



الهيئة العامة للطيران المدني  
GENERAL CIVIL AVIATION AUTHORITY

## **CIVIL AVIATION ADVISORY PUBLICATION**

**CAAP 27**

**EXAMINERS**

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**INFORMATION AND POLICY  
REGARDING GCAA EXAMINERS (AEROPLANE)**

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## **1. INTRODUCTION**

The GCAA issues flight crew licences and ratings in accordance with the requirements of the CAR FCL regulations. The GCAA shall ensure that the applicant has qualified by reason of knowledge, competence and skill to hold the appropriate license or rating or certificate.

The GCAA will certify suitably experienced and qualified pilots as Examiners to conduct the necessary Skill test and Proficiency checks. In addition, the GCAA will certify as Senior Examiners suitably experienced and qualified pilots of integrity to conduct Assessment of Competency for the Initial, Revalidation and change of type on Type Rating Examiners (TRE) and Synthetic Flight Examiners (SFE) Certificate.

## **2. PURPOSE**

The purpose of this CAAP is to provide Policy and Guidance for Examiners as well Instructions and Procedures for Senior Examiners on requirements to the existing CAR OPS 1 concerning examiners on airplane. These requirements are therefore complementary to CAR OPS 1 and take into considerations provisions of PART II – CAR FCL of February 2014.

It addresses requirements related to roles, privileges, training, limitations, conduct of test/check and tolerances applicable to Type Rating Examiners as well as the approval process for Examiners and Senior Examiners.

## **3. STATUS OF THIS CAAP**

This is a complete re -issue of CAAP 27 and is published as a result of NPA13-2014 . Further changes to the NPA have been incorporated based on the Comments Response Document.

## **4. APPLICABILITY**

This guidance and policy material applies to all UAE operators, training organisations and holders of Examiner and Senior Examiners (aeroplane) status.

Nothing in this document is intended to conflict with the GCAA CAR Ops 1 and Flight Crew Licensing Regulations CAR FCL Part II or UAE statute law where applicable. Whilst every effort is made to ensure that all information is correct at the time of publication, the GCAA 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.

This CAAP shall enter into force with effect from 26<sup>th</sup> October 2014. Organizations are to comply fully with this CAAP by 12<sup>th</sup> June 2015.

## **5. RESERVED**

## **6. EXAMINER PRINCIPLES AND CATEGORIZATIONS**

An examiner shall hold a certificate detailing the privileges that he may exercise. In this role, the examiner shall take into consideration that he is performing a function on behalf of GCAA and in accordance with UAE Aviation Legislation and regulations even when conducting skills tests (ST) or proficiency checks (PC) within his own company.

6.1. Examiner will be responsible for the following:

- (a) Raising the standards of awareness and performance of the flight crew.
- (b) Ensuring that the operator's test/check complies with legal requirements.
- (c) Provide feedback to the company.
- (d) Complying with the specified CAR-FCL-Part II regulations and applicable provisions of CAAP 27.
- (e) Being a role model for the crew under check.

6.2. Tests/proficiency checks carried out on UAE issued license holders shall be conducted in accordance with this document. Knowledge of this document and its practical application is vital for the examiner's conduct and assessment of skill tests or proficiency checks.

## **7. PRE REQUISITES AND REQUIREMENTS**

7.1. **Pre requisites and General Requirements**

- (a) Examiners shall:
  - i) hold an equivalent licence, rating or certificate to the ones for which they are authorized to conduct skill tests or proficiency checks or Assessment of Competencies and, unless specified otherwise, the privilege to instruct for them and
  - ii) be qualified to act as pilot-in-command of the aircraft during a skill test or proficiency check or assessment of competency when conducted on the aircraft.
  - iii) Note: unless authorized by this CAAP, the licence shall be valid.
  - iv) A TRE shall hold a valid class one medical Certificate.
  - v) SFE shall satisfy the prerequisites as detailed in PART FCL – 10.10. SFE
- (b) Applicant for Examiner Certificate shall complete an examiner standardization course provided by the GCAA or by a GCAA approved ATO and approved by the GCAA.
- (c) Examiner shall demonstrate to possess relevant knowledge, background and appropriate experience related to the privileges of an examiner; this may include the personality and character of the applicant and their cooperation with the GCAA.
- (d) Examiner shall not have been subject to any sanctions including suspension, limitation or revocation of any of their licenses, ratings or certificates for the last three years.
- (e) Applicants for an examiner certificate shall demonstrate their competence to GCAA or a Senior Examiner specifically certified, by the GCAA, through the conduct of, at least one, skill test,

proficiency check or assessment of competence in the examiner role for which privileges are sought, including briefing, conduct of the skill test, proficiency check or assessment of competence, and assessment of the person to whom the test, check or assessment is given, debriefing and recording documentation. This 'Examiner Authorisation Acceptance Test' shall be supervised by GCAA or by a Senior Examiner specifically certified by the GCAA for this purpose.

## **7.2. Special Conditions**

- (a) In the case of introduction of a new type of aircraft in a UAE operator's fleet, when compliance with the Examiner's requirements is not possible, the GCAA may issue a specific certificate giving privileges for the conduct of skill tests and proficiency checks. Such a certificate shall be limited to the skill tests and proficiency checks necessary for the introduction of the new type of aircraft and its validity shall not, in any case, exceed 1 year. This provision doesn't apply on new type of aircraft which is considered a common type with existing type of aircraft.

## **7.3. Examiner Assessment Of Competence**

- (a) EAoC is intended for the examiner to demonstrate his competence to exercise the privileges of his examiner certificate.
- (b) The requirements regarding EAoC are as per appendix 1.

## **7.4. Examiners Validity Revalidation and Renewal of TRE Certificate**

- (a) An examiner's certificate is valid for not more than three years and shall expire at the last day of the month. Examiners revalidation is at the discretion of the GCAA.
- (b) All revalidation entries are made by the GCAA.
- (c) The requirements for revalidation and renewal are as per Appendix 2.

## **7.5. Examiners- Privileges and Conditions**

The privileges of Examiners are as follows.

- (a) Skill tests for initial issue of Type Ratings
- (b) Proficiency checks for revalidation or renewal of Type ratings
- (c) Proficiency checks for revalidation or Renewal of IRs
- (d) Skill tests for ATPL issue
- (e) Skill tests for MPL issue provided CAR FCL requirements are complied with.
- (f) AoC for issue, revalidation and renewal of TRI or SFI certificate provided privileges stipulated in CAR FCL are satisfied.

## **8. CONDUCT OF FLIGHT TEST/CHECK**

### **8.1. Purpose of Flight Test/Check**

The purpose of the flight test/check is to:

- (a) Determine whether, by practical demonstration, the applicant has reached/maintained the required level of knowledge and skill for the rating;
- (b) Improve the standards of instruction and training by feedback of those exercises and procedures which are commonly failed; and
- (c) Ensure that safety standards are maintained and where possible improved, throughout the aviation industry, by requiring the application of sound airmanship and flight discipline.

### **8.2. Conduct of Flight Test/check**

The conduct of the flight test/check is as per appendix 3

### **8.3. Conduct of Examiner during Flight Test/check**

- (a) Examiners shall ensure that the test/check is completed efficiently and in a timely manner. The examiner shall establish a friendly and relaxed atmosphere, which will enable the applicant to demonstrate his abilities fully. The attitude and approach of the examiner can do much to overcome the stress the candidate pilot may experience prior the check.
- (b) It is essential that all examiners apply a common standard. The examiner shall exercise sound judgment and impartiality throughout. To assist with this, each examiner should maintain a record of the test/check so that all aspects may be debriefed comprehensively.
- (c) Examiners may change the sequence of sections or manoeuvres to achieve an orderly and efficient flow of a practical flight having regard to the existing conditions or circumstances but shall not miss out any items.

### **8.4. Training alongside testing**

- (a) Proactive Training

When carrying out the mandatory proficiency check items 3.4 to 3.6 selected from the check form and combining this test/check with an OPC, regulations requires an element of training as well as checking. This training applies to the proficiency checks and not to the skill test. The skill test assumes that the applicant already has the required knowledge and ability. It is performed when all training has been completed.

It is acceptable to GCAA, and often necessary and desirable, to train difficult and complex failures or exercises (usually multiple events: e.g. total electrics failure, total hydraulics failure). The examiner may wish to freeze the simulator to point out and explain by taking some time the indications of the failure. However, the ability of the pilot to read and apply a straight forward checklist on any routine aspects of the failure or exercises shall never be in question. This training applies to Proficiency checks and not to the skill tests. The skill test assumes that the applicant already has the required knowledge and ability.

Exercises (e.g. TCAS RA, pilot incapacitation), which line pilots are routinely expected to manage successfully without training input, should be subject to check in the accepted manner.

(b) Reactive or Remedial Training

The skill test/proficiency check is a “two attempt” test or check, with all items in attempt number one having been attempted by the applicant before any re-testing/re-checking can occur in attempt number two.

That implies retraining will have to be given before this re-testing/re-checking.

Any retraining deemed necessary shall precede re-testing/re-checking and this retraining can be given at any appropriate time prior to the re-test/re-check – it does not have to be performed immediately prior to any re-test/re-check.

(c) Training Input during LPC/OPC Briefing

It is perfectly acceptable and GCAA highly recommends examiners to include some training input during the briefing. Examiners though exercised caution when responding to a question from an applicant who is seeking an answer on how to carry out a particular approach to be flown during the test/check. In such a case an appropriate response would be to facilitate a generic understanding of the profile or procedure for example, single engine profiles or non-precision approaches.

It is essential to make clear in the opening part of the examiner’s briefing to the applicants which elements of the day’s proceedings are to be assessed as part of the test/check.

In simulators, tests/checks shall be based on real-time scenarios. This will provide great benefit in improved realism and most importantly the need for crews to make decisions and act accordingly as they would have done in a real flight scenario.

Sub-standard performance at any time, even when it occurs during training or relates to a stand in pilot who is not subject to formal assessment, cannot be ignored. Any crew member exhibiting such performance will be required to undergo remedial training before release back to normal operations.

(d) Summary:

Training may be integrated with testing/checking. When training is combined with a test/check, the examiner shall indicate clearly when moving from test/check to training and vice versa. The Examiner shall ensure that the applicant is not confused when training and checking is carried out.

The applicant shall know, in advance, what is being assessed.

During briefing examiners must be very careful with the terminology they use; e.g. LOFT, training, licensing skill test or licensing/operator proficiency checks.

Licensing Skill Test and Licensing Proficiency Check

## 9. LICENSING SKILL TEST

The skill test for the type rating shall be carried out when all the training elements ( Practical training) have been satisfactory completed. The test will be carried out by an examiner who has not been involved in the training. The examiner may test any item but shall include those items marked as “M” which are mandatory.

The applicant shall pass all items of the skills tests within six months of commencing the type rating course. For the MPA and SP HPC (A) the test will grant an instrument rating for the type and may be combined with the OPC.

Licensing Proficiency check

All above applies except the training (practical training as well items marked “M skill test only”.

GCAA requires that NON ATQP operators establish an aircraft / FSTD training program which ensures that all major failures of aircraft systems and associated procedures will have been covered in the preceding three year period. Operators that conduct their recurrent training and checking program as part of an advance approved ATQP may have an alternative training program.

Skill test / Proficiency check Retraining

After a partial pass the examiner may recommend additional training. After a failed test or check retraining is mandatory as determined by the examiner. This retraining can be given at any time but shall be completed before any re-test items are flown. There is no legal limit to the number of Skill tests/ Proficiency checks may be attempted. Operator may have their own policy on such matters.

### 9.1. Performance Criteria

The Examiner shall ensure that the applicant can demonstrate the following abilities:

- (a) Operate the aeroplane within its limitations.
- (b) Complete all manoeuvres with smoothness and accuracy.
- (c) Exercise good judgment and airmanship.
- (d) Apply aeronautical knowledge of procedures and regulations as currently applicable.
- (e) Maintain control of the aeroplane at all times in a manner such that the successful outcome of a procedure or man oeuvre is never seriously in doubt. The applicant's airmanship shall be assessed with each exercise and this shall include lookout, checks and drills, cockpit management, RTF and ATC liaison, fuel management, icing precautions, planning and use of airspace.
- (f) Manage the crew.
- (g) Maintain a general survey of the operation by appropriate supervision.
- (h) Set priorities and make decisions in accordance with safety aspects and relevant rules and regulations appropriate to the operational situation, including emergencies.
- (i) Understand and apply crew co-ordination and incapacitation procedures.
- (j) Communicate effectively with other crewmembers.
- (k) Knowledge of the emergency equipment and procedures sufficient to ensure the safety of passengers.



## 9.2. Flight Test Tolerance

The flight test/check tolerance is as per Appendix 4.

## 9.3. Briefing and debriefing

Refer to appendix 5 for the contents of pre-flight briefing and debriefing

# 10. SENIOR EXAMINERS

The following instructions are for Senior Examiners (SEs) conducting an Assessment of Competency (AoC) for the revalidation/ change of type on Type Rating Examiners ( TREs) and Synthetic Flight Examiners in Simulators.

The Qualification of SEs derives from CAR FCL 1020.

This establishes the need for Standardization of examiners carried out by GCAA Flight Operations Inspectors and Senior Examiners.

SEs is required to maintain high professional standards and hold an examiner certificate detailing the privileges that may be exercised.

### Senior Examiners Privileges

- a) A Senior Examiner can conduct AoC for the initial and revalidation of a SFE/TRE certificate in an approved simulator.
- b) A SE may at the discretion of GCAA Flight Operations Director, conduct an assessment to renew a SFE/TRE up to two years from the date that privileges were last exercised.
- c) A SE can conduct an AOC for a change of aircraft type on current SFE/TRE certificate.
- d) A SE may be authorized on more than one type provided that he is a current SFE/TRE on the additional type(s).

*Note: GCAA approval shall be obtained from the operators/ ATO inspector prior the conduct of an initial Assessment of Competence on SFE/TRE. It is GCAA policy that all initial SFE/TRE AoC are conducted by GCAA Flight Operation Inspector when is possible.*

### Application for Senior Examiner

SFE/TRE who is seeking authorization to conduct AoCs on SFEs/TREs shall meet the following:

- Hold a SFE/TRE certificate on the type requested for Senior Examiner authorization.
- Be sponsored by an AOC holder, ATO which operates the types of aircraft or simulator for which the applicant holds a current SFE/TRE certificate.
- Demonstrate to the GCAA that arrangements are in place to ensure that he can maintain a minimum recency of 2 AoCs per year.

Note: The initial / revalidation application as a Senior Examiner shall be made via email providing all required supportive documentation to the operator / ATO GCCA Flight Operations Inspector.

#### 10.1. License and Experience Requirements

- (a) The applicant must hold or have held an ATPL.
- (b) Must hold a current SFE/TRE certificate on the type requested for Senior Examiners authorization.

i) Senior Examiner sponsored by an AOC operator:

The applicant must:

- Have a minimum of three years' experience as a SFE/TRE immediately preceding the application;
- Produce a record of 12 tests conducted as a SFE/TRE on the aircraft type;
- Remain in line operating recency as a captain whilst exercising the privileges of his senior examiner authorization.

ii) Senior Examiner sponsored by an ATO (Non AOC): The applicant must:

- Have a minimum of three years' experience as a SFE/TRE immediately preceding the application;
- Produce a record of 12 tests conducted as a SFE/TRE on the aircraft type;
- Pass a pre course SFE/TRE observation on the initial type.

Note: The GCAA may elect to conduct a check of the candidate conducting an LST, LPC, and OPC prior to acceptance for the Senior Examiner course.

#### 10.2. Senior Examiner Responsibilities

A Senior Examiner will be responsible for the following:

- (a) Developing and promoting consistent, and where applicable, cross-fleet standards
- (b) Ensuring the involvement of the SFE/TREs in maintaining standards
- (c) Raising the standards of awareness and performance of the flight crew
- (d) Ensuring that the current company test/check is efficient and complies with legal requirements

#### 10.3. Senior Examiner Training Process

- (a) Pre-course study

Before attending the Senior Examiner Training Course, Senior Examiner applicants will be expected to have a working knowledge of current UAE legislation. A pre-course study guide is enclosed for reference – see Appendix 6.

- (b) Senior Examiner Training Course

The course will last for one day. This course can be delivered by the GCAA or by the AOC or ATO

provided the training course is approved by the GCAA.

The course includes the following main elements:

- i) Legislation;
- ii) Requirements for training and testing;
- iii) Briefing and debriefing the SFE/TRE and the crew;
- iv) Assessment of SFE/TRE competence;
- v) Roles of the Senior Examiner;
- vi) GCAA/ Operator administrative requirements, documentation and recording, liability and data protection in accordance with relevant organizations requirements and UAE data protection legislation.

#### 10.4. **Certification procedure**

After completing the Senior Examiner training course, the candidate will be required to observe a GCAA Flight Operations Inspector (FOI) / Senior Examiner (SE) conducting an SFE/TRE AoC ('shadowing observation').

On completion of the shadowing observation, candidates will undertake a Senior Examiner practice observation of an SFE/TRE AoC under the supervision of a GCAA Flight Operations Inspector (FOI) / Senior Examiner (SE).

Following the practice observation, a GCAA Flight Operations Inspector or a Senior Examiner will conduct the applicant Senior Examiner AoC, on an SFE/TRE.

Note: The AoC must be conducted within a year of the Senior Examiner Training Course. Failure to comply will result in the prospective Senior Examiner having to attend another Senior Examiner Training Course.

The SFE/TRE candidate for this Senior Examiner AoC must not be a Senior Examiner. When arranging this test, the Senior Examiner must ensure that there is sufficient seating for all occupants in the simulator and that all are able to listen to all communications.

The Senior Examiner certificate will be issued by GCAA following a successful AoC.

#### 10.5. **Senior Examiner Three-Yearly Assessment of Competency**

A Senior Examiner certificate will be valid for a period of not more than three years. Thereafter revalidation will be at the discretion of the GCAA and subject to the following:

- (a) The Senior Examiner should have conducted at least two AoCs in every yearly period within the three-year authorization. Evidence of these checks must be made available at the Senior Examiner's AoC to verify the conduct of the AoCs. If there is a likelihood that the Senior Examiner cannot comply, he should contact GCAA Flight Operations Director.
- (b) For revalidation, one of the AoCs conducted by the Senior Examiner within the last 12 months of the authorization period will be observed by a GCAA Flight Operations Inspector or a Senior Examiner.

- (c) The Senior Examiner shall attend a Senior Examiners Refresher Seminar within the last 12 months of the authorization period organized by GCAA Flight Operations department or an approved Senior Examiners Refresher Seminar approved by GCAA.
- (d) Senior Examiners may make arrangements for an AoC at any mutually convenient time during the 12 months preceding the expiry date. In this case the next three-year validity will run from the expiry date rather than the date of test.
- (e) The Senior Examiner's authorization and his SFE/TRE authorization cannot be checked simultaneously.

The aim of the Senior Examiner conducting an AoC on a candidate SFE/TRE is to assess the latter's competency to continue to exercise the privileges of his examiner certificate.

In the event that a Senior Examiner fails an AoC, he will be issued with a Notice of Failure and must undergo suitable retraining as determined by GCAA before being rechecked. In the event that he holds Senior Examiner authorization for another type(s), he will not be able to exercise the privileges of a Senior Examiner on any type.

When a Senior Examiner transfers to a different aircraft type he will qualify on that type as a SFE/TRE by the normal process. Any transfer of Senior Examiner authorization is subject to application and administrative action only - no observation is required. However, the expiry date will be unchanged from the Senior Examiner authorization for the previous type.

GCAA observations for Senior Examiner revalidation will be based on the three-year validity cycle irrespective of interim change of type.

The GCAA Flight Operations Inspectors will monitor the standard of Senior Examiners by random checks of a percentage of all AoCs.

#### 10.6. **Standards to be followed**

An LST/LPC is carried out on UAE licensed pilots in accordance with the requirements outlined in CAAP 27.

CAAP 27 provides instructions to examiners, and as such is the definitive guide on the conduct of pilot checks for UAE SFE/TREs. As Senior Examiners are also experienced SFE/TREs they are expected to be fully familiar and competent with the requirements set in CAAP 27 as well as its practical application, which are vital for the Senior Examiner's conduct and assessment of the SFE/TRE during the AoC.

#### 10.7. **Conduct of the Senior Examiner when conducting an AoC**

The Senior Examiner must provide a role model for the SFE/TRE, and demonstrate all the qualities and skills expected of an examiner.

The check conducted by the SFE/TRE candidate (LPC, LST and/or OPC), and observed by the Senior Examiner, must always be a genuine check of at least one of the crew members.

##### **Briefing the SFE/TRE**

- Arrive in good time, so as to be able to brief the SFE/TRE away from the crew. Brief the purpose and format of the check, explaining that the SFE/TRE can expect an oral check of his knowledge of CAAP 27 and GCAA rules and regulations pertaining to his SFE/TRE authorisation.

- Confirm details of the simulator and crew. Ensure the crew is representative, properly constituted and the check being observed is suitable.
- The Senior Examiner's principal interest is the performance of the SFE/TRE, who will have to demonstrate competence as an examiner of both the technical and non- technical elements of the candidate(s) performance.
- Explain that on completion of the simulator detail the Senior Examiner and the SFE/TRE will confer before the debriefing of the crew. The SFE/TRE must not announce any result without prior consultation with the Senior Examiner: this will ensure a common assessment standard.
- Confirm the contents of the test or check to be observed, and how it will be achieved.
- Check if there are any constraints on the day; e.g. time/sickness/simulator problems.
- Remind the SFE/TRE that the briefing and debriefing are to be directed to the crew, not to the Senior Examiner. The Senior Examiner will emphasize that he will take no part in the conduct of the detail.
- The SFE/TRE should be told to have no hesitation in telling the Senior Examiner if he is in the way at any time.
- Obtain copies of any airfield plates and checklists being used in paper or electronic format.
- Check that a headset is available for the Senior Examiner.
- Explain that the Senior Examiner will need to check the SFE/TRE's licence and the crew's licences after the SFE/TRE has checked them.
- The whole detail must be observed in order to assess the SFE/TRE's management of time and to allow time for a full debrief.
- Make sure that the SFE/TRE has enough information to carry out the check without reference to the Senior Examiner.
- Ask the SFE/TRE for his record of tests.
- Ensure that a full Health and Safety briefing for both the briefing room and the simulator is given by the SFE/TRE.

Note: GCAA Flight Operations puts a strong emphasis on Health and Safety at every stage of pilot training/checking. Simulator safety is particularly important. Knowledge of escape procedures and safety devices is essential. The Senior Examiner has the responsibility to supervise and assess the entire Health and Safety briefing.

- Ask the SFE/TRE if he has any questions.
- Confirm that he has been adequately briefed.

#### 10.8. **Senior Examiner's Introduction to Crew**

The Senior Examiner will explain that he is conducting an AoC (one detail only) and therefore needs to observe the SFE/TRE conducting the detail. Reassure the crew that the SFE/TRE will conduct a normal

company check, will apply normal standards and will make all decisions during the detail without reference to the Senior Examiner.

In order to ensure common standards the Senior Examiner will explain that the SFE/TRE will be asked to give a brief pre view of his assessment prior to his debriefing of the crew.

Explain that the Senior Examiner will need to record some details from the crew's licences after the SFE/TRE has checked them.

The Senior Examiner should then take a position where he is least prominent.

#### 10.9. **Conduct of Senior Examiner during the SFE/TRE's Briefing to the Crew**

Allow the SFE/TRE to brief uninterrupted.

Make sure that he is briefing the crew not the Senior Examiner.

Make notes on the points the Senior Examiner wishes to debrief.

Ensure that any major omission of the SFE /TRE briefing is covered before entering the simulator.

#### 10.10. **Conduct of the Simulator Detail**

The Senior Examiner will observe that the SFE/TRE checks the simulator qualification and user approval.

Check the SFE/TRE's initial entry into the technical log.

Observe that the SFE/TRE checks the serviceability of the simulator, both visually and with regards to the technical log.

During a simulator detail, the Senior Examiner will make every effort to be an "invisible" observer and ensure that his presence does not interfere with the SFE/TRE's ability to carry out his duties.

The Senior Examiner should in no way intervene to change the flow of the simulator session, the SFE/TRE's management of the detail or even to ask questions of any participant. He should make notes for confirmation of actions by the SFE/TRE at the post session debrief of the SFE/TRE carried out prior to the crew debrief.

The Senior Examiner will make notes on the performance of the crew as if he were conducting the test/check and make notes on the SFE/TRE's performance.

The Senior Examiner will monitor the content and conduct of the test/check and the use of simulator functions to create realistic training and checking.

The SFE/TRE's standard of radiotelephony simulation of the ATC environment and procedures should be assessed.

#### 10.11. **Post-simulator Procedures**

Immediately after exiting the simulator, the crew should be encouraged to retire to the briefing room or refreshment area.

No indication of the test result should be given at this stage.

The SFE/TRE should be given time to complete the simulator technical log – this should be checked by the Senior Examiner to ensure that a correct entry has been made.

The Senior Examiner should now ask the SFE/TRE for a summary of his assessment.

He must not rush the SFE/TRE - but should allow him to review his notes and reach his conclusions before telling the Senior Examiner the result.

If the assessment is substantially the same as that of the Senior Examiner, the SFE/TRE should be asked to debrief the crew.

However, when the SFE/TRE's assessment is significantly different from the Senior Examiner's, the result should be discussed and the standards explained to the SFE/TRE. A SFE/TRE will sometimes be overcritical because he is being observed. Providing the Senior Examiner is satisfied that correct standards will be applied, he may then allow the SFE/TRE to carry out the debriefing and, if all other aspects of the exercise are satisfactory, the overall outcome of the AoC may be ruled as satisfactory.

If the Senior Examiner is not satisfied that the SFE/TRE has demonstrated the required standard in the conduct of the check or assessment, the Senior Examiner should debrief the crew and complete the paperwork.

#### 10.12. **SFE/TRE's Debrief of the Crew**

The Senior Examiner should:

- (a) Note the format and structure of the debriefing;
- (b) Effective and accurate identification of debrief items and training advice.
- (c) Effective analysis of CRM is a requirement for the revalidation of the SFE/TRE's certificate. The Senior Examiner should check that appropriate use is made of facilitation techniques, with reference to the Behavioural Marker System in use.
- (d) When the SFE/TRE has completed his debriefing, the Senior Examiner may discuss and clarify any points arising from the detail. This should be brief and not take the form of a second debriefing to the crew.

#### 10.13. **SFE/TRE's Administration**

The Senior Examiner should observe the correct completion of the following items, as applicable:

- a) All GCAA and Operators Check forms;
- b) Certificates of Revalidation signed in crew's licences;
- c) All other required form(s) or documentation (in paper or electronic format) where applicable.

#### 10.14. **Senior Examiner's check of SFE/TRE's Knowledge**

The Senior Examiner should use oral questioning to establish the SFE/TRE's knowledge of regulations. Relevant questions may arise from the observed check, and recent changes to regulations should also be checked.

**10.15. Senior Examiner's Debrief of SFE/TRE**

The SFE/TRE must be comprehensively debriefed and any items that were below standard fully explored.

The debriefing techniques laid out in CAAP 27 must be used. The appropriate use of facilitation must be included as an exemplary demonstration to the SFE/TRE.

Discuss any company procedures that may require modification.

**10.16. Senior Examiner's Administration – General**

Maintain a personal record of checks conducted. Retain notes taken during the AoC and a copy of the SE report in paper or electronic format.

The SE reports should give a synopsis of the SFE/TRE's performance.

"Satisfactory" may be used, but as a rule, relevant and detailed comments will be appropriate. It is desirable that some reference be made to the SFE/TRE's assessment of CRM.

The synopses in the SE report will be helpful to the GCAA for assessing an applicant's suitability for Senior Examiner appointment. The narrative must be consistent with pass/fail assessment.

**10.17. Senior Examiner's Administration for Initial / Revalidation of SFE/TRE**

Pass: Send the SE report to GCAA Flight Operations Inspector.

Advise the SFE/TRE that he will receive his/her new certificate from GCAA following a formal application by the organization to the GCAA Flight Operations Department. TREs and SFEs should note that examining privileges may only be exercised when the associated instructor certificate is valid.

Fail: Send the SE report to GCAA Flight Operations Inspector. The SE report should contain clear recommendations for required retraining and retesting. This will assist the GCAA Flight Operation Inspector in giving suitable guidance to the company Training Department.

Notice of Failure - One copy to candidate, one copy to Flight GCAA FO and one copy to be retained by the Senior Examiner.

**10.18. Recurrent Development Training**

To maintain the privileges of their authorization, Senior Examiners are required to attend a refresher seminar during the last year of the validity period of their Examiner Certificate. This will be organized by GCAA Flight Operations or through approved courses from AOC or ATO organizations. The refresher seminar can be completed after the AoC but before the expiry of the certificate.



## **APPENDIX 1 – Requirements on Examiners AoC**

### **1. General**

The crew under test/check shall be representative and properly constituted. The test/check shall be a skill test, proficiency check, operator proficiency check or a combination of these. The whole detail shall be observed in order to assess the examiner's management of time and to allow time for a full debriefing.

Crew Resource Management (CRM) issues will always arise and the examiner will be expected to address them appropriately so that his effectiveness in assessing non-technical skills can be confirmed.

When arranging a test, the examiner shall ensure that there is sufficient seating for all occupants in the simulator and that the GCAA Flight Operations Inspector or Senior Examiner is able to listen to all communications.

### **2. The Format of the Examiners AoC:**

The GCAA Flight Operations Inspector or SE will brief the examiner under assessment, will firstly outline the purpose and format of the assessment and will then introduce himself to the crew and explain his presence.

Prior to the Simulator detail, the examiner under assessment will:

- (a) Give a Health and Safety briefing for the briefing room
- (b) Brief the crew for the test/check.
- (c) Check the crew's licences.

### **3. Conduct of the Simulator Detail:**

The examiner under assessment will:

- (a) Check the simulator qualification and associated approvals.
- (b) Complete the initial entry in the technical log.
- (c) Check the serviceability of the simulator, both visually and with regards to the technical log.
- (d) Give a Health and Safety briefing for the simulator even if it is day two of the check.
- (e) Make effective use of available simulator functions and time to create realistic training and checking.
- (f) Use standard radiotelephony and correctly simulate the Air Traffic Control (ATC) environment and procedures.

Note: GCAA Flight Operations puts a strong emphasis on Health and Safety at every stage of pilot training/checking. Simulator safety is particularly important. Knowledge of escape procedures and safety devices is essential. The Senior Examiner has the responsibility to supervise and assess the entire Health and Safety briefing.

4. Post-simulator Procedures:

- (a) Immediately after exiting the simulator, the crew should be encouraged to retire to the briefing room or refreshment area. No indication of the test result should be given at this stage.
- (b) The examiner under assessment will complete the simulator technical log.
- (c) The examiner under assessment will be given time to review his real-time notes and then give the GCAA Flight Operations Inspectors or Senior Examiner a summary of his assessment.
- (d) Then the GCAA Flight Operations Inspectors or Senior Examiner will give the examiner under assessment time to formulate his debriefing.
- (e) The examiner under assessment will debrief the crew.
- (f) When the examiner under assessment has completed his debriefing, the GCAA Flight Operations Inspectors or Senior Examiner may discuss and clarify any points arising from the detail.
- (g) The examiner under assessment will have an oral check of his knowledge of rules and regulations pertaining to the examiner certificate.
- (h) The GCAA Flight Operations Inspectors or Senior Examiner will check the correct completion of check forms, certificates of revalidation etc.
- (i) The GCAA Flight Operations Inspectors or Senior Examiner will debrief the examiner under assessment.

5. EXAMINER VALIDITY

SFI/TRI certificates shall be valid for three years and valid until the last day of the month and shall be revalidated in accordance with the provisions of CAR FCL- Subpart J- Instructors.

TRE and SFE certificates shall be valid for three years and valid until the last day of the month and shall be revalidated in accordance with the provisions of CAR FCL Subpart K –Examiners.

Note: A TRI who is also a TRE may have different expiry dates for the two qualifications. TREs should note that examiners privileges may only be exercised when the TRI qualification is valid.

## Appendix 2 – Requirements on Examiner revalidation

1. An examiner certificate shall be revalidated when the holder has, during the validity period of the certificate:
  - (a) Conducted at least two skill tests, proficiency checks or assessments of competence every year on each type of aircraft he is certified.
  - (b) In the event that the required recency is not met the affected examiner should receive refresher ground training and then be observed conducting a full license proficiency check under supervision of a GCAA Flight Operations Inspector or Senior Examiner who would then confirm the examiners competence to permit continued use of privileges.
  - (c) The examiner shall have attended an examiner refresher seminar provided by the GCAA or by an approved ATO during the last year of validity. The Examiners refresher seminar may be taken after the AoC but before the expiry of the certificate.
  - (d) One of the skill tests or proficiency checks conducted by the Examiner within the last year of the validity period will be observed by a GCAA Flight Operations Inspector or by a Senior Examiner specifically authorised by the GCAA for this purpose.
  - (e) The check will be carried out using the same format as described above for the initial EAoC.
  - (f) GCAA Flight Operations Inspectors will make routine interim checks, sometimes without notice to the Examiner primarily for liaison and standardization purposes. Continued certification will depend on a satisfactory standard as an examiner.
  - (g) The examiner shall demonstrate continued compliance with CAR FCL.1010 Prerequisites for Examiner and CAR FCL.1030 Conduct of skill test, proficiency checks and assessments of competence.
  - (h) If the EAoC is conducted in the simulator then the examiner privileges will be restricted to simulator only. This restriction will be lifted when the examiner has conducted the EAoC in the aircraft.
  - (i) If the examiner has both simulator and aircraft privileges the EAoC conducted in the aircraft will automatically revalidate the simulator privileges.
2. Examiner renewal
  - 2.1 If an examiner certificate has expired, the applicant will be required to attend an examiner refresher seminar within the previous 12 months from the date of application as well as undertake an Examiners AoC.
  - 2.2 Administration Procedures for an EAoC:
    - (a) Pass:

GCAA Flight Operations Inspector or Senior Examiner will complete and sign the EAoC report and GCAA will issue the SFE/ TRE authorization certificate following a formal eservice application.
    - (b) Fail:

GCAA Flight Operations Inspector or Senior Examiner should give to the examiner under assessment one copy of EAoC report.

### Appendix 3 – Conduct of Flight Test/check

1. When conducting the test/check or AoC examiners shall;
  - (a) Ensure no language barriers exist;
  - (b) Ensure the applicant complies with all the qualifications, training and experience requirements;
  - (c) Ensure the applicant has completed at least 10 route sectors as pilot of the relevant type or class of aeroplane, or one route sector with an examiner during the period of validity of the rating. This may be done during the test and shall consist of a take-off, departure, a sector of not less than 15 minutes, arrival, approach and landing. The examiner shall ensure that a complete cycle of normal checks has been carried out;

*Note: A pilot working for an approved commercial air transport operator who has passed the OPC combined with an LPC is exempt from this requirement.)*

- (d) Ensure the applicant is made aware of the consequences of providing incomplete, inaccurate or false information related to their training and flight experience;
  - (e) Revalidate the IR (A) as part of a combined type and IR skill test or proficiency check.
2. After completing the test/check or AoC examiners shall;
  - (a) Maintain records for a period of five years for all skill tests, proficiency checks and assessments of competence performed and their results. This record shall show the date of the event, the applicant's name, type of event, the aircraft or simulator code used the result and confirmation that the licence was signed.
  - (b) The test/check is a two-attempt test/check. The applicant should fly all items at attempt number one prior to retesting any item (attempt number two). There may be some exceptions. When conducting the test/check in an aircraft, it may be inappropriate or impossible to complete the first attempt due to ATC or external influences. This flexibility would not be appropriate or required during simulator testing/checking.
  - (c) Failure in more than five items at the first attempt will require the applicant to take the entire test/check again. Any applicant failing not more than five items shall take the failed items again.
  - (d) Failure in any item of the re-test/re-check (attempt number two) including those items that have been passed at a previous attempt, will require the applicant to take the entire test/check again.

#### 3. First (1) Attempt.

If the applicant is in the process of completing his first attempt at the test/check and he fails an item that he has previously passed, it is now recorded as a fail at attempt number one. This could mean overwriting a previous examiner's entry on the form.

#### 4. Second (2) Attempt.

CAR FCL states "failure in any item of the re-test/re-check including those items that have been passed at a previous attempt will require the applicant to take the entire test/check again". It is important to note that the attempt number one must be completed in total. If there are any failed items, the examiner carries out attempt number two. In such a case the above requirement will

apply. It is therefore advisable to avoid flying a manoeuvre that the applicant has already passed. For example, in a simulator, the aircraft could be airborne repositioned and put in position freeze, or in the case of a failed go-around use a different type of approach to any previously assessed as a way to get to minima.

In case the candidate is going to fly something previously passed and it is to be assessed, the applicant shall be briefed accordingly.

If the skill test/proficiency check is terminated for reasons considered adequate by the examiner only those sections not completed shall be tested in a further flight. If there is a good reason that a check cannot be continued, the applicant may return to line operations providing that the applicant has not failed any item, and the rating has not expired. If any items were failed on the first flight, all items not completed on the first attempt shall be tested separately, before any re-test is undertaken.

At attempt number one the examiner may use his discretion to repeat any item(s) of the test/check once. The option to repeat any item is not a right of the applicant. As general guidance the examiner should only exercise his discretion to repeat an item when he considers that the applicant has made a minor error and that the error can be corrected by debriefing. This discretion should not be used if further training is required. If retraining is required it should be done prior to a retest, i.e. a second attempt. Repeats may not be carried forward to another simulator detail/flight, unless the test was originally planned as a two-day event. Repeats shall not be passed on to another examiner. Retest item(s), attempt number two shall not be repeated. The applicant should be aware of what he did wrong prior to repeating the item.

Although technically all items of the test schedule may be repeated once, this is not in the spirit of the repeat discretion. If the applicant's performance is such that several items need repeating, he is clearly not up to the required standard and the discretion to repeat should not be exercised further. Repeats are not recorded on the relevant GCAA form but shall be recorded on company paperwork.

If an applicant fails to achieve a satisfactory standard in an item, he will be re-tested in that item. Such re-tests shall be indicated on company training records and the GCAA form. The examiner may stop the test/check at any stage if it is considered that the applicant's competency requires a complete re-test or re-check.

In the event that the examiner considers that the applicant was not performing satisfactorily due to any external influence or distraction then the exercise should not be assessed.

If a pilot has presented himself for check and has not declared himself unfit prior to the test, it is assumed that the pilot has presented himself fit for the flight. It is not acceptable for him to complain that he was unwell after completion of the test.

The skill test/proficiency check format for the test/check is intended to simulate a practical flight, i.e. commercial air transport flight.

Planning and preparation shall be completed by the crew using routine planning material in accordance with normal operating procedures.

In flight, the applicant shall use the normal charts and plates as per the company's operation.

Skill tests and proficiency checks shall not be conducted on a flight for the purpose of commercial air transport or public transport of passengers.

The test/check for a multi-pilot aeroplane operated to multi-pilot operations shall be performed in the multi-crew environment. In such case another applicant or another pilot may function as a second pilot. If an aeroplane rather than a simulator is used for the test/check, the second pilot shall be the examiner.

An applicant for the initial issue of a multi-pilot aeroplane type rating or ATPL (A) shall be required to operate as "pilot flying" (PF) during all the required exercises of the test. During the test the applicant shall also demonstrate the ability to act as "pilot not flying" (PNF).

## Appendix 4 Flight Test Tolerance

### Altitude or Height

Normal Flight	± 100 ft.
With simulated engine failure	± 100 ft.
Starting go-around at decision altitude/height LNAV/VNAV	+ 50 ft. /-0 ft. 75 ft below the vertical profile and 75 ft above the profile at or below 700 ft above aerodrome level.
APV Baro final approach segment	75 ft below the vertical profile and 75 ft above the profile at or below 700ft above aerodrome level or as defined in the Aircraft Flight Manual
Minimum descent altitude/height	+ 50 ft. /-0 ft.

### Tracking

Precision approach	half scale deflection azimuth and glide path
RNAV (GNSS) NPA and APV Baro approach	Crosstrack error / deviation ( the difference between the RNAV system computed path and the aircraft position relative to the path) should normally be limited to ± half RNAV/RNP value associated with the procedure. Brief deviations from this standard (e.g. overshoots or undershoots during an immediate after turns up to the RNAV/RNP value are allowable.
Other approaches	± 5°

### Heading

All engines operating	± 5°
With simulated engine failure	± 10°

### Speed

All engines	± 5 kt
Asymmetric	+10/-5 kt

**Note:** When making an assessment, handling qualities and aircraft performance should be taken into account.

## **Further Guidance**

### **Height Accuracy**

The applicant need not be failed if an error of more than 100 ft. occurs two or three times. However, the examiner should seriously consider awarding an individual fail if:

- a) Height error of more than 200 ft. occurs.
- b) An error of 100 ft. or more is uncorrected for an unreasonable period of time.

### **Approach minima**

- (a) On a non-precision approach when constant descent profile is flown care shall be taken not to descend below MDH/MDA when a missed approach is being conducted.
- (b) RVR shall be checked against airfield minima prior to commencing an approach to land.

### **Tracking Accuracy**

- (a) A failure should be awarded at any time during the test/check if there is an inability to settle within  $\pm 5^\circ$  of the specified track or correcting track the wrong way and maintaining the error for an unreasonable period.

### **Speed accuracy**

- (a) The 5 kt limit in climb, cruise and approach should be extended to 10 kt in the case of jet aircraft and an airspeed error of 15 kt at any time.
- (b) If the test/check is conducted in an aircraft, the examiner should make allowance for turbulent conditions.
- (c) During the second segment climb following an engine failure minor speed excursions below V2 are acceptable if corrected without delay.



## Appendix 5 – Briefing and debriefing

### 1. Briefing the Applicant for Simulator test.

The applicant should be given time and facilities to prepare for the test flight. The briefing should cover the following:

- (a) Health and Safety briefing facilities adequate and exercise fully prepared.
- (b) The objective of the flight.
- (c) Licence/10 sector/LVO check, as necessary.
- (d) Freedom for the crew to ask questions.
- (e) Operating procedures to be followed (e.g. AFM/operator's manual/SOPs expeditious as if on an aircraft, use of checklists).
- (f) Weather assumptions (e.g. Icing, cloud base, Notices to Airmen (NOTAMs), chart check.
- (g) Operating capacity and roles of the applicant, the PNF and the examiner:
  - i) Single-/multi-crew environment.
  - ii) PF/PNF (Pilot Monitoring (PM)) – Responsibility for the management of equipment and systems.
  - iii) PF/PNF – Adherence to ATC instructions/liaison.
  - iv) PF/PNF – Identification of radio navigation aids prior to their use.
  - v) PF/PNF – Management of checklists – who calls for what.
  - vi) Examiner – ATC, operations, cabin crew and ground staff.
- (h) Contents of exercise to be performed. This should not be prescriptive, i.e. the order of events should not be given (except when testing in an aircraft).
- (i) Agreed speed (e.g. V-speeds, use of SOP speeds, and use of airspeed bugs).
- (j) Handling and use of automatics (e.g. bank angle/flight director, autopilot, automatics, FMS/TCAS, auto throttle, HUD, EVS).
- (k) Simulator differences and serviceability.\*
- (l) Administrative procedures (e.g. weather brief, submission of flight plan and any slot restrictions).
- (m) Unplanned emergencies and handing of control.
- (n) Applicant understanding of brief.

\*Until all simulators have realistic door-locking devices, it is essential that examiners brief the crews to use the same procedure as on the aircraft. Intercom should be used and the crews shall go through the unlocking routine, even if it is only touch drills.

The examiner should maintain the necessary level of communication with the applicant. The following points should be borne in mind by the examiner:

- (a) Involvement of examiner in a multi-pilot operating environment.
- (b) The need to give the applicant precise instructions.
- (c) The examiner's responsibility for safe conduct of the flight.
- (d) Intervention by the examiner, when necessary.
- (e) Use of suitable view limiting device.
- (f) Liaison with ATC and the need for concise, easily understood instructions.
- (g) Prompting the applicant regarding required sequence of events (e.g. following a go-around).
- (h) Keeping brief, factual and unobtrusive notes.

Note: Some refresher training is encouraged prior to the LPC/OPC. The training given should be of a generic nature in order to facilitate his understanding.

## 2. Licence check

Examiners are required to check the applicant's licence. Tests/checks may only be carried out if the applicant presents a valid licence and medical certificate subject following paragraphs below. The applicant shall have the type on his licence unless an LST is to be carried out.

## 3. Applicant's Licence Expired:

Should the licence have expired, a rating cannot be renewed; however, the test/check may be conducted (in a simulator only). If successful, the examiner shall not sign a certificate of revalidation. He shall advise the applicant that he cannot exercise the privileges of the licence until it is renewed.

## 4. Applicant's Medical Certificate expired but in date Licence:

Where the applicant for the LPC has an in date licence but an expired or missing medical certificate, the test may be conducted (in a simulator only). If successful, the Certificate of Revalidation should be signed in the normal manner. The applicant shall be informed that he cannot exercise the privileges of that rating until he has a valid medical.

## 5. Debriefing the Applicant

- (a) The examiner should conduct a fair and unbiased debriefing of the applicant based on identifiable factual items in order to achieve a balance between friendliness and firmness.
- (b) The examiner should not start the debriefing by asking the applicant any questions unless they

directly affect the result.

- (c) State overall result:
  - i) PASS. If the result is a pass then use facilitative techniques to get the crew to analyse why the flight went so well, in order to promote positive procedures or to analyse any areas of improvement.
  - ii) FAIL or PARTIAL. Continue as detailed below.
- (d) Debrief reasons for failure in descending order of severity (not normally in chronological order and with short, sharp, factual statements not open to dispute – do not discuss any minor criticisms at this stage).
- (e) State re-tests requirements.
- (f) State effect on privileges.
- (g) Retraining requirements.
- (h) Comments on the whole flight, good and bad (including repeated items as they will be recorded on company paperwork). Use as opportunity for training input. Include analysis of trends and CRM assessment. Facilitative techniques are positively encouraged in this area of the debriefing.

## 6. Facilitation

- (a) The debriefing is in two parts, with the result of the test always being stated by the examiner.
- (b) In the case of a pass, the examiner could now move straight into facilitation in order to build upon any learning that arose during the detail.
- (c) In the case of a partial pass or a fail facilitation at this stage would be inappropriate. The examiner shall continue the debriefing, giving the reasons for failure supported by factual statements and stating the re-test requirements, the effects on the applicant's privileges and the retraining requirements. Thereafter the examiner may adopt a facilitative style.

## 7. Detailed Testing Standard

The individual items are taken from the Skill Test but where applicable may be read across to the Proficiency Check.

Collision avoidance and good airmanship are required to be demonstrated in a practical manner by good lookout, use of checklists, precise Radiotelephony (RTF) procedures, standard operating procedures, CRM and sound flight management.

- (a) Item 1.4 - Use of Checklist, Radio and Navigation Equipment Check:

Checks and cockpit procedures shall be carried out in compliance with the authorised checklist for the aeroplane used in the test. When a skill test is conducted, performance calculations for take-off, approach and landing shall be calculated by the applicant. This should

be in compliance with the OM or Aircraft Flight Manual (AFM) for the aeroplane used and shall be agreed with the examiner. Decision Height (DH)/Decision Altitude (DA) and Minimum Descent Height (MDH)/Minimum Descent Altitude (MDA) and missed approach point shall be determined by the applicant in advance and agreed by the examiner. However, if the test is to be carried out as a LOFT type scenario, it may be impossible or inadvisable to state the type of approach or even the airport of final destination. In this case the source of the minima should be ascertained.

This item does not stipulate that it has to be the first flight of the day; however, some thought should be given to alternating first flights with transit checks to make sure that there is a comprehensive knowledge of the checklist.

When using a simulator the use of checklists and the checking and setting of navigation/communication equipment may be done in a briefing room using training devices. In case the examiner wishes to get the crews to perform this item in the simulator care shall be taken to monitor the crews carefully while he may be busy preparing the simulator.

The applicant shall complete a normal start procedure and/or deal with any malfunctions.

(b) Item 1.6 – Before Take-off Checks:

- i) Completes any pre-departure checks. Care should be taken to ensure that first flight of the day and transit checks are alternated, so that the knowledge of the various systems checks that are carried out on a first flight are not overlooked.
- ii) Obtains a clearance.

(c) Item 2.5 - Take-Offs with Simulated Engine Failures:

The engine failure may be combined with the departure (see Item 3.9.1).

In an aircraft this should be after V<sub>2</sub> when safely away from the ground. Shut down checks should be done by use of a touch drill. Simulation of engine failure close to the ground is a critical man oeuvre and examiners shall be aware of the associated risks and develop defences according to the potential threat to safety. Minimum safe heights and speeds for simulation will vary depending on aircraft type and prevailing conditions.

Examiners should take note of any guidance provided by the aircraft manufacturers. Operators shall give precise details in part D of their Operations Manual regarding the minimum height and detailed information on how engine failures are to be simulated.

For some types of aircraft the engine failure profile may be different depending on obstacle clearance. In this case there should be an alternation of the profiles flown by the applicant and care should be taken to record which one has been carried out. If the check is consistently conducted out of an airfield that does not have an emergency turn, thought should be given to manufacturing one for training purposes, to see that the correct procedures are followed.

CAR FCL states that this procedure shall be done by sole reference to instruments. However, all take-offs will have some visual reference available to the pilot. A pilot will make use of these visual cues to keep straight both on the runway and during the initial rotation, but as the pitch attitude increases his gaze will naturally transfer onto the instruments. In a simulator it is not necessary to set the company's minimum Runway Visual Range (RVR) or cloud base - in fact doing so might even forewarn the applicant of an impending Engine Failure after Take-off (EFATO). Setting the weather to close to CAT 1 minima would meet the requirements.

In a simulator, the examiner is acting as ATC and therefore he is not aware that the crew has suffered an engine failure unless they give out a PAN/MAYDAY. It is up to the crew to liaise with the examiner. It is solely the crew's responsibility to reduce airspeed, ask to hold, or extend the final, should they wish more time to carry out the checklists etc.

If a suitable view limiting device is used to simulate Instrument Meteorological Conditions (IMC) in an aircraft, it shall obscure 25 degrees either side of the straight-ahead position. The suitable view limiting device should not be erected prior to taxiing as it obstructs the view. If it has a forward vision panel the suitable view limiting device may be put in place at the holding point. If not, it should be in position by 200 ft. Above Aerodrome Level (AAL). However, should you be in the process of conducting a simulated engine failure for example, safety considerations will override this.

There are no published tolerances as to how much swing is acceptable on an engine failure. Each aircraft type has its own characteristics and this in turn will depend on the time of the engine failure and the type of failure given.

(d) Item 2.6 - Rejected Take-Off:

The Rejected Take-Off (RTO) should be taken to its full conclusion. E.g. would the aircraft taxi onto stand? Was brake cooling, evacuation or a further take-off considered? Etc.

If you have divided duties on the RTO, and it is performed incorrectly, care shall be taken to correctly assess whether a fail in this item should be attributed to just one or both pilots.

This shall not be performed in an aircraft, other than as a static touch drill.

In some aircraft the co-pilot never aborts the take-off. In these cases it will be necessary to manufacture a reason for the co-pilot to stop, e.g. the incapacitation of the captain who then obstructs the controls. This scenario should be included in the three-yearly cycle.

In a simulator an applicant should not be told when the RTO will occur.

CAR FCL states the need for the RTO to take place at a "reasonable speed". A practical approach to this issue is that "reasonable speed" does not mean "high speed". It simply means a speed appropriate to the circumstances (nature of failure, contamination etc.).

(e) Items Selected from 3.4 and 3.6:

These items are mandatory for the skill test and proficiency check.

- (f) Item 3.4.11 – Radio, navigation equipment, instruments and flight management system:

Examiner shall ensure that applicants in aeroplanes equipped with HUD meet the requirements of CAR OPS requirements and pilots should demonstrate competence both with and without the use of the HUD at least every three years.

- (g) Items 3.4.10 and 3.6.9 - Enhanced Ground Proximity Warning System (EGPWS)/Airborne Collision Avoidance System (ACAS):

EGPWS/ACAS should only be conducted in simulators where the equipment is the same version and presentation as the operator's aircraft.

- (h) Item 3.6.3 - Engine Failures, Shutdown and Restart at a Safe Height:

Minimum safe limits for actual shutdown of power plants for training purposes should be observed.

- (i) Item 3.7 – Steep turns with 45° bank, 180° to 360° left and right:

The use of the flight path vector, if installed, removes much of the benefits of improved scan. This is especially the case if a HUD is available. Examiners should vary the scenarios so that the exercise does not always have the FPV available. This is intended to be a visual exercise.

- (j) Item 3.9.1 - Departure and Arrival Procedures:

This may be combined with an abnormal or emergency procedure.

Full use of automatics and Lateral Navigation (LNAV) if fitted is permitted.

Examiners are encouraged to use their imagination to obtain maximum benefit from this item of the test.

Some interpretation of departure and/or arrival plates should be included. If you are using an aircraft and based at an airport that does not have a published instrument departure or arrival procedure, a clearance should be given by the examiner or gained from ATC, which includes some form of altitude/turn/track adherence. A departure that consists only of radar vectors should not be used.

Climb/descent transitions between flight levels and altitudes using correct altimeter- setting procedures.

Flight management is demonstrated with a flight log and fuel and system checks, including anti-ice procedures when necessary.

The applicant should comply with arrival and joining procedures.

Some arrival procedures contain a hold. If it is failed it could be assessed in one of two ways:

- the arrival, as in item 3.9.1; or
- Holding, item 3.9.2.

The latter may be preferable, because it would be clear to another examiner what item(s) should be retested.

(k) Item 3.9.2 – Holding:

Although this exercise is not mandatory, periodical inclusion of an unplanned hold is strongly recommended. Automatics can be used and therefore value can be obtained by giving a last minute clearance into the hold or, if FMS is fitted, an early exit from the hold to see how the FMS is handled.

8. Instrument Approaches – General:

Whenever possible, all checks should include a mix of radar-vectored and procedural instrument approaches.

(l) Item 3.9.3.1 – Precision Approach Flown Manually Without Flight Director:

While examiners will often choose to combine various test items for expediency, since this particular exercise is fairly demanding, it may be wise to avoid overloading the applicant in this way. For skill test purposes, the exercise is to be carried out with manual thrust on all aircraft types.

(m) Item 3.9.3.4 - Manual Precision Approach With One Engine Inoperative:

The applicant should complete a safe approach manually in an asymmetric configuration to the company DA/DH. Should an Instrument Landing System (ILS) be flown, the examiner should ensure that the test is conducted into an airfield where the company minimum allows a DH not normally greater than 450 feet AAL, in order to assess the applicant's ability. The autopilot should be disconnected before intercepting the localizer and before final configuration for the approach so that the applicant's handling of any trim change associated with flap extension can be assessed. The engine failure should also be simulated prior to this phase.

(n) Item 3.9.4 – Non-Precision Approach:

This may be flown either automatically or manually. Provided that the use of LNAV has been approved, this may be engaged. The crew remains responsible for monitoring the radio aid(s) and ensuring the tracking remains within limits when flying this 'overlay' type of approach. It shall normally be flown to the specified minima and not to circling minima, unless they are coincident. This is to ensure that the transition from an instrument approach procedure to a circling approach does not occur at such an early stage as to preclude comprehensive assessment of the former. Provided the examiner is satisfied in this respect, it is not necessary for a further non-precision approach to be flown.

A Non-Directional Beacon (NDB) aural ident need not be continuously monitored during a Non-Precision Approach (NPA), on a non-Electronic Flight Instrument System (EFIS) equipped

aircraft, if the needle or visual ident disappears from view or if the needle fails to a “parked” position when the signal is lost. However, if it is the company’s policy to monitor NDB idents continuously, in all cases, pilots shall obey company SOPs.

CAR OPS 1 requires NPA procedures to be flown using the Continuous Descent Final Approach (CDFA) technique. This is recognised as the best way to optimise crew workload whilst achieving a stabilised approach path, especially in heavy jets with their high inertia. Any input that destabilizes the approach, will have a detrimental effect upon the safe and successful outcome especially if there are associated technical problems.

The completion of either an RNAV (GNSS) NPA or APV Baro approach will fulfil the requirements for the completion of item 3.9.4.

(o) Item 4.3 – Manual Go-Around from Instrument Approach:

A safe go-around from published DA/DH or MDA/MDH. The correct go-around action shall be taken promptly to ensure minimum height loss.

The instrument approach is flown in an asymmetric configuration. Examiners shall ensure that go-arounds are varied. It is preferable to use a published missed approach or as modified by ATC. Avoid continuous use of “straight ahead”.

The asymmetric go-around shall be flown manually for long enough to enable the applicant’s competence to be assessed. This will normally be until completion of the full missed approach procedure.

(p) Item 5.5 - Landing with One Engine Inoperative

The landing shall be carried out manually. Directional control shall be maintained and brakes and other retardation devices used to achieve a safe roll out and deceleration.

The applicant shall complete a safe landing from a stable approach on the required glide path.

Consideration should be given to the weather, wind conditions, landing surface and obstructions.

(q) Item 5.6 - Landing with Two Engines Simulated Inoperative:

The two-engine landing does not negate the requirement to complete item 5.5. Both items are mandatory.

(r) Item 6 – LVO:

In a simulator the training and testing shall be carried out at an airfield displaying the correct lighting for the type of approach and ground markings. The use of a generic airfield is not acceptable.

Where possible (e.g. a dedicated airfield scene) taxiing should be ramp to ramp. This enables the examiner to assess the crew’s situational awareness and other technical and non-technical behaviour. Checking the crews’ prioritisation of tasks, reading aerodrome charts,



checking taxiways orientation against the compass etc,. In all instances the operator should develop scenarios that will expose crews to a number of events. This is important because runway incursions are on the increase.

Some older generation visual systems have runway holding point stop bars that cannot be switched off independently of the taxiway lighting. The examiner shall ensure that crews ask permission to cross these lights.

LVO taxiing between gate and runway (in and/or out) should be included periodically but not necessarily in every six-month check. It should be conducted and documented at least every three years in addition to the normal bi-annual requirements.

9. Engine-Out Exercises:

An outboard engine shall be selected for all mandatory engine-out exercises for the LST/LPC.

10. Pilot Incapacitation:

This should be taken to its full conclusion.

The examiner should give some thought as to how to instigate the incapacitation, and when and how the incapacitation is to occur. A subtle incapacitation is the hardest to recognize and checks that company Standard Operating Procedures (SOPs) are satisfactory.

Incapacitation should be practised during LVO training and should be covered during a three- yearly cycle. When take-off in minimum RVR is dependent on Para visual Display (PVD), incapacitation should take this into account.

11. Pressurisation/Smoke (if applicable):

The use of the oxygen mask is an essential part of an emergency descent with cabin pressure failure and contaminated cockpit drills. The crew's ability to establish communication with each other, ATC, cabin crew etc. can only be assessed if masks are used.

In an aircraft care shall be taken not to depressurise the cabin and to ensure that aircraft safety is taken into account if oxygen masks are donned.

12. Crew Resource Management:

CRM shall be addressed on the skill test and proficiency check in order to encourage the crew's CRM skills and promote good practises. An applicant may be failed for CRM alone; but it should normally be linked to a technical failure. CRM should not be treated as a separate topic, but fully integrated throughout the debriefing using NOTECHs or the company's own behavioural markers/methodology.

13. Facilitation

The effective use of facilitation enables a better learning process and one method that may be employed is to:

- start with an introduction;
- avoid dealing with issues chronologically;
- ask two open questions per issue;
- get the trainees to do the thinking and talking; and
- summaries at the end (it can be useful to get the applicant to summaries);
- Don't facilitate a failure, it usually isn't appropriate.

14. Automatics:

On fly-by-wire aircraft, the use of manual thrust on a proficiency test/check engine-out ILS (item 3.9.3.4) is left to the examiner's discretion. However, even in these types, if the aircraft can be dispatched with an unserviceable auto throttle, the pilot's ability to perform this exercise using manual thrust shall be checked on a three-yearly cycle.

When an OPC is not combined with either a skill test or licensing proficiency check, it should be flown as per company SOPs.

15. Radiotelephony:

As examiners lead by example and great care shall be taken to ensure that their own RTF is correct and in compliance with ICAO Doc 4444 and UAE Radiotelephony standard. An appraisal of the crew's RTF is an integral part of the test/check. Errors should be debriefed in order to maintain the required standard within the airline and improve aviation safety.

16. Situational Awareness:

Examiners are strongly encouraged to conduct test/checks in such a way that, as ATC, they maximise the need for crews to exercise Situational Awareness (SA) throughout. SA is so often a contributory or causal factor in incidents and accidents, so every opportunity shall be taken to assess and develop it during checks.

In general, examiners should be reactive rather than proactive in the role of ATC, to encourage crews to think for themselves. ATC should not offer a simplified missed approach procedure in the event of a go-around from an engine-out approach unless it is in response to a request from the pilot.

17. Jeopardy:

In the case of a "stand in" pilot producing an unacceptable performance, as he has not been briefed and is not on test, it is inappropriate to take away his "stand in" rating. It is recommended that following a below standard performance the stand in pilot undertake additional remedial training to proficiency standard before he is released on line operation. Operators are advised to formalize this

process and include it in the company's OM.

#### 18. Simulator General

Examiners authorised to conduct tests in the simulator shall themselves have had practical training in its operation, especially with regard to the functionality of the Instructor Operating Station or Console.

Prior to any test the examiner shall ensure that the simulator is GCAA qualified and has a valid user approval as applicable, technical log shall be checked for defects and a visual inspection made of the area in the vicinity of the simulator.

All applicants shall be given a briefing on the fire alarm system, safety equipment and use of escape ropes, differences between the company aircraft and the simulator shall be briefed and pointed out to the crew prior to the test/check.

Crew should be in full harness and all other persons securely strapped before the selection of motion.

#### 19. Safety Considerations for Testing in Aircraft

The examiner is expected to use good judgment when simulating any emergency or abnormal procedure, having regard to local conditions and aircraft safety throughout.

Flight testing/checking has potentially more hazards than routine flight schedules that can be worsened by the determination of the applicant to produce the result and by the examiner giving the applicant too much latitude in this endeavour. All the situations cannot be predicted, as the scope of items in the LST/LPC Normal and Abnormal Operations and Abnormal and Emergency Procedures sections is too large to cover in great detail. Some general guidance is listed below.

- It is strongly recommended that the briefing to the applicant is very clear as to the order of events.
- Stalling shall be carried out at a safe height. Care shall be taken not to over temp/ torque the engine on the recovery.
- Aircraft systems shall not be used outside the Flight Manual limits.
- Early recognition of the failure of the compass and attitude indicators shall not be carried out in an aeroplane; only in an FSTD.
- Early recognition of the failure of the localiser and glideslope indications shall not be carried out in an aeroplane.
- Simulated engine failure after take-off in an aeroplane shall be carried out at a safe height.
- Unusual attitude recoveries after loss of the main compass and attitude indicators.
  - i) In aeroplanes fitted with standby attitude/compass reference systems they should be used. Where the aircraft is fitted with Radio Magnetic Indicators (RMIs) these should be simulated failed.
  - ii) The Flight Manual limits for g and VA should be observed.

- iii) It is the correct recovery technique that is being assessed so extreme man oeuvres is not necessary.
  - iv) The examiner shall intervene early if the recovery technique is wrong or the recovery is slow.
  - v) Exercise will be conducted in Visual Meteorological Conditions (VMC) throughout.
- Engine shutdowns should be carried out at a safe height above the ground.
  - The test/check report shall exactly reflect the debriefing.

## Appendix 6 Pre-Course Study Guide

Candidates are expected to have a working knowledge of the following reference documents prior to the course:

- (a) UAE Aviation Legislation
- (b) CAR OPS 1 Regulation
- (c) CAR FCL Part II - Flight Crew Licensing Regulations
- (d) Other documents:
  - CAAP 27
  - CAAP 26
  - ICAO - Pans Ops 8168.
  - UAE AIP.
  - GCAA Information Notices.
  - Operators Procedures
- (e) The GCAA form- FOF-CHK-002 (Flight Check Training and Application Check Form (Multi-Pilot Airplane))