

TECHNICAL GUIDANCE MATERIAL

for Engineering Designated Examiners and Oversight

SUBJECT: Technical Guidance Material for Engineering Designated Examiners and Oversight

EFFECTIVE DATE: 1 March 2022

1. APPLICABILITY

1.1. This document applies as the following:

- a. Guidelines for EDE for the conduct of tests and checks,
- b. Reference to AO who conduct oversights on EDE.

1.2. This document does not apply to any test or check that does not require an EDE for the initial issuance of AME Licence.

2. PURPOSE

2.1. The purpose of this document is to:

- a. Expand on the basic principles and methodologies applied by the EDE during the administration of a test or check,
- b. Expand on the basic principles and methodologies applied by the AO during the designation and redesignation process of the EDE,
- c. Describe and emphasise the professional behaviours and conduct to be displayed by EDE at all times while exercising their privileges, and
- d. Ensure that the assessment process and experience maximise the training experience for both the candidate and the EDE.

3. REQUIREMENTS

Interested parties may find it helpful to consult the list of references in the bibliography. In addition, useful information may be found in the sources listed in the next section.

Note - Users of this TGM should also consult the accompanying (sister) document “Technical Guidance Material for the development and revision of examinations and test items.” The mentioned document contains important information on the design of oral and written examinations as well as their revision. Procedural guidance on these processes is also provided.

4. REFERENCE

- i. ICAO Annex 1,6,8,19
- ii. ICAO Doc 7192
- iii. SAQA Principles of Assessment
- iv. Civil Aviation Regulations

5. ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AO	Authorised Officer
AIC	Aeronautical Information Circulars
ATO	Aviation Training Organisation
CAA	South African Civil Aviation Authority
EDE	Engineering Designated Examiner
DCA	Director of Civil Aviation
ICAO	International Civil Aviation Organisation
N/A	Not Applicable
NYC	Not yet competent
PEL	Personnel Licensing
SACAA	South African Civil Aviation Authority
SACAR	South African Civil Aviation Regulation
SACATS	South African Civil Aviation Technical Standards
SAQA	South African Qualifications Authority
SEP	Safety and Emergency Procedures
SOP	Standard Operating Procedures
TGM	Technical Guidance Material
TPM	Training and Procedures Manual
TS	Technical Standards

6. GENERAL

- 6.1. In the foreword to Document 9379 (Manual of Procedures for Establishment and Management of a State's Personnel Licensing System), the International Civil Aviation Organisation (ICAO) states:

“As long as air travel depends on qualified pilots or other air and ground personnel, their competence, skills and training will remain the essential guarantee of efficient and safe operations. Adequate personnel training and licensing also instil confidence among States, leading to international recognition and acceptance of personnel qualifications and licences and greater trust in aviation on the part of the traveller consequently, personnel licensing is an important element of an ICAO member State's safety oversight system. It is a complex endeavour which encompasses technical, economical and industrial issues.” (ICAO, 0212: (v))

- 6.2. Responsible control of the personnel licensing process is vital to ensure aviation safety. ICAO summarises this as follows:

“A licence is the means by which a State authorises a licence holder to perform specific activities which, unless performed properly, could jeopardize the safety of aviation. The licence provides evidence that the issuing State is satisfied that the holder has demonstrated an internationally acceptable degree of competency.” (ICAO, 2012: I-1-2) and “A personnel licence is required when the person is involved in an activity that is critical to the safety of civil aviation...” (ICAO, 2012: I-4-3).

- 6.3. Flight crew members certainly play a vital role in keeping flying safe.
- 6.4. Without knowledgeable, safe and competent maintenance engineers maintaining aircraft, all other endeavours to ensure safety fall flat.
- 6.5. This document therefore intends to contribute productively towards the maintenance and improvement of South African maintenance engineers testing standards.
- 6.6. Comments and constructive feedback towards its improvement are welcome and may be directed to the Personnel Licensing department of the SACAA.

7. WHAT IS AN OVERSIGHT?

- 7.1. As an ICAO member country, South Africa has an international responsibility to ensure that safety critical activities are performed to an acceptable standard.
- 7.2. The Chicago Convention requires member states to fulfil certain functions, such as Personnel Licensing.
- 7.3. However, the State may delegate some of these functions to external service providers.
- 7.4. In the case of the testing of maintenance engineers, for example, South Africa has delegated the bulk of the country’s practical testing function to Engineering Designated Examiners (EDEs).
- 7.5. ICAO stresses that states can only delegate tasks, not its national accountability (ICAO, 2012: I-6-1):
- 7.6. “It is important to understand that the State of Registry’s Licensing Authority retains its responsibility for personnel licensing even though it may have delegated some or all of the functions.”
- 7.7. For this reason, ICAO requires states to do periodic inspections and audits on delegated institutions and individuals, referring to this activity as “Surveillance”.
- 7.8. Essentially, the concept of surveillance is simply the process of making sure that delegated functions are done correctly by external (i.e., non-CAA) service providers and organisations.
- 7.9. ICAO regards this surveillance requirement as so important that it deems it to be one of the eight critical elements of any state’s aviation safety system.
- 7.10. ICAO has designated surveillance as Critical Element number 7 (CE-7).
- 7.11. ICAO Doc 9734, Part A of the Safety Oversight Manual series defines CE-7 as follows:
 - 7.11.1. “CE-7: Surveillance obligations. The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorisation and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation related activity for which they have been licensed, certified, authorised and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.” (International Civil Aviation Organisation, 2006: 3-2).
- 7.12. Worldwide, different terms are used to describe the surveillance process. In South Africa, the surveillance of examiners to whom the SACAA has delegated certain functions is referred to by the term “Oversight”.

- 7.13. Oversight is normally done by a group of specialised SACAA Examiners (or Inspectors), who were historically referred to as “Testing Standards Officers” (abbreviated to “TSO”). More recently, the official title of this position has been amended to “PEL Inspector”.
- 7.14. The phrase, “This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA” quoted above, of course refers to all delegated EDEs
- 7.15. Although oversights are also required to be done on designated examiners and licence-holders in various other disciplines (such as Pilots, Cabin crew members and Air Traffic Controllers), this document gives specific guidance as the oversight of EDEs.
- 7.16. Some official documentation, such as the EDE Oversight report, uses the term “Authorised Officer” (AO). This term refers to employees of the SA Civil Aviation Authority who have been designated by the DCA in terms of the Civil Aviation Act, No. 13 of 2009.
- 7.17. The delegation empowers Authorised Officers to monitor regulatory compliance and is generally held by the inspectorate and other technical personnel of the SACAA.

8. DESIGNATION OF EXAMINERS

- 8.1. A person is designated as EDE by the DCA in compliance with the SACATS 66.01.11 and associated SACARS.
- 8.2. The designation is granted at the entire discretion of the DCA and shall therefore be considered a privilege and not a right.
- 8.3. It remains the obligation of the EDE to ensure the maintenance of the highest standards and to comply with all regulatory requirements to maintain the Designation.

9. RESPONSIBILITIES OF EDE's

Refer to **Annex A: Code of Conduct** at the end of this document.

- 9.1. The DCA may designate an examiner for a period of one year, in respect of the valid rating or ratings held by the examiner to conduct trade testing on students, issue, trade test reports, do oversight on instructors CATS 66.01.11.
- 9.2. The privileges (shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 66.01.11.
- 9.3. The Director shall sign and issue to each designated examiner a document/certificate which shall state the full name of such examiner and his/her privileges.
- 9.4. The DCA may endorse the designation of the EDE of the licence.

10. DUTIES AND RESPONSIBILITIES OF AN AO DURING AN OVERSIGHT

- 10.1. During an oversight, the AO assumes an administrative duty. He or she may therefore by no means interfere with the flow or the outcome of the lesson unless it is imperative in the interests of safety.
- 10.2. An oversight shall be deemed to be incomplete if the EDE does not observe the entire lesson, which includes the objectives briefing, lesson/class, de-brief and administrative procedures.
- 10.3. During an oversight, the AO must test the EDE against all aspects applicable on the skills test form for EDEs.
- 10.4. The AO will also ensure that the EDE:
 - 10.4.1. Displays a satisfactory level of knowledge and skills appropriate to the lesson being delivered.

- 10.4.2. Is well conversant with the SACAR, SACATS and all SACAA Aeronautical Information Publications/Circulars.
- 10.4.3. Covers all appropriate required sections and aspects contained in the lesson plan,
- 10.4.4. The AO shall meet the EDE at least 30 minutes prior to the lesson to discuss the terms and conditions as well as the rules of engagement applied during the conduct of the oversight.
- 10.4.5. After completion of the of the test, the AO shall provide input to the candidate through debrief ensuring that all deficiencies and deviations from standards are dealt with in a constructive and professional manner.
- 10.4.6. The AO shall inform the candidate of the outcome of the oversight in writing, within 7 days.
- 10.4.7. In the event of an unsatisfactory test, the candidate shall be advised of the requirements to achieve a satisfactory outcome. Sufficient and appropriate time shall be given for the necessary time to redo the skills test.
- 10.4.8. A follow up oversight shall then be scheduled to ensure that the corrective action has been adopted and the EDE is performing satisfactorily.
- 10.4.9. Continued unsatisfactory performance may result in the recommendation that the candidate be tested by a different AO.
- 10.4.10. All records of the candidate should be kept at the ATO.
- 10.4.11. The AO shall engage respectfully and politely with the candidate.

11. SCHEDULING THE ASSESSMENT

- 11.1 The ATO shall provide the candidate about the appropriate assessment at least the date.
- 11.2 EDE shall assess only one candidate on a day.
- 11.3 Where necessary, the ATO may get into an agreement with the candidate about the skills test preparation.
- 11.4 The candidate shall be told before the test, all the aspects she/he needs to prepare for.
- 11.5 Briefing the learner candidate
 - 11.5.1 During the day of the test, the EDE shall brief the candidate prior to the commencement of the lesson, with the learner(s), ensuring that the training objectives are fully established and understood.
 - 11.5.2 It is imperative to explain to the candidate that that the role of the AO is to assess their performance without any distraction.
 - 11.5.3 11.5.3. The period of the assessment and record of the assessment shall be determined and recorded by both the ATO and the EDE.

12. STANDARDISATION AND OVERSIGHTS

- 12.1 SACAA has the mandate to supervise the activities of all EDEs to ensure that the testing and checking standards are achieved uniformly and at a satisfactory level.
- 12.2 To this effect, the DCA appoints AO who are trained and suitably qualified to conduct oversights on the activities of EDEs.
- 12.3 The purpose of oversights is to ensure that the EDEs meets the required standards and that they conduct themselves in conformity with the Code of Integrity and guidelines provided in this document.
- 12.4 Where more than one EDE is registered with the ATO, it is the prerogative of the AO to either sample or request the files of all the EDEs during audits or oversight.

13. INITIAL EDE DESIGNATION PROCESS

For the designation of an EDE, the requirements as prescribed in the regulations shall be met SACATS 66.01.11:

13.1 General Qualification

13.1.1 To qualify for a designation as a EDE, the applicant must possess the general qualifications listed hereunder, in addition to having the specialised experience appropriate to the particular function for which designation is sought

13.1.2 and thorough knowledge of the South African Civil Aviation Regulations (SACARs) and relevant Aeronautical Information Circulars (AIC) , and South African Civil Aviation Technical Standards (SACATS), etc.

13.1.3 current technical knowledge and experience commensurate with that required for the function.

13.1.4 unquestionable integrity, co-operative attitude, and ability to exercise sound judgment.

13.1.5 the ability to maintain the highest degree of objectivity while performing authorized functions on behalf of the DCA in compliance with the SACAR and safety goals, notwithstanding any coercion by any person to the contrary.

13.1.6 at least five years of satisfactory experience in the field of work covered by the designation.

13.2 Specialised experience

13.2.1 In addition to the general qualifications above, an applicant for designation as examiner shall have the following specialised experience, and demonstrated ability in respect of each function for which DE designation is sought,

13.2.2 At least five years' experience as a Grade I instructor at an approved aviation training organisation (ATO) or an aircraft manufacturer's training school that has been involved with either –

13.2.2.1 the issuing of course

13.2.2.2 the management of programs, leading to the issuing of course certificates, in either case for aircraft, engines, propellers, avionics, instruments, electrical and component parts of similar type and complexity to those for which DE designation is sought.

13.2.2.3 Must hold a current valid instructor's certification with an appropriate rating and must demonstrate the ability to carry out instruction and examination to determine the status of aircraft, engines, propellers, avionics, instruments, electrical and component parts of a similar type and complexity for which DE designation is sought.

13.3 Application procedure

13.3.1 Any suitably qualified person may apply for designation as a DE. Applications for designation must be initiated by an application in the form found on SACAA website under forms.

13.3.2 Applications submitted by individual applicants must be accompanied by –

13.3.2.1 a letter from the applicant's employer, attesting to the applicant's integrity and qualifications to perform instruction and examination on products of similar type and complexity, to those for which designation is sought.

13.3.2.2 supporting documents, to substantiate that he or she meets all the relevant qualifications specified above; and

13.3.2.3 the appropriate fee as prescribed in Part 187.

13.3.3 Procedure followed with regard to selection and appointment

13.3.3.1 Receipt of an application is acknowledged by the DCA.

13.3.3.2 The DCA evaluates the applicant's qualifications and peruses the personal references submitted.

13.3.3.3 On determination that the applicant meets all the relevant requirements, the DCA issues a document that identifies him or her as a EDE in the particular category.

14. RE-DESIGNATION OF ENGINEER DESIGNATED EXAMINER

14.1 All EDE shall apply for redesignation annually as prescribed by the regulations (SA-CATS 66).

14.2 An applicant for re-designation as designated examiner must be made on the prescribed form not less than 90 days prior to the beginning of the month in which the designation expires, together with the fee as prescribed in Part 187

14.3 Submission of such application does not automatically entitle the applicant to continue to exercise the privileges of a EDE after the expiry date.

14.4 The DCA may issue the designation if the applicant has been subject to the oversight under auspices of the authority

15. PREPARATION OR TRAINING SCHEDULE

15.1 The EDE shall provide the candidate with a training/preparation schedule, detailing his all-training aspects that the candidate shall be assessed on.

15.2 The training schedule shall include the following details:

15.2.1 Date of training or assessment.

15.2.2 Type of training (module) or assessment (skills test) to be conducted.

15.2.3 Commencement time.

15.2.4 Venue.

16. DUTIES AND RESPONSIBILITIES OF AN EDE DURING AN OVERSIGHT

16.1 EDEs act on behalf of the DCA while conducting skills tests and must not succumb to business pressures and scheduling that may demand an unreasonable effort on their part.

16.2 The DCA has a responsibility to oversee the performance of his or her delegates and may address concerns through discussion, oral counselling and, if required, suspension of organisations due to continued unreasonable work habits.

16.3 A EDE shall be familiar with the operator's or ATO's SOPs prior to commencement of a skills test.

16.4 A EDE shall identify and address irregular practices from an ATO or an operator and report these irregularities to the relevant parties in writing. The ATO or operator, as applicable should be afforded a reasonable time to address the irregularities and feedback should be provided to the EDE, and training department, where applicable. Records of the communication with the ATO and/or operator shall be retained by the EDE and shall be produced on request from the SACAA.

16.5 Briefing a candidate

16.5.1 A EDE shall conduct a thorough pre-assessment briefing with the candidate(s) prior to the evaluation to ascertain that the assessment is fully understood.

16.5.2 Where an AO is present, for oversight purposes, it is imperative to explain to the candidate(s) that the role of the AO is to oversee the EDE in question and not the candidate's performance. The AO may challenge an outcome of a test or item

where safety could be compromised but must be done through the appropriate procedure and will not be done in the presence of the candidate.

16.5.3 After completion of the pre-assessment briefing, the candidate should be afforded a short period of time to review the assessment plan and scenario(s) and ask question(s), as needed.

16.6 Debriefing a candidate

16.6.1 An EDE is responsible to conduct a full individual debriefing on completion of the assessment. This is to ensure the individual's understanding of his or her strengths, weaknesses, observations noted by the examiner and expectations for the competent completion of the drill. Where findings of "not yet competent" have been made, the individual debriefing provides an opportunity for the coaching of the candidate by the examiner.

16.6.2 Where different examiners are used for the skills test, examiner comments may be collated and reviewed prior to the debriefing, as applicable.

16.6.3 Written observations/remarks are required when:

16.6.4 grading an aspect with a "NYC";

16.6.5 an aspect was not assessed - "NA";

16.6.6 deemed necessary by the EDE

16.6.7 Each observation or remark must be numbered to link to the applicable aspect.

16.6.8 The observations or remarks are to be sufficient to inform others, to support subsequent discussion and justify the grading assigned.

16.6.9 During the evaluation, it is sometimes difficult to write clear and concise observations or remarks. It is good practice that EDEs use notes made during the evaluation to complete a final copy of the test form. This permits the EDE to refer to the appropriate test criterion while writing final comments.

16.6.9.1 Before conducting the debriefing, the EDE should consult his notes to establish the final outcome of the assessment for each section, the overall result and whether a partial or full retest is required and if so, the nature of any further training requirements. In reaching his decision, the EDE may need to ask additional questions which could assist him or her to establish whether the candidate had a good reason for taking a particular course of action. At this point, the DE should only ask questions which might affect the final outcome.

16.6.9.1.1 Where the candidate is assessed as competent, the EDE should inform the candidate, accordingly, followed by a summary of any weak areas with suggestions, where necessary, of ways to improve performance. The EDE should also provide positive reinforcement of aspects that were well handled and give examples of good resource management and decision making by the candidate.

16.6.9.1.2 The EDE should encourage the candidate to self-critique his or her performance (good and not so good).

16.6.9.1.3 Where the candidate is assessed as "not yet competent", the EDE should:

16.6.9.1.3.1 ask questions as required to confirm the assessment;

16.6.9.1.3.2 inform the candidate of the outcome of the test;

- 16.8.4.2 A condition under which the EDE was distracted to the point that he could not adequately observe the candidate's performance of the task.
- 16.8.4.3 In the event of a finding of "not yet competent" after the first attempt.
- 16.8.4.4 If the skills test is not completed due to circumstances beyond the candidate's or EDEs control, the subsequent skills test will be completed depending of the availability of both the candidate and the EDE.
- 16.8.5 A skills test is failed under the following circumstances:
 - 16.8.5.1 The aim of the task or duty is not achieved,
 - 16.8.5.2 The performance of an item includes errors or deviations that are repeated or that are not recognised or corrected in a timely manner,
 - 16.8.5.3 The candidate does not demonstrate the level of technical proficiency or knowledge necessary to carry out the functions of the licence or rating,
 - 16.8.5.4 The candidate has lapses in situational awareness that are not identified or corrected,
 - 16.8.5.5 The candidate's management skills are ineffective,
 - 16.8.5.6 The safety of a flight could be compromised by the action or inaction of the candidate,
 - 16.8.5.7 Examiners must evaluate all items prior to announcing a failure and stopping the test. This would provide good feedback during the debriefing to the candidate,
 - 16.8.5.8 The candidate will be required to successfully perform the item(s) not achieved on the complete skills test. Skills test items already assessed will not be re-tested,
 - 16.8.5.9 In the case of an unsuccessful skills test, the AME must undergo remedial training with an EDE or an appropriate instructor, An unsuccessful skills test is considered to be a drill in which there were more than 3 findings of "Not yet competent",
 - 16.8.5.10 A complete re-test will be required if there is a consistent display of unsafe or dangerous habits or actions.

17. GENERAL PRINCIPLES FOR ASSESSMENT

- 17.1 A EDE shall conduct the assessment(s) in a private area, free from distractions and should give the candidate(s) his/her undivided attention.
- 17.2 A EDE should make a concerted effort to be relaxed and non-threatening. The candidate is probably nervous enough without a EDE shaking his/her head, stiffening to rigidity or gasping at inappropriate times. If the CDE can remain calm and neutral, the candidate will perform better.
- 17.3 The candidate(s) should be assessed against what would be an "ideal performance under existing conditions".
- 17.4 The EDE will, as far as possible, not form part of any assessment scenario.
- 17.5 The EDE may not assist the candidate in the management of the scenario being assessed.
- 17.6 During the conduct of a test in an approved ATO, the EDE shall ensure that the following conditions are met:
 - 17.6.1 The ATO used for the test is approved for the specific purpose;
 - 17.6.2 The ATO condition and capabilities can meet the expected assessment outcomes;

- 17.7** Tests should follow a planned and logical sequence. By pre-planning, a EDE can combine various items to maximise the productivity and efficiency of the testing environment. However, care must be taken to ensure that the candidate will not be rushed while performing the different aspects.
- 17.8** Deviations from the published criteria due to situations beyond the control of the candidate or EDE must be taken into consideration when assessing the various aspects.
- 17.9** The EDE should give credit where it is due, and not be influenced by poor performance on a previous aspect when assessing any other aspect.
- 17.10** Human factors can also have a significant effect on evaluation reliability. EDEs should be conscious of these factors and attempt to limit their effects as much as possible for they may result in a lack of smoothness or accuracy in the candidate's performance. EDEs should be aware that their ability to accurately assess the candidate's performance can also be adversely affected by these same factors, especially fatigue.
- 17.11** The practice of planning to complete the entire skills test for candidates in one day is not recommended.

18. EVALUATION

18.1 General principles

- 18.1.1** The practical drill criteria form should contain questions which address all required aspects of the evaluation. The EDE is advised to prepare additional questions as contingency in case of weak performances, to verify the knowledge level of a candidate or to vary the content of the evaluation.
- 18.1.2** Questions posed to candidate(s) should not lead to the correct answer but should confirm candidate(s) understanding for the EDE.
- 18.1.3** The questions should be of a practical and operational nature, ideally based upon the aircraft and the duties assigned to and expected of a AME on a daily basis.
- 18.1.4** Questions should be carefully worded and not ambiguous. Good questions are easily understood and composed of common words and familiar terms. They should measure the application of knowledge, not the use of language. Big words and high-sounding phraseology may allow the EDE to display command of language and vocabulary but only detract attention from the test. If candidates cannot understand the meaning of the words, they will not be able to answer the question. Therefore, EDEs must keep the vocabulary within the grasp of candidates.
- 18.1.5** All questions should derive from one single scenario or event. However, one question can assess the candidate in more than one aspect(s).
- 18.1.6** Questions posed should have a practical drill outcome with understanding of the theoretical knowledge required. Asking a question that requires a YES/NO answer doesn't really tell the EDE much about the candidate's level of understanding and application/correlation.
- 18.1.7** Apart from using probing words such as "what", "why", "where", "when" and "how", the EDE is encouraged to use "action verbs" to emphasise the assessment of higher order thinking skills. Such verbs could be: "explain", "describe", "list", "interpret", etc.
- 18.1.8** EDE must discipline himself/herself in allowing for a reasonable "waiting time" when asking questions. A reasonable "waiting time" encourages the candidate to answer with increased confidence and the answers will be longer and more detailed. However, "waiting times" that are too long create uncomfortable silences which serve no benefit in the assessment process.

18.1.9 It is more effective to guide the candidate's thoughts toward the area to be questioned and then ask the question. In this way the candidate can visualize the situation and then think about the answer(s) to the specific question. Knowing that something happens is not as important as understanding why it happens.

18.1.10 Tricky or irrelevant questions should be avoided. Questions should be challenging for the candidate but all the necessary background to come to the answer must be provided.

18.2 Scenario-based evaluation

18.2.1 The EDE uses specific verbal questions to measure and evaluate the extent of the candidate's knowledge and to determine that the candidate is capable of applying the knowledge to a real live scenario which may contain a specific condition of flight, specific state of the aircraft, events or abnormal events.

18.2.2 CDEs should go to the greatest extent possible to assess the applicant's application and correlation skills.

18.2.3 A scenario is a snapshot of an event, generally providing a brief overall description of a situation/problem that needs to be solved or be given advice on.

18.2.4 General principles

18.2.4.1 Questions shall be carefully and specifically designed to achieve the objectives.

18.2.4.2 Ask only questions relevant to the field of operation of the candidate.

18.2.4.3 Ask only questions related to the subject(s) on which knowledge shall be expected.

18.2.4.4 One question can provide for the assessment of 2 or more aspects.

18.2.4.5 Answers should be complete and detailed.

18.2.4.6 A partial answer must be considered as a deficiency.

18.2.4.7 A deficiency must be dealt with appropriately.

18.2.4.8 The CDE may engage in a discussion with the candidate(s) to assess the thinking processes and decision making.

18.2.4.9 Plan for enough time.

19. PRINCIPLES OF ASSESSMENT/EVALUATION

19.1 Aim of a test is to:

19.1.1 assess skills, knowledge and attitude relevant to a licence and/or a rating;

19.1.2 determine whether the candidate can:

19.1.2.1 apply his or her knowledge to real live events;

19.1.2.2 make the appropriate decisions;

19.1.2.3 apply acceptable risk management; and

19.1.2.4 promote learning.

19.2 Assessment plan

19.2.1 In preparation for the test, the EDE shall use an approved practical drill criteria form.

19.2.2 A well-designed practical drill criteria form is a useful tool which can:

19.2.3 enhance the effectiveness of the evaluation processes;

19.2.4 assist the EDE with achieving the objectives;

19.2.5 cater for contingencies in case of deficient performance (additional questions, another scenario etc.);

19.2.6 prevent the accidental omission of compulsory and regulatory aspects; and

19.2.7 ensure the validity, reliability, practicability and consistency of the tests being conducted.

19.3 Evaluation Cycle

The evaluation process is a five-stage cycle:

- 19.3.1 Objective: The first stage determines the objective of the drill aspects. Since it would be meaningless to evaluate the candidate's performance without considering what that performance should be, the process of evaluation should begin with clearly defined objectives. These objectives are specified in the applicable Technical Standards and drill form.
- 19.3.2 Standards: To be proficient in evaluating a candidate's performance during a test or check, the EDE must be completely familiar with the standards for each aspect. These standards are described in the applicable Technical Standards, drill form and this document.
- 19.3.3 Performance: The EDE assigns the tasks in accordance with their description and observes the candidate's performance in response to the situations and instructions presented.
- 19.3.4 Observation: The EDE observes the performance and compares it to the performance criteria for the task.
- 19.3.5 Assessment: Based on an observation of the candidate's performance under existing conditions, the EDE assesses the performance and assigns a grading of "Competent" or "Not yet competent". When a candidate commits significant errors during the performance of a drill, the EDE must state the nature of the problem(s) on the observation page of the applicable form. To be useful, the notes must be clear and support the grading which has been assigned.

19.4 Factors affecting the evaluation

An evaluation may become useless if certain principles are not respected. The following **5 (five)** characteristics, when used carefully in the conduct of a skills test, will result in an accurate and effective evaluation.

19.4.1 Reliability

- 19.4.1.1. Reliability ensures consistent results. As applied to the test, this would mean that two identical performances should result in the same test grading.
 - 19.4.1.2. Human factors can have a significant effect on skills test reliability.
 - 19.4.1.3. Some of these factors are:
 - 19.4.1.3.1. **fatigue** - insufficient sleep or rest prior to the test
 - 19.4.1.3.2. **emotions** - work or home personal problems
 - 19.4.1.3.3. **health** - cold, flu, etc.
 - 19.4.1.3.4. **time of day** - very early in the morning, or late in the afternoon / evening
 - 19.4.1.3.5. **distractions** - noise, interruptions, etc.
 - 19.4.1.4. EDEs should be conscious of these factors and attempt to limit their effects as much as possible for they may adversely affect the candidate's performance.
Note! The EDE may also be affected by these factors, which could deteriorate his or her assessing capabilities.
 - 19.4.1.5. Validity. Tests are valid if they measure what they are supposed to measure and nothing else. Assessment of drill aspects must remain within the bounds of the appropriate test standards. The scope of the test must be such that when candidates are graded as competent, they have met the knowledge, skill and attitude requirements for the issuance or maintenance of a specific licence or rating.
- 19.4.2 Comprehensive. A test is comprehensive if it contains a sample of all course material and measures each area of skill and knowledge required to ensure the standard is met. Skills tests will be comprehensive if the EDE conforms to the aspects listed in the applicable form and/or Technical Standards.

19.4.3 Discernment. In testing, discernment enables the EDE to detect different levels of achievement among candidates. Discernment separates a standard performance from an excellent, mediocre or poor performance. For this reason, EDEs must take care with their requests for demonstration of various drill aspects.

19.4.4 Objectivity. Objectivity ensures that the EDEs personal opinions will not affect the outcome or assessment of the test. Gradings awarded must be made in accordance with the applicable performance criteria. Assessments will be more valid and less subjective, where the CDE is an experienced cabin crew member, has sound and adequate background knowledge of the instruction process and the expertise to accurately assess the applicant's performance without prejudice.

19.4.5 Evaluation Errors

To test effectively, the EDE requires not only a sound knowledge of the *characteristics of evaluation* and principles of assessment but also a firm understanding of the possible errors that can occur throughout the *evaluation process*. Errors in evaluation fall into several categories.

19.4.1.6. Personal Bias Error. A bias is defined as a prejudice in favour of or against someone or something. EDEs must not allow personal prejudices to interfere with the objective evaluation of a candidate's performance.

19.4.1.7. Generosity errors. Generosity errors are indicated by a tendency to grade an individual as "competent" based on recommendations or personal relationships with the candidate. This could be caused by a EDEs desire to be known as a nice person.

19.4.1.8. Severity errors. In this case, a candidate may be graded as "not yet competent" because the EDE may feel that the published standards are too low and score the test against their own set of standards. This type of EDE feels that few people can perform the job as well as they can.

19.4.1.9. Halo Effect. The halo effect is the tendency for an impression created in one area to influence opinion in another area. It is a cognitive bias in which an observer's overall impression of a person influences his or her feelings and thoughts about that person. This occurs when a EDEs overall impression of a candidate influences the assessment of performance. For example, when testing a friend, acquaintance, or high-profile individual, a EDE may give undeservedly "competent" gradings.

19.4.1.10. Logical error. Logical error occurs when a EDE assumes that a high degree of ability in one area means a similar degree of competency in another. If a candidate is assessed as competent in one or two aspects, it does not mean the candidate is also competent in all remaining aspects. The full drill must be completed and assessed.

19.4.1.11. Error of delayed grading. This type of error occurs when there is a delay in the assessment of a performance, resulting in a tendency to award a grading due to the lack of information and/or poor recall. By not making an assessment immediately after observing the performance, EDEs may award a grading based upon an overall impression of the test. This results in an erroneous assessment that is of little value to the training industry and SACAA standards monitoring system.


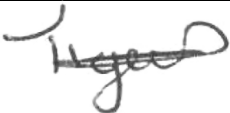

19.4.1.12. Standards error. Standards error is a result of all the errors we have discussed. However, if a EDE is not thoroughly familiar with established standards, as outlined in the applicable forms, SACATS and this document, assessing an applicant against those requirements is virtually impossible.

19.4.1.13. While all above-mentioned errors may appear obvious on paper, they may not be under the test conditions, especially as the judgment of the EDE may be obscured by a combination of two or more errors. EDEs must therefore be aware of these errors to consciously prevent them from influencing the validity of the tests or checks they conduct.

20. PROCEDURE IN CASE OF AN UNSATISFACTORY OVERSIGHT

- 20.1.** An unsatisfactory oversight outcome indicates that one or more deficiencies in the way an examiner carries out a test or check on behalf of the state have been identified. Such an observation requires intervention by the SACAA. Addressing observed shortcomings is critically important to protect the security and reliability of the larger licensing system.
- 20.2.** During the debriefing at the end of an oversight, a EDE is expected to sign the EDE Oversight Report as an acknowledgment that the oversight was conducted. This remains a requirement, irrespective of the outcome of the oversight.
- 20.3.** A EDE is entitled to a debriefing on the reasons for the unsuccessful oversight and encouraged to write reasonable and fair comments on the relevant page of the form. Dissatisfaction or disappointment with the outcome does not justify a refusal to sign the form.
- 20.4.** The remedial actions following an unsatisfactory oversight are described below are designed not as a punitive measure, but to correct the underlying reason for unsatisfactory performance. As such, a EDE should participate in a constructive manner and is invited to engage in healthy 2-way discussion. This will allow areas of weakness or misunderstanding to be sorted out in a positive manner and any concerns to be resolved harmoniously.
- 20.5.** The SACAA will assist with guidance and corrective input, as well as accepting reasonable suggestions and justifiable, factual input regarding improvements in its own oversight processes.
- 20.6.** In cases where it is necessary for a EDE to take responsibility for addressing shortcomings, this becomes an important part of any constructive remedial process.
- 20.7.** In all cases where an unsatisfactory oversight was observed, the oversight outcome shall be regarded as unsuccessful. For monitoring purposes, the calculated percentage shall be regarded as final.
- 20.8.** No re-designation will be done until deficiencies are corrected and a successful oversight undergone.
- 20.9.** Every unsatisfactory oversight shall be followed by a moderation interview between the EDE and two AOs. Its purpose will be to determine the cause of the observed shortcomings, moderate the observations and develop a solution. Where technical input is required, this will be provided. Similarly, the EDE is invited to share his or her perspective as examiner. Such feedback is invaluable to help inform accurate oversight by the SACAA.
- 20.10.** The moderation interview may not be conducted on the same day as the unsuccessful oversight.
- 20.11.** Relevant notes and the outcome of the interview will be entered on the relevant debriefing page of the particular oversight report. This section must be signed by the EDE, as well as the attending AOs.
- 20.12.** Failure to participate in this interview will preclude any further oversight action, as will a refusal to accept remedial input or sign the debriefing section. Where the events during or outcome of an oversight are fundamentally disputed, no further oversight action will be conducted until this is resolved.
- 20.13.** In a case where only the Introduction section was unsatisfactory, the AOs have the prerogative to moderate the oversight and accept the outcome as satisfactory, following a successful interview result.

- 20.14. Although the follow-up oversight might include sections that were successfully demonstrated during the unsuccessful oversight, this is required for the sake of a complete and coherent demonstration. Aspects that were previously successfully demonstrated will not be re-graded.
- 20.15. EDEs are advised against requesting a re-designation oversight for the last week before the closing date for application. This holds the risk that an unsatisfactory oversight outcome will prevent compliance with the legal re-designation requirements.
- 20.16. In a case where an AO is required to travel interprovincially, an unsatisfactory oversight places a significant unplanned financial, time and administrative burden on the SACAA. For this reason, a follow-up oversight is necessarily subject to logistical and administrative delays, as well as the availability of an inspector to travel. EDEs are advised not to expect a follow-up interprovincial oversight within less than 3 weeks.
- 20.17. Where a EDE elects to travel to Gauteng province instead for a follow-up oversight, he or she is advised to coordinate closely with the assigned AO to ensure smooth arrangements. This option eliminates the administrative delays associated with travel arrangements and will most likely expedite follow-up oversight. The SACAA will not be liable for any costs a DFE incurs if he or she elects to travel in such a case.

DEVELOPED BY:		
	Dr. PAUL PHOOKO	14 MARCH 2022
SIGNATURE OF M: E	NAME IN BLOCK LETTERS	DATE
REVIEWED & VALIDATED BY:		
	NEO GOUWE	14 March 2022
SIGNATURE OF ACTING SM: PEL (Acting)	NAME IN BLOCK LETTERS	DATE
APPROVED BY:		
	SIMON SEGWABE	26 March 2022
SIGNATURE OF E: ASO	NAME IN BLOCK LETTERS	DATE

END