**Instructor rating**

**Type rating training endorsement**

#### Version 1.0

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Revision history

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# Syllabus Notes

## Overview of training course

The holder of a Type rating training endorsement on a flight instructor rating is authorised to conduct the following activities;

* + - Conduct flight training for the pilot type rating or cruise relief co-pilot type rating for the aircraft of the specified category
    - Conduct differences training for variants of the specified aircraft type

A course of training for a type rating training endorsement must provide training and guidance to the applicant on the conduct of each of these privileges as well as ensuring that the applicant has the requisite knowledge and skills.

An applicant for a type rating training endorsement is required to undertake a flight test with a flight examiner demonstrating instructional competency to the standards in the Part 61 Manual of Standards (MOS). These standards can be found in schedule 2 of the Part 61MOS and are identified below

* + - NTS1 – Non-technical skills 1
    - NTS2 – Non-technical skills 2
    - FIR4 – Conduct aeronautical knowledge training and flight training
    - FIR-TE5 – Type rating training endorsement
    - FIR9 – Multi-crew training endorsement

The applicant must also demonstrate extensive knowledge of the units of competency published in the Part 61 MOS for the applicable unit for the particular aircraft type rating.

The ground and flight training summary for FIR TE5 Type rating training endorsement, assumes the applicant already holds a flight instructor rating with at least one other training endorsement.

If this is the first training endorsement to be granted on a flight instructor rating, the applicant will require extensive additional ground and flight training to prepare them for airborne instructional activities. Any additional training is outside the scope of this sample syllabus and reference should be made to AC 61- 07 for training material that cover topics related to an initial flight instructor rating. These will include the suite of FIR tutorials detailed in the AC.

Where regulations require the flight training to be conducted using a flight simulation training device (FSTD), the training for the endorsement should include the application of learning principles in the context of that training environment. Where the flight test is conducted in a FSTD the applicant may apply for a Simulator Instructor Rating (SIR) and type rating training endorsement. if they do not already hold such a rating.

Reference to the FIR tutorials may be useful for revision purposes even if this training is not for an initial rating.

The following syllabus notes should be read and cross referenced to the ground and flight training summary for FIR TE5 Type rating training endorsement.

A training record must be completed for all ground and flight training undertaken by the applicant for the type rating training endorsement.

A course completion certificate must be issued to the applicant by the operator when the training has been successfully completed. Due to the specific nature of this endorsement and its use with specific types (single pilot, multi-crew) the course completion certificate should clearly specify what training has been completed.

The focus of every lesson in the syllabus is flight instructor training and uses the operator’s applicable ground or airborne training events as a blueprint for the training.

Flying for the applicant should be in the instructor control seat where the endorsement is to be added to a flight instructor rating (not a simulator instructor rating - CASR 61.T.2)).

Appropriate fault analysis and intervention/recovery techniques should be included in the flight training to ensure the aircraft is operated within a safety margin of the certified flight envelope at all times.

The following notes provide guidance to operators on conducting training for a type rating training endorsement. Training in these topics should adequately prepare an applicant for the flight test. It is not exhaustive and operators may choose to include additional topics in their syllabus.

If this is an initial training endorsement on a flight instructor rating, extensive additional long brief demonstrations and read backs will be required to progress the applicant to a competent standard. This will also apply to demonstration and read back of the in-flight lessons.

Dependent on the complexity of the type, the operator must consider additional ground and flight training events to adequately cover the requirements of FIR-TE5 in relation to the specific type.

This sample syllabus is generic and considered the minimum requirement.

## Course Content

* + - Aeronautical knowledge review
    - Ground training
    - Flight training (including post-flight debriefing and administration)

### Aeronautical knowledge review

#### Lessons TE5-1 and TE5-2

* + - Review the applicant’s knowledge of the structure, content and context of the Part 61 licence and MOS standards as they apply to training for aircraft type ratings (category specific).
    - Review units TYPA, TYPH or CRT and review the applicant’s underpinning knowledge described in units of competency for TR-SEA, TR-SEH, TR-MEA, TR-MEH and TR-CR as applicable to the specific aircraft type.

### Ground training

#### Lessons TE5-3 to TE5-5

* + - These are lessons on the general topics detailed below
      * Provide an overview of the privileges, limitations and obligations of the endorsement
      * Review the administrative procedures and documents for granting a type rating including operator and CASA process
      * Review the principles of competency-based training and assessment as applied to type rating training
      * Preparing lesson plans and pre-flight brief for type rating training lessons

### Flight Training

#### Lessons TE5-6 to TE5-7 Type rating category specific

* + - Refer to the lead-in notes above reference requirements for long brief training. It is anticipated that the topics for these long briefs will be relevant aircraft systems or operating procedures applicable to the specific type.
      * Demonstration of selected long brief from the operators approved syllabus of training for the particular aircraft type
      * Read back of selected long brief from the operators approved syllabus of training for the particular aircraft type

#### Lessons TE5-8 to TE5-9 Type specific flight training – Normal operations

* + - Refer to the lead-in notes above reference requirements for in-flight training. It is anticipated that the topics for this in-flight training will be relevant aircraft systems and/or operating procedures relevant to the specific type
      * Demonstration flight for selected elements of competency detailed in the applicable category/type unit. Normal operations, including pre-flight briefing
      * Read back flight for selected elements of competency detailed in the applicable category/type unit. Normal operations, including pre-flight briefing. The trainee instructor reads back the blueprint

#### Lessons TE5-10 to TE5-11 Type specific flight training – Abnormal and Emergencies

* + - Demonstration flight for selected elements of competency detailed in the applicable category/type unit. Abnormal and emergency conditions, including pre-flight briefing
    - Read back flight for selected elements of competency detailed in the applicable category/type unit. Abnormal and emergency conditions, including pre-flight briefing. The trainee instructor reads back the blueprint

#### Lesson TE5-12 Type specific flight training

* + - An additional flight to allow consolidation of ground and flight elements selected by the operator, not already covered in the previous lessons
      * Read back flight for selected elements of competency detailed in the applicable category/type unit. Can be normal, abnormal and emergency conditions, including pre-flight briefing.

#### Lessons TE5-13 to TE5-14 Conduct a Type rating Flight Review (type specific)

* + - These are ground lessons and must include the following topics:
      * Review the Part 61 MOS requirements for the conduct of a type rating flight review (schedule 7)
      * Review the performance criteria in Unit FIR7 – Conduct a flight review
      * Discuss the standards for a type rating flight review and managing below standard performance by the flight review applicant
      * Preparation of a training plan for a type rating flight review with reference to element FIR7.1 of unit FIR7
      * Preparation of a pre-flight briefing for a type rating flight review
      * Discuss post flight administration following a type rating flight review (operator and CASA requirements)

The applicant for the type rating training endorsement should demonstrate flying techniques and procedures to CPL standard, prescribed in Appendix 8 of the Part 61 MOS, at all times during flight training sessions and be cognisant of the elements specified in units NTS1 and NTS2.

If the flight test is conducted using a FSTD, the applicant will be required to demonstrate competency in conducting training from the Instructor Operating Station (IOS) and demonstrating flying techniques from a control seat.

# Guidance for all training courses

This training course covers the relevant aeronautical knowledge, practical flight skills and underpinning knowledge units and elements that are prescribed in the Part 61 MOS.

Each training course may be tailored to the needs of the trainee, taking into account the trainee’s entry level competencies and knowledge including any previous training.

Appropriate recognition of prior learning and current skills should be applied to the content of the training and documented accurately in the training records for the specified competency standards.

The training course has the following components:

* ground and flight training summary
* planning matrix
* progress and achievement record
* lesson plans and training record (combined)
* course completion certificate.

### Ground and flight training summary

The summary table lists each training session with a reference, its description and the allocated time.

The summary table includes sufficient flight training to meet the requirements that would otherwise be required for the grant of the rating and endorsement in accordance with Part 61. It is a template and can be modified according to the entry level of the applicant and the training he or she needs to undertake to satisfy the prescribed competency standards in Schedule 2 of the Part 61 MOS.

### Planning matrix

The planning matrix sets out the order in which the units and elements of training are presented as well as the anticipated performance standards for each lesson. It is a model plan and can be adjusted according to the needs of the trainee at the time the training is being conducted.

### Achievement record

The achievement record is evidence of the trainee achieving the practical flight standards prescribed for the rating and endorsement. The record should be progressively completed when the trainee has satisfactorily demonstrated competency for the unit and element on at least two separate occasions.

Trainees must achieve competency at performance standard 1 in each element of each unit in this achievement record. The performance criteria for the elements are prescribed in Schedule 2 of the Part 61 MOS.

The trainee may demonstrate competency using a combination of training course assessments and assessments of current competency achieved through prior training and operational experience.

The instructor conducting the training and assessments must certify that competency has been achieved by entering the details in achievement record entering their ARN, signature and the date when the applicant achieved the required competency performance standard.

### Lesson plans and training record

A lesson plan is provided for each lesson listed in the planning matrix. Each lesson plan details the aeronautical knowledge topics and relevant underpinning knowledge topics that should be covered. The lesson plans include a breakdown of the estimated time required for the long briefing and pre-flight briefing, where applicable.

The resources described in the lesson plan can be modified with suitable equivalent resources.

The underpinning knowledge topics are taken from the relevant sections of the units of competency.

The practical flight training section details the units and elements covered by the lesson that are prescribed in Schedule 2 of the Part 61 MOS. The relevant general instructor units are FIR1, 2 and 3; however, these have been consolidated into a new draft unit FIR4 that is attached at Appendix A along with unit FIR-TE5 at Appendix B. FIR-TE5 is the unit for the type rating training endorsement. The underpinning knowledge topics are also taken from this draft unit. Reference is also made to applicable units in Schedule 2 of the Part 61 MOS.

The lesson comments and outcomes section of the lesson plan and training record should record the performance of the trainee in the particular lesson. Where the trainee has not achieved the standard in any or all of the elements, particular note must be made of the elements or performance criteria where the trainee requires further or remedial training. Additionally, the instructor trainer must clearly indicate that the trainee can proceed to the next lesson sequence.

### Course completion certificate

A sample course completion certificate is included.

# Ground and flight training summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **LESSON NUMBER** | **MOS REF** | **LESSON DESCRIPTION** | **GROUND HOURS** | **HOURS** | **TOTAL PROG TIME** |
| **For initial issue of Instructor Rating** | | | | | |
|  |  | FIRC - Principles and Methods of Instruction and Legislation | 12.0 |  |  |
|  |  | Short Theory Lessons (Aviation based - refer to course notes) | 12.0 |  |  |
|  | FIR-TE5.6(b) | Conduct aircraft basic, advanced and emergency handling from instructor control seat (for aircraft only) or flight simulation training device familiarisation training | 1.0 | 1.5 | 1.5 |
| **Aeronautical Knowledge - Review** | | | | | |
| TE5-1 | FIR-TE5.1; FIR7 | Review - Part 61 & Part 61 MOS for aircraft ratings & Flight Reviews (category specific) | 2.0 |  |  |
| TE5-2 | FIR-TE5.1; FIR- TE5.3 | Review – Units TYPA, TYPH and CRT(as applicable) and underpinning knowledge required for units TR-SEA, TR-SEH, TR-MEA, TR-MEH and TR-CR as applicable | 3.0 |  |  |
| **Ground Training** | | |  |  |  |
| TE5-3 | Part 61T & FIR- TE5 FIR4.6(b) | Briefing - Privileges and limitations of the type rating training endorsement. Administration procedures and responsibilities | 1.0 |  |  |
| TE5-4 | FIR-TE5.1 | Review – Knowledge of competency based training as applied to type rating training. Understand the application of manoeuvre based and scenario based training to achieve training goals | 1.0 |  |  |
| TE5-5 | FIR4.1; FIR4.3; FIR-TE5.4 | Briefing/Discussion – Preparing lesson plans and pre- flight briefs for type rating training sessions | 2.0 |  |  |
| **Practical Training** | | |  |  |  |
| TE5-6 | FIR-TE5.2; FIR- TE5.3; FIR4.1; FIR4.2; 61 MOS  units | Type rating (category specific) – Long Brief – Demonstration. Requirement for long brief on selected topic detailed in FIR-TE5.3 (c) to (e). | 1.5 |  |  |
| TE5-7 | FIR-TE5.2; FIR- TE5.3; FIR4.1; FIR4.2; 61 MOS  units | Type rating (category specific) – Long Brief – Read back. Requirement for long brief on selected topic detailed in FIR-TE5.3 (c) to (e). | 1.5 |  |  |
| TE5-8 | FIR-TE5.2; FIR- TE5.5; FIR- TE5.6; FIR- TE5.7; FIR- TE5.8; FIR4.3; FIR4.4; FIR4.5;  61 MOS units | Type specific – conduct flight training for selected elements of competency detailed in the applicable category specific unit (TR-SEA, TR-SEH, TR-MEA, TR- MEH and TR-CR).  Pre-flight brief and lesson demonstration | 1.0 | 1.5 | 3.0 |
| TE5-9 | FIR-TE5.2; FIR- TE5.5; FIR- TE5.6; FIR- TE5.7; FIR- TE5.8; FIR4.3; FIR4.4; FIR4.5;  61 MOS units | Type specific – conduct flight training for selected elements of competency detailed in the applicable category specific unit (TR-SEA, TR-SEH, TR-MEA, TR- MEH and TR-CR).  Pre-flight brief and lesson read back | 1.0 | 1.5 | 4.5 |
| TE5-10 | FIR-TE5.2; FIR- TE5.5; FIR- TE5.6; FIR- | Type specific – conduct flight training for ‘Manage abnormal and emergency conditions’ detailed in the applicable category specific unit (TR-SEH, TR-MEH) or | 0.7 | 1.0 | 5.5 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **LESSON NUMBER** | **MOS REF** | **LESSON DESCRIPTION** | **GROUND HOURS** | **HOURS** | **TOTAL PROG TIME** |
|  | TE5.7; FIR- TE5.8; FIR4.3; FIR4.4; FIR4.5;  61 MOS units | (TR-CR.9, TR-SEA.10, TR-SEA.11, TR-MEA.10 and  TR-MEA.11 type specific)  Pre-flight brief and lesson demonstration |  |  |  |
| TE5-11 | FIR-TE5.2; FIR- TE5.5; FIR- TE5.6; FIR- TE5.7; FIR- TE5.8; FIR4.3; FIR4.4; FIR4.5;  61 MOS units | Type specific – conduct flight training for ‘Manage abnormal and emergency conditions’ detailed in the applicable category specific unit (TR-SEH, TR-MEH) or (TR-CR.9, TR-SEA.10, TR-SEA.11,  TR-MEA.10 and TR-MEA.11 type specific). Pre-flight brief and lesson Read back | 0.5 | 1.0 | 6.5 |
| TE5-12 | FIR-TE5 and FIR  4 and part 61 MOS unit | Type specific – selected demonstration of ground and flight lessons for consolidation (optional) Read backs | 1.5 | 1.5 | 8.0 |
| **Conduct a Type Rating Flight Review (type specific)** | | |  |  |  |
| TE5-13 | Part 61; FIR 7; FIR-TE5.1; FIR- TE5.3; FIR4.6 | Review - Part 61 & Part 61 MOS Flight Reviews and application of standards – administration procedures | 1.5 |  |  |
| TE5-14 | FIR7; FIR-TE5.4; FIR-TE5.5; FIR- TE5.8 | Briefing/Discussion – Preparing for, and planning a type rating Flight Review – Prepare a pre-flight brief for a type rating flight review – Conduct post flight administration for a flight review | 1.5 |  |  |
|  |  | **Flight Test** | **4.0** | **1.5** | **9.5** |

# Progress and achievement record

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Trainee’s name** |  | | **Trainee’s ARN** |  |  |
| **Date training commenced** |  | | **Date of assessment of prior learning and current competency (if applicable)** |  |  |
| **Date of Aeronautical Knowledge Examination pass (if applicable)** | |  | **Date of Knowledge Deficiency Report assessment (if applicable)** | |  |

## Trainee progress record

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **LESSON** | **DATE** | **STD ACHIEVED?1** | **DATE2** | **\*STD ACHIEVED?** | **DATE2** | **STD ACHIEVED?1** | **FLIGHT HOURS** | **PROG HOURS** | **INSTRUCTOR ARN AND SIGNATURE** |
| TE5-1 |  |  |  |  |  |  |  |  |  |
| TE5-2 |  |  |  |  |  |  |  |  |  |
| TE5-3 |  |  |  |  |  |  |  |  |  |
| TE5-4 |  |  |  |  |  |  |  |  |  |
| TE5-5 |  |  |  |  |  |  |  |  |  |
| TE5-6 |  |  |  |  |  |  |  |  |  |
| TE5-7 |  |  |  |  |  |  |  |  |  |
| TE5-8 |  |  |  |  |  |  |  |  |  |
| TE5-9 |  |  |  |  |  |  |  |  |  |
| TE5-10 |  |  |  |  |  |  |  |  |  |
| TE5-11 |  |  |  |  |  |  |  |  |  |
| TE5-12 |  |  |  |  |  |  |  |  |  |
| TE5-13 |  |  |  |  |  |  |  |  |  |
| TE5-14 |  |  |  |  |  |  |  |  |  |

1: Indicate YES if trainee has achieved competency in accordance with the lesson plan and can progress to next lesson, indicate NO if trainee to repeat this lesson 2: Complete when trainee repeats lesson

## Training achievement record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ELEMENT** | **DATE** | **INSTRUCTOR NAME (PRINTED)** | **INSTRUCTOR ARN** | **INSTRUCTOR’S SIGNATURE** |
| FIR-TE5.1 – Demonstrate knowledge of competency based training as applied to training for an aircraft type rating and conduct of a flight review |  |  |  |  |
| FIR-TE5.2 – Demonstrate understanding of principles and methods of instruction |  |  |  |  |
| FIR-TE5.3 – Conduct aeronautical knowledge training |  |  |  |  |
| FIR- TE5.4 – Plan flight training |  |  |  |  |
| FIR-TE5.5 – Conduct pre-flight briefing |  |  |  |  |
| FIR-TE5.6 – Conduct practical training |  |  |  |  |
| FIR-TE5.7 – Conduct post-flight briefing |  |  |  |  |
| FIR-TE5.8 – Complete post-training administration |  |  |  |  |

**Trainee confirmation**

|  |  |  |  |
| --- | --- | --- | --- |
| I have received the training specified above and have been certified as competent and ready for flight test. | | | |
| **Trainee’s signature** |  | **Date** |  |

# Course completion certificate

|  |  |
| --- | --- |
| **Name of course** | Type rating training endorsement |
| **Training provider name** |  |
| **Training provider ARN** |  |
| **Trainee name** |  |
| **Trainee ARN** |  |
| **Date commenced training** |  |
| **Date of final assessment** |  |
| **Certification** |  |
| **Head of Operations name or approved Course Manager** |  |
| **Signature** |  |
| **Date** |  |

**Appendix A**

**Draft competency unit – FIR4**

**{Insert copy of unit from**

**Part 61 Manual of Standards Schedule 2}**

**Appendix B**

**Draft unit – Type rating training endorsement - FIR- TE5**

**{Insert copy of unit from**

**Part 61 Manual of Standards Schedule 2}**