Instructor rating

Instructor rating training endorsement

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Revision history

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Contents

1   Syllabus Notes

1.1   Overview of training course

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

- Conduct flight training for a flight instructor rating in an aircraft of the specified category
- Conduct flight training for a simulator instructor rating
- Conduct flight training for a training endorsement in an aircraft of the specified category

The instructor rating training endorsement is item 14 of table 61.1235 of CASR Part 61.

For the purposes of this document, TE means training endorsement.

A course of training for the instructor rating TE provides training and guidance to the applicant on conducting the activities mentioned above as well as ensuring that the applicant has the requisite knowledge and skills.

An applicant for the instructor rating TE is required to demonstrate competency conducting instruction in a flight test conducted by a fight examiner to the standards in the Part 61 Manual of Standards (MOS). These standards are prescribed in the following units that are found in Schedule 2 of the Part 61MOS:

- NTS1 – Non-technical skills 1
- NTS2 – Non-technical skills 2
- FIR4 – Conduct aeronautical knowledge training and flight training
- FIR-TE14 - Instructor rating training endorsement

The applicant must also demonstrate extensive knowledge of the unit of competency FIRC published in the Part 61 MOS.

The following syllabus notes should be read and cross referenced to the ground and flight training summary for FIR TE14 Instructor rating training endorsement.

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

A course completion certificate must be issued to the applicant by the operator when the training has been successfully completed.

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

Flying for the applicant should be in the command seat, as the trainee instructor will occupy the instructor control seat.

Appropriate fault analysis and intervention/recovery techniques should be included in the flight training. The instructor must ensure that the applicant has the required skills and knowledge to ensure that a trainee instructor is competent in handling recovery from undesired aircraft states including inadvertent spins.

The terminology used in these notes and in the ground and flight training summary is as follows:

- Applicant – the person who is undertaking the training to obtain an instructor training endorsement (item 14 in table 61.1235)
- Instructor – the person delivering the training to the applicant
- Trainee instructor – the person the applicant would be training

The following notes provide guidance to operators on conducting training for the instructor 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.

1.2   Course content

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

Aeronautical Knowledge - Review

Lessons TE14-1 and TE14-2

- Review the conduct of flight instructor rating training. Use the sample syllabus for the grade 3 training endorsement in AC 61-07 as an example (or other appropriate training endorsement syllabus). Explain the principles applied, including the order of training events, phases, ground briefings, flight lessons, demonstration and read back and the use of 'Bloggs On/Off'.
- Review the applicant's knowledge of the structure, content and context of the Part 61 licence and rating standards as they apply to training for Flight instructor rating, endorsement standards and Instructor Proficiency checks.
- Review the applicant's underpinning knowledge described in units of competency FIRC and FIR-TE14

Ground Training

Lessons TE14-3 to TE14-10 Conduct ground training for a flight instructor rating

- TE14-3 tutorial on preparing lesson plans and pre-flight briefs for instructor rating training. It must be emphasised that FIR training should use the same principles of airborne instructional technique and the use of 'Demonstration, Direct and Monitor' as for any other flight training. Include guidance on :
  - Timing constraints for Pre-flight Briefs
  - Role playing a trainee pilot during read back Pre-flight Briefs
  - Assessing and de-briefing trainee instructor performance for Pre-flight Briefs
  - Threat and Error Management considerations during planning
- TE14-4 and TE14-5 Planning an airborne lesson and prepare a pre-flight briefing. Demonstration and read back of the FIR tutorial used to teach an FIR trainee how to plan airborne lessons and prepare/conduct a pre-flight briefing.
  - Before demonstrating the tutorial, the instructor should take time to explain the context of the lesson to the applicant. Discuss the actual lesson plan for the topic, where it fits into the training for a grade 3 training endorsement (or other example training syllabus used) and where it may be used for other training endorsements.
  - Encourage the applicant to take notes but also participate as the trainee instructor would do.

- − On completion of the demonstration, summarise the stages of the lesson and allow for questions from the applicant.
  - − The read back should be conducted after they have had the opportunity to prepare and practice. The instructor should role play a trainee instructor during the read back.
  - − On completion of the read back, the instructor must de-brief the applicant on their performance against the performance criteria.
  - − Where the applicant has not achieved the required standard, the performance criteria must be covered during an additional lesson.
- TE14-6 and TE14-7 Develop a long brief. Demonstration and read back of the FIR tutorial used to teach an FIR trainee how to develop a long briefing.
  - − Before demonstrating the tutorial, the instructor should take time to explain the context of the lesson to the applicant. Discuss the actual lesson plan for the topic, where it fits into the training for a training endorsement and where it may be used for other training endorsements.
  - − Encourage the applicant to take notes but also participate as the trainee instructor would do.
  - − On completion of the demonstration, summarise the stages of the lesson and allow for questions from the applicant.
  - − The read back should be conducted after they have had the opportunity to prepare and practice. The instructor should role play a trainee instructor during the read back.
  - − On completion of the read back, the instructor must de-brief the applicant on their performance against the performance criteria.
  - − Where the applicant has not achieved the required standard, the performance criteria must be covered during an additional lesson. Further into the course of training the applicant will have the opportunity to read back further FIR tutorials, however this will not include all FIR tutorials contained in the suite and operators may choose to utilise all tutorials during the training.
- TE14-8 an instructional lesson on considerations and techniques for simulating a student pilot under instruction. Includes:
  - − Skill level and the need for consistency in role playing (for example, the ability to consistently maintain a nominated airspeed badly until appropriate intervention is applied by the trainee instructor)
  - − Common faults and errors and how to simulate them
  - − Appropriate reaction to trainee instructor intervention
  - − Appropriate reaction to trainee instructor direction
  - − Safety implications of role playing faults
  - − The use of the word "NO" in response to perceived trainee instructor late intervention
  - − Need to avoid nit picking
- TE14-9 an instructional lesson on assessment and de-brief of a trainee flight instructor. Includes:
  - − Procedures and techniques for assessing trainee instructors
  - − The trainee instructor's application of DEMONSTRATE, DIRECT and MONITOR
  - − Role playing the student pilot while concurrently assessing the trainee instructor performance
  - − Aircraft safety and recovery from potential upset situations
  - − Stress that faults in airborne instructional technique should take priority over faults in flying technique.

- TE14-10 an instructional lesson on the conduct of a demonstration and read back training flight. Includes:
  - Purpose and use of 'Bloggs ON/OFF'
  - Briefing considerations for emergencies, including the automatic suspension of 'Bloggs on' when taking over control
  - Conduct of airborne instructional technique training applied to the relevant training sequence being flown – the demonstration
  - Role playing the student pilot whilst concurrently assessing the trainee instructor – the read back
  - Common trainee instructor errors and faults
  - Time management
  - Flight management
  - The need, not to complete the entire flight sequence and the use of impromptu instruction

Flight Training

Lessons TE14-11 to TE14-16 Conduct flight training for a flight instructor rating

- TE14-11 and TE14-12 Principles and methods of Airborne Instructional Technique (AIT). Demonstration and read back of the FIR tutorial used to teach an FIR trainee Principles and methods of AIT.
  - Before demonstrating the tutorial, the instructor should take time to explain the context of the lesson to the applicant. Discuss the actual lesson plan for the topic, where it fits into the training for a training endorsement and where it may be used for other training endorsements.
  - Encourage the applicant to take notes but also participate as the trainee instructor would do.
  - On completion of the demonstration, summarise the stages of the lesson and allow for questions from the applicant.
  - The read back should be conducted after they have had the opportunity to prepare and practice. The instructor should role play a trainee instructor during the read back.
  - On completion of the read back, the instructor must de-brief the applicant on their performance against the performance criteria.
  - Where the applicant has not achieved the required standard, the performance criteria must be covered during an additional lesson.
- TE14-13 is an instructional airborne lesson. It provides an opportunity for demonstration and read back of conducting a demonstration and directing a student pilot. The blueprint for this lesson is the appropriate lesson (category specific) from the training endorsement syllabus in which the trainee instructor is taught how to demonstrate and how to direct. It must include:
  - Pre-flight and post-flight briefings as a demonstration and read back
  - Development of a pre-brief and debrief for a flying sequence
  - Conduct of a demonstration with use of appropriate key words and direction of attention
  - Use of question technique in the debrief
  - Linking the demonstration to the direct
  - Conduct of the direct with appropriate timing of key words
  - Conduct of the pre-brief and debrief for a direct
- TE14-14 an instructional airborne lesson. Role play a student pilot under instruction, demonstration and read back. It must include:
  - Simulate a student pilot under instruction
  - Techniques for simulating common student pilot faults

- – Appropriate response to trainee instructor demonstration and directing
- – Consistent simulation of faults until trainee instructor corrective action is applied
- – Aircraft safety and techniques to recover from upset and potentially unsafe situations
- TE14-15 an instructional airborne lesson. Assess and de-brief a trainee instructor in flight and on the ground, demonstration and read back. It must include:
  - – Procedures and techniques for assessing the trainee instructor during ground and flight lessons
  - – Assessing the trainee's application of AIT in a variety of sequences.
  - – Role playing the trainee pilot while concurrently assessing the trainee instructors performance
  - – Aircraft safety and recovery from potentially upset and unsafe situations
- TE14-16 Conduct an FIR demonstration and read back training flight. Conduct post-training administration. This lesson presents an opportunity for the applicant to apply all elements learnt during the course of training, by practicing the delivery of a Demo and Read back lesson. It is suggested the lesson should be selected from the training endorsement syllabus and must include elements of both demonstration by the applicant followed by read back by the instructor (role playing the trainee instructor) for the applicant to assess and de-brief.

The applicant for the Instructor rating training endorsement must 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.

2   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 should be tailored to the needs of the applicant, taking into account the applicant's entry level competencies and knowledge and 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.

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 adjusted 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 applicant at the time the training is being conducted.

Achievement record

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

Applicants 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 applicant 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-TE14 at Appendix B. FIR-TE14 is the unit for the instructor 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 applicant in the particular lesson. Where the applicant 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 applicant requires further or remedial training. Additionally, the instructor trainer must clearly indicate that the applicant can proceed to the next lesson sequence.

Course completion certificate

A sample course completion certificate is included.

3   Ground and flight training summary

LESSON NUMBER	MOS REF	LESSON DESCRIPTION	GROUND HOURS	DUAL HOURS	TOTAL PROG FLIGHT TIME
The terminology used in this ground and flight training summary and the associated syllabus notes is as follows: • **Applicant** – the person who is undertaking the training to obtain a multi-engine aeroplane class rating instructor training endorsement (item 15 in table 61.1235) • **Instructor** – the person delivering the training to the applicant • **Trainee instructor** - the person the applicant would be training					
Aeronautical Knowledge - Review					
TE14-1	Part 61T; Part 61 MOS; FIR4; FIR-TE14.1	Lesson - The conduct of flight instructor rating training. Review Part 61 & Part 61 MOS for Flight instructor rating & endorsement standards and Instructor Proficiency checks	3.0		
TE14-2	FIR4; FIR-TE14.2; FIR-TE14.3	Review – Unit FIRC and underpinning knowledge required for unit FIR-TE14	3.0		
Ground Training					
TE14-3	FIR-TE14.3(a); FIR-TE14.4; FIR-TE14.5	Lesson – Preparing lesson plans and pre-flight briefs for flight instructor rating and endorsement' training lessons	1.5		
TE14-4	FIR-TE14.2; FIR-TE14.3; FIR-TE14.5	FIR Tutorial - Planning an airborne lesson and Prepare a pre-flight briefing – Demonstration.	1.5		
TE14-5	FIR-TE14.2; FIR-TE14.3; FIR-TE14.5	FIR Tutorial – Planning an airborne lesson and Prepare a pre-flight briefing – Read back	1.5		
TE14-6	FIR-TE14.2; FIR-TE14.3	FIR Tutorial – Developing a long brief - Demonstration	1.0		
TE14-7	FIR-TE14.2; FIR-TE14.3	FIR Tutorial – Developing a long brief – Read back.	1.0		
TE14-8	FIR-TE14.6	Lesson – Considerations and techniques for simulating a trainee pilot under instruction.	1.0		
TE14-9	FIR-TE14.6	Lesson – Assessment and de-brief of a trainee flight instructor.	1.0		
TE14-10	FIR-TE14.6	Lesson – Conduct of a demonstration and read back training flight.	1.0		
Flight Training					
TE14-11	FIR-TE14.2; FIR-TE14.3	FIR Tutorial – Principles & Methods of Airborne Instruction - Demonstration	1.0		
TE14-12	FIR-TE14.2; FIR-TE14.3	FIR Tutorial – Principles & Methods of Airborne Instruction – Read back	1.0		
TE14-13	FIR-TE14.2; FIR-TE14.6 (a) to (e)	Conduct flight training for a flight instructor rating. Demonstrate the aim of 'demonstrate the task', demonstrate the aim of 'direct the task'. Demonstration and Read back	1.0	1.2	1.2
TE14-14	FIR-TE14.2; FIR-TE14.6 (f) to (j)	Conduct flight training for a flight instructor rating. Role play a student pilot under instruction. Demonstration and Read back	1.0	1.2	2.4
TE14-15	FIR-TE14.2; FIR-TE14.6 (k) to (p); FIR-TE14.7	Conduct flight training for a flight instructor rating. Assess and de-brief a trainee instructor in flight and on the ground. Demonstration and Read back	1.0	1.0	3.4

LESSON NUMBER	MOS REF	LESSON DESCRIPTION	GROUND HOURS	DUAL HOURS	TOTAL PROG FLIGHT TIME
TE14-16	FIR-TE14.2; FIR-TE14.6 (k) to (p); FIR-TE14.7; FIR-TE14.8	Conduct flight training for a flight instructor rating. Conduct a demonstration and read back training flight. Conduct post-training administration.	1.0	1.2	5.6
		Flight Test	**4.0**	**1.5**	**7.1**

4 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)	

4.1 Trainee progress record

LESSON	DATE	STD ACHIEVED?[1]	DATE[2]	*STD ACHIEVED?	DATE[2]	STD ACHIEVED?[1]	FLIGHT HOURS	PROG HOURS	INSTRUCTOR ARN AND SIGNATURE
TE14-1									
TE14-2									
TE14-3									
TE14-4									
TE14-5									
TE14-6									
TE14-7									
TE14-8									
TE14-9									
TE14-10									
TE14-11									
TE14-12									
TE14-13									
TE14-14									
TE14-15									
TE14-16									

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

4.2   Trainee competency achievement record

ELEMENT	DATE	INSTRUCTOR NAME (PRINTED)	INSTRUCTOR ARN	INSTRUCTOR'S SIGNATURE
FIR-TE14.1 - Describe the conduct of flight instructor rating training				
FIR-TE14.2 - Demonstrate understanding of principles and methods of instruction				
FIR-TE14.3 - Conduct aeronautical knowledge training				
FIR-TE14.4 - Develop briefings and plan flight training for flight instructor rating training				
FIR-TE14.5 - Conduct pre-flight briefing for a flight instructor rating training flight				
FIR-TE14.6 - conduct airborne training for a flight instructor rating				
FIR-TE14.7 - Conduct post-flight briefing				
FIR-TE14.8 - compete 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**	

5   Course completion certificate

Name of course	Instructor 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

FIR4   Conduct aeronautical knowledge training and flight training

1   Unit description

This unit describes the skills and knowledge required to competently plan, conduct and review aeronautical knowledge training and effectively conduct flight training in an aircraft or flight simulation training device for Part 61 authorisations.

Note: The skills and knowledge described in this unit are to be integrated into the training syllabus for the particular training endorsement(s) sought.

2   Elements and performance criteria

2.1   **FIR4.1 Plan training**

  (a)   confirm trainee readiness for proposed training through review of training records to confirm their competency status;

  (b)   identify training objectives based on performance criteria in the manual of standards and operator's training plans;

  (c)   identify underpinning knowledge for the units and elements relevant to the lesson and confirm trainee understanding;

  (d)   select appropriate training methods to facilitate training objectives and knowledge transfer;

  (e)   apply threat and error management into each ground lesson;

  (f)   identify potential threats and errors in a flight lesson, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and consider suitable mitigators;

  (g)   select appropriate training resources and confirm availability and serviceability of required facilities, equipment, training aids, reference material and the airworthiness of the training aircraft or device.

2.2   **FIR4.2 – Conduct aeronautical knowledge training**

  (a)   establish a learning environment and motivation that suits the trainee's needs;

  (b)   clearly state training objectives that are relevant, practical and measurable;

  (c)   conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge;

  (d)   present and link new knowledge to previous knowledge;

  (e)   use selected training aids to illustrate and enhance explanations;

  (f)   apply appropriate instructional techniques; with instruction to the point using clear and deliberate speech;

  (g)   deliver technical knowledge accurately and clearly to the required standard;

  (h)   provide opportunities for trainee participation and practice;

  (i)   discuss threat and error management issues and ensure application is understood by the trainee;

  (j)   confirm training objectives have been achieved by questioning, review and other suitable methods;

(k)   provide feedback on trainee performance;

(l)   develop trainee self-assessment skills;

(m)   complete training objectives in the time available;

(n)   ensure all training is conducted effectively.

2.3   **FIR4.3 – Conduct pre-flight briefing**

(a)   confirm the trainee is mentally and physically prepared for flight training;

(b)   brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight;

(c)   link previous training to the current exercise;

(d)   brief the trainee on how the flight will be conducted to meet the training outcomes;

(e)   confirm the trainee's ability to recall the training outcomes, underpinning knowledge, handling technique and planned flight scenario;

(f)   discuss the environmental conditions and their suitability for the training exercise;

(g)   discuss threat and error management issues applicable to the proposed flight and confirm the trainee understands her or his responsibility for managing those issues (airmanship).

2.4   **FIR4.4 – Conduct airborne training**

(a)   manage responsibilities as pilot in command for the safe operation of the aircraft;

(b)   apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat;

(c)   demonstrate the task:

(i)   introduce tasks in manageable portions without trainee overload;

(ii)   make clear, concise and systematic explanations;

(iii)   coordinate demonstration with explanation of manoeuvre;

(iv)   make coordinated control inputs without abrupt manoeuvring, using accepted techniques;

(v)   demonstrate the manoeuvre to the competency standards specified in this manual for a commercial pilot.

(d)   direct the task :

(i)   implement handover and takeover procedures for control of the aircraft;

(ii)   provide direction appropriate to the trainee's progress;

(iii)   provide instructions in a clear, concise and timely manner;

(iv)   provide sufficient practice for the trainee to achieve the task;

(v)   intervene only to the extent necessary to assist the trainee's progress or to maintain safety.

(e)   monitor the task (unassisted practice):

(i)   identify the trainee's deficiencies and provide feedback to assist the trainee in achieving the standard;

(ii)   provide and vary additional instruction and demonstration as necessary to assist trainee;

(iii)   ensure remedial training is effective such that errors are corrected;

(iv)   encourage the trainee to develop self-assessment skills;

(v)   note training events for debriefing and assessment.

(f)   intervene to recover the aircraft if the trainee does not manage an undesired aircraft state;

(g)   develop the trainee's responsibility through the application of human factors principles for threat and error management.

2.5 FIR4.5 – Conduct post-flight briefing

(a)   encourage the trainee to self-assess performance against the performance criteria;

(b)   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;

(c)   identify any deficiencies in performance and suggest remedial actions and training;

(d)   discuss threat and error management issues encountered during the flight;

(e)   brief the trainee on the details of the next training exercise;

2.6 FIR4.6 – Complete post-training administration

(a)   record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercise;

(b)   complete administration procedures required for issue of an endorsement or military equivalent where applicable.

(c)   inform relevant staff of the trainee's performance and results where required;

(d)   review effectiveness of training and identify any adjustments to delivery, presentation and content for improvement, and discuss with appropriate stakeholders.

3 Range of variables

(a)   activities are performed in accordance with published procedures;

(b)   flight training includes training for the issue of a flight crew licence, rating or endorsement using a suitable training aircraft or approved flight simulation training device;

(c)   flight training includes the units and elements authorised by the flight training endorsement(s) held by the instructor;

(d)   aeronautical knowledge training, including pre- and post-flight briefings, is provided to support the flight training units and elements;

(e)   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;

(f)   flight training for licences and ratings is conducted under a Part 141 or Part 142 operator certificate with the relevant training specification in accordance with holder's operations manual.

(g)   the training is delivered in accordance with appropriate and documented lesson plans;

(h)   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   Underpinning knowledge of the following:

(a)   relevant sections of Civil Aviation Safety Regulations;

(b)   principles and methods of instruction as prescribed in unit FIRC in schedule 3 of the MOS

(c)   the process of making an objective assessment against a standard;

(d)   provision of evidence of competency in performing as a flight crew member

(e)   terms used in respect of the evidence used to determine an individual's competency against a standard

(f)   the different forms of assessment and application in flight training

(g)   the requirements for assessing consistency of performance of flight crew standards;

(h)   the differences in standards for consistency of performance at different licence levels;

(i)   the application of the range of variables in making an assessment.

(j)   performing and learning complex skills, including cognitive and developmental issues and observational learning;

(k)   the levels of situational awareness and methods of developing and monitoring trainees situation awareness skills

(l)   rate of learning, enforced automaticity and the foundations of expertise;

(m) instructor professionalism, including interpersonal skills, implications of being a role-model, self-reflection and self-managed professional development;

(n)   effective use of a course of training, curricula and syllabus and lesson plans;

(o)   training and assessment standards;

(p)   debriefing and feedback techniques;

(q)   transfer of control (handover and takeover or follow-through) drills and procedures;

(r)   principles of flight;

(s)   crew resource management (CRM) principles;

(t)   techniques for introducing tasks in manageable segments to avoid overloading a trainee and principles for integrating task segments;

(u)   appropriate use of scenario-based training in flight instruction;

(v)   application of risk management principles to emergency procedure simulations in flight;

(w)   checklists for single-pilot or multi-crew operations as applicable;

(x)   common student errors and suggested suitable remedial instruction;

(y)   obstacles to learning associated with flight training

(z)   operational concept of threat and error management in relation to flight training

(aa) procedures and strategies for developing trainee threat and error management skills;

(bb) task prioritisation system to assist the development of trainee task management skills

(cc) suitable procedures for making decisions in-flight and for developing trainee decision-making skills;

(dd) goal fixation effects on good decision making;

(ee) three types of stress likely to affect trainee performance and methods of assisting trainees to cope with stress:

(ff) requirements for completing relevant documentation;

Appendix B

Draft unit - Instructor rating training endorsement - FIR-TE14

FIR-TE14   Instructor rating training endorsement

1   Unit description

This unit describes the skills and knowledge required to effectively plan, conduct and administer flight training authorised by the instructor rating training endorsement.

2   Note: In this unit the following terminology is used:

Applicant – the person who is undertaking training to obtain an instructor rating training endorsement

Instructor – the person delivering the training to the applicant

Trainee instructor – the person the applicant would be training

3   Elements and performance criteria

3.1   **FIR-TE14.1 – Describe the conduct of flight instructor rating training**

    (a)   describe the structure, content and context of the Part 61 MOS operational rating and endorsement standards for the flight instructor rating;

    (b)   describe the content of the flight test standard for pilot instructor ratings;

    (c)   discuss the requirement for recurrent flight instructor proficiency checks.

3.2   **FIR-TE14.2 - Demonstrate understanding of principles and methods of instruction**

    (a)   apply extensive knowledge and application of element 3, principles and methods of instruction, described in unit FIRC (instructor rating - common) in schedule 3 of Part 61 MOS;

    (b)   apply comprehensive use of applicable performance criteria from unit FIR4 when conducting flight instructor rating training.

3.3   **FIR-TE14.3 – Conduct aeronautical knowledge training**

    (a)   plan and conduct aeronautical knowledge training including all the elements identified in unit FIRC (instructor rating – common);

    (b)   identify underpinning knowledge for the units and elements for a flight instructor rating included in unit FIR4 and confirm trainee flight instructor has the appropriate knowledge;

    (c)   identify underpinning knowledge for the units and elements for applicable training endorsements and confirm trainee instructor has the appropriate knowledge.

3.4   **FIR-TE14.4 – Develop briefings and plan flight training for flight instructor rating training**

    (a)   prepare a training plan that identifies training outcomes based on prescribed performance criteria, the operator's training plans and consultation with supervisors;

    (b)   plan flight instructor rating flight training exercises to ensure an effective, efficient and safe outcome;

    (c)   identify potential threats and errors, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by the trainee instructor and apply suitable mitigators.

3.5 **FIR-TE14.5 – Conduct pre-flight briefing for a flight instructor rating training flight**

(a) perform effective pre-flight briefings for each flight exercise in the training plan, including application of standard operating procedures, demonstrating relevant performance criteria described in elements FIR4.1 and FIR4.3 of unit FIR4 (conduct aeronautical knowledge training and flight training

(b) describe the considerations for assessing and debriefing the pre-flight brief conducted by a trainee instructor.

3.6 **FIR-TE14.6 – Conduct airborne training for a flight instructor rating**

(a) conduct flight training in accordance with the training plan demonstrating all skills and behaviours described in element FIR4.4 of unit FIR4 (conduct aeronautical knowledge training and flight training);

(b) demonstrate the aim of 'demonstrate the task' in element FIR4.4(c) of unit FIR4 (conduct aeronautical knowledge training and flight training):

(c) state the performance required by the applicant in the conduct of trainee instructor demonstrate the task elements;

(d) demonstrate the aim of 'directs the task' in element FIR4.4(d) of unit FIR4 (conduct aeronautical knowledge training and flight training);

(e) state the performance required by the applicant in the conduct of trainee instructor direct the task elements;

(f) demonstrate the aim of 'monitors the task' (unassisted practice) in element FIR4.4(e) of unit FIR4 (conduct aeronautical knowledge training and flight training);

(g) state the performance required by the applicant in the conduct of trainee instructor monitors the task elements;

(h) demonstrate the performance required by the applicant in the conduct of give and give back training flights;

(i) perform role play of a trainee pilot under instruction;

(j) identify the scope of skill level, and the need for consistency, in role playing a trainee pilot;

(k) assess and debrief trainee instructor performance during airborne instruction;

(l) demonstrate common faults/errors and how to simulate them;

(m) apply the appropriate reaction to trainee instructor direction;

(n) apply the appropriate reaction to trainee instructor intervention.

(o) maintain situational awareness through all phases of flight demonstrating the performance criteria specified in unit NTS1;

(p) manage threats and errors during all phases of the flight demonstrating the performance criteria specified in unit NTS2.

3.7 **FIR-TE14.7 – Conduct post-flight briefing**

(a) conduct post-flight briefing demonstrating all performance criteria described in element FIR4.5 of unit FIR4 (Conduct aeronautical knowledge training and flight training).

3.8 **FIR-TE14.8 – Complete post-training administration**

(a) complete post-training administration demonstrating performance criteria in element FIR4.6 of unit FIR 4 (conduct aeronautical knowledge training and flight training).

4 Range of variables

(a) activities are performed in accordance with published procedures;

(b) flight training for the FIR includes training for the issue of the rating and at least one training endorsement using a suitable training aircraft or approved synthetic flight training device;

(c) flight training includes the units and elements authorised by the flight training endorsement(s) held by the instructor;

(d) aeronautical knowledge training, including pre- and post-flight briefings, is provided to support the FI flight training units and elements;

(e) 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;

5 Underpinning knowledge of the following:

(a) relevant sections of Civil Aviation legislation;

(b) performing and learning complex skills, including cognitive and developmental issues and observational learning;

(c) cognitive understanding of airmanship relating to situational awareness, captaincy, prioritisation, load shedding and decision making;

(d) rate of learning, enforced automaticity and the foundations of expertise;

(e) instructor professionalism, including interpersonal skills, implications of being a role-model, self-reflection and self-managed professional development;

(f) effective use of a course of training, curricula and syllabus and lesson plans;

(g) training and assessment standards;

(h) debriefing and feedback techniques;

(i) transfer of control (handover and takeover or follow-through) drills and procedures;

(j) principles of flight;

(k) crew resource management (CRM) principles;

(l) techniques for introducing tasks in manageable segments to avoid overloading a trainee and principles for integrating task segments;

(m) appropriate use of scenario-based training in flight instruction;

(n) application of risk management principles to emergency procedure simulations in flight;

(o) checklists for single-pilot or multi-crew operations as applicable;

(p) common student errors and suggested suitable remedial instruction;

(q) operational concept of threat and error management in relation to flight training in terms of:

(i) managing threats;

    (ii)   managing errors;

    (iii)   managing undesired aircraft state;

(r)   procedures and strategies for developing trainee threat and error management skills;

(s)   task prioritisation system to assist the development of trainee task management skills in terms of:

    (i)   aircraft control;

    (ii)   navigation;

    (iii)   communication;

(t)   suitable procedures for making decisions in-flight and for developing trainee decision-making skills;

(u)   goal fixation effects on good decision making;

(v)   3 types of stress likely to affect trainee performance and methods of assisting trainees to cope with stress:

    (i)   physical;

    (ii)   physiological;

    (iii)   psychological;

(w) requirements for completing relevant documentation;

(x)   principles, purpose and location of controls, monitoring devices, and systems;

(y)   procedures to be followed in the event of an emergency.