



REPUBLIC OF MAURITIUS

DEPARTMENT OF CIVIL AVIATION

Sir Seewoosagur Ramgoolam International Airport, PlaineMagnien

**Procedures and
Guidance for Type
Rating Instructor
(Aeroplanes),
Synthetic Flight
Instructor
(Aeroplanes) and
Course Providers for
TRI (A), SFI (A)**

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Foreword

These requirements have been published as procedures and guidance for Type Rating Instructors, Synthetic Flight Instructors and associated course providers for the State of Mauritius and they complement the Mauritius Flight Crew Licensing Requirements (MFCL), Issue 3 dated 3rd March 2015. This document is aimed at multi-pilot aeroplane Instructors only.

If there is insufficient guidance information within this document, contact the DCA Flight Operations Inspector for clarification and guidance.

The document has been issued by the Authority pursuant to Regulation 135 of the Civil Aviation Regulations 2007 and is effective from 31 August 2016.

Compliance with these procedures is mandatory for all Instructors. Failure to comply with the associated MFCL requirements could result in regulatory action being taken, such as the suspension or revocation of Instructor privileges. Any queries should be addressed to the Flight Operations Department of the Department of Civil Aviation.



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Director of Civil Aviation

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Amendment summary

This document is complementary to the DCA Approved Training Organisation requirements, Mauritius Flight Crew Licencing Requirements (MFCL) and the Mauritius Air Operator Certifications Requirements (MCAR-AOCRs).

AMENDMENT	DATE	INSERTED BY	DATE
Issue 1 (Revision 0)	31 August 2016	Captain Fox	31 August 2016

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Glossary of Abbreviations and Terms Used

AI or ADI	Attitude Indicator or Attitude Direction Indicator
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
AMC	Acceptable means of compliance
APV	(Instrument) Approach with Vertical Guidance
ATC	Air Traffic Control
ATO	Approved Training Organisation
ATPL	Airline Transport Pilots Licence
CDFA	Continuous Descent Final Approach
CPL	Commercial Pilot Licence
CRE	Class Rating Examiner
CRE/IRR	Class Rating Examiner with Instrument Rating Revalidation/Renewal Privileges
CRI	Class Rating Instructor
CRM	Crew Resource Management
CRMI	Crew Resource Management Instructor
DA/H	Decision Altitude/Height
EFATO	Engine Failure After Take-off
FNPT	Flight Navigation Procedures Trainer
FFS	Full Flight Simulator
FSTD	Flight Simulation Training Device
GE	Ground Examiner
GPS	Global Positioning System
GM	Guidance Material
GNSS	Global Navigation Satellite System
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IR	Instrument Rating
IRE	Instrument Rating Examiner
IRI	Instrument Rating Instructor

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LIFUS	Line Flying Under Supervision
LNAV	Lateral Navigation
LPC	Licensing Proficiency Check
LST	Licensing Skill Test
MDA/H	Minimum Descent Altitude/Height
ME	Multi-Engine
MEP	Multi-Engine Piston Aeroplane
MFCL	Mauritius Flight Crew Licencing Requirements
MP or MPA	Multi-Pilot or Multi-Pilot Aeroplane
OPC	Operator Proficiency Check Proficiency Check
RNP	Required Navigation Performance
RT or RTF	Radiotelephony
RTO	Rejected Take-off
SE	Single-Engine
SEP	Single-Engine Piston Aeroplane
SET	Single-Engine Turboprop Aeroplane
Skill Test	Demonstration of skill for the issue of a licence or rating
SP or SPA	Single-Pilot or Single-Pilot Aeroplane
SP HPCA	Single-pilot high performance complex aeroplane
TMG	Touring Motor Glider
TRE	Type Rating Examiner
U/T(u/t)	Under Training
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VNAV	Vertical Navigation

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Part 1 - General

- 1.1 This document provides guidance for Type Rating Instructor (TRI) course providers and applicants for SFI and TRI certificates only.
- 1.2 The Department of Civil Aviation (DCA) issues flight crew licences, ratings and certificates in accordance with the requirements of the Mauritius Flight Crew Licensing (MFCL) Requirements. The DCA must ensure that all applicants are qualified by reason of knowledge, competence and skill to hold the appropriate licence, rating or certificate. The DCA will therefore authorise Approved Training Organisations (ATOs) to conduct the necessary training and then an authorised DCA Inspector will conduct the Assessments of Competence for the grant of a TRI or SFI certificate as appropriate.

The DCA has the right to deny any application for an instructor's certificate, including the revalidation or renewal of such a certificate, as it sees fit.

- 1.3 MFCL.900 states that a person shall only carry out flight/synthetic flight/MCC instruction when he/she holds an instructor certificate appropriate to the instruction given, issued in accordance with subpart J.
- 1.4 The DCA will only grant a TRI or SFI certificate to an applicant who has successfully completed an approved course of training conducted in accordance with MFCL subpart J, and passed the applicable Assessment of Competence. The applicant must be sponsored by his employer [AOC or ATO] as appropriate.
- 1.5 The DCA reserves the right to amend this document as required to accommodate changes to the primary authority documents, to correct errors and omissions or to reflect changes in national policy and best practice.
- 1.6 For clarity this document uses the term 'Aeroplane' when referring to the category of aircraft (i.e. aeroplane versus helicopter etc.) and the term 'Aircraft' when distinguishing between a simulator and the real aircraft.
- 1.7 Any advice concerning SFI or TRI courses may be obtained from the DCA as detailed overleaf:

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Department of Civil Aviation
SSR International Airport
PlaineMagnien
MAURITIUS

Tel: (230) 6032000
Fax: (230) 6373164
E-mail: Mauritius-Fltops@govmu.org

To open a document, click on its title in the list.

Application forms for course approval or a revalidation of an approval are available on the DCA website as follows: www.civil-aviation.govmu.org

Click on [Licencing](#)

To open a document, click on its title in the list.

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Part 2 - Approval of Instructor Courses

- 2.1 To conduct Instructor Courses the ATO must hold an approval from the DCA. To hold an approval, the ATO shall demonstrate to the DCA that they have an appropriate management system that satisfies the requirements of AOCR.GEN.200. For the grant of an approval the ATO will normally be required to provide a practical demonstration of part, or all, of the course to the satisfaction of a DCA Inspector
- 2.2 TRI courses must meet the requirements set out in MFCL.930.TRI and AMC1MFCL.930.TRI for a 3-Part course.
- 2.3 It should be noted that DCA approval will not restrict eligibility to attend the course to pilots employed by the course provider. Places on any approved Instructor Course can be filled by any suitably qualified applicant.

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Part 3 - Instructor Qualifications and Licence Annotations

3.1 TRI Courses will be approved to provide for Aeroplane (A) Instructor qualifications annotated in the licence as:

Certification	Privilege
TRI(A) 'A/c'	Aircraft only (unrestricted*)
TRI(A) 'FFS' and SFI(A)	Simulator only
TRI(A) 'A/c & FFS)	Both Aircraft (unrestricted*) and Simulator

* A Limitation 'T/Os & ldg's will be appended to the certificate of a TRI(A) whose Aircraft privileges are restricted to the conduct of take-off and landing training required to complete a type rating course which has been undertaken in an FFS. The holder of a TRI (A) certificate so restricted is entitled to exercise 'LIFUS' privileges (see paragraph 3.3).

3.2 Instructors who wish to add aircraft privileges (whether 'Unrestricted' or 'T/Os & lds only') to a qualification restricted to simulator (or vice-versa) are required to attend an approved TRI course to complete those elements of Parts 2 and 3 of the course which have not previously been completed. The amount of training, including any refresher that may be deemed necessary, will be determined by the ATO Head of Training. An instructor adding aircraft privileges will be required to pass an Assessment of Competence in an aircraft after completing the training.

3.3 A similar process to that described in paragraph 3.2 applies in the case of a TRI(A) (FFS only) who wishes to add 'LIFUS' privileges, which entitle the holder to conduct a pilot's first four line flying sectors following a Zero Flight Time type rating course (see paragraph 16). An Assessment of Competence is not required to add 'LIFUS'.

Guidance is provided by the DCA on the duration and content of abbreviated courses, see appendices.

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Part 4 - Requirements to Conduct Instructor Courses

4.1 Organisation

Any ATO may apply for an approval to conduct Instructor Courses.

4.2 Personnel

All Instructors conducting instructor courses, (referred to as ‘Tutors’) must be nominated by the course provider, and accepted by the DCA.

4.2.1 Head of Training (HT)

The HT, as required under is responsible for ensuring that the course is delivered to the required standard and that newly-appointed Course Tutors receive adequate training, observation and supervised tuition.

4.2.2 Course Tutors

Course Tutors must satisfy the requirement of MFCL.905.TRI (b) and AMC1MFCL.930.TRI. They should possess the following skills and knowledge*:

- Provide a framework to enable SFI/TRIs to teach any lesson
- Know the Instructor skill set and explore all of these skills during delivery of the course
- Understand the TRI course content, progression and changing emphasis
- Give demonstrations
- Set the scene and role play
- Teach by example
- Impart information that is relevant, readily understandable and memorable

**Source: DCA TRI Tutor Course guidance*

4.2.3 Examiners

A TRE whose examiner privileges include MFCL.1005.TRE (a) (5) to conduct Assessments of Competence for the issue, revalidation and renewal of a TRI or SFI certificate.

An SFE whose examiner privileges include MFCL.1005.SFE (a) (5) maybe authorised to conduct Assessments of Competence for the issue, revalidation and renewal of an SFI certificate.

4.3 Facilities

The following facilities must be provided by the course provider:

4.3.1 Accommodation and Equipment

A dedicated training room must be available throughout the course. Instructional aids, such as a white board and computer projector, must be available. The facilities may include equipment to record briefings and debriefings and suitable playback equipment to enable the u/t Instructors to view their performance.

4.3.2 Training Devices

Where training is to be conducted using a Flight Simulation Training Device (FSTD), the device must be qualified in accordance with EASA Level C or D (CS standards) or equivalent acceptable to the DCA. All courses must be conducted in full flight simulator (FFS) approved by the DCA.

4.4 Documents

The documents to be available for use during the course must include those listed in Appendix J.

4.4.1 Course Manual

A detailed Instructor's manual and course syllabus and must be produced by the ATO. The manual should provide details as follows:

- Aim of the Course.
- Timing and content of the course modules
- Objectives for each day's training
- Course notes for SFI/TRI retention

- Details of reference material to be used during the course.
- Format of the Assessment of Competence.

4.4.2 Tutor's Manual

The course provider must produce a manual for the Course Tutor, in order to ensure a consistent standard of course delivery. The Tutor manual should contain, as a minimum, the following:

- Detailed exercise scenarios with simulator seating plans and flight profiles to be used*
- Tutor guidance for developing the exercises in a progressive way, aligned to each day's specific objectives
- Student teaching points to be covered within each module (including a list of typical student errors)
- Instructor teaching points to be delivered during the TRI course
- A system for recording trainee Instructor performance

Note: *Simplified generic flight profiles and checklists will be appropriate if a simulator is to be used for Teaching & Learning modules.

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Part 5 - Initial Application and Approval Process

- 5.1 ATOs applying for an initial approval must apply to the DCA using Form 'DCA ATO Application Form'. The appropriate fee, as published in the DCA Scheme of Charges, must accompany the application.
- 5.2 The applicant must provide the following with the application:
- A course manual.
 - A Tutor's Manual
 - A list of Course Tutors, including details of their relevant experience.
 - Details of the facilities to be used to conduct the course.
- 5.3 It is important that each element meets an acceptable standard in its own right. It is not sufficient, for example, for a highly competent tutor to teach a course which relies solely on his knowledge and skill for its effectiveness, and for which the documentation is deficient. Training staff may change during the approval period, and a subsequent Tutor might conduct the course quite differently in the absence of a clearly-defined structure.
- 5.4 Upon receipt of the application, a DCA will assign an Inspector responsible for processing the course approval. The Inspector will review the documentation submitted to ensure the course is compliant with the requirements of MFCL. When satisfied a course observation by a DCA Inspector will be scheduled.
- 5.5 For the initial issue of an approval the DCA will normally observe selected days from each Part of the course. Occasionally the whole course will be observed. The Inspector will agree with the course provider dates for the observation. The same fee applies irrespective of the number of days observed.

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Part 6 - Modification to an Existing Course

Any changes to an existing course must be notified in advance to the DCA and all courseware approved. Where such changes are significant, the DCA may conduct an observation. This observation will be charged in line with the DCA Scheme of Charges.

Part 7 - Tutor Competence

The ATO is to provide initial training for Tutors. Additionally, for effective course delivery the Tutors need to be in regular practice and the HT is responsible for ensuring that Tutors maintain the necessary skills and knowledge. Recency criteria and refresher training requirements must be detailed in the ATO manual.

Part 8 - Course Syllabus

The minimum course content and duration is defined in MFCL.930.TRI and AMC1 MFCL.930.TRI. Further amplification is provided by the DCA guidance on the conduct of a TRI course contained in the Appendices.

ATOs are to prepare their syllabuses such that the main academic requirements are covered before any practical training is undertaken. The Part 1 syllabus may be designed for several participants up to a maximum of six. Part 2 & 3 courses should be designed for two u/t Instructors. This is both the maximum and optimum number. It is highly undesirable to have a single u/t Instructor because the practical workload would be very high and, more significantly, the u/t Instructor would be unable to benefit from interaction with a course partner. Where an ATO is left with no option but to run a Part 2/3 course for a single u/t Instructor (e.g. because of a last minute cancellation due to sickness), the syllabus should be amended to ensure the single u/t Instructor receives the number of practical training exercises they would receive on a 'normal' course. It should also be borne in mind that in multi-pilot operations a "stand-in" crew member/panel operator will be required for all simulator exercises.

To ensure the u/t Instructors are able to assimilate the training and prepare for the following day's exercises, it is recommended that the working day be planned to take place within the period 0700 to 1900 local time. The training will be intensive and u/t Instructors will be expected to prepare exercises for the following day after the day's training is complete.

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Part 9 - Course Standards

A system of continuous assessment should be employed, and u/t Instructors should not be entered for the Assessment of Competence unless they have achieved the required standard.

Part 10 - Teaching & Learning – Part 1

10.1 Introduction

The syllabus and requirements are set out in AMC1 MFCL.930.FI Part 1. However, this is only a guide and course providers have some freedom to include other topics.

10.2 Training Records

A written personal progress report shall be maintained for each u/t Instructor throughout the course.

Part 11 - TRI Course Technical Training and Flight Instruction – Part 2 & 3

11.1 Objectives

Part 2 and 3 objectives

- Develop instructor competencies and skills in accordance with AMC1MFCL.920
- Become fully conversant with operation of the simulator.
- Become familiar with the relevant simulator qualification and approval requirements (including Technical Log).

11.2 Practical Content

The practical exercises must include a cross-section to equip the prospective instructor with the skills and knowledge needed to teach the entire type rating training course syllabus. The course should therefore normally provide practice at instructing in the exercises, which are mandatory for the LST/, and a cross-section of the remainder of the syllabus. It must also ensure that there is an appropriate balance of skill-based and procedure-based exercises.

Each exercise should be treated as a ‘first time teach’, except of course for linking exercises that would have been covered at an earlier stage on a Type

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Rating course. Notwithstanding, at least one 'remedial training' exercise should be included later on the course.

It is a requirement of the TRI course that u/t Instructors are taught to continually assess a student pilot's performance. Tutors should emphasise the "Train to Proficiency" principle by routinely asking u/t Instructors whether they assess the "trainee" to have achieved competence in each exercise for that stage of a Type Rating Course, or if not, what further training would be appropriate.

U/t instructors should be given practice at dealing with unacceptable performance, without forewarning. A commonly used scenario is that the u/t Instructor must assess whether his student is competent to attempt a Licence Skill Test on the next detail (i.e. a "sign-off" standard for the Form PEL-01). It is preferable that the content of this exercise be kept simple, to allow the u/t Instructor to focus his judgement and analysis on a small number of exercises. This should be done at a late stage of the instructor course. It is important that this purpose is kept in context. It is not the intention for the u/t Instructor to be given examiner training.

A type specific course will normally be run for a pair of u/t instructors, and it is neither necessary nor desirable that all exercises should be duplicated for both. For example, one might teach a manually flown emergency descent procedure, and the other using automatics; and stalls in different configurations could be shared. On the other hand, teaching exercises such as an engine failure on take-off are comparatively demanding and should be practised by both.

All simulator training exercises must be carried out in a DCA Approved Full Flight Simulator (FFS).

11.3 Demonstrations by Tutor

Course Tutors should provide model briefings and demonstrations of instructor delivery techniques when necessary; especially early in the course for exercises which are difficult to demonstrate or teach. Time will be wasted, standards impaired, and confidence undermined if the u/t Instructor attempts unsuccessfully to teach a difficult exercise without proper guidance. This is often the case with exercises in which instruction is based predominantly on subjective cues (e.g. visual approach; landing technique).

As the course progresses, the need for the Tutor to provide models will usually decrease and the u/t instructor should be able to apply principles with which he has become familiar to fresh exercises.

11.4 Demonstrations by u/t Instructor

U/t Instructors should learn to demonstrate exercises from both pilots' seats, as may be necessary from time to time when a converting student pilot is experiencing difficulty. To facilitate this, u/t Instructors should have been given any handling re-familiarisation that may be required, in the simulator or the aeroplane, in both pilots' seats, prior to the TRI course.

An example of a handling demonstration sequence often used by the Tutor for this aspect of practical instructor training is given in Appendix H.

The course must provide guidance about when a student pilot might benefit from a demonstration by an Instructor. U/t instructors should appreciate that whilst a demonstration should be as polished as possible, it is unlikely to be perfect and, far from glossing over any shortcomings, the Instructor should use them to make constructive teaching points whenever possible.

11.5 Student Role Play by the Tutor

In the Instructor training exercises of the course Tutor should role-play the u/t Instructor's student pilot.

During the course, the Tutor should ensure that his student role-play variously develops the u/t Instructor's instructional techniques in areas such as handling skills, operating techniques, technical knowledge, radiotelephony discipline, monitoring skills, TEM and CRM. The Tutor's personal pride as a pilot has to be set aside; an immaculate "student" performance provides negligible Instructor training value.

11.6 Time Management

Time management for briefings and simulator details is an important consideration, and course Tutors must progressively place emphasis on this. However, in the early stages of the TRI course it is desirable that greater priority be given to quality of instruction, and the timetable should contain some leeway to accommodate, for example, practice briefings, which over-run.

11.7 SOPs and Behavioural Marker System

The ATO should have a defined set of default Standard Operating Procedures (SOPs) and a Behavioural Marker System for use on the course. However, where both u/t instructors are employed by the same operator, their own procedures should be used.

Part 12 - Construction of a Course Manual

12.1 Introduction

- Pre-course preparation
- Overall course aims
- Course infrastructure:
- Names of Tutors and Post-holders
- Tutor: student ratio
- Course duration, days off and schedule (see paragraph 19)
- Role definitions (e.g. Course Tutor, Instructor 'A', Instructor 'B', Course Tutor role-playing student pilot)
- Additional study material
- Glossary

12.2 For each training day (as applicable to the type of course)

- Training objectives
- Reference documentation (e.g. Flight Manual, Performance Manual)
- Discussion topics *
- Briefing topics *
- Content of flight instruction exercise *
- Debriefings *
- Preparation requirements for next day's exercise
- Notes for u/t instructor relating to the days exercise (e.g. instructional techniques providing guidance on use of automatics, simulation of smoke conditions etc).
- Technical notes relating to the day's exercise (profiles, QRH extracts etc).

* A detailed schedule should be provided for the above, stating who does what, when, and from which simulator seat etc.

12.3 Forms

Specimen training report form for u/t instructor

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Specimen training report form for type rating student pilot
Forms PEL-01, 03, 04 & 07
Course critique form

12.4 Course Tutor's Supplementary Notes

For each training day:

- A course tutor's checklist of teaching points for both instructor and student. to be covered during the session.
- Guide to student role-play: a list of experience-related student faults and errors (handling and CRM).
- Past experience assumed in role (e.g. low hours light aircraft single pilot; military fast jet etc).
- Any training aspects which will not be divulged to u/t instructor beforehand but brought out during the course (e.g. the exercises which trainee instructors will be required to demonstrate)

Note: Care must be taken to ensure that these discreet notes are accessible only to course tutors.

General:

- A list of instructor skills that must be developed during the course, and a list of instructor "Do's" and "Don'ts".
- Instructions to tutors for maintaining training reports on u/t instructors throughout the course, with an example of the form to be used.

Part 13 - Assessments of Competence

The assessment of competence for the issue of a TRI(A) Simulator Only or an SFI certificate shall be conducted in accordance with Appendix C

The assessment of competence for the issue of a TRI(A) Restricted shall be conducted in accordance with Appendix D

The assessment of competence for the issue of a TRI(A) certificate Unrestricted shall be conducted in accordance with Appendix E

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Part 14 - Line Flying Under Supervision (FCL.910.TRI)

For the holder of a TRI(A) (FFS only) certificate, MFCL.910.TRI mandates additional training for the qualification to conduct of line flying under supervision (LIFUS). This requirement applies only to the conduct of the first four landings following a zero flight time type rating (ZFTT) course completed in accordance with MFCL.730.A. The requirements for conducting non-ZFTT line flying under supervision are detailed in - MAOCRs.

The additional training referred to above is detailed AMC1MFCL.930.TRI AEROPLANE TRAINING para (k) and (aa). Guidance for an ATO that wishes to conduct training for the purposes of MFCL.910.TRI is provided in Appendix F.

Part 15 - Aeroplane Training – General Consideration

15.1 OML Restriction

A TRI whose medical certificate is subject to an Operational Multi-Crew Limitation (OML) is not permitted to give instruction in a multi-pilot aeroplane as part of a type rating training (TRI) course.

15.2 TRI Recency – training in-flight

It is recommended that when a TRI has not carried out training in-flight on the relevant aeroplane type within the last 6 months, refresher training in a flight simulator is undertaken before proceeding to the aeroplane. This interval may be extended to 12 months where the training does not involve abnormal/emergency procedures.

15.3 Safety Pilots

Operators are strongly urged to carry safety pilots on base training flights, whose responsibilities may include (as appropriate):

- Lookout
- Monitoring of checklist, flight path, configuration, radio communications, instruments, icing, fuel, brake cooling
- Recording times, numbers of landings etc
- Security of cabin/galley, arming/disarming slides

During a TRI(A) course the second u/t instructor can fulfil the safety pilot role for practice and experience whilst his colleague is in the pilot's seat, during both simulator and aeroplane practical exercises.

15.4 Aircraft Training

This phase of a TRI(A) course, if applicable, should be used, , to consolidate the techniques and procedures which have been practised in the simulator. No attempt should be made to introduce 'student' mishandling errors that could jeopardise safety.

Part 16 - Revalidation of TRI and SFI Certificates

16.1 Revalidation of a TRI(A) (simulator only) or SFI certificate

The requirements for revalidation of a TRI(A) or SFI Certificate are detailed in MFCL.940.TRI(a)(1) and MFCL.940.SFI(a) respectively. It is a DCA requirement that the applicant continues to be sponsored by the relevant AOC or ATO as appropriate.

16.2 Assessment of Competence

The AoC may either take the form of a role-played exercise as detailed in Appendix C or, by the examiner observing the TRI conducting a 'live' training detail which includes at least two hours in a full flight simulator together with the associated briefing and debriefing.

16.3 Experience

A simulator session as detailed in MFCL.940.TRI(a)(1)(i) for a TRI, or satisfy the requirements of MFCL.940.SFI(a)(1) for a SFI.

16.4 Refresher Training

Refresher training must include elements of all parts of the TRI(A) course. The syllabus will form part of the ATO approval, and the training must be completed to a satisfactory standard. The amount of refresher training will be determined in each individual case by the ATO Head of Training, and will take into account such factors as elapsed time since TRI privileges were last exercised on the type, overall instructing experience, and the proficiency of the individual.

16.5 Revalidation of TRI(A) privileges to instruct in an aircraft

The requirements for revalidation of a TRI(A) Certificate are detailed in MFCL.940.TRI.

16.6 Assessment of Competence

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The AoC may either take the form of a role-played exercise as detailed in Appendix D or E (as applicable) or, by the examiner observing the TRI conducting a 'live' training detail of at least one hour flight time in an aircraft for unrestricted privileges, or 30 minutes flight time in an aircraft for privileges restricted to 'T/Os & lds'. The AoC must include a minimum of 2 take-offs and landings.

16.7 Experience

Conduct one air exercise of at least 1 hour flight time which includes at least 2 take-offs and landings.

16.8 Refresher Training

Refresher training must include elements of all parts of the TRI(A) course. The syllabus will form part the ATO approval, and the training must be completed to a satisfactory standard. The amount of refresher training will be determined in each individual case by the ATO Head of Training, and will take into account such factors as elapsed time since TRI privileges were last exercised on the type, overall instructing experience, and the proficiency of the individual.

Part 17 - Privileges to Conduct Assessments of Competence (AOC)

MFCL.1005.TRE(a)(5) states that a TRE with at least 3 year's experience can conduct AoC for the issue, revalidation or renewal of a TRI or SFI certificate, ALL TREs must be appropriately trained, authorised and acceptable to the DCA.

MFCL.1005.SFE(a)(5) states that an SFE with at least 3 year's experience can conduct AoC for the issue, revalidation or renewal of an SFI certificate. ALL SFEs must be appropriately trained, authorised and acceptable to the DCA.

In both these cases an AUTHORISED examiner must conduct the AoC in accordance with the instructions contained within this document.

An examiner may not conduct AoCs until the privileges to do so have been added to their examiner certificate.

Part 18 - New TRI Courses

18.1 Common Criticisms

Syllabi, course manuals and/or tutor manuals, which are too sparse. These documents must be comprehensive in order to define the structure and content of the course. It is implicit when an approval is issued that course tutors must be competent; however, it cannot rely solely on an individual's

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knowledge and ability, and the syllabus must be sufficiently detailed and prescriptive to ensure continuity.

Poorly planned exercises. Because of the frequent changes of role by tutor and u/t instructors, clear strategy and objectives for each exercise are essential. Success in achieving these will depend on both the tutor's skill and a sufficiently detailed syllabus.

Too much emphasis placed in briefing and in the simulator on what to do in an exercise, and too little on how to do it. This tends to lead, predictably, to inadequate fault analysis and slow student progress. It is a shortcoming more commonly observed in tutors who are not practising pilots on the type.

Over-ambitious programming. Instructor training involves several "layers" of briefing and debriefing, and repetitive demonstrations and "student" practice, interspersed with discussions and analysis; very often this consumes more time than planned.

18.2 Points of Emphasis

The course should be designed so that it builds on, and does nothing to undermine, principles learnt from the teaching and learning phase. For example, u/t Instructors should not be expected to give briefings for which they have been given insufficient time to prepare. The Tutor must stress that instructors should:

- use aide memoires to brief TO ENSURE THE LESSON PLAN IS FOLLOWED
- always prepare in advance calculations which will be expected of trainees so that they have the answers to hand (minima, performance etc.)
- have a note of page numbers when reference is to be made to manuals during the briefing.

During all phases of a TRI course, the amount of preparatory information (both written and verbal) provided to the u/t instructor for an exercise should become progressively less prescriptive. For example, he should develop the ability to sequence exercises, select suitable airfields and weather, operating weights etc.

Debriefings must be balanced, constructive and to the point. It is not unusual for u/t instructors to "nit-pick"; this arises from a desire to be seen to be

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thorough during their instructor training, and the course tutor should stress the need for effective fault analysis and the use of appropriate debriefing techniques.

Part 19 - Newly Qualified Instructors: Consolidation

It is strongly recommended that, whenever possible, a newly qualified instructor should conduct his first type conversion course under the supervision and guidance of an experienced instructor.

It is also recommended that prospective examiners should be given plenty of opportunity to consolidate in the instructor role before undertaking an Examiner Standardisation course. In this regard, instructors who are to become examiners for the first time must comply with the requirements of MFCL.1010.TRE(a)(4) or MFCL.1010.SFE(b)(3), as applicable.

Part 20 - Administration Procedures for a SFI / TRI Assessment of Competence

In all cases the nominating organisation and applicant shall complete the application form PEL-10 for the initial issue, revalidation or renewal, prior to the commencement of the assessment of competence.

Initial Issue - PASS

The DCA authorised examiner shall complete the Examiner Report PEL-06

Revalidation or Renewal - PASS

SFI Certificate:

- (a) Sign the Certificate of Revalidation in the licence or SFI certificate
- (b) Complete Form PEL-06.
- (c) Forward completed PEL-06 to the DCA

TRI(A) Certificate:

- (a) Sign the Certificate of Revalidation in the licence.
- (b) Complete Form PEL-06
- (c) Forward completed PEL-06 to the DCA

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Initial Issue, Revalidation or Renewal - FAIL

SFI and TRI(A) Certificate

- Complete Form PEL-06 and the Examiner Report, indicating FAILURE, the reason for the failure and send the form to the DCA.

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Appendix A – Expanded Guidance for the Content of Part 2 & 3 of the TRI (A) Course

The following should be read in conjunction with the required content of the course as detailed in AMC1MFCL.930 TRI.

Simulator instruction

- advantages and disadvantages of simulators for training
- limitations of simulators
- simulator qualification and approval (and a review of associated documents)
- approval conditions in relation to technical differences from aeroplane
- technical log, acceptable defects
- freezes
- speed up/down/resets and repositions, including use of mnemonics/aide memoires
- visual system considerations
- special effects
- instructor role-play (ATC, ground crew, cabin crew, emergency services communications etc)
- maximising the realism of a simulator exercise
- communications: use of headsets, standard RT phraseology
- when and how an instructor should demonstrate an exercise
- debriefing simulator training during and after the detail
- time management
- simulator safety devices, emergency/evacuation procedures (demonstration briefing)

Aeroplane Instruction

- Purpose of take-off and landing training in a type rating course
- Proficiency criteria
- MFCL subpart H and J.

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- Minimum number of take-offs and landings: experience discriminant
- DCA advice for TRI recency
- TRI Rating restrictions
- The legal constitution of an aircraft crew for training flights.
- Valid medical certificate
- Considerations with regard to OML restriction (student and TRI)
- Completion of SEP training
- Advantages and disadvantages of touch and go landings
- V-speed considerations
- inapplicability of V1 to touch-and-go. $V_{mca}/V_s/V_2$ relationships.
- Touch-and-go performance considerations
- Relationship of ASI bug settings for landing to take-off speeds.
- Training manual limitations for minimum runway length and how they are derived.
- SOPs used in circuit training
- Training checklists
- Take-off briefing differences (e.g. “Stop” call and RTO handling)
- Crew actions during touch and go
- Real emergencies during touch and go’s
- Change of crew with engines running
- External check/cabin security / slide arming etc.
- Technical Log (including change of commander)
- How much fuel to load/approximately burn rate
- Load sheets
- Refreshments
- How to select a suitable airfield
- If going away, engineer/spares/oils
- Local restrictions
- Circuit heights
- Reverse thrust
- Weather considerations

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- W/V (including gusts and crosswind)
- Availability of alternate airfield
- Training in IMC
- Applicability of MEL to training circuits (especially touch and go)
- Correct seat position
- Use of automatics, Flight Director limitations, auto-thrust etc.
- EHSI mode considerations
- Fatigue and overload: instructor, student
- Typical errors: cause and correction
- When and how to debrief (taking control/use of automatics)
- Rotation rates
- Different flap settings for landing
- Datum attitudes and power settings
- Touchdown aiming points
- Landing without speed-brake/auto-brake
- Difference in landing cues
- Float/skip/bounce considerations and correction
- Unplanned go-arounds (including after touchdown)
- How to guard the controls
- Fly-by-wire flight controls: instructor input considerations
- When to take control
- Visual approaches without glideslope guidance
- Circuit direction considerations (including noise nuisance)
- ATC liaison
- Note taking
- Airfield markings
 - Revision (including non-standard markings)
- Taxi practice
 - Not in confined area
 - Min radius turns
- How to record circuit times for the tech log

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- Benefits and disadvantages of student flying a positioning leg
- Safety Pilot
- Advantages and responsibilities
- Briefing
- Brake cooling considerations
- Problems/failures during touch-and-go; stop/continue decision factors.
- Guarding controls during critical phases to prevent mishandling (e.g. take-off rotation).
- Typical student errors.
 - When to intervene.
 - When to anticipate errors/mishandling (eg reminding student to keep heels on floor, clear of brakes, during take-off and landing)
 - When to demonstrate an exercise.
 - Applicability of 'following through' on controls (and inapplicability in fly-by-wire types)
- How and when to debrief (differences from simulator).
 - Consider taking control (and using autopilot).
 - When not to debrief/analyse (critical phases of flight).
- Techniques for avoiding excessive brake temperatures.
- Simulated engine failure considerations - e.g. crosswinds, fuel balance, and flight in icing conditions.
- Precise information about how and when a 'Base Training Checklist' is to be used/monitored.

Demonstration pre-flight briefing by the Tutor, to include the following:

- Objectives of flight exercise.
- Planned schedule.
- Differences between simulator and aeroplane.

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- Define individual duties and responsibilities of all crew members; in particular Trainee, Training Captain and Safety Pilot.
- Crew changes.
- Detailed description of all non-SOP procedures (e.g. Touch-and-go handling and crew actions; use of training checklist; RTO handling differences)
- Airfield briefing (non-standard markings, glidepath, runway perspective, aids, procedures; significant terrain/obstacles).
- Real emergencies; handover/takeover of control.

Notes: *The tutor should stress that it is not the purpose of the pre-flight briefing to teach the visual circuit, as this is covered in the type rating course.*

Each u/t TRI should be required to brief for an aeroplane detail before each simulator and aeroplane training exercise on the course.

Simulator Training as part of a TRI(A) Course to obtain aeroplane instructor privileges

All simulator-training exercises must be carried out in a Full Flight Simulator (FFS) qualified to CS-FSTD A Level C or D and approved by the DCA.

The majority of the flying will be done by the tutor role-playing a student, with the u/t TRI occupying the other pilot's seat and performing the functions of aircraft commander, training captain and non-flying pilot. It is generally beneficial to conduct these simulator details in 'real' time (including taxi after full-stop landings). This provides realistic scope for the u/t TRI to debrief/rebrief, give his 'student' more taxiing practice, liaise with ATC about training requirements etc.

The syllabus should include (as applicable to aircraft type):

- Pre-flight briefing (by both u/t TRIs)
- Instructing practice from both pilots' seats.
- Demonstrations by Tutor and u/t TRI (see Appendix G)
- Taxi techniques (including minimum radius turns).
- Visual circuits (right- and left-hand), touch-and-go and full-stop landings.

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- Visual approaches:
 - with and without glideslope guidance.
 - with different flap settings
- Mishandling and emergencies requiring decision-making, e.g.:
 - engine failure during touch-and-go ground roll
 - flap asymmetry during touch-and-go ground roll
 - selection of reverse thrust during touch-and-go ground roll
 - high/excessive/prolonged/drifted landing flare
 - approaches which are:
 - high/fast
 - low/slow
 - poorly aligned
 - unstable
- Analysis of poor control by the student such as:
 - incorrect rotation rate
 - incorrect rudder input
 - mis-trimming
 - incorrect thrust settings
- pitch/power technique
- Debriefing by u/t TRIs
- Critique of exercise by Tutor (and course partner)

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Appendix B – TRI Course Design; suggested Content, Progression and Changing Emphasis for Part 1, 2 & 3 TRI Courses

TRI Teaching and Learning Courses- Part 1

The 'Building Blocks' for new Instructors

Day 1

Classroom theory and short presentation practices

Theory modules from AMC1 MFCL.930.FI – FI Training Course
Introduction to and initial practice at giving presentations – own choice subjects, not necessarily aviation related delivered in any preferred style (lecture or lesson)

Day 2

Classroom theory and presentation practices

15-20 minute presentations by the participants to the class – on an aviation related technical subject (in lesson style)-this gives vital briefing practice.
Theory modules from AMC FI

Day 3

CRM /TEM

How and When to Teach non-technical skills alongside technical skills

Practice at Instructor assessment of CRM /TEM

Demonstration of a pre-flight brief by the Tutor (1:2)

Day 4

Pre-flight brief practice
20 minute pre-flight briefs by the participants to the Tutor + 1 (give back)
Debriefing Skills
The Instructional Model for a simulator detail
Lesson Plans
Review of Instructor Skills/Characteristics

Notes:

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1. The above is only a suggested order of events to create a suitable building block approach for the ab-initio instructor. Other permutations are possible, and the order of things can be changed to suit. This example uses 4 day course, which will achieve the 25 hour requirement.
2. Any of the above can be abbreviated or omitted if appropriate, depending on candidate experience levels and satisfactory progress. However TRI/SFI candidate knowledge should be established in all respects, never assumed.

TRI Type Specific Courses (for FFS qualification) - Part 2 & 3 combined

The 'Building Blocks' for new Instructors

Day 1 (Part 2)

Various Classroom topics and fixed base sim visit

Review/revision of Part 1; the Instructional Model, the Instructor Skills set; Pilot Skills set; development of lesson plans etc.

Sim safety/emergencies - visit the simulator; Tutor 'gives' demo of a sim safety brief

Fixed base sim session to give 'hands on' practice at IOS

Give and give back on 'static' exercises – cockpit familiarisation; seat/pedal adjustments; engine starts etc.

Tutor 'gives' a classroom demonstration 'pre-flight brief' for a simulator detail

Tutor sets prep for Day 2 exercises (ensuring participants have the Teaching Points)

Day 2 (the start of Part 3 with Part 2 'Technical training' embedded throughout)

Briefings + sim practical

New instructors practice pre-flight briefs and sim safety brief ('give back'). Practical sim session to include demonstrations by the Tutor throughout. Emphasis placed on using the Instructional Model. This first session represents a fundamental analysis of type specific teaching methods. Tutor shows how to deliver 'pre-emptive' briefs in the sim; how to deliver the desired Teachings Points; how the exercise might be simplified to create the right number of building blocks; and how best to set up for each exercise. There is very little fault analysis associated with this stage, although an explanation of common errors for the exercises used should be given. Frequent critiques in the sim ('hats on/off'). Safety aspects of sim operation instilled. On completion, dispense with practicing a post flight debrief – the stop start

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nature of the tuition makes this of little value. Tutor wash-up, and gives prep for next day.

Day 3 + 4

Briefings + sim practical + debriefs

Lots of instructor practice at various 'first time' exercises, preferably following the sequence of the type conversion syllabus. Tutor coaches and intervenes where necessary. Further short demo's if required. Emphasis on identification of Teaching Points by new instructors. Introduction on how to teach and assess non-technical skills (CRM/TEM/MCC). In sim debriefing methods/when to intervene etc. More in depth fault analysis introduced with Tutor in student role (preferably as an F/O). Introduction to an Instructor demonstration from a pilot seat (employing a different style of 'patter') – probably on Day 4. Practice at post flight debriefing skills using facilitation.

Day 5 + 6

Briefings + sim practical + debriefs

Much less Tutor input. Introduction of different characters: LHS Captain, pilot reluctant to use new SOP's, awkward/argumentative individual etc. On one of these days introduce a remedial training exercise, developed from a training report from the previous instructor. Further practice at teaching from a pilot's seat. Further development of non-technical skills (CRM/TEM/MCC) alongside technical skills, (the pilot skills list); how to teach and assess monitoring skills etc. More debriefing practice plus report writing introduced.

Day 7

Briefings + sim practical + debriefs

Assessment of 'student' as ready for LST. Dealing with failure/inability to continue Give test scenarios for Day 8, including main exercise to be briefed.

Day 8

AoC day.

See conduct of the AOC.

Notes:

1. The above is only a suggested order of events to create a suitable building block approach for the ab-initio instructor. Other

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permutations are possible, and the order of things can be changed to suit. This example uses an 8 day course, but shorter courses are feasible.

2. Any of the above can be abbreviated or omitted if appropriate, depending on candidate experience levels and satisfactory progress. However, TRI/SFI candidate knowledge should be established in all respects, never assumed.

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Appendix C – Simulator Element of the Flight Instruction Syllabus for a TRI(A) Course - Part 3

The following is a typical format for a practical training day:

2 hours	Syllabus discussion topics (continued) Briefings by both u/t instructors for the simulator exercises to be flown (topics to be chosen by Tutor and notified to u/t instructors at the end of preceding training day to enable preparation in their own time. Briefing duration 30 mins maximum). Critique of briefings by Tutor and course partner.
4 hours	Simulator detail shared between 2 u/t instructors
2 hours	Debriefings by both u/t instructors of “student”. U/t instructors write training report on “student”. Critique of conduct of simulator detail, debriefing and written report by Tutor and course partner. Preparation for next training day, including allocation of briefing topics.

The tutor should give a demonstration briefing for a simulator training exercise before the u/t instructor is required to prepare his first briefing. U/t instructors are to be told to assume that their “student” has completed the ground school course and relevant preparatory study.

The main purpose of the first practical exercise should not be to teach instructional techniques, but to provide a comprehensive introduction to the simulator operator's panel and set-up procedures, giving each u/t instructor as much “hands on” practice as possible. Ideally, they will be provided with a simple quick reference guide.

Each u/t instructor must give a simulator emergency briefing and complete the simulator technical log on a sufficient number of occasions to ensure proficiency.

As the course progresses, the following skills should be developed in parallel:

- Simulator operation (starting with straightforward applications and progressing to more complex inputs).

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- Type-orientated instructional techniques (in general terms, the simpler exercises to teach are those which are predominantly practice of procedures, and the more difficult those where the instruction requires analysis of flying technique).
- Communications skills related to the role (briefing, debriefing including facilitation, report writing).

Additional Topics to be Discussed During the Course

Review of MFCL subparts H and J

Exercising the privileges of an instructor's certificate within an ATO Review of:

Form PEL-01 / PEL-10

Revision of report-writing

LOFT/LOE

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Appendix D - Assessment Of Competence For The Issue Of TRI(A) 'FFS' or SFI Certificates

Part 1 - AoC conducted by Student Role Play

For initial issue, revalidation or renewal

For the assessment of competence, the applicant will be required to:

- give a briefing (duration approximately 20 minutes) for a pre-notified exercise from the type rating course using normal briefing room facilities and visual aids as appropriate. Give a simulator safety/evacuation briefing.
- conduct a simulator training exercise (1½ hour simulator slot) which will consist mainly of instruction from the simulator operator's panel but must also include a teaching demonstration from a pilot's seat.
- debrief the simulator exercises.
- write a training report on the student's performance.
- manage time efficiently throughout.
- demonstrate adequate knowledge of relevant parts of MFCL

Part 2 - Preparation for the Assessment of Competence (AoC)

The examiner should allocate the applicant a list of exercises at the end of the preceding day's training; he should also define the experience of the 'student', and specify whether he is a captain or co-pilot. Each applicant must receive a different list (typically there will be a stock of at least 5 lists). Each list will contain approximately 4-5 exercises from the type rating course, at least one of which will be asymmetric (e.g. EFTO, engine-out instrument approach, engine out go-around). The applicant should decide on a suitable sequence in which to conduct the exercises; i.e. devise a lesson plan, and should be advised that this sequence is not required to conform to the type rating course syllabus.

The examiner will nominate one exercise from the list which the applicant will be required to brief. This can be a normal interactive briefing based on the assumption that the student has completed relevant preparatory study.

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Part 3 - Examiner Briefing Prior to the Assessment of Competence (AoC)

3.1 Notes

Before commencing his briefing, the examiner must check the applicant's licence and ask for his instructor application form PEL-06 which the examiner should check for correct completion (applicant's personal details and TRI course completion certificate. The examiner should retain the form until the end of the AoC, for completion of the Test Report and Examiner's Certificate sections.

The examiner may act as a student undergoing a type rating course; alternatively, he may conduct the AoC as an observer and delegate the student role to a course tutor.

Normally there will be two applicants. When there is only one, a pilot with a current type rating is required to take the PM role.

3.2 Briefing Content

Immediately prior to the AoC the examiner must brief the applicant on the following:

- Invite the applicant to ask questions during the briefing.
- Purpose of the AoC.
- Describe the content of the AoC. Briefing, including health and safety, simulator detail, debriefing, written report, knowledge of relevant legislation and the final debriefing by the examiner.
- Explain that the assessment will be based on overall performance in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.
- Define the schedule and remind the applicant that he will be assessed on efficient use of simulator and briefing times. Emphasise that simulator times will be finite and that the "end of detail" time will be given to him once he is seated at the Instructor Operating Station (IOS).
- Tell the applicant that exercises in his lesson plan for which he has not been required to give a briefing should be conducted on the assumption that they have been previously briefed.
- Define the student's assumed role (captain or co-pilot), background and experience.

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- Explain that the examiner (or course tutor, as applicable), whilst playing the role of student, should be treated as such, and all aspects of his performance should be regarded in context. If it is considered that the student would benefit from a demonstration, the applicant should proceed accordingly.
- In the simulator the applicant should proceed with the student's training in each exercise until a satisfactory standard is achieved, or it is judged that the student will not benefit from continuing, or the examiner asks him to move on to the next exercise. As with any training detail, the student's needs may preclude completion of the lesson plan.
- Brief the applicant that if at any stage during the simulator detail he considers that the student would benefit from a demonstration he should give one.
- Prior to a demonstration the applicant instructor is to set up the IOS for the PM to operate. Explain to the applicant that the examiner may decide to terminate an exercise prematurely solely because he has seen sufficient. (The examiner therefore has influence over time management, which will be assessed on that basis).
- No role play is expected of the other applicant. He is to act as a passive (non instructor) PM whilst the applicant is giving instruction from the IOS.
- The applicant is responsible for the tech log both prior to and after the simulator session. If there are two applicants, division of this responsibility should be briefed.
- Should the simulator develop a fault the applicant is responsible for liaison with the engineers. If the fault cannot be rectified the applicant must decide whether to continue.
- Ask the applicant if he has all the briefing aids he requires (e.g. overhead projector equipment, whiteboard pens, charts, manuals etc).
- At the end of the briefing, ask the applicant if he fully understands the briefing.

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Part 4 - Conduct of the Assessment of Competence

- 4.1 The AoC must be an assessment of the applicant's skills as an instructor, not as an examiner. The Instructor competencies listed in MFCL are at Appendix D, and an Instructor skills matrix is at Appendix E.
- 4.2 On initial AoCs, the examiner must take into account that a newly trained instructor's ability can reflect only unconsolidated skills which have been acquired during the instructor course and cannot, for obvious reasons, draw on expertise gained from instructional experience.
- 4.3 It should be a much simpler day than the rest of the course! TRI candidates should benefit from the continued training value even though it is a formal Assessment of Competence. Output may be just average, but this is OK if the 10 principle characteristics/skills of an Instructor are present; IOS proficiency is acceptable; and simulator safety procedures followed – because you then have the makings of a potentially good instructor who will gain valuable experience with real students.
- 4.4 The applicant should demonstrate his ability to devise a lesson plan for the allocated exercises, and manage time efficiently with the intention of completing this lesson plan. However, the test should be based on a principle of quality rather than quantity, and kept as straightforward as possible. For example, provided the simulator detail contains at least one teaching demonstration from a pilot's seat, instruction from the simulator operator's position and at least one asymmetric exercise, there is no requirement to complete all the exercises in the allocated list. A fuller insight into an instructor's ability can be gained by allowing him to progress with relatively few exercises than if he is required superficially to teach a larger number. (The TRI course will have provided adequate practice in the range of exercises appropriate to qualifying as an instructor on the type).
- 4.5 Instructional exercises do not need to be complex or advanced. Basic exercises (e.g. visual approach and landing) can reveal a great deal about instructional skills.
- 4.6 Student role play should be aeroplane-related rather than personality-based. Errors made should be typical technical and non-technical student errors for the type and exercise (e.g. not trimming, inadequate knowledge of procedures, mishandling rudder during asymmetric exercises, poor scan, CRM issues etc) and kept to a relatively small

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number. The student's performance should reflect the quality and content of the instruction given.

- 4.7 Before debriefing, the examiner should ensure that the applicant has an adequate knowledge of the requirements of MFCL concerning type rating training (sub-part H) and instructor privileges, revalidation etc (sub-part J).
- 4.8 After the AoC has been completed, the examiner should complete PEL-06 and return the form to the DCA to be processed, give one copy to the applicant and retaining a copy for his own records. The examiner should remind successful applicants that they may not exercise the privileges of the instructor certificate until it has been issued by the appropriate National Authority.
- 4.9 Examiners should advise successful applicants to maintain a personal record of their instructor activity. This record will be evidence for revalidation of the instructor certificate by experience (FCL.940.TRI(a)(1)(i)). He should also remind them that adequate operator training should be undertaken before they use their newly acquired qualification in an unfamiliar simulator.

Part 5 - Failed Tests

In the event of a failure, the entire AoC must be retaken. The examiner must specify in PEL-06 the minimum remedial training to be undertaken before a further attempt at the AoC.

Part 6 - Example of a Schedule for Two Assessments of Competence for the initial issue of TRI(A) (Simulator Only) or SFI Certificates

(Assuming a simulator slot 1100-1500)

0900-0915 Preliminary administration and Examiner's briefing
0915-0945 Applicant 'A' briefs student
0945-1015 Applicant 'B' briefs student
1015-1045 Break
1050-1100 Applicant 'A' tech log and safety briefing
1100-1230 Applicant 'A' simulator exercise
1235-1255 Applicant 'A' debriefs student, writes training report
1255-1310 Examiner tells Applicant 'A' result and main debriefing points
Applicant 'B' takes break while Examiner debriefs Applicant 'A')
1315-1325 Applicant 'B' tech log and safety briefing
1325-1455 Applicant 'B' simulator exercise
1500-1520 Applicant 'B' debriefs student, writes training report
1520-1600 TRIE tells Applicant 'B' result and debriefs test

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(also any more detailed debrief of Applicant 'A')
Associated admin (test report etc).

Part 2 - AoC conducted by Observation of Live Training

This process is permissible for revalidation only

1. For the AoC, the applicant will be required to:

- brief the trainees for a simulator detail from the type rating course using normal briefing room facilities and visual aids as appropriate.
- give a simulator safety/evacuation briefing.
- conduct the simulator detail in accordance with the ATO's approved syllabus.
- debrief the simulator detail.
- write a training report on the students' performance.
- manage time efficiently throughout.
- demonstrate adequate knowledge of relevant parts of MFCL

2 - Examiner Briefing Prior to the Assessment of Competence (AoC)

Immediately prior to the AoC the examiner must brief the applicant on the following:

- before commencing his briefing, the examiner must check the applicant's licence and TRI or SFI certificate.
- invite the applicant to ask questions during the briefing.
- state the purpose of the AoC.
- describe the content of the AoC. Briefing, including health and safety, simulator detail, debriefing, written report, knowledge of relevant legislation and the final debriefing by the examiner.
- explain that the assessment will be based on overall performance in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.

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- should the simulator develop a fault the applicant is responsible for liaison with the engineers. If the fault cannot be rectified the applicant must decide whether to continue.
- at the end of the briefing, ask the applicant if he fully understands the briefing.
- In his introduction to the pilots under training, the examiner will explain that:
 - he needs to observe the candidate conducting the detail (one day only) in order to carry out the AoC. He should reassure the students that the candidate will conduct a normal training detail and make all decisions during the detail without reference to the examiner.
 - at the end of the simulator detail, the examiner will ask the candidate for a brief preview of the debrief – this is a normal aspect of the AoC process to ensure common standards.
 - he will need to record some details from the pilots' licences for the report form.

3 - Conduct of the Assessment of Competence

The applicant should demonstrate his ability to adhere to the lesson plan for the allocated exercises, and manage time efficiently.

Before debriefing, the examiner should ensure that the applicant has an adequate knowledge of the requirements of MFCL concerning type rating training (sub-part H) and instructor privileges, revalidation etc (sub-part J).

After the AoC has been completed, the examiner should complete (PEL-06) and return the form to the DCA, giving a copy to the applicant and retaining a copy for his own records.

Examiners should advise successful applicants to maintain a personal record of their instructor activity. This record will be evidence for revalidation of the instructor certificate by experience (FCL.940.MTRI(a)(1)(i)MFCL.940.SFI.(a)(1)).

4 - Failed Tests

In the event of a failure, the entire AoC must be retaken. The examiner must specify on the PEL-06 the minimum remedial training to be undertaken before a further attempt at the AoC.

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Appendix E – Assessment Of Competence For A TRI(A) T/os and lds

Part 1 - AoC conducted by Student Role Play in an aircraft

For initial issue, revalidation or renewal

1 Introduction

An AoC for this purpose must be conducted in an aircraft. The examiner must ensure, in his student role play, that any handling and non-technical errors do not jeopardise safety.

2 Content of AoC

- For the AoC, the prospective TRI will be required to:
 - Plan a take-off& landing training exercise (normally visual circuits) to be flown in the aeroplane; e.g. airfield selection, including alternates; scheduling, flight plans and slots; fuel and ballast requirements)
 - Give a pre-flight briefing for the planned exercise using standard briefing room facilities and visual aids as appropriate.
 - Teach the exercise from a pilot's seat. This must be a role-play exercise in which the examiner acts as "student". The flight exercise must include at least the following exercises with the applicant in the instructor role:
 - Taxiing (this may determine which pilots' seats the applicant TRI and "student" occupy")
 - A normal take-off
 - A touch and go landing
 - A full stop landing
 - Debrief the exercise (this must include an assessment against the required completion standard)
 - Write a training report on the students' performance
 - Demonstrate adequate knowledge of relevant regulations

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3 - Examiner's briefing prior to the AoC

3.1 Before commencing his briefing, the examiner should check the applicant TRI's pilot's licence and ask for his TRI application (PEL-10) which the examiner should check for correct completion. The examiner should retain the form until the end of the AoC, for completion of the AoC Report and Examiner's Certificate sections.

Immediately prior to the test the examiner should brief the applicant TRI on the following:

- Invite the applicant to ask questions during the briefing. Purposes of the AoC. TRI (Aeroplane) (Restricted "No instruction for abnormal/emergency procedures to be undertaken in an aircraft").
- Describe the content of the AoC. Planning, pre-flight briefing, flight exercise, debriefing, knowledge of relevant legislation and the final debriefing by the examiner.
- Explain that assessment will be based on overall standard in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.
- Agree the schedule and remind the applicant that he will be assessed on efficient use of time.
- Tell the applicant to assume that the student's type conversion course has included visual circuits and that he has passed the LST in the simulator.
- Define the student's assumed role (captain or co-pilot), background and experience.
- Explain that the examiner, whilst playing the role of student, should be treated as such, and all aspects of his performance should be regarded in context.
- The applicant TRI should proceed with the student's training until a satisfactory standard is achieved, or it is judged that the student will not benefit from continuing.
- The examiner must specify that, although he is the legal Commander and has over-riding authority over the conduct of the flight, he will act as student and the applicant TRI is to act as instructor/captain for the purposes of the test. The applicant TRI's responsibilities include the following:

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- checking (but not signing) the technical log to determine the aeroplane's fitness for the exercise
- Liaison with all external agencies (e.g. maintenance and ground staff.
- All operational matters such as positioning, use of airspace, liaison with ATC
- Weather decisions
- Ask the applicant if he has all the briefing aids he requires.
- At the end of the briefing, ask the applicant if he fully understands the briefing.

Note: *Following the applicant TRI's pre-flight briefing, the TRIE may wish to modify or supplement his own or the safety pilot's responsibilities during the test, particularly in relation to emergencies.*

4 Conduct of the AoC

- 4.1 The AoC must be an assessment of the applicant TRI's skills as an instructor, not as an examiner.
- 4.2 The AoC should be based on a principle of quality rather than quantity, and kept as straightforward as possible.
- 4.3 The examiner must ensure, in his student role-play, that any handling and non-technical errors do not jeopardise safety. The student's performance should reflect the quality and content of the instruction given.
- 4.4 After the test has been completed, the examiner should complete the TRI AoC Form (PEL-06) and Examiner's Certificate and return the form to the DCA giving a copy to the applicant, and retaining a copy for his personal records. The examiner must not make any entry in the applicant's licence. In the event of a successful AoC, the examiner must advise the applicant that he may not exercise his newly acquired privileges until the certificate has been issued.

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Part 2 - AoC conducted by Observation of Live Training in an aircraft

This process is permissible for revalidation only

1 - Introduction

An AoC for this purpose must be conducted in an aircraft.

2 - Content of AoC

For the AoC the TRI will be required to:

- Plan a take-off & landing training exercise (normally visual circuits) to be flown in the aeroplane; e.g. airfield selection, including alternates; scheduling, flight plans and slots; fuel and ballast requirements)
- Give a pre-flight briefing for the planned exercise using standard briefing room facilities and visual aids as appropriate.
- Teach the exercise from a pilot's seat. The flight exercise must include at least the following exercises with the candidate in the instructor role:
 - Taxying
 - A normal take-off
 - A touch and go landing
 - A full stop landing
- Debrief the exercise (this must include an assessment against the required completion standard)
- Write a training report on the students' performance
- Demonstrate adequate knowledge of relevant regulations

3 - Examiner's briefing prior to the AoC

Before commencing his briefing, the examiner should check the TRI's licence and TRI certificate.

Immediately prior to the test the examiner should brief the applicant TRI on the following:

- Invite the applicant to ask questions during the briefing.

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- Purposes of the AoC. TRI (Aeroplane) (Restricted “No instruction for abnormal/emergency procedures to be undertaken in an aircraft”).
- Describe the content of the AoC. Planning, pre-flight briefing, flight exercise, debriefing, knowledge of relevant legislation and the final debriefing by the examiner.
- Explain that assessment will be based on overall standard in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.
- Agree the schedule and remind the applicant that he will be assessed on efficient use of time.
- The examiner must clarify that the candidate is the legal Commander and has over-riding authority over the conduct of the flight. The examiner will act as an observer and will not be a member of the operating crew; however, he will assist with the look-out and bring to the attention of the commander any perceived threat to safety.
- Ask the applicant if he has all the briefing aids he requires.
- At the end of the briefing, ask the applicant if he fully understands the briefing.

4 - Conduct of the AoC

After the test has been completed, the examiner should complete the TRI AoC form (PEL-06) and return the form to the applicant, retaining a copy for his personal records.

In the event of a successful AoC, the examiner must sign the Certificate of Revalidation on the candidate’s TRI certificate.

5 - Failed AoCs

In the event of a failure, the entire AoC must be retaken. The examiner must specify on the Notice of Failure section of the Examiner Form (PEL-06) the minimum remedial training to be undertaken before a further attempt at the AoC.

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Appendix F - Assessment Of Competence for the Issue of a TRI(A) A/c, or A/c and FFS

Part 1 - AoC conducted by Student Role Play in an Aircraft

For initial issue, revalidation or renewal

1 - Introduction

An AoC for this purpose must be conducted in the aircraft. The examiner must ensure, in his student role play, that any handling and non-technical errors do not jeopardise safety.

2 - For the AoC, the applicant will be required to:

- Plan an aircraft training exercise (content specified by the examiner). This planning must include airfield selection, including alternates; scheduling, flight plans and slots; fuel and ballast requirements etc.
- Give a pre-flight briefing for the planned exercise using standard briefing room facilities and visual aids as appropriate.
- Teach the exercise from a pilot's seat. This must be a complete flight exercise (pre-start to shutdown), with the examiner acting as student, and must include a minimum of:
 - Taxiing (this may determine which pilots' seats the applicant and "student" occupy)
 - Upper airwork exercise(s)
 - Visual circuit(s) including touch and go landing(s)
 - Instrument procedure(s) involving the use of screens
 - Simulated asymmetric exercise(s)
- Debrief the exercise (this must include an assessment against the required completion standard)
- Write a training report on the student's performance.
- Manage time efficiently throughout.
- Demonstrate adequate knowledge of relevant regulations.

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3 - Examiner's briefing prior to the AoC

- 3.1 Before commencing his briefing, the examiner must check the applicant's pilot's licence and ask for his instructor application form (PEL-10), which the examiner must check for correct completion. The examiner should retain the form until the end of the AoC, for completion of the AoC Report and Examiner's Certificate sections.
- 3.2 Immediately prior to the AoC the examiner should brief the applicant on the following:
- Invite the applicant to ask questions during the briefing.
 - Purposes of the AoC
 - Describe the content of the AoC. Planning, pre-flight briefing, flight exercises, debriefing, report writing, knowledge of relevant legislation and the final debriefing by the examiner.
 - Explain that assessment will be based on overall standard in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.
 - Agree the schedule and remind the applicant that he will be assessed on efficient use of time.
 - Tell the applicant to assume that the student has completed the ground school phase of a type rating course and final examination.
 - Define the student's assumed role (captain or co-pilot), background and experience.
 - Explain that the examiner, whilst playing the role of student, should be treated as such, and all aspects of his performance should be regarded in context. If it is considered that the student would benefit from a demonstration, the applicant TRI should proceed accordingly.
 - The applicant should proceed with the student's training in each exercise until a satisfactory standard is achieved, or it is judged that the student will not benefit from continuing, or the examiner asks him to move on to the next exercise. As with any training detail, the student's needs may preclude completion of the lesson plan.
 - The examiner must specify that, although he is the legal Commander of the aeroplane and has over-riding authority over the conduct of the flight, he will act as student and the applicant instructor is to act as

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instructor/captain for the purposes of the test. The applicant's responsibilities include the following:

- checking (but not signing) the technical log to determine the aeroplane's fitness for the exercise
 - liaison with all external agencies (e.g. maintenance and ground staff)
 - All operational matters such as positioning, use of airspace, liaison with ATC
 - Weather decisions
- Ask the applicant if he has all the briefing aids he requires.
 - At the end of the briefing, ask the applicant if he fully understands the briefing.

Note: *Following the applicant's pre-flight briefing, the examiner may wish to modify or supplement his own or the safety pilot's responsibilities during the AoC, particularly in relation to emergencies.*

3 Conduct of AoC

- The AoC must be an assessment of the applicant's skills as an instructor, not as an examiner.
- The AoC should be based on a principle of quality rather than quantity, and kept as straightforward as possible. However because of the range of exercises which must be included, the duration of the flight test is unlikely to be less than 1½ hours.
- The examiner must ensure, in his student role play, that any handling and non-technical errors do not jeopardise safety. Student role play should be aeroplane-related rather than personality-based. Errors made should be typical technical and non-technical student errors for the type and exercise. The student's performance should reflect the quality and content of the instruction given.
- After the AoC has been completed, the examiner should complete the AoC Form PEL-06 and return the form to the DCA to be processed, a copy should also be retained by the applicant and the authorised examiner. In the event of a successful test, the examiner must advise the applicant that he may not exercise his newly acquired privileges until the certificate has been issued.

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Part 2 - AoC conducted by Observation of Live Training in an Aeroplane

This process is permissible for revalidation only

1. Introduction

An AoC for this purpose must be conducted in an aircraft.

2. Content of AoC

For the AoC the TRI will be required to:

- Plan a take-off& landing training exercise (normally visual circuits) to be flown in the aeroplane; e.g. airfield selection, including alternates; scheduling, flight plans and slots; fuel and ballast requirements)
- Give a pre-flight briefing for the planned exercise using standard briefing room facilities and visual aids as appropriate.
- Teach the exercise from a pilot's seat. The flight exercise must include at least the following exercises with the candidate in the instructor role:
 - Taxiing
 - Upper airwork exercise(s)
 - Visual circuit(s) including touch and go landing(s)
 - Instrument procedure(s) involving the use of screens
 - Simulated asymmetric exercise(s)
- Debrief the exercise (this must include an assessment against the required completion standard)
- write a training report on the students' performance
- demonstrate adequate knowledge of relevant regulations

3. Examiner's briefing prior to the AoC

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Before commencing his briefing, the examiner should check the TRI's licence and TRI certificate.

Immediately prior to the test the examiner should brief the applicant TRI on the following:

- Invite the applicant to ask questions during the briefing.
- Purposes of the AoC. TRI (Aeroplane) (Unrestricted).
- Describe the content of the AoC. Planning, pre-flight briefing, flight exercise, debriefing, knowledge of relevant legislation and the final debriefing by the examiner.
- Explain that assessment will be based on overall standard in the areas listed; that the examiner will therefore not debrief each phase separately but the whole exercise on completion.
- Agree the schedule and remind the applicant that he will be assessed on efficient use of time.
- The examiner must clarify that the candidate is the legal Commander and has over-riding authority over the conduct of the flight. The examiner will act as an observer and will not be a member of the operating crew; however, he will assist with the look-out and bring to the attention of the commander any perceived threat to safety.
- Ask the applicant if he has all the briefing aids he requires.
- At the end of the briefing, ask the applicant if he fully understands the briefing.

4 Conduct of the AoC

After the test has been completed, the examiner should complete the TRI (Form PEL-06) and return the form to the DCA, retaining a copy for his personal records.

In the event of a successful AoC, the examiner must sign the Certificate of Revalidation on the candidate's TRI certificate

5. Failed AoCs

In the event of a failure, the entire AoC must be retaken. The examiner must specify on the Examiner Report Form PEL-06 the minimum remedial training to be undertaken before a further attempt at the AoC.

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Appendix G Training For The Qualification To Conduct Line Flying Under Supervision Following ZFT Training. (MFCL.910.TRI TRI – Restricted privileges)

1. Requirement

When a type rating course includes line flying under supervision following zero flight time training (ZFTT) the first four take-offs and landings as required must be conducted under the supervision of a pilot in the other seat who holds either:

- TRI(A) with aircraft privileges,
- TRI(A) with privileges restricted to a simulator only who has received additional training in accordance with AMC1MFCL.930.TRI (aa), and whose TRI certificate in the pilot's licence includes 'LIFUS'

2. Required training

The training shall include all of the aeroplane training as detailed in AMC1MFCL.930.TRI (h) followed by training in an aeroplane in-flight under the supervision of a qualified TRI(A). Following this training the applicant instructor should conduct a training flight under the supervision and to the satisfaction of a TRI(A) nominated for this purpose by the training organisation.

Training in an aeroplane in-flight

This training should consist of at least one sector where the applicant instructor either:

- Observes a TRI(A) conducting actual line flying under supervision following ZFT training
- Conducts role play line flying under supervision for a TRI(A) who is qualified to line flying under supervision following ZFT training.

At the completion of the training above, the applicant shall conduct a line flying under supervision sector for a pilot following ZFT training. This training flight shall be under the supervision of a TRI(A), nominated for this purpose, and to his satisfaction.

3. Administration

After successful completion of the required training above the applicant shall apply for the privilege to conduct line flying under supervision following

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ZFTT to be added to his or her TRI(A) certificate. The application shall be made using form (PEL-10)

A TRI(A) with privileges restricted to a simulator only shall not conduct line flying under supervision following ZFTT until they have had the privilege added to their TRI certificate licence and completed the appropriate operator specific standardisation as detailed in the company DCA approved training manual.

Note: *Part FCL reference to 'line flying under supervision' is with regard to the four mandatory take-offs landings that are required to be conducted following a type rating course that includes ZFT training.*

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Appendix H - Revalidation Of TRI Certificates by Assessment Of Competence on Another Type (MFCL.940.TRI(a)(4))

1. Revalidation of Additional TRI Certificates
 - (a.) Following a successful TRI AoC on one type, MFCL.940.TRI(a)(4) permits an examiner to revalidate, but NOT renew, all TRI(A) certificates held by the candidate, license rating validity and subject to approval from the DCA.
 - (b.) These other TRI certificates may only be revalidated if the holder has maintained the required recency on the type, or has received instructor refresher training as a TRI at a DCA approved ATO, within the 12 months preceding the expiry date of the certificate.
 - (c.) The application of this requirement does not though over-ride MFCL.935.TRI that states that “If the TRI assessment of competence is conducted in an FFS, the TRI certificate shall be restricted to flight instruction in FFSs”.
 - (d.) When a TRI AoC is conducted in a simulator it may only revalidate simulator privileges for that certificate and any other TRI certificates held.
 - (e.) When a TRI AoC is conducted in an aircraft the associated simulator privileges may be revalidated as well as the aeroplane privileges. Additionally, when the candidate holds a TRI certificate for one or more other types, the aircraft and simulator privileges may also be revalidated.
2. Period of Validity of Additional TRI Certificates following a TRI AoC
 - (a.) The new validity of a TRI certificate following an TRI AoC on the type is in accordance with MFCL.940.TRI (a) (1) – within 12 months of the expiry date of the certificate.
 - (b.) Any other TRI certificate that is revalidated in accordance with paragraph 1 above, and within 12 months of expiry, may be revalidated for a further three years from the original expiry.
 - (c.) Any other TRI certificate that is revalidated in accordance with paragraph 1 above, but is not within 12 months of expiry, may be revalidated for a further three years from the date of the AoC.

Appendix I – Extract from MFCL: Instructor Competences

AMC1MFCL.920 Instructor competencies and assessment

- (a) Training should be both theoretical and practical. Practical elements should include the development of specific instructor skills, particularly in the area of teaching and assessing threat and error management and CRM.
- (b) The training and assessment of instructors should be made against the following performance standards:

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Competence	Performance	Knowledge
Prepare resources	(a) ensures adequate facilities; (b) prepares briefing material; (c) manages available tools.	(a) understand objectives; (b) available tools; (c) competency-based training methods.
Create a climate conducive to learning	(a) establishes credentials, role models appropriate behaviour; (b) clarifies roles; (c) states objectives; (d) ascertains and supports trainee's needs.	(a) barriers to learning; (b) learning styles.
Present knowledge	(a) communicates clearly; (b) creates and sustains realism; (c) looks for training opportunities.	teaching methods.
Integrate TEM or CRM	makes TEM or CRM links with technical training.	HF, TEM or CRM.
Manage time to achieve training objectives	allocates time appropriate to achieving competency objective.	syllabus time allocation.
Facilitate learning	(a) encourages trainee participation; (b) shows motivating, patient, confident and assertive manner; (c) conducts one-to-one coaching; (d) encourages mutual support.	(a) facilitation; (b) how to give constructive feedback; (c) how to encourage trainees to ask questions and seek advice;

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Assesses trainee performance	(a) assesses and encourages trainee self-assessment of performance against competency standards; (b) makes assessment decision and provide clear feedback; (c) observes CRM behaviour.	(a) observation techniques; (b) methods for recording observations.
Monitor and review progress	(a) compares individual outcomes to defined objectives; (b) identifies individual differences in learning rates; (c) applies appropriate corrective action.	(a) learning styles; (b) strategies for training adaptation to meet individual needs.
Evaluate training sessions	(a) elicits feedback from trainees; (b) tracks training session processes against competence criteria; (c) keeps appropriate records.	(a) competency unit and associated elements; (b) performance criteria.
Report outcome	reports accurately using only observed actions and events.	(a) phase training objectives; (b) individual versus systemic weaknesses.

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Competence	1	2	3	4
Preparation and Pre-Flight Briefing	<ul style="list-style-type: none"> • Little or no reference to H&S • Accepts inadequate facilities • Lack of preparation/No proper Lesson Plan • Poor time keeping • Starts briefing without introduction • Order of play not defined • Little or no interaction with crew • Little or no use of board or other visual medium • Reference only to ‘What’ is to be accomplished with very little ‘How’ it is achieved, and no ‘Why’ • Explanations verbose and/or muddled • Briefing is detached from the practical exercise that will be flown in the simulator or aircraft • No questioning at the end to check student knowledge • No re-cap or summing up of the main points at the end • Safety aspects of aeroplane training not mentioned 	<ul style="list-style-type: none"> • Identifies basic H&S aspects at the outset • Ensures facilities are suitable and functional • Appropriate resources prepared in advance • Has a prepared Lesson Plan with a Sequence; Teaching points; and the ‘set-up’ parameters listed for each exercise • Introduces the training session correctly, and states the Aims • Allows ample time for each element • States who will do what and when • Briefs from the classroom to the simulator or aircraft and back again • Uses “You and I” in preference to “We” • Briefs all items required • Invites questions • Provides all required documentation • Introduces CRM NOTECHS • Understands MCC concepts and TEM principles 	<ul style="list-style-type: none"> • As per 2 plus: • Good introduction with clearly defined Aims and more specific Objectives • Identifies the needs of the crew to create a climate conducive to learning • Uses facilitation appropriately • Clear structure and clarity for all visual aid work • Includes CRM NOTECHS/MCC/TEM seamlessly into all areas • Generates a relaxed atmosphere • Good technical explanations • Uses key words and concise phrases to convey meaning very effectively • Immediately, able to give alternative explanations if something is not understood • Has a highly attuned sense of airmanship 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Introduction immediately puts the crew at ease, and sets the professional tone of the session • Moves effortlessly from instruction to facilitation and back to instruction as required • Generates a very high level of engagement with crew, responds to their needs, and develops an empathy with them • Has an in-depth knowledge of HF for the application of CRM/ MCC/TEM principles • Defines clearly what is expected of the crew, but explains that the instructor is there to guide them throughout • Has a comprehensive technical knowledge • Very responsive to questions

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	<ul style="list-style-type: none"> • Little or no time allowed for comfort break/thinking time between the briefing and flight 	<ul style="list-style-type: none"> • Uses some visual aids to support teaching points • Explains 'What' is required, and 'How' to achieve it, and also 'Why' it is done that way • Technically correct explanations, but may not yet be particularly concise in delivery • Occasional use of key words and phrases • Checks student knowledge at the end with a few questions • Re-caps on the main points • Provides a 10 minute comfort break before going to simulator or aircraft • Briefs safety aspects for aeroplane training 		<ul style="list-style-type: none"> • Visual aids support and enhance the briefing and teaching points • Excellent 'patter' throughout
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Simulator Operation	<ul style="list-style-type: none"> • Insufficient or no simulator safety brief • Limited familiarity with IOS • Irregular observation of crew • Incorrect R/T • Distracted by IOS at key observing moments • Limited note taking • Inappropriate use of freezes and repositions • Poor radar vectoring • Lax adherence to simulator times 	<ul style="list-style-type: none"> • Checks simulator log and approvals • Gives a simulator safety brief • Efficient use of IOS • Presents repositions to crew correctly • Pre-warns the crew of failures to achieve best training value • Effective note taking • Provides a short break at half time 	<ul style="list-style-type: none"> • As per 2 plus: • Crew enters the simulator with the correct scene set • Introduces failures appropriate to crew actions • Adjusts 'running sequence' to optimize time management • Identifies crew or individual fatigue 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Very realistic scenarios • Role play of other agents responsive to crew's actions • Comprehensive observation/notes • High level of flexibility to the training plan
Aircraft Operation	<ul style="list-style-type: none"> • Unstructured approach to Flight Planning • Pays 'lip service' to Met/NOTAMsetc • Shortcuts checklist but has no approved Training checklist as a substitute • Training SOP's missing or inadequate • Uses inadequate screening for simulated IMC (ineffective screening for student and/or poor lookout for instructor) • Incorrect use of screens 	<ul style="list-style-type: none"> • Considers all aspects of the flight in context with the task in hand/background and experience level of the student • Understands fully the safety aspects involved in aircraft training • Uses a Training Checklist • Uses Training SOP's • Specifies individual duties throughout – e.g. Lookout, R/T, and Navigation • Safe use of well-designed screens at appropriate times 	<ul style="list-style-type: none"> • As per 2 plus: • Conveys flight safety message to students by setting a good example 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Sets an impeccable example, and inspires students to do the same

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Appendix J – Instructor Skills Matrix

INSTRUCTOR SKILLS – Simulator and Aircraft

Definition of grading:

- 1. Requiring Improvement 2. Basic standard 3. Good 4. Very Good**

Competence	1	2	3	4
Instruction in the simulator or aircraft	<ul style="list-style-type: none"> • No pre-emptive briefs as reminders of what comes next • Allows crew to proceed on a ‘trial and error’ basis (experiential learning) with little or no instructor input before each exercise commences....or • Repeats large chunks of the pre-flight brief unnecessarily • Emphasis on the ‘What’ rather than the ‘How’ • Uses conversational delivery style lacking in key words or phrases – Talks too much....or • No commentary at all • Gives technically inaccurate or ambiguous commentary • Instructs by ‘examining’ • Overloading of failures, with no pre-warning 	<ul style="list-style-type: none"> • Pre-briefs each part of the exercise • Good bias towards ‘How’ to accomplish the desired outcome, not just ‘What’ is required • Uses appropriate instructional technique – demonstration, follow through, observation, etc • Supplies appropriate instructional input in the form of patter, prompts and cues • Intervenes when and where necessary • Observes faults and provides adequate corrective guidance • Uses mini debriefs to provide feedback when students have capacity to listen (i.e. not flying) • Provides correct technical input 	<ul style="list-style-type: none"> • As per 2 plus: • Has a more incisive view of what the student needs depending on their experience/background – and is able to tailor the instruction accordingly • Knows the common errors for each category of student • Uses high quality ‘patter’ – repeats the same key words and phrases used in the briefing • Interventions are timely to achieve the best training value • Accurate observation and clear identification of root cause of any faults – and able to provide very good corrective remedies • Facilitates error analysis • Able to teach an evolution by using different explanations for different learner styles 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Increases the confidence and skills of the crew throughout the training event • Entirely empathetic approach, tolerant of student mistakes • Makes the learning experience thoroughly enjoyable

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	<ul style="list-style-type: none"> • In-disciplined handover of control • Briefs and de-briefs whilst the student is flying • Intervenes too early or too late • Does not recognise when the training is becoming negative • Gives undue praise or... • Does not provide any encouragement • Gets angry or frustrated by the crew performance • Sets a poor example to students • Gives vague targets • Teaches the whole exercise as the finished article – no building blocks • Does not consider crew experience/background – therefore does not establish what is known or unknown • Presses on regardless of crew performance/ fatigue (to tick all the boxes) • Works through the half time break • Poor time management 	<ul style="list-style-type: none"> • Uses correct hand-over of control procedure (in both the sim and aircraft) • Provides sufficient student practice to consolidate skills learned • Teaches from the Known to the Unknown • Delivers all the teaching points • Has a disciplined approach to SOP's • Provides encouragement by giving praise • Teaches to proficiency • Recognises student fatigue • Utilises good time management 	<ul style="list-style-type: none"> • Has an empathetic approach to the students • Uses time management in a flexible way to achieve the best training outcome 	
	<ul style="list-style-type: none"> • Chronological • No prioritisation of faults • Does not identify root causes 	<ul style="list-style-type: none"> • Prioritises areas for improvement • Holds the agenda • Some use of facilitation 	<ul style="list-style-type: none"> • As per 2 plus: • Starts with an introduction 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Allows the crew drive the agenda but with the instructor controlling it

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Debrief	<ul style="list-style-type: none"> • Little opportunity for crew to review their own performance • Nitpicking • cursory review of the flight...or • Debriefs for an excessively long time 	<ul style="list-style-type: none"> • Encourages crew to provide their views • Discusses CRM /MCC/TEM • Supports company SOPs • Limits debrief to 3 or 4 main points, plus 3 or 4 minor ones • Debriefs good aspects as well as the faults • Compares individual performance against the objectives • Generates a brief summary • Gives preparatory work for the next lesson • Produces a written training report 	<ul style="list-style-type: none"> • At ease with facilitation to move the debrief in the required direction • Draws common faults together – perceptive to root causes • Links CRM NOTECHS/MCC and TEM into the debrief • Balances praise and criticism • Concise and informative report writing 	<ul style="list-style-type: none"> • Achieves crew consensus • Seamless integration of the CRM NOTECHS/MCC and TEM into all aspects of the operation • Crew leave with clear and concise learning points
Regulation	<ul style="list-style-type: none"> • Insufficient knowledge of ATO syllabus • Poor understanding of privileges held 	<ul style="list-style-type: none"> • Adequate knowledge and application of ATO standards • Understands privileges held • Adequate knowledge of DCA documentation 	<ul style="list-style-type: none"> • As per 2 plus: • Thorough working knowledge of applicable regulations and relevant DCA Standards Documents • Knows where the ATO sits in the regulatory framework 	<ul style="list-style-type: none"> • As per 2 & 3 plus: • Clear and detailed knowledge of all relevant DCA regulations and policy documents. • Understands implicitly the ATO and Instructors' responsibility for delivery of training standards

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Appendix K - Practical Instructor Training Ina Simulator or Aeroplane as Part of a TRI (A) Course to Obtain Aeroplane Instructor Privileges

The following is a standard sequence for conducting practical instructor training exercises. The Tutor should emphasise that the primary objective is for the u/t instructor to observe and listen to how the exercise is taught.

- 1 Course Tutor teaches the manoeuvre by demonstration accompanied by appropriate “patter”.u/t instructor observes and listens to how the exercise is taught.
- 2 u/t instructor flies the manoeuvre acting as student pilot. Course Tutor makes instructional inputs during the manoeuvre to illustrate to the u/t TRI when and how to interject.
- 3 u/t instructor practises giving a demonstration of the same manoeuvre back to the course Tutor, who role plays student. (This stage is sometimes described as “give-back”).
- 4 Course Tutor attempts handling of the exercise as “student” under the tuition of u/t instructor, making typical student errors. u/t instructor observes “student’s” practice, making verbal inputs as required, and afterwards analyses and comments.

(The Course Tutor may elect to repeat Stage 4, modifying the “student’s” performance to reflect feedback from the u/t instructor)

- 5 u/t instructor practises debriefing “student”.
- 6 Course Tutor critiques u/t instructor on his instructional technique.

NOTES

1. *Stages 1 and 2 will not always be required prior to a practice teaching demonstration by a u/t instructor. The need will depend on the stage of the course (i.e. the degree of instructing skill acquired) and the difficulty involved in teaching a particular exercise. Often the more difficult exercises to teach are those, which depend on subjective cues, as opposed to those which are essentially procedure-based.*
2. *As the course progresses, the u/t instructor should be able to apply principles with which he has become familiar to other exercises, without need for a Tutor demonstration.*

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3. *There is no requirement for u/t instructors to give teaching demonstrations of every exercise in the TRI (A) training course syllabus. Some practice at demonstrating manoeuvres from both pilots' seats must be included.*
4. *The use of the word "patter" above might be misleading. A continuous flow of words will wash over any student without beneficial effect. In advanced conversion training particularly, instructors should be selective in their inputs; in most exercises "bullet training points" only are required.*

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Appendix L – Reference Documents, Forms and E-Links

Documents

- MAOCRs
- The Civil Aviation Act
- MFCL
- ICAO Annex 1 & 6

Forms

All relevant DCA licensing forms:

E-Links:

DCA website: <http://civil-aviation.govmu.org/English/Pages/default.aspx>

DCA Licensing: <http://civil-aviation.govmu.org/English/Pages/Licencing.aspx>