

Standards Document 43 version 05

Instructions and Procedures for Type Rating Instructor (Aeroplane), Synthetic Flight Instructor (Aeroplane) and Type Rating Instructor (High Performance Complex Aeroplanes) Course Providers

All amendments to this document will be completed electronically.

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flightcrewstandards@caa.co.uk

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Table of Contents

	Table of Contents	2
	Glossary	3
1	General	5
2	Approval of Instructor Courses	6
3	Categories of Instructor	6
4	Requirements to Conduct Instructor Courses	6
5	Initial Application and Approval Process	8
6	Temporary ("One-Off") TRI Course Approvals	9
7	Modification to an Existing Course	9
8	Tutor Recency	9
9	Administration Process	10
10	Course Syllabi	10
11	Course Standards	10
12	PART 1 - Teaching and Learning (formerly known as the Core Course)	11
13	TRI Course Parts 2 & 3	11
14	Construction of Course Manual	13
15	Assessments of Competence	14
16	Line Flying Under Supervision (FCL.910.TRI)	14
17	Aeroplane Training – General Considerations	14
18	Revalidation of a TRI(A) (Simulator Only) or SFI Certificate	15
19	Revalidation of TRI(A) Privileges to Instruct in an Aeroplane	16
20	New TRI Courses	16
21	Newly-Qualified Instructors: Consolidation	17
Арр А	Expanded Guidance for the Content of Parts 2 & 3 of the TRI(A) Course	18
Арр В	Simulator Element of the Flight Instruction Syllabus for a TRI(A) Course – Part 3	21
Арр С	Assessment of Competence for the Issue of TRI(A) (Simulator Only) or SFI Certificate	22
App D	Assessment of Competence for the Issue of TRI(A) Certificate (Restricted to "No Instruction for	27
	Abnormal/Emergency Procedures to be Undertaken in an Aircraft")	
Арр Е	Assessment of Competence for the Issue of TRI(A) Certificate (Unrestricted)	30
App F	Training for the Qualification to Conduct Line Flying under Supervision following ZFT Training.	34
	(FCL.910.TRI TRI - Restricted Privileges	
App G	Revalidation of TRI Certificates by Assessment of Competence on Another Type	35
	(FCL.940.TRI(a)(4))	
Арр Н	Practical Instructor Training in a Simulator or Aeroplane as Part of a TRI(A) course to Obtain	36
	Aeroplane Instructor Privileges	
App J	Reference Documents, Forms and e-links	37

Glossary of Abbreviations and Terms

AI or ADI	Attitude Indicator or Attitude Direction Indicator
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publication
AMC	Acceptable means of compliance
ANO	Air Navigation Order
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
EASA	European Aviation Safety Agency
EFATO	Engine Failure After Take-off
EU-OPS	European Union Requirements - Commercial Air Transport (Aeroplanes)
FCS	CAA Flight Crew standards
FEH	Flight Examiners Handbook
FE (CPL)	Flight Examiner Commercial Pilot Licence (Aeroplanes)
FE (PPL)	Flight Examiner Private Pilot Licence (Aeroplanes)
FI	Flight Instructor
FIE	Flight Instructor Examiner
FNPT	Flight Navigation Procedures Trainer
FS or FFS	Flight Simulator or Full Flight Simulator
FSTD	Flight Simulation Training Device
FTO	Flight Training Organisation
GBR	Prefix replacing 'UK' in EASA pilots' licences and certificates issued by UK CAA.
GE	Ground Examiner
GPS	Global Positioning System
GM	Guidance Material
GNSS	Global Navigation Satellite System
HPCA	High Performance Complex Aeroplane
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
IR	Instrument Rating
IRE	Instrument Rating Examiner
IRI	Instrument Rating Instructor
L&TS	CAA Licensing & Training Standards
LNAV	Lateral Navigation
LPC	Licensing Proficiency Check
LIT	Licensing Skill Test
101	

MDA/H	Minimum Descent Altitude/Height
ME	Multi-Engine
MEP	Multi-Engine Piston Aeroplane
MP or MPA	Multi-Pilot or Multi-Pilot Aeroplane
OPC	Operator Proficiency Check
Part FCL	EASA Aircrew Regulation - Annex 1 – Part-FCL
Proficiency Check	Demonstration of skill for the revalidation or renewal of a licence or rating, including such oral examinations as may be required.
RF	Registered Facility
RNAV	Area Navigation
RT or RTF	Radiotelephony
RTC	Regional Test Centre
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
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VNAV	Vertical Navigation

Part 1 - General

- 1.1 This document provides guidance for all Type Rating Instructor (TRI) course providers and applicants for SFI and TRI certificates. Where the text is applicable to both the above categories, the word "instructor" is used in the document. It does not provide guidance for Instrument Rating Instructor (IRI), Class Rating Instructor (CRI), Synthetic Training Instructor (STI) or Flight Instructor (FI) Rating Course Providers. For these categories, advice should be sought from CAA Licensing & Training Standards (L&TS).
- 1.2 The Civil Aviation Authority (CAA) issues flight crew licences, ratings and certificates in accordance with the requirements of EASA Annex 1 to the Regulation on Civil Aviation Aircrew (Aircrew Regulation). The CAA must ensure that the applicant is qualified by reason of knowledge, competence and skill to hold the appropriate licence, rating or certificate. The CAA will therefore authorise Approved Training Organisations (ATO) to conduct the necessary training and assessments of competence for the grant of a TRI or SFI certificate
- 1.3 Aircrew Regulation Annex 1 Part FCL FCL.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 CAA will only grant a TRI or SFI certificate to an applicant who has successfully completed an approved course of training conducted in accordance with Part FCL subpart J, and passed the applicable assessment of competence.
- 1.5 Nothing in this document is intended to conflict with the EASA Aircrew Regulation or UK statute law where applicable. Whilst every effort is made to ensure that all information is correct at the time of publication, the CAA 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 Any advice concerning SFI or TRI courses may be obtained from Licensing & Training Standards (Flight Crew Standards),

Civil Aviation Authority Safety Regulation Group Gatwick Airport South West Sussex RH6 0YR

Fax: 01293 573959

e-mail: flightcrewstandards@caa.co.uk .

CAA Standards Documents are available on the CAA website at: www.caa.co.uk/standardsdocuments

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 CAA website as follows: <u>www.caa.co.uk/forms</u>

• Click on Flight Crew Licensing Forms (from 17 September 2012)

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

Part 2 - Approval of Instructor Courses

- 2.1 To conduct Instructor Courses the ATO must hold an approval from the UK CAA. To hold an approval the ATO shall demonstrate to the CAA that they have an appropriate management system that satisfies the requirements of OR.GEN.200 and the organisational requirements as detailed in Annex III Part Organisation Requirements (OR). For the grant of an approval the ATO may be required to provide a practical demonstration of part, or all, of the course to the satisfaction of a CAA Inspector (CAAI).
- 2.2 It should be noted that CAA approval will not restrict the course to pilots employed by the course provider. Places on any approved Instructor Course can be filled by any suitably qualified applicant.

Part 3 - Categories of Instructor Courses

- TRI(A)(Simulator Only)
- TRI(A) (Restricted "No instruction for abnormal/emergency procedures to be undertaken in an aircraft")
- TRI(A) (Unrestricted)

A course may be designed to add aeroplane privileges to an existing instructor (simulator only) rating, or vice versa.

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 in this document as 'tutors') and examiners conducting the assessment of competence, must be qualified in accordance with the Aircrew Regulation. Tutors must be nominated by the course provider and their names notified to the CAA before being used on the course.

4.2.1 Head of Training (HT)

The HT, as required under OR.ATO.110 is responsible for ensuring that the course is delivered to the required standard and that newly-appointed Course Tutors receive adequate training by observation and supervised tuition.

4.2.2 Course Tutors

Course Tutors must satisfy the requirement of FCL.905.TRI(b) and AMC1 FCL.930.TRI GENERAL(f) and possess the following skills and knowledge:

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

4.2.3 Examiners

A TRE whose examiner privileges include FCL.1005.TRE(a)(5) is authorised to conduct assessments of competence for the issue, revalidation and renewal of a TRI or SFI certificate.

An SFE whose examiner privileges include FCL.1005.SFE(a)(5) is authorised to conduct assessments of competence for the issue, revalidation and renewal of an SFI certificate.

FCL.1005 requires that an examiner shall not conduct an assessment of competence of an applicant for the issue of an instructor certificate to whom they have provided flight instruction during the instructor course.

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. The facilities should include equipment to record briefings and debriefings and suitable playback equipment to enable the u/t instructor to view their performance in order to facilitate learning. Other instructional aids, such as a white board or computer projector, must be available.

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 requirements and must be a full flight simulator.

4.3.3 Documents

The documents to be available for use by the u/t instructor during the course must include those listed in Appendix J.

4.4 Course Syllabus

A detailed course syllabus must be produced by the ATO. The syllabus should provide details as follows:

- Aim of the Course.
- Aim of the specific course modules.
- Timing and content of the course modules.
- Details of reference material to be used during the course.
- Aim and format of the assessment of competence.

4.4.1 Tutor's Manual

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

- Aim of the course.
- Aim of each part of the training course.
- Student teaching points to be covered within each module (including a list of typical student errors)
- Instructor teaching points to be covered during the course
- Knowledge requirements, including source of information.
- Detailed exercise scenarios and simulator seating plans
- Flight profiles to be used in the simulator* or aeroplane.
- Detailed course timings.
- System for recording trainees' performance

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

Part 5. - Initial Application and Approval Process

ATOs applying for an initial approval must apply to the CAA. The appropriate fee, as published in the CAA Scheme of Charges, must accompany the application. No work can be undertaken by the CAA until the fee has been received.

The applicant must provide the following with the application:

- A detailed course syllabus.
- A list of Course Tutors, including details of their relevant experience.
- Details of the facilities to be used to conduct the course.
- The Tutor's Manual

Upon receipt of the application, a CAA Inspector (CAAI) will be assigned as the Inspector responsible for the course approval. The CAAI will review the application paperwork to ensure it is compliant with the requirements of Part FCL. The CAAI will request the training provider to make changes if the application is considered to fall short of the requirements. The observation described below will not take place until the CAAI is satisfied that the requirements have been met.

For the initial issue of an approval the CAA may elect to observe part, or all of the course. To facilitate this, the CAA will agree with the course provider dates for this observation.

Note: 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.

Part 6 - Temporary ("One-Off") TRI Course Approvals

6.1 Applicability

At the CAA's discretion a temporary TRI course approval may be issued, usually for one course only. Examples of circumstances, separately or in combination, when this could be considered are:

- No suitable external course is available in the UK.
- The ATO may not have qualified or suitably experienced training personnel for appointment as a Tutor, and therefore has to make arrangements to use an external Tutor.
- The ATO does not anticipate a continuing need for the course.

6.2 Application

An ATO seeking temporary approval of an Instructor course should discuss the circumstances with Flight Crew Standards. If it is considered that a temporary approval is appropriate, the operator must submit the following at least 12 weeks before training is due to commence:

- The form can be accessed from the CAA website. The appropriate fee, as published in the CAA Scheme of Charges, must accompany the application. No work can be undertaken by the CAA until the fee has been received.
- A detailed course syllabus.
- A list of course tutors, including details of their relevant experience.
- Details of the facilities to be used to conduct the course. All simulator training exercises must be carried out in an EASA qualified Full Flight Simulator (FFS).

Upon receipt of the application a CAAI will be tasked with the course approval. The CAAI will review the application, and associated course manuals, to ensure that it complies with the requirements set out in this Standards Document.

Once the CAAI is satisfied that the application meets the requirements the CAA will issue a Temporary Approval document authorising the course to take place.

For a Temporary Approval, the training is not normally subject to CAA observation. However the assessment(s) of competence will normally be conducted by a CAAI. For this reason, ATOs are strongly advised to book a date for this assessment of competence with Flight Crew Standards Support prior to scheduling the course.

Part 7 - Modification to an Existing Course

All proposed changes to an existing course must be notified in advance to L&TS approvals. Where such changes are significant, the CAA may conduct an observation. This observation will be charged at the CAAI daily rate.

Part 8 - Tutor Recency

For effective course delivery the tutors need to be in regular practice. The HT is responsible for ensuring that tutors maintain the necessary skills and knowledge.

The ATO is to provide refresher training for tutors who fall out of recency prior to conducting a course. Recency criteria and refresher training requirements must be detailed in the Tutor manual.

Part 9 - Administration Procedures

In all cases the applicant shall complete the application form SRG\1131 for the initial issue, or SRG\1135 for revalidation or renewal, prior to the commencement of the assessment of competence.

Initial Issue - PASS

The examiner shall complete the Examiner Report SRG\2199

Revalidation or Renewal - PASS

SFI Certificate

• Sign the Certificate of Revalidation in the licence or SFI certificate. Forward completed Form SRG\1135 and the Examiner Report SRG\2199 to the CAA

TRI(A) Certificate

- Sign the Certificate of Revalidation in the licence.
- Forward completed Form SRG\1135 and the Examiner Report SRG\2199 to the CAA

Initial Issue, Revalidation or Renewal - FAIL

SFI and TRI(A) Certificate

• Complete Form SRG\1135 and the Examiner Report, SRG\2199 including the Notification of Failure section and send to the CAA

Part 10 - Course Syllabi

The minimum course content is defined in FCL.930.TRI and AMC1 FCL.930.TRI.

The CAA will approve courses in these two categories:

- TRI (Simulator)
- TRI Aeroplane

ATOs are to prepare their syllabus such that the main academic requirements are covered before any practical training is undertaken. The syllabus is designed for a course of 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 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.

Part 11 - 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.

A satisfactory standard must be achieved in each module before progressing to the next.

Part 12 - Teaching & Learning (Formerly Known As Core Course)

12.1 Introduction

The syllabus and requirements are set out in AMC1 FCL.930.FI Part 1

12.2 Training Records

A written personal progress report should be maintained for each u/t instructor throughout the course and his training abilities should be assessed as satisfactory by the course tutor before progressing to the next part.

Part 13 - TRI Course Parts 2 and 3

13.1 Objectives

Part 2 and 3 objectives

- To develop instructor competencies and assessment skills in accordance with AMC1 FCL.920
- Become fully conversant with operation of the simulator.
- Become fully conversant with the relevant EASA simulator qualification and approval requirements (including Technical Log).

13.2 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.

All simulator training exercises must be carried out in an EASA qualified Full Flight Simulator (FFS).

The course should therefore normally provide practice at instructing in the exercises which are mandatory for the LST/LPC, 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.

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 takeoff are comparatively demanding and should be practised by both.

13.3 Handling Demonstrations by Tutor

Course Tutors should provide model briefings and demonstrations 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). An example of a handling demonstration sequence often used in practical instructor training exercises is given in Appendix H.

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.

13.4 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 pilot is experiencing difficulty. 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.

The course must provide guidance about when a trainee might benefit from a demonstration by an instructor. U/t instructors must understand 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.

13.5 Student Role Play

In all instructor training exercises 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 and CRM. (As an example, the NDB approach can be a useful exercise in which to introduce poor crew management). The Tutor's personal pride as a pilot has to be set aside; an immaculate "student" performance provides negligible instructor training value.

13.6 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.

13.7 Line Orientated Flight Training (LOFT)

It is recommended that the course include discussion about the purpose, benefits and conduct of LOFT exercises. In particular, guidance should be given on LOFT debriefing techniques and, where applicable, the use of video. A practical exercise devoted to LOFT is not required; should training providers wish to include one, an additional training day must be allocated.

13.8 Assessment of Trainee Performance

It is a requirement of the TRI course that u/t instructors are taught to continually assess a trainee 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 (i.e. a "sign-off" standard for the Form SRG1158) 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 trainee is competent to attempt a Licence Skill Test on the next detail. 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.

13.9 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 14 - Construction Of A Course Manual

14.1 Introduction

- Pre-course preparation
- Overall course objectives
- 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 roleplaying student pilot)
- Additional study material
- Glossary

14.2 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.

14.3 Forms

Specimen training report form for u/t instructor Specimen training report form for type rating student pilot Form SRG\1131 Forms SRG\1119 and 1158 Course critique form

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 15 - 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

For aeroplanes where a simulator exists, an applicant for the issue of a TRI(A) certificate that includes privileges to undertake training in aeroplane must successfully pass an assessment of competence in a simulator, as detailed in Appendix C, prior to the assessment of competence in an aeroplane.

Part 16 - Line Flying Under Supervision (FCL.910.TRI)

For TRIs with restricted privileges, i.e. simulator only, FCL.910.TRI mandates additional training for the conduct of line flying under supervision. This requirement applies only to the conduct of the first four landings following a zero flight time type rating (ZFTT) course FCL.730.A. The requirements for conducting non-ZFTT line flying under supervision are detailed in EU-OPS.

The additional training referred to above is detailed AMC1 FCL.930.TRI AEROPLANE TRAINING para (k) and (aa). Guidance for an ATO that wishes to conduct training for the purposes of FCL.910.TRI is provided in Appendix F.

Part 17 - Aeroplane Training – General Considerations

17.1 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 course.

17.2 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.

17.3 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.

17.4 Aeroplane Training

This phase should be used, if applicable, 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 18 - Revalidation of TRI and SFI Certificates

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

The requirements for revalidation of a TRI(A) or SFI Certificate are detailed in FCL.940.TRI(a)(1) or FCL.940.SFI(a) respectively.

18.2 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.

18.3 Experience

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

18.4 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.

18.5 Revalidation of TRI(A) privileges to instruct in an aeroplane

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

18.6 Assessment of Competence

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 which includes at least one hour flight time in an aeroplane for unrestricted privileges, or 30 minutes flight time in an aeroplane for privileges restricted to "no instruction for abnormal/emergency procedures to be undertaken in an aircraft". The AoC must include a minimum of 2 take-offs and landings.

18.7 Experience

Conduct one air exercise of at least 1 hour flight time comprising a minimum of 2 take-offs and landings.

18.8Refresher 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

Part 19 - Privileges to Conduct Assessments of Competence (AOC)

FCL.1005.TRE(a)(5) states that a TRE with at least 3 years experience can conduct AoC for the issue, revalidation or renewal of a TRI or SFI certificate.

FCL.1005.SFE(a)(5) states that an SFE with at least 3 years experience can conduct AoC for the issue, revalidation or renewal of an SFI certificate.

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

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

Note: The existing UK CAA qualification of a TRI Examiner will cease to have effect on 17th September 2012.

Part 20 - New TRI Courses

20.1 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 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.

20.2 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
- 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 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 21 - 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 FCL.1010.TRE(a)(4) or FCL.1010.SFE(b)(3), as applicable.

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

The following should be read in conjunction with the required content of the course as detailed in AMC1 FCL.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/downresets 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 takeoff and landing training in a type rating course
- Proficiency criteria
- EASA Part FCL subpart H and J.
- Minimum number of takeoffs and landings: experience discriminant
- CAA 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. Vmca/Vs/V2 relationships.
- Touch-and-go performance considerations
- Relationship of ASI bug settings for landing to takeoff speeds.
- Training manual limitations for minimum runway length and how they are derived.
- SOPs used in circuit training
- Training checklists
- Takeoff briefing differences (e.g. "Stop" call and RTO handling)
- Crew actions during touch and go
- Real emergencies during touch and gos
- Change of crew with engines running
- External check/cabin security /slide arming etc
- Technical Log (including change of commander)
- How much fuel to load/approx 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

- 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, autothrust 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 speedbrake/autobrake
- 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
- 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.
 - \circ When to intervene.
 - When to anticipate errors/mishandling (eg reminding student to keep heels on floor, clear of brakes, during takeoff and landing)
 - $\circ~$ When to demonstrate an exercise.
 - $\circ\,$ 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 eg crosswinds, fuel balance, 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.
- 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 (if applicable) 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 an Full Flight Simulator (FFS) qualified to CS-FSTD A Level C or D.

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.
- 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
 - o flap asymmetry during touch-and-go ground roll
 - selection of reverse thrust during touch-and-go ground roll
 - o high/excessive/prolonged/drifting landing flare
 - approaches which are:
 - high/fast
 - Iow/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)

Appendix B - 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).
- 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 EASA Part-FCL subparts H and J Exercising the privileges of an instructors certificate within an ATO Review of Form SRG\1158 Revision of report-writing LOFT/LOE

Appendix C - Assessment Of Competence For The Issue Of TRI(A) (Simulator Only) 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 EASA Part FCL

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.

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

.1 Notes

- Before commencing his briefing, the examiner must check the applicant's licence and ask for his instructor application form SRG\1131, 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.
- 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.

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.
- 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 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).
- 4.4 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.
- 4.5 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 number. The student's performance should reflect the quality and content of the instruction given.
- 4.6 Before debriefing, the examiner should ensure that the applicant has an adequate knowledge of the requirements of EASA Part FCL concerning type rating training (sub-part H) and instructor privileges, revalidation etc (sub-part J).

- 4.7 After the AoC has been completed, the examiner should complete the instructor test report and Examiner's Certificate on Form SRG\1131 and return the form to the applicant, 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..
- 4.8 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 on the Notice of Failure section of the Examiner Report Form (SRG\2199) 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
	(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 EASA Part FCL

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.
- 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 EASA Part FCL 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 the instructor test report and Examiner's Certificate on Form SRG\1131 and return the form to the applicant, 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.TRI(a)(1)(i) FCL.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 Notice of Failure section of the Examiner Report Form (SRG\2199) the minimum remedial training to be undertaken before a further attempt at the AoC.

Appendix D – Assessment Of Competence For A TRI(A) Certificate (Restricted To "No Instruction For Abnormal/Emergency Procedures To Be Undertaken In An Aircraft")

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

For initial issue, revalidation or renewal

1 - Introduction

An AoC for this purpose must be conducted in an aeroplane. 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 takeoff & 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:
- Taxying (this may determine which pilots' seats the applicant TRI and "student" occupy")
- A normal takeoff
- 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

- 3.1 Before commencing his briefing, the examiner should check the applicant TRI's pilot's licence and ask for his TRI application form (Form SRG\1131), 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.
 - .2 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 overriding 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:
- 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 Report and Examiner's Certificate on Form SRG\1131 and return the form to the applicant, 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.

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 aeroplane.

2 - Content of AoC

For the AoC the TRI will be required to:

- Plan a takeoff & 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 takeoff
 - 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.
- 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 overriding 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 Report and Examiner's Certificate on Form SRG\1131 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 Report Form (SRG\2199) the minimum remedial training to be undertaken before a further attempt at the AoC.

Appendix E - Assessment Of Competence for the Issue of a TRI(A) Certificate (Unrestricted)

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

For initial issue, revalidation or renewal

1 - Introduction

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

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 (Form SRG\1131), 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 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)
 - $\circ~$ 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 Report and Examiner's Certificate on Form SRG\1131 and return the form to the applicant. 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.

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 aeroplane.

2. Content of AoC

For the AoC the TRI will be required to:

- Plan a takeoff & 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

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 overriding 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 Report and Examiner's Certificate on Form SRG\1131 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 Report Form (SRG\2199) the minimum remedial training to be undertaken before a further attempt at the AoC.

Appendix F – Training For The Qualification To Conduct Line Flying Under Supervision Following ZFT Training. (FCL.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 under AMC2 ORA.ATO.125(k)(3)(iii) 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 AMC1 FCL.930.TRI (aa).

2. Required training

The training shall include all of the aeroplane training as detailed in AMC1 FCL.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 ZFTT to be added to his or her TRI(A) certificate. The application shall be made using form SRG\1131.

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.

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.

Appendix G – Revalidation Of TRI Certificates by Assessment Of Competence on Another Type (FCL.940.TRI(a)(4))

1. **Revalidation of Additional TRI Certificates**

- a. Following a successful TRI AoC on one type, FCL.940.TRI(a)(4) permits an examiner to revalidate, but NOT renew, all TRI(A) certificates held by the candidate.
- 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 an ATO, within the 12 months preceding the expiry date of the certificate.
- c. The application of this regulation does not though over-ride FCL.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 aeroplane 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 aeroplane 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 FCL.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 H - Practical Instructor Training In A 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.
- 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").
- 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

- 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.
- 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.

Appendix J - Reference Documents, Forms And E-Links

Documents

- EU-OPS
- EASA Aircrew Regulation Annex 1 (Part FCL)
- UK Air Navigation Order
- Aeronautical Information Circulars
- CAA Standards Document 24(A)
- CAA Standards Document 29
- CAP804

<u>Forms</u>

- Application for an Aircraft TRI or SFI Certificate (SRG\1135
- Application Form for Approval of a TRI(A) Course (SRG\1823)
- Application Form for Temporary Approval of a TRI(A) Course (SRG\1824)
- Examiner Report Form (SRG\2199)
- MPA Type Rating, Skill Test and Proficiency Check Schedule Examiner's Record (SRG\1158)
- Application for Additional Aeroplane Type/Class Rating Single/Multi Pilot and Revalidation/Renewal of UK/JAA Type/Class and or Instrument Rating (Aeroplane) (SRG\1119)