergency check of competency is only a legal requirement for a pilot conducting actual air transport operations, not an instructor conducting a check flight for a later air transport operation.

But if the instructor was to conduct a line check for the operator, which occurs on an air transport operation, then the instructor is a pilot conducting an air transport operation for the operator and they must meet all the same requirements as other air transport pilots of the operator.

3.1.4 However, Part 138 operators are reminded that training for an aerial work operation is often defined as an aerial work operation[16].Therefore, sometimes the trainer or checker for an aerial work operator will need to meet the line crew member requirements.

Example

An operator's Part 138 flight crew member proficiency check includes individual technical competency elements that are specific to the aerial work operations the pilot under check is permitted to conduct by the operator, but also includes some elements, such as some normal or emergency operating procedures, that are not aerial work specific but are instead related to the non-aerial work flight of the aircraft.

If an operator desired to, they could split such a proficiency check into 2 separate flights.

One flight could be conducted solely focussing on the aerial work specific competencies and another flight could focus on the aircraft type competencies.

The aerial work competency flight would be defined as an aerial work operation. As a result of this, the trainer or checker for the flight would need to meet the operator's requirements for any crew member conducting an aerial work operation.

[16] See regulation 138.010 of CASR.

However, the second flight, as it doesn't involve the conduct of any aerial work operation, could be conducted solely under Part 91, and therefore the trainer or checker would not be required by the regulations to meet the operator's aerial work crew member requirements.

3.1.5 Operator nominations for personnel to conduct training and checking activities are not transferable. Individual trainers and checkers are required to meet the relevant training, approval and nomination requirements for each individual operator.

3.1.6 As a minimum, operators should ensure that any individual engaged to carry out training and checking has received training in the following topics:

- operator exposition or training and checking manual (as relevant to the CASR Part for the operator) content that relates to the conduct of the training or check
- operator specific aircraft SOP's
- lesson plans, check forms and assessment techniques
- administration and record keeping.

3.1.7 Flight crew specific overview

3.1.7.1 Operators may elect to use instructors or examiners who work for Part 141 or Part 142 organisations as trainers and checkers.

3.1.7.2 The use of these individuals, when they are contracted in to perform specific training and checking functions for a Part 133, 135 or 138 operator; as distinct from the Part 133, 135 or 138 operator contracting out the conduct of its training and checking system, are **not** Part 141 or Part 142 activities.

3.1.7.3 For clarity, CASA has no objection to a flight instructor conducting Part 133, 135 or 138 check events, assuming all operator requirements are met.

3.1.7.4 Under Parts 133, 135, and 138 of CASR, a person conducting a flight crew member training and checking activity, including flight crew member proficiency checks, must:

- meet the operator's requirements as stated in their exposition or training and checking manual (as relevant to the CASR Part for the operator)
- unless they hold a Part 61 flight instructor rating or flight examiner rating relevant to the training or check event being conducted, be[17] nominated in the operator's exposition or training and checking manual (as relevant to the CASR Part for the operator).

3.1.7.5 The simplest solution for most operators is to use pilots who hold a current and appropriate Part 61 flight instructor rating or flight examiner rating for all training and checking activities as these persons already possess skills in the delivery of training and checking activities.

3.1.7.6 Operators would need to ensure that any flight instructor or flight examiner who does not routinely work for the operator has the requisite ratings, endorsements, recency and experience for the aircraft and the activity that they are engaged to carry out.

3.1.8 Next sections of this Annex

3.1.8.1 The next 2 sections contain specific guidance on training and checking personnel used to conduct:

- in-flight normal, and on-ground exercises
- in-flight non-normal exercises.

[17] Subsection 12.11(2) of the Part 133 MOS, subsection 12.11(2) of the Part 135 MOS, and subsection 23.10(3) of the Part 138 MOS.

3.2 Trainers and checkers for in-flight normal exercises, or on-ground exercises

3.2.1 CASA has defined, for the purposes of requiring operators to hold a specific approval, what constitutes a *non-normal exercise*:

"non-normal exercise means an exercise where the simulated failure of a system in-flight would adversely affect the safety of the aircraft as compared to normal operation."

3.2.2 A key consequence of this definition is that certain simulated system or equipment failures would, for the purposes of this definition, actually be considered a *normal exercise*, since the simulated failure would not adversely affect the safety of the aircraft compared to normal operations. These kinds of 'safer' simulated failures are likely to include almost all in-flight training and checking sequences for crew members that are not flight crew members. Operators need to consider their intended in-flight training and checking sequences to determine whether they trigger the definition of *non-normal exercise*.

3.2.3 Operators must establish minimum experience and entry control requirements for individuals they intend to nominate as training and checking pilots[18] and publish these in their exposition or training and checking manual, as relevant to the CASR Part for the operator.

3.2.4 No prescriptive details are published in the respective MOS; however operator requirements should include:

- suitable experience in carrying out the activity that will be the subject of the training or check (with the operator or in a similar operation in a similar aircraft)
- suitable experience in the aircraft type (or similar aircraft types if the experience is directly relevant or transferable)
- sufficient flying experience and exposure in the industry.

3.2.5 For a trainer or checker in general emergency matters, the easiest way for an operator to assure themselves of the trainer/checker competency in these matters is to set a requirement that the trainer/checker have passed the operator's general emergency training and successfully completed their check. If the training and check is specific to an aircraft type, conducting the training and check for that aircraft type would also be required.

3.2.6 However, there are other ways operators might determine the competency of their proposed ground emergency trainer or checker.

3.2.7 For example, using a recognition of prior learning (RPL) process to determine any critical differences between a person's existing competencies from another source and what the operator requires, **and any additional training that needs to be given**, an operator could satisfy themselves that:

- a person approved and nominated by another operator for the same aircraft type is competent
- a person competent for one aircraft type is competent for another type.

3.2.8 Flight crew whose responsibilities include training, assessments of standards, conduct of repeat exercises and remedial training should demonstrate the following skill sets:

- instructional competencies
- assessment competencies
- competencies in managing assigned tasks in the training and checking system.

[18] Section 12.11 (1) (a) of the Part 133 and Part 135 MOS, Section 23.10 (2)(a) of the Part 138 MOS.

3.2.9 For the conduct of other ground or in-flight training and checking, operators should refer to section 1.2.10 of the appropriate CASA Part 133/135/138 Sample Training and Checking Manual and the forms section of the CASA sample for details on training course content recommendations for operators wishing to train their own training and checking personnel. Operators are recommended to read section 3.3 of the main body, not this Annex, of this AC for more information on these sample training and checking manuals.

3.2.10 Operators must include any training course details and content for training their own personnel in their exposition or training and checking manual (as relevant to the CASR Part for the operator).

3.3 Flight crew trainers and checkers for in-flight non-normal exercises

3.3.1 CASA has defined, for the purposes of requiring operators to hold a specific approval, what constitutes a non-normal exercise.

"non-normal exercise means an exercise where the simulated failure of a system in-flight would adversely affect the safety of the aircraft as compared to normal operation."

3.3.2 Refer to section 4 of this Annex for an explanation of the competencies required and guidance on how to design training courses for trainers/checkers conducting training and checking involving in-flight non-normal exercises.

3.3.3 As mentioned previously, the use of pilots holding current and appropriate Part 61 flight instructor ratings or flight examiner ratings for all training and checking activities is strongly recommended. For clarity, CASA has no objection to a flight instructor conducting Part 133, 135 or 138 check events, assuming all operator requirements are met.

3.3.4 However, operators may train, approve and nominate flight crew members without Part 61 flight instructor or flight examiner qualifications to conduct training and checking activities, including training and checking in non-normal exercises.

3.3.5 Operators must apply for and obtain a specific approval from CASA for the elements of their training and checking system relating to their proposed training and/or checking pilot training course, and ongoing competency maintenance, content if they choose to train persons without a current Part 61 FIR or FER to conduct training and checking involving non-normal exercises.

3.3.6 To gain this approval, CASA will expect the operator to have:

- appropriate prerequisites for persons to enter the training pathway to become a non-Part 61 qualified trainer or checker for non-normal exercises
- unless the persons planned to be nominated have a demonstrated history of competency in safely delivering training or checking events involving non-normal exercises:
  - a documented training course for these persons in their exposition or training and checking manual, such that the persons have knowledge, skills and attitudes equivalent to an FIR for the activity being conducted
- a competency maintenance plan for these trainers and checkers involving ongoing assessment of their instructional and assessment skills.

3.3.7 The specific course of training should be tailored to the characteristics of the aircraft types operated by the operator.

Example

The training course for a person to be the trainer/checker conducting non-normal exercises in a PC for a single-engine aeroplane, which only consists of a simulated engine failure, should be substantially

less complex than the training course for a trainer/checker conducting non-normal exercises in a PC for a multi-engine aeroplane.

Note: Operators are recommended to review CASA's sample training and checking manual Forms 6A, 6B, 6C and 6D to identify suggested content of a PC.

3.3.8 Pilots who have completed operator training courses to become trainers or checkers are strongly recommended to be subject to an operator trainer/checker proficiency check prior to being nominated in the exposition or training and checking manual, as appropriate. This check is recommended to assess the candidate's competencies in the items listed in section 3.1.9 above.

3.3.9 Operators could adapt the CASA Flight Test Report form 61-1509 to generate an assessment checklist for a training pilot, and CASA Flight Test Report form 61-1511 to generate an assessment checklist for a check pilot.

3.3.10 CASA is unlikely to grant the required approval for a training course for non-normal exercise pilot trainers and checkers that are operator-trained, as distinct from Part 61 FIR or FER holders, unless the proficiency check for these pilot trainers or checkers is required by the training and checking system to be carried out by a pilot holding a current and appropriate Part 61 flight examiner rating with experience and qualifications equivalent to that of an FER holder with a Flight Instructor Rating flight test endorsement.

3.3.11 Operators should design and implement a recurrent training and checking program for training and checking pilots that ensures a check of competency is carried out on these individuals at least every 2 years.

3.3.12 Training and checking pilots should be subject to the operators' normal PIC recency requirements for air transport or aerial work flights.

3.3.13 An operator might decide that individuals employed on the basis of suitable Part 61 qualifications and/or approvals do not need to meet all the operator's requirements to conduct air transport or aerial work flights. Such individuals would, in these circumstances, only be able to carry out in-flight training and checking activities on flights that are not air transport or aerial work flights. If the training or checking activity is to be carried out by an individual during an air transport or aerial work operation, the training or check pilot must meet the operator's induction and recency requirements to act as PIC for the flight, from the seat they will be occupying during the flight.

3.4 Cabin crew trainers and checkers (Part 133 only)

3.4.1 Cabin crew trainers and/or checkers should demonstrate the following skill sets:

- instructional competencies
- assessment and testing competencies
- competencies in managing assigned tasks in the training and checking system.

3.4.2 Personnel who conduct training and/or checking activities must be appointed by the operator in accordance with the exposition.

3.4.3 The Part 121 check pilot training program mentioned in section 4 of this AC could be modified to work for cabin crew check personnel. Modules 1 to 6 of that program could be used to develop the training program for cabin crew checkers, provided the practical elements in Module 7 were modified to suit the role of a cabin crew checker.

3.5 Air crew member, medical transport specialist and task specialist trainers and checkers

3.5.1 Air crew member, medical transport specialist and task specialist training and checking requirements are detailed in the respective Chapter of the Part 133, 135 and 138 MOS.

3.5.2 Staff who conduct training and/or checking activities for these crew members should demonstrate the same, or appropriately similar, competencies as those required for cabin crew trainers and checkers.

3.5.3 To be authorised to conduct training and/or checking for air crew members and medical transport specialists, the trainer / checker must be[19] nominated by the operator and be included in the exposition or training and checking manual (as appropriate).

3.6 Other operational safety-critical personnel training and checking personnel

3.6.1 Training and checking personnel who conduct training and assessment of non-crew member operational safety-critical personnel are recommended to demonstrate appropriately similar competencies to those required for cabin crew.

3.6.2 As always, the operator's exposition or training and checking manual must[20] detail their qualifications, training, and assessment.

[19] Subsection 14.11(2) of the Part 133 MOS, subsection 13.11(2) of the Part 135 MOS, and subsection 24.03(2)(d) of the Part 138 MOS.

[20] Regulations 119.170 and 138.125 of CASR.

4 Syllabi and competency units for flight crew trainers and checkers conducting in-flight non-normal exercises

4.1 Introduction

4.1.1 Carrying out in-aircraft training and checking activities involving the in-flight simulation of failures of vital systems introduces additional risks. These risks are managed in the Part 61 pilot training and competency checking system by utilising instructors and examiners who hold formal Part 61 qualifications and are routinely checked for continued competence.

4.1.2 However, the Part 133, 135 and 138 rules allow an operator to develop their own trainers and checkers, for internal use only, without the future trainer or checker having to hold Part 61 qualifications such as a Flight Instructor Rating (FIR) or Flight Examiner Rating (FER). CASA can choose to test a person required to be nominated in the operator's exposition or training and checking manual as outlined in the relevant sections of the Part 133, 135 and 138 MOS[21].

4.1.3 Operators are directed[22] to hold an approval from CASA for the elements of their training and checking system that contain the support the training and use of such persons for *non-normal exercises*.

4.1.4 The intention is that an operator could only gain this CASA approval if their system can produce a training outcome for a candidate training and checking pilot, with respect to the pilot's competence in the narrow band of non-normal exercises planned to be conducted, that ensures the candidate has appropriate competencies to achieve an equivalent safety outcome for the event, when compared to a flight instructor or flight examiner.

4.1.5 Relevantly, the following new definitions are mentioned in these directions:

- *non-normal exercise* means an aeroplane flight that involves the simulated failure of a vital system.
- *specified training or check* means an aeroplane training or check event that involves carrying out a non-normal exercise.
- *vital system* means a system whose simulated failure in flight would adversely affect the safety of the aeroplane as compared to normal operation.

4.2 Developing training syllabi for training and checking pilots

4.2.1 A training programme to achieve an outcome equivalent to completion of an instructor training course with a Part 141 or 142 organisation will require an appropriately designed training syllabus with clear guidelines for the conduct of the training articulated down to the lesson plan level.

[21] See sections 12.12, 14.12 and 15.12 of the Part 133 MOS, sections 12.12, 13.12 and 14.12 of the Part 135 MOS and sections 23.11 and 24.04 of the Part 138 MOS.

[22] For Part 133 operators, see section 20B of CASA EX70/24. For Part 135 operators, see section 20A of CASA EX71/24. For Part 138 operators, see section 17 of CASA EX72/24.

4.2.2 Since no Part 61 outcome is required, operators are free to design their own training syllabi and submit it for assessment. It should be noted that approvals may be simpler to obtain if submissions are based on material from CASA published sources.

4.2.3 CASA publishes a variety of guidance materials aimed at flying training operators who wish to conduct flight instructor training. Whilst this material is aimed at operators developing Part 61 instructor rating training courses, much of this material will be relevant for the development of training courses for training pilots and check pilots for air operators.

4.2.4 Operators are advised to review this guidance before commencing to design training courses. Annex A to this document details units of competency that CASA recommends be incorporated into an air operator training syllabus. These units of competency have been derived from the equivalent Part 61 MOS entries and the details particular to Part 61 Licence issue have been removed.

4.2.5 CASA's guidance can be summarised as follows:

- The main page for sample syllabuses: Sample syllabuses for flying training operators | Civil Aviation Safety Authority (casa.gov.au)
- The guide to using the syllabuses and generating lesson plans: Guide to the use of CASA flight training syllabuses
- Flight Instructor Rating sample syllabus: https://www.casa.gov.au/sites/default/files/2021-10/sample-syllabus-flight-instructor-rating-training-package.zip
- AC on Flight Instructor Training: AC 61-07 - Flight instructor training (casa.gov.au).

4.2.6 In general, for CASA to approve an operator's exposition or training and checking manual content setting out training and check pilot training syllabi for non-normal exercises:

- the level of detail required would be similar to that contained in the various annexes to AC 61-07 (which are available in the "Associated documents" tab on the CASA webpage for the AC
- the operator will need to develop a course schedule, course notes, lesson plans, competency standards and assessment procedures.

4.2.7 Operators would need to customise any training course to take into account the qualifications and experience level of a candidate using their RPL process.

4.2.8 Operators are reminded that CASA can choose to test a person required to be nominated in the operator's exposition or training and checking manual as outlined in the relevant sections of the Part 133, 135 and 138 MOS[23].

4.3 Personnel who could deliver operator training programs

4.3.1 Individuals holding a flight instructor rating with a flight instructor training endorsement would be suitable to deliver this training. Since the training does not lead to a Part 61 qualification the flights are not Part 141 or Part 142 activities. However, operators could engage a Part 141 or Part 142 organisation to conduct this training, however it is not ,contracted recurrent training, as referred to in Regulation 142.035 of CASR.

4.3.2 Training of training and checking pilots is not an air transport activity and is subject to the Part 91 rules. If conducted in conjunction with an aerial work activity, some Part 138 rules apply as well as Part 91. The provisions in Division 91.D.11 of CASR regarding causing or simulating failures etc. must be complied with, however this would be the responsibility of the nominated

[23] See sections 12.12, 14.12 and 15.12 of the Part 133 MOS, sections 12.12, 13.12 and 14.12 of the Part 135 MOS and sections 23.11 and 24.04 of the Part 138 MOS.

PIC for the training flight. Training flights to train training and check pilots could be undertaken in any geographic location and in any class or type of aeroplane as desired.

4.3.3 Training and checking pilots trained using the air operators' process must be approved by the HOTC and nominated in the exposition or operations manual. Air operators desiring to use training and checking pilots that are trained using the operators' processes should ensure that after their training is complete, they have sufficient knowledge, skills and experience in the aeroplane type that they will be conducting training and checking events for the air operator.

4.3.4 Since a trainer or checker trained by an operator may not possess an equivalent Part 61 qualification, the normal CASA processes (FIR FPC and FER EPC) for ensuring continued competence of the pilot may not take place. In order to assure equivalent continuing integrity of training and checks conducted by these pilots, operators should develop suitable recurrent training and checking programs for these pilots.

4.3.5 Any such recurrent checks should use content derived from the CASA flight test report forms 61-1509 and 61-1511.

4.4 Recommended sample units of competency table

4.4.1 Table 1 below outlines some sample units of competency (UOC) that individuals are recommended to complete before carrying out in-flight air operator training and checking tasks involving non-normal exercises.

4.4.2 Successful achievement of competency in these units is recommended as a prerequisite for operators to appoint these individuals to conduct non-normal in-flight training and checking tasks.

4.4.3 The equivalent Part 61 qualifications for these roles are also listed in Table 1. A person holding a relevant Part 61 rating or training endorsement may have already completed some or all of the units. In this circumstance an operator could decide to apply recognition of prior learning principles to adjust the units of competency that need to be achieved by that individual.

4.4.4 The sample UOC in Table 1 are recommended to be used by operators as a basis for developing the training syllabi and lesson plans for operator non-Part 61 FIR/FER qualified non-normal exercise training and checking pilots.

4.4.5 As part of establishing their system for training these persons, operators would need to determine who can deliver this training and determine a pilot's competency in the relevant skills and knowledge. These personnel are strongly recommended to hold, or have held, flight instructor ratings with an instructor rating training endorsement or equivalent.

4.4.6 Operators are advised that there is a high level of safety criticality to the proper delivery of this training and CASA is unlikely to grant the required approval under EX70/24, EX71/24 or EX72/24 if the operator system for developing non-Part 61 FIR/FER persons to conduct in-aircraft non-normal exercises proposes to use inadequate 'train the trainer' staff.

4.4.7 Operators may contract with Part 141 or 142 operators who have expertise in these training activities to carry them out. This sort of training is not Part 141 or 142 training as it is not for the purpose of obtaining a Part 61 qualification.

4.4.8 In this instance the Part 141 or 142 operator would be engaged to deliver the units of competence as described for the air operator, however a Part 61 outcome would not necessarily follow from this training.

4.4.9 Third-party providers of approved courses known as 'Principles and Methods of Instruction' (PMI) could be used if required to deliver the equivalent of the unit titled 'TPC'.

Table 1: Matrix of types of training and check and units of competency

Title	Type of training / check intended	Sample unit of competency (UOC)	Part 61 equivalent rating and endorsement
Training pilot	Supervised line flying, line training, conversion training, new or inexperienced pilot train.	TPC.	Nil.
Training pilot	Conversion training involving non-normal exercises.	TPC NTS 1 and 2 TP1, TP2, TP3.	FIR TR (or Class) SE or ME IR if required.
Check pilot	Flight crew member proficiency check (OPC) and proficiency check (138).	Modules 1-3 of the CASA FER on-line course NTS 1 and 2 CP1.	FER TR (or Class) and/or ME Class IR if required.

4.5 Index of units

4.5.1 The following sample aeronautical knowledge and practical flight standards are adapted from those in the Part 61 Manual of Standards (MOS). They consist of:

Unit TPC: Training pilot – common.

Unit TP1: Conduct aeronautical knowledge training.

Unit TP2: Assess competence.

Unit TP3: Conduct flight training.

Unit CP1: Conduct check flight.

NTS 1 and 2: Refer to Part 61 MOS.

Note: The phrase 'flight training' when used in the context of this document does not mean flight training for a flight crew licence, rating or endorsement as mentioned in regulation 61.010 of CASR. For this document it means training delivered in-flight that the trainer or checker will carry out for an air operator.

4.6 Knowledge standards Unit TPC: Training pilot – common

4.6.1 Unit description

4.6.1.1 This unit describes the theoretical knowledge required to plan and deliver a training sequence in accordance with air operator exposition requirements in an aeroplane or flight simulator.

4.6.2 Principles and methods of instruction

4.6.2.1 TPC.1 – Principles of learning:

- Describe the adult learning process.

- Explain what is meant by perception.
- Explain the relative importance of each of the physical senses in learning.
- Explain how the defence mechanisms listed may hinder learning:
  - rationalisation
  - flight
  - aggression
  - resignation.
- Explain how the level of stress may affect learning.
- Explain the relation between perception and understanding.
- State how positive and negative motivation affects learning.
- Explain the application of the levels of learning.
- Explain how the rate of learning may vary with practice.
- Explain the role of each of the memory systems in terms of the model of information processing:
  - sensory register
  - short-term memory
  - long-term memory.

4.6.2.2 TPC.2 – Principles of instruction:

- Explain how a training pilot could assist the process of perception and understanding.
- State examples of how rote learning, understanding of knowledge and correlation apply to flight training.
- Identify the outcomes of aeronautical knowledge instruction associated with the 3 domains of learning:
  - cognitive (knowledge)
  - affective (attitudes, beliefs and values)
  - psychomotor (physical skills).
- State the factors that may hinder learning with respect to aeronautical knowledge training.
- Explain the advantages and disadvantages of guided discussion in flight training and identify flight training activities for which this technique could be suitable.
- Give examples of positive and negative transfer in aeronautical knowledge training.
- Explain the role of each factor listed in the communication process:
  - source
  - symbols
  - receiver.
- Recall how these common barriers affect communication:
  - lack of common experience
  - confusion
  - abstractions.
- Explain how a training pilot may monitor, and whether communication has been achieved.

- Explain each of the basic steps of the teaching process:
  - preparation
  - presentation
  - application
  - review and evaluation.
- State the purpose of behavioural (performance-based) outcomes in flight training.
- Explain the following attributes of effective outcomes:
  - achievable
  - observable
  - measurable.
- Explain how to develop the 3 essential elements of behavioural outcomes:
  - performance (what has to be done)
  - performance criteria
  - conditions.
- Explain the advantages and disadvantages of the teaching methods listed and give practical examples of situations best suited to each of these techniques in flight training:
  - lecture
  - theory or skill lesson
  - group learning
  - guided discussion
  - briefing.
- Explain the role of the training pilot in each of the 5 steps involved in providing skill practice to trainees:
  - explanation
  - demonstration
  - performance
  - supervision
  - evaluation.
- Explain the difference between a training syllabus and competency-based standards.

4.6.2.3 TPC.3 – Lesson planning and delivery:

- Explain the general purpose and content of each of the components of a typical lesson plan:
  - aim/motivation/revision
  - outcomes
  - explanation of principles
  - explanation/demonstration of technique
  - threat and error management
  - practice
  - review.

- State the reasons for limiting the duration of lessons and indicate the desirable duration of a typical lesson.
- Explain the purpose and content of a training syllabus.
- Give examples of training aids particularly suited to the training.
- Explain the role of the training pilot in each of the following phases of review and evaluation:
  - fault analysis (diagnosis)
  - competency assessment
  - trainee self-assessment
  - training effectiveness.

4.6.2.4 TPC.4 – Principles of questioning:

- Explain the reasons for questioning trainees.
- Explain the characteristics of an effective or open question.
- Give examples of good and poor questions.
- Explain how oral questions can promote mental activity.
- Explain why oral questions maintain trainee interest during a lesson.
- Explain why it is essential that the training pilot always confirm answers to questions.
- Explain the purposes of oral questions.
- Describe the desired qualities of good oral questions.
- Describe the procedure to follow when asking a question.
- Explain the key points to observe in the handling of trainee answers.
- Explain the key points to observe in the handling of trainee questions.

4.7 Knowledge standards - Unit TP1: Conduct aeronautical knowledge training

4.7.1 Unit description

4.7.1.1 This unit describes the skills and knowledge required to competently plan, conduct and review aeronautical knowledge training for an air operator in accordance with their exposition requirements.

4.7.2 Elements and performance criteria

4.7.2.1 TP1.1 – Plan training:

- Assess and confirm the trainee's readiness for training.
- Ensure the training plan includes training objectives, including threat and error management training.
- Identify appropriate training resources.
- Plan the lesson and delivery method appropriate to the training objectives.
- Specify the assessment procedures.
- Schedule and integrate the theory training with flight training lessons where appropriate.

- Confirm the availability of the required facilities, equipment, training aids and reference materials.

4.7.2.2 TP1.2 – Conduct training:

- Establish a learning environment and motivation that suits the trainee's needs.
- Present the training materials.
- State the training objectives.
- Lesson plan is followed and modified where applicable to achieve training objectives and transfer of knowledge.
- New knowledge to previous knowledge is linked and presented within a meaningful and logical framework.
- Training aids are used to illustrate and enhance explanations.
- Accurate technical knowledge is presented clearly and to the required standard.
- Opportunities for trainee participation and practice are provided.
- Applicable threat and error management issues are discussed.
- Trainees' ability to apply threat and error management principles to the material presented is confirmed.
- Achievement of training objectives is confirmed by questioning, review and other suitable methods.
- Feedback on trainee performance is provided.
- Trainee self-assessment skills are developed.
- Training objectives are completed in the time available.
- Training is conducted effectively and safely.

4.7.2.3 TP1.3 – Review training:

- Training objectives and transfer of knowledge are achieved.
- Training delivery and effectiveness using self-assessment, peers and supervisors is reviewed.
- Records of assessment and progress of trainee are maintained and reviewed in accordance with established workplace procedures.

4.7.3 Range of variables

- Activities are performed in accordance with published procedures.
- Delivering training to trainees in accordance with operator exposition.
- The training environment includes suitable classroom or briefing facilities and training aids.
- Suitable learning resources may be used to assist the presentation, including audio visual aids, aircraft models, synthetic training devices, regulatory publications and aircraft and operations manuals.

4.7.4 Underpinning knowledge

- Principles of learning:
  - learning as a behavioural change
  - sensory perception

  - factors affecting perception
  - motivation, positive and negative
  - attitudes, discipline and responsibility
  - the following levels of learning:
    - » rote
    - » understanding
    - » application
    - » correlation.
  - factors which aid the learning process;
  - transfer, habit formation
  - reinforcement
  - memory and retention
- Role of psychology in flying instruction:
  - satisfaction of human needs
  - defence mechanisms
  - dealing with stress, abnormal reactions to airborne stress situations
  - psychological problems of both junior and experienced pilots.
- Teaching methods:
  - lecture, theory and skill lessons, guided discussion, briefing
  - behavioural objectives, their importance and formulation.
- Lesson planning and development.
- Effective communication.
- Questioning techniques.
- Use of teaching aids.
- Application of instructional principles to airborne instruction.

4.8 Knowledge standards - Unit TP2: Assess Competence

4.8.1 Unit description

4.8.1.1 This unit describes the skills and knowledge required to effectively assess a trainee's competence.

4.8.2 Elements and performance criteria

4.8.2.1 TP2.1 – Prepare for assessment:

- Interpret an assessment plan and confirm organisational, legal and ethical requirements for conducting an effective competency assessment.
- Access and interpret relevant benchmarks for assessment and nominated assessment tools to confirm the requirements for evidence to be collected.

- Arrange identified material and physical resource requirements according to assessment system policies and procedures.
- Organise specialist support if required for assessment.
- Explain, discuss and agree details of the assessment plan with candidate.

4.8.2.2 TP2.2 – Gather quality evidence:

- Use agreed assessment methods and instruments to gather, organise and document evidence in a format suitable for determining competence.
- Apply the principles of assessment and rules of evidence in gathering quality evidence.
- Determine opportunities for evidence gathering in actual or simulated activities through consultation with the candidate and relevant personnel.
- Determine opportunities for integrated assessment activities and document any changes to assessment instruments where required.

4.8.2.3 TP2.3 – Support the candidate:

- Guide candidates in gathering their own evidence to support recognition of prior learning (RPL).
- Use appropriate communication and interpersonal skills to develop a professional relationship with the candidate that reflects sensitivity to individual differences and enables two-way feedback.
- Make decisions on reasonable adjustments with the candidate, based on candidate's needs and characteristics.
- Access required specialist support in accordance with the assessment plan.
- Address any OHS risk to person or equipment immediately.

4.8.2.4 TP2.4 – Make the assessment decision:

- Examine collected evidence and evaluate it to ensure that it reflects the evidence required to demonstrate competence.
- Use judgement to infer whether competence has been demonstrated, based on the available evidence.
- Make assessment decision in line with agreed assessment procedures and according to agreed assessment plan.
- Provide clear and constructive feedback to candidate regarding the assessment decision and develop any follow-up action plan required.

4.8.2.5 TP2.5 – Record and report the assessment decisions:

- Record assessment outcomes promptly and accurately.
- Complete and process an assessment report according to agreed assessment procedures.
- Inform other relevant parties of the assessment decision according to confidentiality conventions.

4.8.2.6 TP2.6 – Review the assessment process:

- Review the assessment process in consultation with relevant people to improve own future practice.
- Document and record the review according to relevant assessment system policies and procedures.

4.8.3 Range of variables

- Activities are performed in accordance with operator exposition.
- Assessment plan may include:
  - overall planning, describing:
    - what is to be assessed
    - when assessment is to take place
    - where assessment is to take place
    - how assessment is to take place.
- Benchmarks for assessment:
  - refer to a criterion against which the candidate is assessed
  - may be a competency standard, unit of competency, assessment criteria of course curricula, performance specifications, or product specifications.
- Assessment tools include:
  - the learning or competency unit(s) to be assessed
  - the context and conditions for the assessment
  - the tasks to be administered to the candidate
  - an outline of the evidence to be gathered from the candidate
  - the evidence criteria used to judge the quality of performance (i.e., the assessment decision-making rules)
  - the administration, recording and reporting requirements
  - the evidence of how validity and reliability have been tested and built into the design and use of the tool.
- Specialist support may include:
  - assistance by third party
  - support from specialist educator
  - provision of developed online assessment activities
  - support from subject matter or safety experts
  - advice from regulatory authorities
  - support from HOTC.
- Assessment methods include:
  - particular techniques used to gather different types of evidence, such as:
    - direct observation
    - structured activities
    - oral or written questioning.
- Feedback may include:
  - ensuring assessment for RPL process is understood
  - ensuring candidate concerns are addressed
  - enabling questions and answers
  - confirming outcomes

  - identifying further evidence to be provided
  - discussing action plans
  - confirming gap training needed
  - providing information regarding available appeal processes
  - suggesting improvements in evidence gathering and presentation.
- Consultation may involve:
  - moderation with other assessors, or HOTC
  - discussions with trainers
  - technical and subject experts
  - English language, literacy and numeracy experts.

4.8.4 Underpinning knowledge

- Competency-based assessment, including:
  - vocational education and training as a competency-based system
  - criterion-referenced assessment as distinct from norm-referenced assessment
  - competency standards as the basis of qualifications
  - structure and application of competency standards
  - principles of assessment and how they are applied
  - rules of evidence and how they are applied
  - range of assessment purposes and assessment contexts, including RPL
  - different assessment methods, including suitability for gathering various types of evidence, suitability for content of units, and resource requirements and associated costs
  - reasonable adjustments and when they are applicable
  - types and forms of evidence, including assessment instruments that are relevant to gathering different types of evidence used in competency-based assessment, including RPL
  - potential barriers and processes relating to assessment tools and methods
  - assessment system, including policies and procedures established by the operator.
- Recognition of prior learning policies and procedures established by the operator.

4.9 Knowledge standards - Unit TP3: Conduct flight training

4.9.1 Unit description

4.9.1.1 This unit describes the skills and knowledge required to effectively conduct and review flight training in an aircraft.

4.9.2 Elements and performance criteria

4.9.2.1 TP3.1 – Plan flight training:

- Review a trainee's performance records, identify the appropriate units and elements of training to be delivered and develop an appropriate lesson plan, including remedial training if required.
- Identify training outcomes based on prescribed performance criteria, the operator's training plans and consultation with supervisors.
- Identify underpinning knowledge for the proposed sequence and confirm that the trainee has received the appropriate knowledge training.
- Plan flight training exercise to ensure an effective, efficient and safe outcome.
- Identify potential threats and errors, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and apply suitable mitigators.
- Consider availability and program suitable training aircraft and briefing facilities.
- Establish airworthiness and fuel state of the training aircraft.
- Determine that environmental conditions are suitable for the training exercise.

4.9.2.2 TP3.2 – Conduct pre-flight briefing:

- Confirm the trainee is mentally and physically prepared for flight training and they can recall the underpinning knowledge required for the flight exercise.
- Brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight.
- Link previous training to the current exercise.
- Brief the trainee on how the flight will be conducted to meet the training outcomes.
- Confirm the trainee's ability to recall the training outcomes, underpinning knowledge, handling technique and planned flight scenario.
- Discuss threat and error management issues applicable to the proposed flight and confirm the trainee understands their responsibility for managing those issues (airmanship).

4.9.2.3 TP3.3 – Conduct airborne training:

- demonstrate elements:
  - introduce tasks in manageable portions without trainee overload
  - make clear, concise and systematic explanations
  - coordinate demonstration with explanation of manoeuvre
  - make coordinated control inputs without abrupt manoeuvring, using accepted techniques
  - demonstrate the manoeuvre to the competency standards specified in exposition.
- Directs task performance:
  - implements handover and takeover procedures for control of aircraft
  - provides direction appropriate to trainee's progress
  - provides instructions in a clear, concise and timely manner
  - provides sufficient practice for the trainee to achieve the task
  - intervenes only to the extent necessary to assist the trainee's progress or to maintain safety.
- Monitors trainee performance (unassisted practice):
  - identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard

- provide additional instruction and demonstration as necessary to assist trainee
- encourage the trainee to develop self-assessment skills
- note training events for debriefing and assessment.

4.9.2.4 TP3.4 – Manage threats and errors:

- Manage responsibilities as pilot in command for the safe operation of the aircraft and maintain situation awareness while providing instruction.
- Identify and manage threats and errors.
- Intervene to recover the aircraft if trainee does not manage an undesired aircraft state.
- Develop the trainee's responsibility through the application of human factors principles for threat and error management.

4.9.2.5 TP3.5 – Conduct post-flight briefing:

- Ask the trainee to self-assess performance against the performance criteria.
- Describe, clearly and accurately, significant details of the trainee's performance and assess the trainee's achievement against the training outcomes for the lesson and associated performance criteria.
- Identify any deficiencies in performance and suggest remedial actions and training.
- Discuss threat and error management issues encountered during the flight.
- Brief the trainee on the details of the next training exercise.
- Record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercise.

4.9.2.6 TP3.6 – Complete post-training administration:

- Relevant staff are informed of trainee's performance and results.
- Administration procedures required for record keeping are completed.

4.9.2.7 TP3.7 – Review training:

- Evaluate training effectiveness with trainees and other appropriate stakeholders.
- Evaluate final session outcomes against desired session outcomes.
- Identify and incorporate adjustments to delivery, presentation and content of training when appropriate.

4.9.3 Range of variables

- Activities are performed in accordance with published procedures.
- Flight training includes the units and elements authorised by the operator exposition.
- Aeronautical knowledge training, including pre- and post-flight briefings, is provided to support the flight training units and elements.
- Flight training and aircraft operation is conducted in accordance with regulatory requirements and safe operational practices and includes administrative procedures associated with authorising and recording flight training and maintaining training records.

4.9.4 Underpinning knowledge

- Relevant sections of the civil aviation legislation (the Act, CAR. CASR, MOS, CAO, exemptions and directions).

- Performing and learning complex skills, including cognitive and developmental issues and observational learning.
- Cognitive basis of airmanship, situational awareness, captaincy, prioritisation, load shedding and decision making.
- Rate of learning, enforced automaticity and the foundations of expertise.
- Instructor professionalism, including interpersonal skills, implications of being a role-model, self-reflection and self-managed professional development.
- Effective use of a course of training, curricula and syllabus and lesson plans.
- Training and assessment standards.
- Debriefing and feedback techniques.
- Transfer of control (handover and takeover or follow-through) drills and procedures.
- Principles of flight.
- Crew resource management (CRM) principles.
- Techniques for introducing tasks in manageable segments to avoid overloading a trainee and principles for integrating task segments.
- Appropriate use of scenario-based training in flight instruction.
- Application of risk management principles to emergency procedure simulations in flight.
- Checklists for single-pilot or multi-crew operations as applicable.
- Common student errors and suggested suitable remedial instruction.
- Operational concept of threat and error management in relation to flight training in terms of:
  - managing threats
  - managing errors
  - managing undesired aircraft states.
- Procedures and strategies for developing trainee threat and error management skills.
- Task prioritisation system to assist the development of trainee task management skills in terms of:
  - aircraft control
  - navigation
  - communication.
- Suitable procedures for making decisions in-flight and for developing trainee decision-making skills.
- Goal fixation effects on good decision making.
- Three types of stress likely to affect trainee performance and methods of assisting trainees to cope with stress:
  - physical
  - physiological
  - psychological.
- Requirements for completing relevant documentation.
- Principles, purpose and location of controls, monitoring devices, and systems.
- Procedures to be followed in the event of an emergency.

4.10 Knowledge standards - Unit CP1: Conduct check flight

4.10.1 Unit description

4.10.1.1 This unit describes the skills and knowledge required to plan, conduct and administer a flight test in accordance with air operator requirements in an aircraft or flight simulator.

4.10.2 Elements and performance criteria

4.10.2.1 CP1.1 – Plan a check:

- Identify the check to be conducted and extract the check standards from the applicable section of the operators' exposition.
- Confirm the applicant is eligible to sit the check.
- Identify competency standards that must be assessed and plan methods of gathering evidence.
- Plan evidence gathering activities to provide sufficient, reliable, valid and fair evidence of competency.

4.10.2.2 CP1.2 – Prepare candidate for check:

- Confirm underpinning knowledge specified for the check.
- Explain and confirm the context, purpose and content of the check.
- Explain and confirm the assessment procedure and expected performance requirements.
- Explain and confirm the function of the check pilot, including role-playing, simulation and procedures in the event of an actual emergency.
- Explain and confirm action to be taken by the check pilot in the event of failure to achieve competency.
- Convey information using language and interactive strategies and techniques to communicate effectively with the person being assessed.

4.10.2.3 CP1.3 – Conduct check:

- Correctly apply the check process in accordance with the relevant sections of the operator exposition.
- Use clear, logical, systematic and unambiguous explanations to convey information to the applicant to ensure the effective conduct of the check.
- Limit check pilot intervention to ensuring effective conduct of the check and management of contingencies and abnormal or emergency situations.
- Monitor and assess the applicant's performance and maintain a comprehensive record of events.
- Ensure the safe completion of the check and maintain situational awareness.

4.10.2.4 CP1.4 – Make assessment decision:

- Evaluate the evidence of the applicant's performance in terms of validity, authenticity, sufficiency, currency and consistent achievement of the specified standards.
- Evaluate the evidence of the applicant's performance using a holistic procedure that ensures competency when conducting tasks, managing tasks and contingencies, operating in a flight environment and transferring skills and knowledge to new situations and contexts.

- Make the assessment decision based on objective evaluation of the evidence against the specified standards.

4.10.2.5 CP1.5 – Conduct post-check briefing:

- Advise the candidate of the achievement of competency, or failure to achieve competency.
- Provide clear and constructive feedback about performance to the candidate using appropriate language and strategies, including guidance on further training if appropriate.
- Explore opportunities for overcoming any gaps in competency as revealed by the assessment with the applicant.

4.10.2.6 TP3.6 – Complete post-training administration:

- Advise the HOTC of the check result and the reasons for the outcome, including both positive and negative aspects of the candidate's performance and any information that could assist in improved training outcomes.
- Complete appropriate forms and records.

4.10.3 Range of variables

- Activities are performed in accordance with published procedures.
- In an aircraft or an FSTD approved for the purpose.
- The aircraft or flight simulation training device must be appropriate for the purposes of the flight test endorsement.

4.10.4 Underpinning knowledge

- Workplace training and assessment competency standards.
- Principles of adult teaching and learning.
- Human performance and limitations factors relevant to the checking tasks.
- Psychological factors affecting satisfaction of human needs, defence mechanisms and stress management.
- Relevant workplace policies and procedures.
- Principles of assessment.
- Assessment of behaviour.
- Questioning techniques.
- Applicable subject matter.