

TECHNICAL GUIDANCE MATERIAL

for

Designated Flight Examiners and Oversight

SUBJECT: TECHNICAL GUIDANCE MATERIAL FOR DESIGNATED FLIGHT EXAMINERS AND OVERSIGHT

EFFECTIVE DATE: 05 MARCH 2024

1. APPLICABILITY

- 1.1. This document applies to the following:
 - 1.1.1. DFEs who conduct tests and checks.
 - 1.1.2. AOs who conduct oversights on DFEs.
 - 1.1.3. Other inspectors and AOs, employed by the SACAA, who might benefit from applying
 - 1.1.4. the general principles contained in this document; and
 - 1.1.5. Persons involved in official aviation testing in the Republic of South Africa who might benefit from
 - 1.1.6. applying the general principles in their specific field of work.
 - 1.1.7. The SACAR and SACATS were consulted during the compiling of this document

2. PURPOSE

- 2.1. The central purpose of this document is to:
 - 2.1.1. Provide technical guidance to Examiners in respect of flight crew testing and checking.
 - 2.1.2. It is aimed at both internal examiners, employed by the South African Civil Aviation Authority (SACAA), and external examiners.
 - 2.1.3. The latter are specialists, not employed by the SACAA but to whom authority for conducting flight crew tests has been delegated by the Authority.
 - 2.1.4. In the South African environment, these external flight crew specialists are allocated the title, "DFE".
 - 2.1.5. The scope of this document includes the surveillance (oversight) of DFEs.
 - 2.1.6. The document consequently contains explanatory notes on the official form used for this purpose.
 - 2.1.7. Where detailed procedures are described, these are referenced to official policy and shall be adhered to.
 - 2.1.8. This document also serves to:
 - 2.1.9. Expand on the basic concept and principles of testing.
 - 2.1.10. Explain certain educational fundamentals to be kept in mind when preparing to conduct an assessment/evaluation and during its execution.
 - 2.1.11. Expand on the methodology to be applied by a DFE during the administration of a test or check.
 - 2.1.12. Describe the professional conduct always expected from a DFE while exercising delegated privileges; and
 - 2.1.13. Provide surveillance guidelines to SACAA Examiners that aim to improve the overall consistency of testing by and oversight over Designated Examiners.

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 “TGM 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. SACAR and Document SACATS.
- ii. CAP 804 (UK CAA).
- iii. Flight Examiner’s Handbook (UK CAA).
- iv. Flight Examiner’s Handbook (EASA).
- v. Pilot Examiner Manual TP14277E (Transport Canada).
- vi. Airmen Certification – Volume 5 (FAA).
- vii. Flight Test Standards Guide (New Zealand).

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5. TERMS AND ABBREVIATIONS:

5.1. Terms

TERM	DEFINITION
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None

5.2. Abbreviations

ABBREVIATION	DESCRIPTION
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ADM	Aeronautical Decision-making
AO	Authorised Officer
ATC	Air Traffic Control or Air Traffic Controller
ATPL	Airline Transport Pilot Licence
AWOPS	All-weather Operations
CAA	Civil Aviation Authority
CPL	Commercial Pilot Licence
DCA	Director of Civil Aviation
DE	Designated Examiner
DFE	Designated Flight Examiner
FAA	Federal Aviation Administration
FNPT	Flight and Navigation Procedures Training Device
FSTD	Flight Simulation Training Device
ICAO	International Civil Aviation Organisation
IOS	Instructor Operating Station
LOE	Line Operational Evaluation
MEL	Minimum Equipment List

NA	Not assessed
NC	Not competent
NOTAM	Notice to Airmen
PEL	Personnel Licensing Department (SACAA)
PIC	Pilot-in-Command
POH	Pilot Operating Handbook
PPC	Pilot Proficiency Check
PPL	Private Pilot Licence
SAA	Safety Standard and Assurance
SACAA	South African Civil Aviation Authority
SACAR	South African Civil Aviation Regulations
SACATS	South African Civil Aviation Technical Standards
TEM	Threat and Error Management
TGM	Technical Guidance Material

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 instill confidence among States, leading to international recognition and acceptance of personnel qualifications and licences and greater trust in aviation on the part of the traveler 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 pilots crewing 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 flight crew 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 flight crew, for example, South Africa has delegated the bulk of the country's practical flight crew testing function to DFEs.
- 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 Examiners, including DFEs.
- 7.15. Although oversights are also required to be done on designated examiners and licence-holders in various other disciplines (such as Cabin crew members, Aircraft maintenance Engineers and Air Traffic Controllers), this document gives specific guidance as the oversight of DFEs.
- 7.16. Some official documentation, such as the DFE 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 AOs 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 Flight Examiner by the DCA in compliance with SACAR 61.26 and associated Document SACATS.
- 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 a DFE to ensure the maintenance of the highest standards and to comply with all regulatory requirements to maintain the Designation.

9. RESPONSIBILITY OF DESIGNATED FLIGHT EXAMINERS

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

10. PRINCIPLES OF LEARNING

*Note: Users are advised to consult the document "TGM for the development and revision of examinations and test items" for a more detailed background discussion of learning principles.

- 10.1. There are several models in use in educational theory, all of which aim to classify and explain human learning. Some are well-known and commonly used, but others less so.

- 10.2. The following model is from the FAA Aviation Instructor's Handbook FAA-H-8083-9A (Federal Aviation Administration, Flight Standards Service, 2008: 2-13) and is useful as a simplified, intuitive explanation of learning.
- 10.3. It demonstrates that basic, practical learning is:
 - 10.3.1. progressive; and
 - 10.3.2. happens in four stages.
- 10.4. The levels are graphically shown in Image 1 with clear, explanatory notes alongside each level. Importantly, in connection with the basic model, the FAA states:
- 10.5. "The correlation level of learning, which should be the objective of aviation instruction, is that level at which the student becomes able to associate an element which has been learned with other segments or blocks of learning." (Federal Aviation Administration, Flight Standards Service, 2008: 2-12).

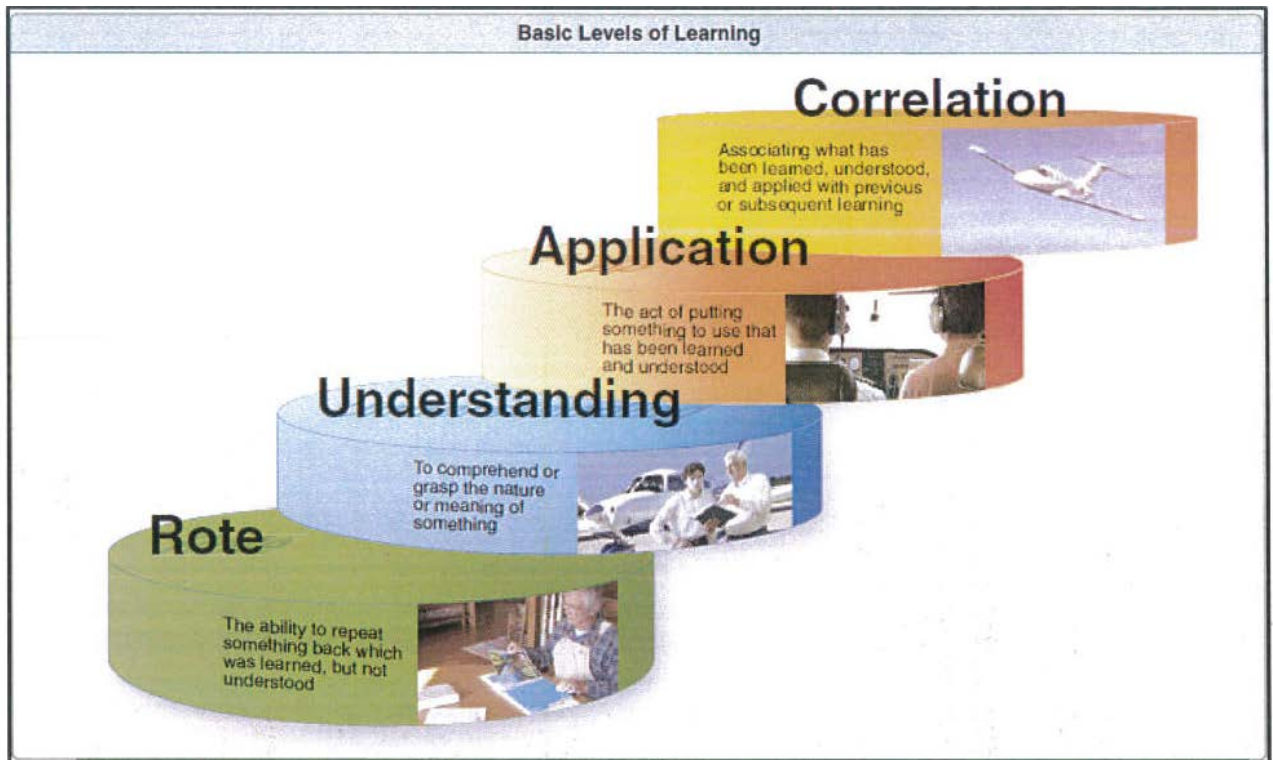


Image 1 – Basic levels of learning (Federal Aviation Administration, Flight Standards Service)

- 10.6. It is interesting to note that the FAA also explains its testing requirements in terms of cognitive and learning levels.
 - 10.7. In the following example, taken from its guidance document "Instrument Rating Practical Test Standards for Airplane, Helicopter, and Powered Lift", the FAA requires the following (Federal Aviation Administration, Flight Standards Service, 2010: 12):
 - 10.8. "Examiners shall test to the greatest extent practicable the applicant's correlative abilities rather than mere note enumeration of facts throughout the practical test."
 - 10.9. The FAA uses a similar phrase in the "Flight Instructor Practical Test Standards" (Federal Aviation Administration, Flight Standards Service, 2012: 13):
 - 10.10. "Examiners should go to the greatest extent possible to test the applicant's application and correlation skills."
11. **CLARIFYING A FEW TERMS – TEST, CHECK, ASSESSMENT, EVALUATION AND *EXAMINATION**
- *Note: Users are encouraged to refer to the document "TGM for the development and revision of examinations and test items" for further clarification of examination-related terminology.

11.1. Background

- 1.1.1.1 It can be utterly confusing to understand what the many different (often familiar sounding) terms used in the testing environment actually mean.
- 1.1.1.2 Words such as test, check, flight review, exam, assessment, quiz, measurement and evaluation are common but can mean different things, depending on the field of work or speciality.
- 1.1.1.3 To make matters worse, the everyday meaning of some of these words is often highly incorrect.
- 1.1.1.4 Bizarrely, as explained below, it would seem that even the commonly used aviation terms, "Examiner", "Designated Examiner", and "DFE" are indeed misnomers.
- 1.1.1.5 It does not help that even academics disagree about the meaning of assessment-related terms.
- 1.1.1.6 To add to the confusions, terms like "assessment" and "evaluation" are used in contradictory ways in different countries.
- 1.1.1.7 In the UK and USA, for example, these two words do not nearly mean the same thing (Stobart, 2008: 8).
- 1.1.1.8 The final straw seems to be that the way in which certain terms are used in the aviation context is often archaic and at odds with modern principles.
- 1.1.1.9 ICAO, for example, uses training-related terminology in an enormously broad sense.
- 1.1.1.10 Doc 9379, for example, uses the term "Examination tasks" to refer to any kind of aviation personnel testing, including (International Civil Aviation Organisation, 2012: I-2-2):
 - a) written examinations.
 - b) written tests.
 - c) oral examinations.
 - d) flight tests.
 - e) simulator tests.
 - f) practical tests.
 - g) medical examinations.
 - h) medical assessments, and even
 - i) language proficiency examinations

11.2. Assessment or Evaluation

- 11.2.1. According to Dreyer (2014: 4-5), the difference between assessment and evaluation can be explained in the following way:
 - a) To assess a person means to make a judgement of performance in relation to a fixed standard, normally expressed in criteria.
 - b) For example, one could ask: "Is a candidate able to demonstrate a steep turn smoothly and accurately while maintaining altitude to within 100 feet?"
- 11.2.2. To evaluate means to compare a performance with a non-specific value or to make a decision about the value of something in comparison with something else.
- 11.2.3. For example, one could ask: "How well was the steep turn done?" or "Who does the better steep turn, Thomas or Rosina?"
- 11.2.4. Some authors, like Gordon Stobart and Arend Carl, see assessment and evaluation as synonymous.
- 11.2.5. However, for our purpose, the fundamental similarities between the concepts of assessment and evaluation are that both require:
 - a) a measurement of performance to be made.
 - b) evidence to be collected; and
 - c) a conclusion to be reached about whether performance is satisfactory or not.
- 11.3. For our purpose, "assessment" is done when performance is weighed against set criteria and "evaluation" when performance is compared to what is regarded as normal, often informed by broad guidelines. This TGM is not intended to be an academic reference work. For this reason, an exact term will only be used when it is specifically required.
- 11.4. In all other cases, the terms "assessment" and "evaluation" or "assess" and "evaluate" will be used in combination separated by a forward stroke, for example "assess/evaluate" or "assessment/evaluation".
- 11.5. In the following paragraph, the meaning of certain terms in this TGM and the DFE Oversight Report is clarified.

11.6. Terminology

- 11.6.1. An "assessment" means the process during which evidence is collected about performance, the comparison of the observed performance with pre-determined criteria and the making of a judgement regarding the achievement or non-achievement of the standard.
- 11.6.2. An "evaluation" refers to the similar process as assessment, except that it is made in the absence of pre-determined performance criteria.
- 11.6.3. An "examination" means a written or oral measurement of theoretical knowledge requiring either a written or oral response.
- 11.6.4. The following terms are used exactly in accordance with their *definition in the SACAR, namely:
- a) "Skills test" means an initial test carried out for the purpose of issuing a pilot licence or rating.
 - b) "Competency check" means a check carried out for the maintenance of competency of a pilot licence.
 - c) *Note – In this document, the terms "test" and "check" are used as shortened versions of the two definitions immediately above.

A. TGM FOR DFE AND OVERSIGHT

1. THE PURPOSE OF A TEST OR CHECK

1.1. Background

1.1.1. ICAO Doc 9379 (Manual of Procedures for Establishment and Management of a State's Personnel Licensing System) summarises the purpose of the testing process splendidly:

"The issue of a licence is evidence that the State is satisfied that the holder has demonstrated an internationally acceptable degree of competency. However, that competency is the result of the applicant's training and capability, not of the examinations or tests passed. Rather, the examination system should be considered an audit on an applicant's knowledge and skill to confirm that the training system has succeeded. By implication, a well-designed system of the theoretical examination and practical testing will drive the training system to produce licence applicants of the appropriate standard."

(International Civil Aviation Organisation, 2012: II-5-1)

1.1.2. It could be said that a test or check is a verification that a candidate has demonstrated the necessary knowledge, skills and attitudes and has consequently been found competent.

1.1.3. As an official to whom the South African government has delegated a serious responsibility, the Designated Examiner is in an unenviable position of having to do this "audit" that ICAO refers to above.

1.1.4. This test or check constitutes the final decision on whether someone has demonstrated satisfactory performance to be issued with a South African pilot licence.

1.1.5. The purpose of the oversight of DFEs is to ensure that the proper standard of testing is maintained.

1.1.6. It is important to remember that an oversight and test use similar standards.

1.1.7. The oversight should demonstrate a standardized, model assessment/evaluation, not an abnormality.

1.1.8. One could state that if a DFE uses the same principles for each test, he or she is bound to get sufficient practice for the oversight.

1.1.9. Some common and potential problems that could interfere with the purpose of testing and oversights are:

- a) Performance criteria have not been defined clearly enough or simply do not exist.
- b) Where criteria have been set, DFEs are sometimes unaware of their existence.
- c) AOs are inconsistent in their oversight requirements.
- d) AOs are inexperienced in their fields.
- e) DFEs conduct testing in an ad lib fashion with inadequate preparation; and
- f) DFEs are unfamiliar with Regulations themselves.

1.2. The aim of a test or a check is to:

1.2.1. assess/evaluate skills, knowledge and attitude relevant to a licence and/or a rating.

1.2.2. determine whether the candidate:

- a) is capable of applying his or her knowledge to real-life events.
- b) is capable of making the appropriate decisions.
- c) applies acceptable risk management
- d) maintains acceptable levels of safety by applying sound airmanship and flight discipline.

2. PRINCIPLES OF ASSESSMENT/EVALUATION

2.1. Background

- 2.1.1. Fundamentally, an assessment/evaluation is about the collection of evidence about a candidate's performance.
- 2.1.2. This evidence then informs a significant decision – has the candidate, during the test, unambiguously demonstrated to be knowledgeable and skillful enough to do the job of a pilot in the areas required for the specific licence or rating?
- 2.1.3. Of course, it is understood that the competence demonstrated should include all the other, necessary mental and psychological skills, such as situational awareness, workload management and decision-making.
- 2.1.4. It is critical that a DFE remembers that it is NOT up to him or her to make the candidate pass.
- 2.1.5. Rather, it is up to the candidate to demonstrate satisfactory performance to the DFE.
- 2.1.6. The DFEs job is to create the conditions for this demonstration to happen fairly and thoroughly.
- 2.1.7. Clearly, a DFE is required to be up to date with legal requirements and well-prepared for every test or check that he or she conducts.
- 2.1.8. It is requested and strongly recommended that no practical skills test or revalidation check is done before a candidate has passed all required theoretical knowledge examinations.
- 2.1.9. Although it is (in some cases) not yet illegal to proceed with a test or check without a candidate having passed the exams, it contravenes all sound principles of responsible testing.
- 2.1.10. The requirement to do a comprehensive test or check remains.
- 2.1.11. Absolutely no leniency may be allowed because of the outstanding exam requirement.
- 2.1.12. Because the flight test or check has been designed to act as a summative one, the DFE is still required to ensure that all required competence is in place.
- 2.1.13. A DFE might well be placed in an unfavourable position and compromised legally by passing a candidate that ends up unable to pass an examination afterwards.

2.2. Use of Simulators

- 2.2.1. Special mention should be made of the use of flight simulators for assessment/evaluation purposes.
- 2.2.2. A crucial requirement is that the simulated flight should resemble actual operational conditions as closely as possible.
- 2.2.3. If this is not ensured, it is impossible to verify whether a candidate is able to perform under actual conditions.
- 2.2.4. Similarly, the more realistic the simulated flight, the more accurate and valid an assessment/evaluation is.
- 2.2.5. Although the following quote is from a pedagogic textbook, it appropriately illustrates the principles of simulation (Dreyer, 2014: 111):
"Simulation means that the actual situation, procedures and circumstances are imitated. Learners are assessed when working in the simulated situation as if they were in the real situation. Here the teacher will observe and assess the learners' performance according to predetermined criteria in a situation where conditions, problems or situations are reproduced so that they are as close to the real thing as possible. If learners can perform a task correctly in the simulated situation, it is very likely that they will also be able to perform the task correctly in a real-life or job situation."

2.3. Assessment plan

- 2.3.1. In preparation for a test or check, a DFE must develop a written "assessment plan" (also called a "plan of action").
- 2.3.2. This "plan of action" is nothing more than a tool (for the exclusive use of the examiner) to be used in evaluating a candidate. It is not a requirement for this plan of action to be grammatically correct or in any formal format (even a hand-written plan could work). However, the plan of action must contain all of the

required operational functions and tasks that will be tested and any optional tasks that the examiner plans to require.

- 2.3.3. This design “blueprint” is the examiner’s tool for the day and should therefore contain enough information to act as a guide with anything that the examiner considers necessary.
- 2.3.4. The assessment plan will include a scenario that allows the evaluation of as many required operational activities and tasks as possible without disruption. During the scenario the candidate will typically be given a combination of normal, non-normal and emergency situations in a way that is as close to a real-world operational environment as possible. The candidate is required to manage those tasks, problems, and emergencies in an effective and safe manner in accordance with the privileges of his or her licence and rating.
- 2.3.5. The examiner has the prerogative to be flexible and, where necessary, change the plan to accommodate unexpected situations as they arise. Some tasks (e.g., unusual attitudes) are not normally done during routine flight operations or may not fit into the scenario.
- 2.3.6. Importantly, the assessment plan should include the Ground Evaluation section, which should ideally be transferred seamlessly into the In-flight evaluation section.
- 2.3.7. The term “Assessment plan” therefore does not refer to the administrative or logistical details of the day’s events, but to the design (i.e., pre-planned content and progression) of the specific day’s testing activity. Within broad regulatory guidelines, the actual design of a test is the prerogative of each examiner, who has the proverbial creative freedom to design the conduct of each test to best evaluate a candidate’s ability. It is therefore expected that an examiner fully applies testing expertise to responsibly and thoroughly test a candidate’s real-world operational competence.
- 2.3.8. Scenario details, reminders, cues, prompts, backup questions and legal notes might all form part of this plan.
- 2.3.9. Although tests might progress in a similar or prescribed format, there are many variables which can and must change from test to test. The day’s unique test or check plan of action must take this into account.
- 2.3.10. Having an adaptable planning framework which is adjustable and easily enhanced for each different test is a useful method to follow.
- 2.3.11. A well-designed assessment plan is a useful tool which can:
 - a) Enhance the effectiveness of the assessment/evaluation processes.
 - b) Provide structure to the sequence of the test.
 - c) Assist a DFE to achieve the test or check objectives.
 - d) Cater for contingencies in case of deficient performance (such as additional
 - e) questions or another scenario); and
 - f) Prevent the accidental omission of compulsory aspects.
- 2.3.12. It is not acceptable to have only one standard assessment plan, for several reasons, including
 - a) The assessment plan is certain to be exposed with time, effectively allowing candidates to share details of what can be expected during a test or even be coached towards a pre-determined outcome. This is an unacceptable practice which completely defeats the object of testing and checking.
 - b) The various test and checks may widely differ.
 - c) The different licences (e.g., PPL, CPL and ATPL) have very different privileges associated with them, which requires a markedly different evaluation approach for each licence. For example, the demand placed on an ATPL holder’s command ability and crew interaction skill is different from that of a PPL holder with an IR.

2.4. Assessment/Evaluation Cycle

- 2.4.1. The assessment/evaluation process is a five-stage cycle:
 - a) **Objective:** The first stage determines the objective of the test or check aspects. Since it would be meaningless to evaluate the candidate’s performance without considering what that performance

should be, the process of assessment/evaluation should begin with clearly defined objectives. These objectives are specified in the applicable Technical Standards and test/check form.

- b) **Standards:** To be proficient in evaluating a candidate's performance during a test or check, the DFE must be completely familiar with the standards for each aspect. These standards are described in the applicable Technical Standards, test/check form and this document.
- c) **Performance:** The DFE assigns the tasks or manoeuvres in accordance with their description and observes the candidate's performance in response to the situations and instructions presented.
- d) **Observation:** The DFE observes the performance and **compares** it to the performance criteria for the task or manoeuvre.
- e) **Assessment:** Based on an observation of the candidate's **performance** under existing conditions, the DFE assesses the performance and assigns a marking or a grading. When a candidate commits significant errors during the performance of a task or manoeuvre, the DFE 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 or marking which has been assigned.

2.5. Factors affecting the assessment/evaluation.

2.5.1. An evaluation may become useless if certain principles are not respected.

2.5.2. The following five (5) characteristics, when used carefully in the conduct of a skills test, will result in an accurate and effective assessment/evaluation.

2.5.2.1. Reliability

Reliability ensures consistent results. As applied to the test or check, this would mean that two identical performances should result in the same test or check grading and marking.

Human factors can have a significant effect on skills test reliability.

Some of these factors are:

- i. Fatigue – insufficient sleep or rest prior to the test.
- ii. Emotions – work or home personal problems.
- iii. Health – cold, flu, etc.
- iv. Time of day – very early in the morning, or last trip of the day.
- v. Distractions – noise, interruptions, etc.

DFEs 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 DFE may also be affected by these factors which could deteriorate his or her assessing capabilities.

2.5.2.2. Validity

Tests and checks are valid if they measure what they are supposed to measure and nothing else. Assessment of ground and in-flight aspects must remain within the bounds of the appropriate flight test/check standards. The scope of the test or check must be such that when candidates are marked and graded as competent, they have met the knowledge, skill and attitude requirements for the issuance or maintenance of a specific licence or rating.

2.5.2.3. Comprehensive

A test or check 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. Flight tests or checks will be comprehensive if the DFE conforms to the aspects listed in the applicable for and/or Technical Standards.

2.5.2.4. Discernment

In testing or checking, discernment enables the DFE to detect different levels of achievement among candidates. Discernment separates a standard performance from an excellent, mediocre, or poor

performance. For this reason, DFEs must take care with their requests for demonstration of various test or check aspects. The marking scale is designed to reveal how candidates perform and allows for a greater degree of discernment than one that simply distinguishes between “pass” and “fail”. Also, the required minimum pass mark prevents candidates who consistently demonstrate weak performance throughout the flight test from passing.

2.5.2.5. Objectivity

Objectivity ensures that the DFEs personal opinions will not affect the outcome or assessment of the test or check. Marks and grading awarded must be made in accordance with the applicable performance criteria. Assessments will be more valid and less subjective, if the DFE is an experienced pilot, has sound and adequate background knowledge of the evaluation process and the expertise to accurately assess the applicant’s performance without prejudice.

2.5.2.6. Assessment/Evaluation Errors

In order to test or check effectively, the DFE requires not only a sound knowledge of the characteristics of assessment/evaluation, but also a firm understanding of the possible errors that can occur throughout the assessment/evaluation process. Errors in assessment/evaluation fall into several categories:

2.5.2.7. Personal Bias Error

A bias is defined as a prejudice in favour of or against someone or something. DFEs must not allow personal prejudices to interfere with the objective assessment/evaluation of a candidate’s performance.

2.5.2.8. Central Tendency Errors

Central tendency errors are indicated by a tendency to rate all or most candidates as average. The DFE really “feels” that the performance of most candidates is not as good as it should be and therefore underscores a candidate’s good performance. On the other hand, the DFE is reluctant to cope with the possible emotional response of a candidate or a recommending instructor. This results in padded or inflated assessments of poor performance. This error may also occur because a DFE does not want to put effort into making a decision. An average mark is easier to defend.

2.5.2.9. Generosity Errors

Generosity errors are indicated by a tendency to rate all individuals at the high end of the scale and are probably the most common type of personal bias. This could be caused by a DFEs desire to be known as a nice person.

2.5.2.10. Severity Errors

In this case, all or most candidates are graded at the low end of the marking scale. DFEs may feel that the published standards are too low and score the test against their own set of standards. This type of DFE feels that few people can fly as well as they can.

2.5.2.11. 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 DFEs overall impression of a candidate is allowed to influence the assessment of performance. For example, when testing or checking a friend, acquaintance, or high-profile individual, a DFE may give undeservedly high marks.

2.5.2.12. Logical Error

Logical errors occur when a DFE 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 test or check must be completed and assessed.

2.5.2.13. 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 average marks due to the lack of information and/or poor recall. By not making an assessment immediately after observing the performance, DFEs may award a grading based upon an overall impression of the test or check. This results in an erroneous assessment that is of little value to the training industry and SACAA standards monitoring system.

2.5.2.14. Standards Error

Standards error is a result of all the errors we have discussed. However, if a DFE 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.

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

2.6. Test or check profile

- 2.6.1. DFEs are expected to vary their test or check format, profile, and scenarios from candidate to candidate to avoid a situation in which candidates might be prepared for that “predictable” DFEs test or check.
- 2.6.2. The result would be licensing of pilots with major gaps in training and proficiency that are not identified through the test or check “snapshot”.
- 2.6.3. Tests and checks should follow a planned and logical sequence that results in a minimum amount of unproductive flight time.
- 2.6.4. By pre-planning, a DFE can combine various items such as high level, low level, and circuit work in order to keep transit time and repetitive climbing and descending to a minimum. However, care must be taken to ensure that the candidate will not be rushed while performing the different aspects.

3. ORAL EXAMINATION QUESTIONS*

*Note: Users are referred to the document “TGM for the development and revision of examinations and test items” for more advanced information on the development of oral examination questions.

3.1. Background

- 3.1.1. A significant part of a flight test or check is the ground evaluation.
- 3.1.2. Oral questioning plays a major role in this phase of the test or check.

3.2. General principles of questioning

- 3.2.1. Design questions carefully and specifically to achieve predetermined objectives.
- 3.2.2. Ask only questions relevant to the field of operation of the candidate;
- 3.2.3. Ask only questions related to the subject(s) on which knowledge shall be expected;
- 3.2.4. One question can provide for the assessment of 2 or more aspects;
- 3.2.5. Require responses to be complete and detailed;
- 3.2.6. Consider a partial answer as a deficiency;
- 3.2.7. Do not let any question unanswered;

- 3.2.8. Deal with deficiency appropriately;
- 3.2.9. Feel free to engage in a discussion with the candidate(s) in order to assess the thinking process and decision making;
- 3.2.10. The use of tools such as white board, Power-Point presentation or hand-outs is encouraged; and
- 3.2.11. Plan for enough time.

4. GUIDELINES FOR OBSERVATION

4.1. Background

- 4.1.1. The purpose of observation to determine student performance is seen in the following quote from the FAA Aviation Instructor's Handbook:
- 4.1.2. "Evidence of skill knowledge is gained through observations of performance."
- 4.1.3. (Federal Aviation Administration, Flight Standards Service, 2008: 2-20)
- 4.1.4. A significant part of both a DFEs testing, and an AO's oversight function comprises observation.
- 4.1.5. Observation, as stated in the FAA quote above, is done to collect evidence.
- 4.1.6. A DFE, for example, lets a candidate perform certain flight activities and then tries to determine – through observation and interpretation – whether the candidate's performance meets the minimum requirement to pass the test or check.
- 4.1.7. The AO, in turn, observes a DFEs performance during a test or check, compares his or her observations with published criteria and interprets whether the DFEs assessment/evaluation performance complies with published governmental standards and requirements.
- 4.1.8. Despite being an immensely important skill, observation is neglected during training.
- 4.1.9. Fortunately, academic literature contains some very useful principles, a number of which are given below, along with a few practical guidelines.
- 4.1.10. In essence, to do meaningful observation means that one should look FOR something, not AT something.
- 4.1.11. Accurate and meaningful observation should therefore be:
 - a) Structured; and
 - b) Planned

4.2. Phases of observation

- 4.2.1. Observation is done in 3 phases (Dreyer, 2014: 48-50):
 - 4.2.1.1. **Phase 1 – Objective description**
This means accurately looking at performance first without trying to interpret it. Be very precise and thorough in doing this.
"What do I want to find out more about?"
 - 4.2.1.2. **Phase 2 – Interpretation**
In the interpretation phase, the observer goes beyond merely describing. Now, he or she tries to explain what was observed.
"What does what I saw mean?"
 - 4.2.1.3. **Making a decision (evaluating the performance)**
The evaluation phase is about deciding whether the performance that was observed is adequate when compared with what it should have been. A clear-cut decision, based on objective description and interpretation is needed.
"What do I do with the findings?"
- 4.2.2. **Guidelines to the observer**
 - i. Remember that an observation is made on the basis of your own knowledge.
 - ii. If necessary, have a preparatory discussion with another specialist beforehand.
 - iii. Ensure that you have the necessary knowledge to do a proper observation.
 - iv. Acknowledge your own emotions and reactions.

- v. Do not let these emotions (whether positive or negative) influence your decision.
- vi. Be unprejudiced and open-minded.
- vii. Be alert when you observe.
- viii. Do not make value judgements.
- ix. Try to describe the performance, not the person.
- x. Be accurate and systematic.
- xi. Make notes and include detail.
- xii. Stay away from pre-sentiment and intuition. These can be misleading and lead to erroneous interpretations.
- xiii. In summary, the observer (in this case a DFE or AO), should do his or her observation professionally.
- xiv. Do not let worrying about the outcome of the test or check weigh you down – let the candidate pass or fail himself or herself by his or her performance. This is their worry.

5. STANDARDISATION, CONSISTENCY AND OVERSIGHTS

- 5.1. The SACAA has the mandate to supervise the activities of all DFEs in order to ensure that the testing and checking standards are achieved uniformly and at a satisfactory level.
- 5.2. To this effect, the DCA has appointed AOs (AO's), who are trained and suitably qualified to conduct oversights on the activities of DFEs.
- 5.3. The purpose of oversights is to ensure that the DFEs achieve the required standards and that they conduct themselves in conformity with the Code of Conduct and guidelines provided in this document.
- 5.4. An oversight may only be conducted over one DFE during the administration of a test or check.
- 5.5. The oversight shall be conducted in the environment (field of operation) in which a DFE is most active or does most of his or her testing. For example, an examiner who commonly does testing or checking in the General Aviation environment, shall undergo the oversight in this area.
- 5.6. The oversight conducted in one category may count for the other category unless otherwise instructed by the DCA.
- 5.7. However, where a DFE has been designated in more than one category, oversights shall alternate between the categories in successive designation periods. An unsuccessful oversight in one category will therefore also preclude re-designation in another category of aircraft.
- 5.8. An oversight may be carried out during the administration of a "mock" test or check in order to ascertain that the session is not negatively affected by unrealistic performances.
- 5.9. For the purposes of this document, a "mock" test or check is defined as an authentic replication of a test or check scenario.
- 5.10. The "mock" candidate(s) should be a 3rd party. It is not ideal for an AO to play the role of a candidate that is about to be assessed/evaluated.
- 5.11. In a case where an AO is requested to act as the candidate, participation will be at the discretion of the AO and with the approval of the relevant SACAA line manager.
- 5.12. Contrary to an actual test or check, in a case where a candidate fails the Ground Evaluation section during a mock test or check, the oversight may continue. If the DFE believes that the candidate should not be informed of this to avoid poor performance during the In-flight evaluation, this failure does not have to be announced prior to the in-flight evaluation. However, the DFE shall advise the AO of this fact to prevent any misunderstanding or confusion during the oversight. This may of course be done discreetly.
- 5.13. The SACAA is not liable for any cost associated with the use of a facility, FSTD or aircraft.
- 5.14. Likewise, the DFE is normally not required to pay the SACAA, nor may the AO be reimbursed for the time spent during the oversight.
- 5.15. In case of an actual test or check, the DFE should inform the candidate(s) about the oversight and its purposes well in advance.
- 5.16. The oversight may not take place without prior consent of the candidate(s).

- 5.17. A DFE is responsible for arranging the oversight with the SACAA.
- 5.18. The request for an oversight shall be addressed in writing via email to the relevant section of the PEL department and shall contain the following information:
 - 5.18.1. Date and time of meeting;
 - 5.18.2. Time allocated to the ground evaluation;
 - 5.18.3. Time allocated to the in-flight evaluation and debriefing;
 - 5.18.4. Location;
 - 5.18.5. Aircraft model and/or FSTD type;
 - 5.18.6. Type of test or check;
 - 5.18.7. Multi, or single pilot operation
 - 5.18.8. The PEL department will then try to allocate an appropriate AO who will liaise with the DFE in order to confirm the booking.
- 5.19. Should the PEL department not be able to allocate an AO for the proposed date, the DFE will be required to propose another date.
- 5.20. Except for exceptional circumstances, the request should reach SACAA at least two weeks prior to the proposed date of oversight.
- 5.21. The times allocated to an oversight should cater for a pre- and post-oversight briefing.
- 5.22. The AO will request a written assessment plan from the DFE or operator prior to the oversight.

6. DUTIES AND RESPONSIBILITIES OF AN AO DURING AN OVERSIGHT

- 6.1. During an oversight, the AO is assuming an administrative duty and does not conduct any licensing action.
- 6.2. He or she may therefore by no means interfere with the flow or the outcome of the test or check unless it is
- 6.3. imperative in the interests of safety.
- 6.4. In the case of a DFE finding a candidate competent for the ground evaluation during an actual test or check, but the AO has observed that such candidate did not achieve the required standard, the AO will discuss the matter with the DFE prior to the in-flight evaluation.
- 6.5. The test or check may be terminated in terms of the SACAR.
- 6.6. In the case of a DFE finding a candidate competent for the in-flight evaluation during a live test or check, but them AO is not in agreement with the finding, the AO will discuss the matter with the DFE prior to the debriefing.
- 6.7. An oversight shall be deemed to be incomplete if an AO does not observe the entire test or check, which
- 6.8. includes the ground evaluation, pre-flight briefing, in-flight evaluation, debriefing and all administrative procedures required for the test or check.
- 6.9. An oversight may only be conducted during the administration of a test or check (actual or mock) which legally requires a DFE.
- 6.10. A SACAR Part 121 PPC may be acceptable, provided the standards thereof are equivalent to a licensing check or test.
- 6.11. During an oversight, the AO evaluates the DFE against all aspects and items listed in the "DFE Oversight report".
- 6.12. The AO will also ensure that the DFE:
 - a) Is acting within the limits of his or her authority;
 - b) Displays a satisfactory level of knowledge and skills appropriate to the test or check conducted;
 - c) Is well conversant with the SACAR, SACATS and all SACAA Aeronautical Information Publications;
 - d) Conducts the tests or checks fairly, in compliance with the requirements specified in document SACATS and in accordance with the guidelines provided in this manual;
 - e) Covers all required test or check sections and aspects contained in the applicable forms; and
 - f) Follows administrative procedures in compliance with the requirements of the SACAR and SACATS.
 - g) In case of an oversight for the initial DFE appointment, the AO shall meet the DFE at least 30 minutes prior to the test or check.
- 6.13. For a re-designation oversight, the AO shall meet the DFE at least 15 minutes prior to the test or check in order to discuss the terms and conditions, as well as the rules of engagement applied during the conduct of the oversight.

- 6.14. The AO shall always be on time. In case of an unexpected delay, he or she shall inform the DFE as soon as practical.
- 6.15. The AO shall introduce himself or herself to the candidate(s) in a professional manner, explain the objectives of the oversight and indicate that he or she will mainly focus on the performance of the DFE.
- 6.16. The AO shall also ensure that all crew members agree verbally with the oversight processes.
- 6.17. The AO shall be professionally and suitably dressed at all times as he or she represents the Director of Civil Aviation.
- 6.18. On request from the DFE and after completion of the test or check, the AO may provide input to the candidate(s).
- 6.19. The AO may also brief, coach or mentor the candidate(s) or DFE on any SACAA-related matters.
- 6.20. In the absence of the crew, the AO shall debrief the DFE, ensuring that all deficiencies and deviations from standards are dealt with in a constructive and professional manner.
- 6.21. In dealing with the DFE, the AO shall at all times act professionally and display courtesy.
- 6.22. Should an AO conduct himself or herself inappropriately, the DFE should report the AO to the SACAA, either contacting the relevant line manager or the Senior Manager: Personnel Licensing.
- 6.23. Similarly, it is expected of a DFE to act in a manner befitting an examiner acting on behalf of the state. This requires a professional, polite and disciplined approach. Professional disputes and disagreements should be dealt with in a courteous, mature and rational manner.

7. THE OVERSIGHT GRADING SYSTEM AND ASSESSMENT RUBRIC IN USE

7.1. Background

- 7.1.1. It was explained earlier in this TGM that delegation and oversight are serious matters.
- 7.1.2. The SACAA is faced with two competing demands in terms of these activities: both are difficult to do properly, yet it is absolutely critical to get them right.
- 7.1.3. As far as the oversight of DFEs is concerned, a persistent challenge remains to ensure that testing and oversight performance are consistent, standardized and thorough enough to ensure the continued safety of South African aviation.
- 7.1.4. In response to these challenges, the SACAA has redesigned the DFE Oversight Report and this TGM document in the following ways:
 - a) The distinct sections (phases) of a test, check and oversight have been clarified;
 - b) The aspects representing the "ingredients" of each section have been defined;
 - c) Unambiguous performance criteria have been designed with input from experts inside and outside of the SACAA (with special attention given to the minimum acceptable standard for a successful oversight);
 - d) A modern analytic assessment rubric has been adopted to present the criteria;
 - e) A grading mechanism has been developed with the purpose of getting a better idea of how consistently AO's are doing oversights;
 - f) The recording of percentages will also help determine areas of weakness in DFE performance, making accurate remedial guidance possible; and
 - g) This TGM has been restructured and expanded, with fresh educational content. It has also been aligned closely with the DFE Oversight report to make it a more meaningful document. Guidance on the various oversight phases and the constituent aspects of each have been added.

7.2. Assessment rubric

- 7.2.1. The use of an assessment rubric is exceptionally well compatible with outcomes-based or competency-based approaches to training and assessment.
- 7.2.2. Rubrics are in widespread use in secondary and tertiary educational institutions, because they greatly increase the transparency of training objectives and consistency of assessment.
- 7.2.3. The use of a rubric will assist AO's in applying "standard, published criteria, making oversight more meaningful and accurate.
- 7.2.4. For the same reason, making required standards known in advance will help DFEs understand exactly what is expected during an oversight.

- 7.2.5. *Note – In certain, isolated aspects, the criteria in the rubric may not yet be perfectly compatible with all possible variations of tests and checks. This is anticipated and acknowledged.
- 7.2.6. In the Air Operator environment, this discrepancy is expected to have a limited influence on the oversight of isolated aspects during a Pilot Proficiency Check.
- 7.2.7. In the General Aviation environment, this discrepancy is expected to have a limited influence on the oversight of isolated aspects during a type rating skills test.
- 7.2.8. It is not required of a FE to make artificial changes to such tests and checks purely to accommodate the new oversight criteria in the exceptional areas.
- 7.2.9. However, the criteria in these exceptional areas nevertheless reflect academically sound, modern assessment/evaluation principles.
- 7.2.10. DFEs are consequently still required to reflect the underlying philosophy in their assessment/evaluation.
- 7.2.11. AOs are still expected to assess a DFEs performance in accordance with the relevant criteria but are expected to use healthy judgement as far as the mentioned discrepancies are concerned.
- 7.2.12. These discrepancies shall be briefed and agreed on with the DFE prior to the start of the oversight.
- 7.2.13. The exceptions shall be noted in the “Comments by AO” section of the DFE Oversight Report.
- 7.2.14. The rubric is also intended to demonstrate the general principles to be applied in all tests and checks.
- 7.2.15. Hopefully, users of the rubric will learn to appreciate the value of defined, objective criteria in a test/check and the philosophy will gradually spill over into all tests and checks.

8. ADVANCED GRADING OF PERFORMANCE ON DFE OVERSIGHT REPORT

- 8.1. Extensive notes on the completion of the new revised DFE Oversight Report and integral rubric are provided on the form.
- 8.2. If a DFE has a query about any element of the form, grading concept or a specific criterion, he or she is invited to contact the AO allocated to do his or her oversight.
- 8.3. Similar to the invitation to provide comment and feedback about the TGM document made earlier, general queries or comments about the revised DFE Oversight Report may also be forwarded to the Personnel Licensing department.
- 8.4. Three columns with criteria for levels of performance are featured on the rubric.
- 8.5. From left to right, these represent progressively superior DFE performance.
- 8.6. From left to right, the columns reflect:
 - 8.6.1. Unsatisfactory performance, allocated a grade of “0”,
 - 8.6.2. Acceptable, but ordinary performance, allocated a grade of either “1” or “2” and
 - 8.6.3. Excellent performance allocated a grade of either “3” or “4”.
- 8.7. The AO is allowed a minor degree of grading discretion in the second and third columns.
- 8.8. As far as the judgement of a DFEs performance is concerned, it is reiterated that the DFE shall have demonstrated acceptable performance standards (as described in the second column) in all aspects of the oversight.
- 8.9. Stated differently, no aspect may have been graded with a “0”.
- 8.10. A failure in any aspect automatically signifies an unsatisfactory oversight with corresponding regulatory consequences.
- 8.11. As explained above, additional grading scores have been added to the progressive criteria.
- 8.12. After all aspects have been graded, the AO adds the grading marks, enters the total score in the appropriate
- 8.13. block after the rubric and calculates the mathematically rounded percentage achieved.
- 8.14. This advanced grading and percentage has been designed to provide additional monitoring capability.
- 8.15. This firstly aims to monitor and correct any medium-term AO oversight inconsistencies.
- 8.16. Secondly, it aims to monitor long-term DFE performance, pinpoint testing/checking deficiencies and (eventually) make accurate remedial training intervention possible.
- 8.17. The advanced (percentage) scoring information does not have a punitive function and individual statistics are retained internally only.

- 8.18. Once enough data has been collected, it is envisaged to provide broad feedback to DFEs about areas of strength, deficiencies and overall performance grading.
- 8.19. This might happen at the annual DFE conference series.

B. DESCRIPTION OF SECTIONS AND ASPECTS ON THE REPORT

1. DESCRIPTION OF SECTIONS AND ASPECTS ON DFE OVERSIGHT REPORT

- 1.1. The various sections of an assessment/evaluation are listed sequentially in phases, as they would occur in an oversight and in the identical order of appearance as on the DFE Oversight Report.
- 1.2. A brief overview of the most important considerations for each phase is given.
- 1.3. Next, the constituting aspects of each phase are listed, in the same order as they appear on the DFE Oversight Report. Explanatory notes provide additional information on each individual aspect.
- 1.4. These notes sometimes justify standards or explain principles or arguments and at other times simply provide food for thought.

SECTION 1 - INTRODUCTION

Overview and important considerations -

- a. The DFE should conduct the ground evaluation in a private area free from distractions and should give the candidate(s) undivided attention.
- b. The ground evaluation is an important part of the test or check. It also often results in the greatest variance in standardisation. For this reason, it is essential that the questions be prepared beforehand to ensure that they are worded correctly and that they are relevant, accurate, valid and fair.
- c. The assessment plan should contain questions which address all required aspects of the ground evaluation. The DFE is advised to prepare additional questions as contingency in case of a weak performance in or in order to vary the content of the evaluation.
- d. 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 visualise 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.

Aspect description

- | | |
|----|--|
| 1. | Briefing on structure and sequence of evaluation or assessment |
|----|--|

Instructions and recommendations:

- a. It is important to approach a test or check in a structured manner. If the raison d'être of the session is to assess/evaluate a candidate, then it is obvious that the latter should know what will happen and what is expected. This will also help make the process more efficient and smooth. The introductory briefing sets the tone for this and this requirement is compatible with modern assessment/evaluation principles.
- b. It is important to prepare the candidate by explaining how the test or check will be conducted i.e. what it will contain and in which order it will proceed. This is not only a proper principle, but also creates a disciplined environment. During this briefing, general expectations are conveyed, the test or check "rules" are specified and any general questions by the candidate(s) are clarified. During this briefing, the DFE will, for example, explain what legal documentation may be used during the ground evaluation and to what extent.
- c. A briefing is complete once the above has been explained and the candidate understands what is expected of him or her. An incomplete (but acceptable) briefing covers all important elements but omits non-critical details that have little or no significant impact on whether the candidate understands the proverbial "big" picture or not.
- d. It is undesirable and inefficient to take inappropriately long to do this briefing, for several reasons. These reasons include:
 - Exhausting the candidate(s) with irrelevant details and
 - Wasting precious time, potentially resulting in a shortened or incomplete ground or in-flight evaluation.

Aspect description	
2.	Review of the applicable evaluation or assessment tool
Instructions and recommendations: <ol style="list-style-type: none"> a. Possibly the single-most important component of the introductory briefing is a brief review of how the performance will be scored (graded) and assessed/evaluated. b. The assessment/evaluation method (or technique) refers to the way in which performance will be demonstrated. The ground evaluation, for example, uses a structured interview format. The in-flight section uses a simulated or actual flight. c. The assessment/evaluation scoring (grading) uses the official SACAA test/check form with a built-in grading and scoring system. This grading and scoring mechanism is called the tool (sometimes called the instrument). In some cases, Air operators use assessment/evaluation tools developed in-house. This is acceptable where it is legally allowed. Nevertheless, it is expected that the DFE makes sure that the candidate about to be tested understands how his or her performance will be measured and graded. 	

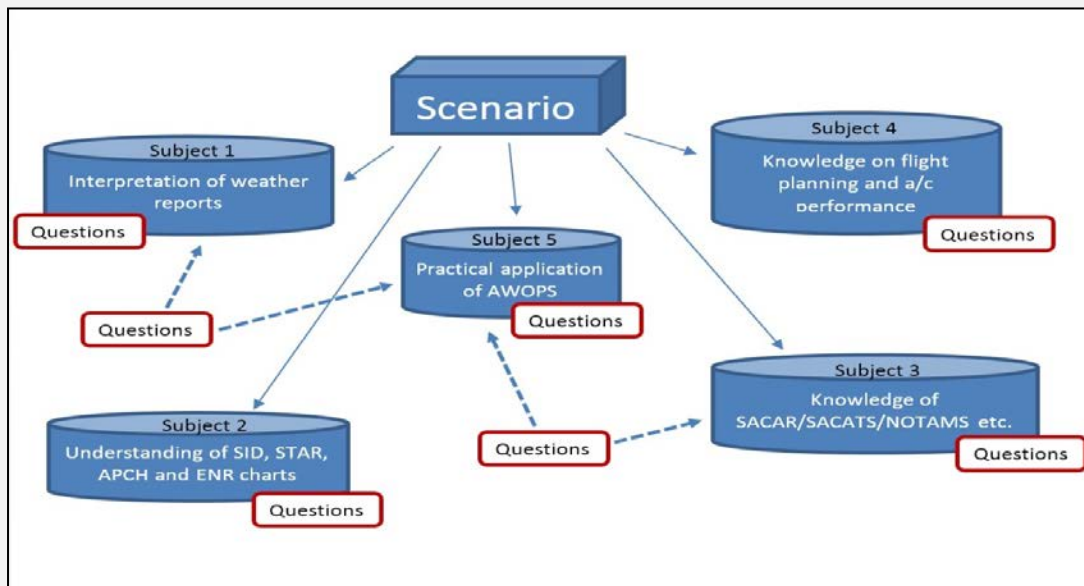
Aspect description	
3.	Checking of licence(s), logbook(s) and verification of all other relevant documents
Instructions and recommendations: <ol style="list-style-type: none"> a. The governing principle is that the documents should be checked to make sure that a legitimate and legal assessment/evaluation operation is about to take place. b. Before starting a test/check, a DFE is required to verify the prima facie (1) legality of the intended activity or operation and (2) correctness of the candidate's documents. This is a wide-ranging specification, which requires vigilance and knowledge on the part of the DFE. It is impossible to specify a standard list because of the variety of tests/checks possible, but a DFE should keep an eye open for the following: <ul style="list-style-type: none"> • The identity of the candidate(s) is confirmed, • The licence is legal and valid (if necessary), • The required PIC flight time, recency, maintenance of competency and retraining requirements have been met (as applicable), • Any required letter of recommendation is present, • Hours logged should indicate that a candidate is eligible for the test/check, • All documents, books and electronic access required for the test/check are available, • Aircraft documents are valid and legal, • FSTD documents are in order - including the certificate reflecting qualification, credits, and validity period and • The FSTD qualification credits are appropriate to the test/check (e.g., no ZFTT type rating tests may be done on FNPT II's). 	

SECTION 2 - GROUND EVALUATION
Overview, important considerations - <ol style="list-style-type: none"> a. The aim of the ground evaluation is to determine whether a candidate has the required knowledge to operate an aircraft safely, correctly, and efficiently (with all the complexities and nuances this entails). Determining this is a critical decision for a DFE and maximum use should be made of the time available. Using time optimally and effectively is even more critical in cases where the time available is constrained by the booking availability of a briefing facility and any simulator or aircraft time slot limitations. b. This means that a DFE's should stay away from trivial topics and questions that do not support the objective of the ground evaluation. Asking on which day of the week Jeppesen updates are published is an example of an irrelevant, wasteful question that squanders precious time. Such a question has little bearing on practical, day-

to-day operations and only decreases the time available for more relevant topics.

- c. It is recommended that the candidate not be examined on trivial legal matters.
- d. Certain aviation legalities are important, but it is nevertheless not necessary to memorise them. Where knowledge of such legal matters is tested, a DFE should consider referring questions to legitimate documents. In other words, an open-book approach can be useful. The ability to navigate the SACAR and SACATS is sometimes more relevant than merely requiring recall of arbitrary legal facts.
- e. However, there are certain operationally critical matters that must be committed to memory. In such a case, it is obvious that a DFE should not allow access to documents but require candidates to rely on their memory.

Image 2 - The use of a scenario during a ground assessment/ evaluation



- f. The ground evaluation does not replace any SACAA written examination, nor should it be diluted for the ostensible reason that a candidate has passed the official regulatory theoretical knowledge examinations. The purpose of a ground evaluation is vastly different from a regulatory theoretical exam. Fundamentally, the ground evaluation is required to verify a candidate's application of operational knowledge. For this purpose, it is especially important to make the ground evaluation realistic. A scenario-based evaluation, seamlessly integrated with the in-flight evaluation, is a fantastic way to achieve this. More information is given below.
- g. A DFE should use specific verbal questions to measure the extent of a candidate's aeronautical knowledge. The questions should be well-designed and targeted at relevant areas to help the DFE evaluate all applicable areas. Ideally, the ground evaluation should require the candidate to apply his or her aeronautical knowledge to a real-life type of scenario. This scenario may contain a specific condition of flight, specific aircraft state and normal or non-normal events.

Scenario-based assessment/evaluation:

- a. One of the most efficient ways of assessing the application of knowledge is to apply a scenario-based approach. A DFE should develop a well-designed scenario which include clues embedded in weather reports, NOTAMS, POH, MEL and other operational data.
- b. A scenario is a snapshot of an event, generally providing a brief overall description of a situation or problem that needs to be solved.

Aspect description	
1.	Planning of evaluation
Instructions and recommendations: <ol style="list-style-type: none"> a. Any assessment/evaluation must be structured and planned. An oversight will not be refused if the plan is not submitted beforehand, but if it becomes clear during the oversight that the assessment/evaluation was not planned properly, this will result in an unsatisfactory oversight. 	

Aspect description	
2.	Evaluation at higher order thinking levels
Instructions and recommendations: <ol style="list-style-type: none"> a. Users should refer to the document "TGM for the development and revision of examinations and test items" for an explanation of Bloom's taxonomy, the concept of higher order thinking and cognitive action words. b. Questions should be of a practical operational nature, ideally based upon the aircraft and the trip assigned for the in-flight evaluation. c. All questions should derive from one single scenario or event. However, one question can assess the candidate in more than one aspect. A question in AWOPS, for example, may require a candidate to demonstrate knowledge in interpretation of weather reports and the SACATS in combination. d. Apart from using probing words such as "what", "why", "where", "when" and "how", DFE's are encouraged to use "action verbs" in order to emphasise the assessment of higher order thinking skills. Such verbs could be: "explain", "describe", "list" and "interpret." Additional examples are provided in the TGM listed above. 	

Aspect description	
3.	*Oral evaluation technique
Instructions and recommendations: <p>*Note - Users should refer to the section "Oral examination questions" in this document and to the relevant section in the document "TGM for the development and revision of examinations and test items."</p> <ol style="list-style-type: none"> a. 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 DFE to display command of language and vocabulary but only detract attention from the test. If a candidate does not understand the meaning of words, he or she will not be able to answer the question. Therefore, a DFE must keep the vocabulary within grasp of candidates. b. The cautionary statement above does not absolve candidates from understanding English. Despite the general comment above, the requirement for a minimum level of English language proficiency remains. The TGM listed above has more information on the use of English in questions. If a candidate reveals a serious deficiency in this regard, the testing/checking DFE should consider whether <ul style="list-style-type: none"> • the test/check is even feasible in such conditions, • whether this deficiency possibly constitutes a failure of the ground evaluation and • whether this should be reported to the SACAA by one of the official mechanisms. c. Questions should get the candidate thinking. Asking a closed-ended question that only requires a Yes/No answer does not tell the DFE much about the candidate's level of understanding and application/correlation. d. An examiner should be disciplined in allowing for "waiting time" ("thinking time") when asking questions. If "waiting time" is increased, the candidate will answer with increased confidence and the answers will be longer and more detailed. Increasing "waiting time" may be difficult for a DFE who has the habitual desire to add something immediately after the answer is given. However, those who persevere will come to see the benefits of some "waiting time." 	

e. Tricky or irrelevant questions should be avoided. Questions should be challenging, but the necessary background should certainly be provided.

FAA 3-9:

“An instructor should ask focused, open-ended questions and avoid closed-ended questions.” “Open-ended questions are designed to encourage full, meaningful answers using the student’s own knowledge and perceptions while closed-ended questions encourage a short or single-word answer. Open-ended questions, which typically begin with words such as “why” and “how” tend to be more objective and less leading than closed-ended questions. Often open-ended questions are not technically questions, but statements that implicitly ask for completion.” “In contrast, closed-ended questions tend to evaluate the student’s understanding only at the rote level of learning.”

Aspect description	
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4.	Time management
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Instructions and recommendations:

- a. The purpose of assessing a DFE’s time management during the ground evaluation is not to restrict individual style, but to ensure a focussed, disciplined, and effective ground evaluation. Aviation activities mostly have time restrictions and excessive time spent on one component simply steals time from another one. This is unprofessional, sets a poor example and is potentially dangerous.
- b. Conversely, it is unrealistic to allege that one can conduct a proper ground evaluation with insufficient time allocation or when wasting time exchanging chatty flying stories. Lengthy, unnecessary introductions to questions also detract from the purpose of the test or check phase. The goal is to get on with the job. The SACAA therefore expects a DFE to make optimal use of the time available and do a comprehensive evaluation of the knowledge underpinning a candidate’s operational ability.
- c. Proper time management also means completing an evaluation timeously. Allowing a ground evaluation to extend into an FSTD or aircraft flight slot potentially poses an operational or safety risk and hampers candidate performance. A DFE should be able to reach a conclusion and make a decision regarding a candidate’s knowledge within the allocated time. If this is not possible, either insufficient time was budgeted, or the evaluation was poorly executed and inaccurate. However, when it is clear that unforeseeable operational circumstances have affected an evaluation, the AO is expected to be fair and exercise reasonable judgement.

Time allocation for the ground evaluation

A DFE should allocate enough time to the ground evaluation phase, within the following *suggested framework:

For a single-pilot test or check:

0.5 hours = too short

1.0 hours = acceptable

1.5 hours = ideal

For a multi-crew test or check

1.0 hours = too short

1.5 hours = acceptable

2.0 hours = ideal

The ideal time allows for:

meeting the candidate(s)

conducting the ground evaluation

buffer time in case of poorly performing weak candidate(s)

conducting the pre-flight briefing

a short break to give opportunity to the candidate(s) to revise the test or check plan

***Note** -Some air operators require flight crew to undergo, as part of a test or check, an additional written examination prior to the ground evaluation. This practice is acceptable, provided that it does not detract from the operational flavour

and completeness of the ground evaluation. For such operators, the AO doing the oversight may allow a reasonable and responsible decrease of the suggested time allocation.

Aspect description

5. Completeness of ground evaluation

Instructions and recommendations:

- a. All required aspects on the applicable test/check form must be assessed/checked during the ground evaluation. Any omission will result in an unsatisfactory oversight.

Aspect description

6. Authenticity of evidence

Instructions and recommendations:

- a. Fundamentally, the principle of a test/check is that the **candidate** is responsible to demonstrate that he or she is able to perform adequately. The DFE is required to design the test or check so that this can be achieved thoroughly, yet fairly. Such a situation will allow the DFE to collect enough evidence to make an informed, responsible decision. However, as long as the DFE has done this, it is up to the candidate to show competence. It is not the DFE's job to look for reasons to pass the candidate.
- b. Practically, the requirement for authenticity means that the evidence provided came from the candidate and nowhere else. If the DFE assists the candidate (even if this is done inadvertently or with good intentions), the evidence collected during the assessment/evaluation becomes invalid. DFE's should take great care to remain dispassionate and objective in order to ensure that flight standards are maintained.

Aspect description

7. Interpretation of evidence (Ground evaluation)

Instructions and recommendations:

- a. The conclusion reached about whether a candidate should pass, or fail should be correct. Allowing an incompetent candidate to pass a flight test or check and operate an aircraft constitutes a serious failure on a DFE's part and presents a major safety threat to aviation.
- b. Clear guidance is provided in every SACAA Part 61 test/check form and these performance descriptions must be followed to ensure that standards are met.
- c. A candidate that does not give a convincing performance is not regarded as competent. Satisfactory performance is deliberate, consistent, repeatable, and unambiguous - anything less than this should be regarded as unsatisfactory. It is important to clarify or dispel any doubt about a candidate's ability by requiring additional evidence (within legal provisions). However, once it is evident that a candidate is not competent, a clear-cut decision must be made.

SECTION 3 - PRE-FLIGHT BRIEFING

Overview and important considerations -

- a. A DFE shall conduct a thorough pre-flight (dispatch) briefing with the candidate(s) prior to the in-flight evaluation in order to ascertain that the following is fully understood:
 - i. full in-flight assessment plan
 - ii. criteria/tolerances to be applied
 - iii. duty authority and sitting of each crew member (including the DFE)
 - iv. specific parameters for the general handling exercises (speeds, configuration, etc.)

- v. rules of engagement regarding procedures and roles of DFE
 - vi. state of the aircraft or FSTD (snags and MEL items)
 - vii. differences between FSTD and aircraft
 - viii. transfer of control
 - ix. addressing human factors (if any)
 - x. threat analysis
- b. The ATC departure clearance may not be given to the candidate(s) during the pre-flight briefing as it negatively affects the realism of the in-flight evaluation.
 - c. This briefing must be given with as much emphasis as possible in order to ensure that the candidate(s) becomes familiar with all applicable aspects.
 - d. An example of the practical content of this briefing is that the DFE should explain the rules about the use of on-board equipment during the during the in-flight evaluation.
 - e. After completion of the pre-flight briefing, the candidate(s) should be afforded a short period of time to relax and to review the assessment plan and scenario.

Aspect description	
1.	Scenario and sequence of events
<p>Instructions and recommendations:</p> <ol style="list-style-type: none"> a. The pre-flight briefing is a dispatch briefing. In this context, it must serve two purposes - reinforce a safe and efficient flight and support the assessment/evaluation. b. This briefing should be focussed and clear, not lengthy, and inefficient. An overly complicated or long briefing is puzzling, causes confusion and neither promotes safety nor a proper assessment/evaluation. c. Similarly, if a briefing is rushed or unstructured, it will not fulfil its purpose. d. It is not necessary to be overly rigid or legalistic about the briefing, but it should communicate all essential information. While the introductory briefing gives a broad sketch of the proceedings, this one should include a refined briefing on the sequence of activities, flight management, control hand-over procedure, principles of dealing with emergencies and so forth. 	

SECTION 4 - IN-FLIGHT EVALUATION
<p>Overview and important considerations -</p> <p>A DFE must conduct the in-flight evaluation in accordance with the guidelines provided in this manual, the applicable form and SACATS.</p> <p>A DFE should make a concerted effort to be relaxed and non-threatening. The candidate is probably nervous enough without the DFE shaking his or her head, stiffening, clenching teeth or gasping at inappropriate times. If a DFE remains calm and neutral the candidate will perform better. Put differently, the less a DFE influences the outcome by interference, distraction, or assistance, the closer the outcome will match the candidate's actual ability, whether good or poor.</p> <p>The candidate(s) should be assessed against what would be an "ideal performance under existing conditions". For example, if it's windy and turbulent, the candidate will not be able to maintain altitude, heading and airspeed as well as if the day was calm.</p> <p>A DFE is expected to use any suitable opportunity to assess the candidate's application of knowledge during the in-flight evaluation on any aspect appropriate to the condition or state of flight. "Dead-legs" often present the opportunity for such integrated assessment methods.</p> <p>Give credit where credit is due, and do not be influenced by poor performance on a previous item when assessing any other item.</p> <ol style="list-style-type: none"> a. A DFE is expected to vary the flight test profile, cross-country routing, and emergency scenarios from candidate(s) to candidate(s) to avoid a situation in which pilots might be trained specifically for a "predictable"

DFE's flight test or check. If this were to happen, the result would be the licensing of pilots with major training gaps that were not identified through the flight test/check process.

- b. The practical assessment/evaluation may never be pre-occupied with pure psychomotor flying skills only, while ignoring the supporting psychological and cognitive skills. Dreyer explains this as follows:

"Observation-based assessments assess not only skills but also the underpinning knowledge and essential attitudes that are necessary to perform at a required standard" (2014: 110).

- c. For a testing/checking DFE, the principle above means that adequate holistic performance remains critically important. If it becomes clear during the in-flight assessment/evaluation that a candidate simply does not have the necessary knowledge to manage a flight, this should result in a failure of the candidate. The same applies to aspects like lost situational awareness, an inability to recognise the implication of serious equipment failures and critical ignorance of the functioning or limitations of an instrument.
- d. ON an interpersonal level, human factors can also have a significant effect on in-flight evaluation reliability. A DFE 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. DFE's should be aware that their ability to accurately assess the candidate's performance can also be adversely affected by these same factors, especially fatigue.

In-flight evaluation in an aircraft

- a. During the conduct of an in-flight evaluation in an aircraft, a DFE shall remain alert for other traffic at all times and has a duty to intervene to maintain the safety of the flight.
- b. Under normal circumstances, the candidate will consider the DFE his or her passenger.
- c. The DFE may not assist the candidate in the management of the aircraft, radio communications, navigational equipment, and navigational charts, except in the following circumstances:
 - i. In the case of a test for a Multi-engine Class Rating, the DFE may perform the radio communications required for coordination with ATC.
 - ii. In the case of a test or check for the Instrument Rating or a test for an ATPL in uncontrolled airspace, the DFE may perform the radio communications required for coordination with other aircraft and/or ATC. The DFE will use correct ATC terminology when delivering simulated ATC clearances to the candidate.

In-flight evaluation in an FSTD

During the conduct of a test or check in an approved FSTD, the DFE shall ensure that the following conditions are met:

- a. The FSTD used for the test or check is qualified in accordance with Part 60 of SACAR and is approved for the specific purpose;
- b. In case of an LOE, the intercom system shall be used at all time;
- c. Where the DFE is not qualified to operate the instructor operating station (IOS), another qualified person may operate the equipment on his or her behalf;
- d. The person who operates the IOS on behalf of the DFE, must have been briefed prior to the test or check on the assessment plan/script, flight mission, flight profile, sequencing of events, weather and the clearances to be delivered;
- e. System failures must be practical and applicable to the type of operation and aircraft model or variant. Multiple failures must be related and cascading as a result of the initial failure (i.e.: engine-driven hydraulic pump fails as a result of the associated engine failure), or as a result of pilot actions. Multiple unrelated failures should be avoided.
- f. During a test or check for single-pilot operation, no assistance is to be provided. The DFE should however offer his assistance as ATC, ground personnel, cabin personnel, Operations Control Centre, etc.
- g. For multi-crew operation, the DFE will evaluate the candidate's performance from a third seat that permits a view of the candidate's instrumentation. Each pilot occupying a seat during the administration of a test or check in a multi-crew operation shall be qualified to operate the specific

aircraft type, variant or model.

- h. When acting as ATC, the DFE shall apply ICAO standard terminology and phraseology. Where the DFE role-plays as ATC, simulated clearances must use correct and standard terminology;
- i. The test or check should start on the ground in order to assess the applicable aspects. The DFE may, due to time constrain, reposition the aircraft at the holding point of the take-off runway. This shall be thoroughly briefed during the pre-flight briefing.
- j. The DFE may reposition the aircraft in-flight while assessing the general handling, different instrument approaches, low visibility take-offs etc.
- k. In case of an LOE, the aircraft should not be "repositioned" along the route but rather "fast-forwarded", depending on the IOS functionality;
- l. The test or check profile/scenario should be conducted as a Line Operational Evaluation (LOE) and completed to a logical conclusion (outcome);
- m. It is not advised to interrupt an LOE with general aircraft handling exercises as it can negatively affect the performance of the candidate(s).
- n. Simulated weather conditions for the required approaches should be set at or close to the minimum weather criteria specified on the applicable approach charts;
- o. Approach publications and databases for FSTDs should be current and obtained from reputable sources, but if the database is expired, the corresponding approach charts must be retained and used until the deferred defect is rectified.;

Discretion of the DFE:

- a. Deviations from the published criteria due to weather, turbulence, traffic or other situations beyond the control of the candidate must be taken into consideration when assessing the various test or check aspects.
- b. The test or check should, whenever possible, be conducted under normal flight conditions in order to enhance objectivity and to reduce the need for the DFE to make allowances.

Aspect description	
1.	Adherence to pre-flight briefing
<p>Instructions and recommendations:</p> <ul style="list-style-type: none"> a. The outline of the in-flight evaluation conveyed during the briefing must be adhered to, unless exceptions were briefed, unexpected events occur, technical issues arise, or flight safety dictates a change. b. As discussed above the essential requirement still is that the assessment/evaluation must be planned, methodical and structured. If evidence of on-spur-of-the-moment testing or checking is observed, the AO will view this as an unsatisfactory performance by the DFE. c. This requirement to test/check methodically obviously does not mean that every single flight situation should have been briefed. If decision-making is assessed/evaluated, it is inevitable that the candidate be allowed space to think and act. As such, the planning requirement excludes actions taken by the candidate in response to a test/check situation. Such responses, for example, might be in reaction to an open-ended scenario in which a DFE requires either in-flight replanning and decision-making or handling a simulated emergency. d. In other words, the principle that an AO will assess in this aspect is whether a DFE has an unplanned, ad-lib style of assessment/evaluation (which is unacceptable) or whether the concept of orderly, thorough, and systematic is demonstrated. 	

Aspect description		
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2.	ATC simulation (realism, procedures, and phraseology/terminology)
<p>Instructions and recommendations:</p> <p>The rubric is self-explanatory. It is expected that a DFE demonstrates a professional example with exemplary radiotelephony.</p> <p>However, the intention with the assessment of this aspect is not to penalise a DFE for minor phraseology errors or slips. For this reason, only gross radiotelephony errors and ill-discipline will lead to an aspect failure. However, procedural errors will lead to a failure of the aspect.</p>	

Aspect description	
3.	Compliance with minimum requirements of test/check
<p>Instructions and recommendations:</p> <p>a. All required aspects on the test/check form must be assessed/evaluated, except where otherwise allowed.</p>	

Aspect description	
4.	Evaluation of flight management skills
<p>Instructions and recommendations:</p> <p>No comments. Rubric is self-explanatory.</p>	

Aspect description	
5.	Authenticity of evidence
<p>Instructions and recommendations:</p> <ol style="list-style-type: none"> a. The SACAA allows limited in-flight revision and re-testing during the *in-flight portion of a test or check. b. The provision is sometimes misunderstood or even abused. It has occasionally resulted in unsatisfactory candidates being awarded a pass for an unsatisfactory performance or simply given repeated coaching until they pass. c. The purpose of this provision is to ensure a fair assessment/evaluation of candidates' abilities, not to allow instruction during a summative assessment/evaluation. It is important to take note that the minimal allowance for in-flight repeat of a failed aspect does not mean that the Examiner may retrain a candidate that should rightfully fail a test/check. Abuse of the repetition leniency totally defeats the object of a test or check and will result in an unsatisfactory oversight. The provision for the repetition of an aspect is explained in the relevant form, but guidelines are given below. <p>*Note -This provision does not apply to the ground evaluation section of a test or check.</p> <p>Repeat of an aspect</p> <ol style="list-style-type: none"> a. Testing or checking for the purpose of a licensing action must remain clearly removed from the training in order to maintain the reliability of an assessment/evaluation. For this reason, an aspect will not be repeated unless one of the following conditions applies: <ol style="list-style-type: none"> i. Grading. <p>An aspect is graded with a "2" and the candidate is offered the opportunity to repeat the one aspect once more. The candidate must be graded accordingly, and the second display regarded as final. This provision is intended to give candidates that have made isolated, minor mistakes one more opportunity to demonstrate proficiency, specifically in cases where performance is so close that differentiating between a grading of "2" and "3" is difficult. Stated differently, this provision exists to cater for borderline performance that is so close to the required standard that it</p> 	

is virtually indistinguishable.

ii. **Discontinuance.**

Discontinuance of a manoeuvre for valid safety reasons; i.e., a go-around or other procedure necessary to modify the originally planned manoeuvre.

iii. **Collision Avoidance.**

DFE intervention on the flight controls to avoid another aircraft that the candidate could not have seen due to position or other factors.

iv. **Misunderstood Request.**

A legitimate instance when a candidate does not understand a DFE's request to perform a specific manoeuvre. A candidate's failure to know the requirements of a specified manoeuvre is not grounds for repeating a task or manoeuvre.

v. **Other Factors.**

Any condition where the DFE was distracted to the point that the candidate's performance of the manoeuvre (radio calls, traffic, etc.) could not adequately be observed.

SECTION 5 - DEBRIEFING, FORM HANDLING AND CORRECTNESS OF PASS/FAIL DECISION

Overview and important considerations -

Post flight debriefing

- a. Before leaving the aircraft or FSTD, the DFE should consider whether there are any questions that are best answered or issues that are best resolved in the flight deck.
- b. Before conducting the debriefing, the DFE 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 DFE 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 DFE should only ask questions which might affect the final outcome.
- c. In a case where a candidate has demonstrated that he or she is competent, the DFE should inform him or her accordingly, followed by a summary of any weak areas with suggestions, where necessary, of ways to improve performance. The DFE should also provide positive reinforcement of aspects that were well handled and give examples of good resource management, TEM and decision making by the applicant.
- d. In a modern, constructivist environment, candidate participation is crucial to a debriefing. A DFE should certainly encourage a candidate to self-critique his or her performance (both for satisfactory and poor aspects). Potentially, the training value of a candidate realizing his or her own errors by guided self-reflection is huge.
- e. A DFE should conduct a fair and unbiased debriefing of the applicant based on identifiable factual items. A balance between friendliness and firmness should be maintained. It may be appropriate to use a facilitative style of questioning in order for the applicant to obtain maximum benefit from the debriefing. Facilitative techniques are inappropriate when indicating the result of the test but may be used thereafter to engage the applicant in a discussion of any follow-up points. One effective facilitation method is to:
 - i. start with an introduction
 - ii. avoid dealing with issues chronologically
 - iii. ask two open questions per issue
 - iv. get the applicant to do the thinking and talking
 - v. summarise at the end (it can be useful to get the candidate to summarise)
- f. The following points should be discussed with the candidate (at the DFE's discretion):
 - i. how to avoid or correct mistakes;
 - ii. any other points of criticism noted;
 - iii. any advice considered helpful
 - iv. any good points
- g. Further de-briefing guidelines:

- i. the debriefing needs to be valid and comprehensive.
- ii. the recommending instructor should be on hand for the post-flight debriefing.
- iii. the candidate should be advised of the outcome as soon as practicable.

Recording observations and remarks

- a. Written observations/remarks are required when:
 - i. grading an aspect with a "1";
 - ii. marking an aspect as "NC"
 - iii. an aspect was not assessed "NA"
 - iv. deemed necessary by the DFE
- b. Each observation or remark must be numbered to link to the applicable aspect.
- c. The observations or remarks are to be sufficient to inform others, to support subsequent discussion and justify the mark or grading assigned.
- d. During the in-flight evaluation, it is sometimes difficult to write clear and concise observations or remarks. It is good practice that a DFE uses notes made during the evaluation to complete a final copy of the test/check form. This permits the DFE to refer to the appropriate flight test criterion while writing final comments.

Aspect description	
1.	Quality and completeness of debriefing
<p>Instructions and recommendations:</p> <ul style="list-style-type: none"> a. There are only two significant requirements within this aspect - the debriefing should cover (1) all reasonable test/check areas in which a debriefing can improve future performance and (2) all areas in which the candidate displayed notable deficiencies. The latter does not necessarily imply a test/check failure. b. It is a requirement that the debriefing should promote learning and attempt to improve future performance. At the very least, the candidate should be clear about the reason(s) for failure. He or she should also know which areas of performance need improvement. In a nutshell, therefore, the debriefing should clarify misconceptions and remove serious ignorance. It should also promote growth, development and learning. c. It may happen, sadly, that a candidate displays such serious ignorance or poor performance that a thorough debriefing is impossible or impractical. This oversight aspect therefore does not imply that a DFE should spend an unreasonable amount of time to debrief or retrain a candidate that has failed a test/check. 	

Aspect description	
2.	Interpretation of evidence (In-flight evaluation)*
<p>Instructions and recommendations:</p> <ul style="list-style-type: none"> a. Any gross deviation from the relevant grading scale will undoubtedly result in an unsatisfactory oversight. b. The SACAA wishes to clarify that any act or omission by a candidate that is safety-related must result in a failure of the test/check. The following explanation may be used as a reasonable guideline in this regard. This guideline has been adapted from testing guidance provided by the FAA. <p>Any action or lack of action by a candidate that requires corrective intervention by the DFE to maintain safe flight or, in the case of an FSTD, any action that would have required the same intervention, had it occurred in an aircraft, is regarded as unsafe and must result in a failure of the test or check.</p> <p>*Note - Users should also refer to the notes in section 2: Interpretation of evidence (Ground evaluation).</p>	

2. IMPORTANT NOTES ABOUT FORM COMPLETION

2.1. Handling a failed test or check

- 2.1.1. DFEs should be sensitive to the fact the candidate may become aware or assume that a test or check aspect has been performed at an unacceptable level without the DFEs input.
- 2.1.2. The examiners should then encourage the candidate to continue, provided that he or she is still eligible, and agrees to complete the test or check.
- 2.1.3. DFEs should terminate the test or check when it becomes evident that a complete retest or recheck is required, unless the candidate wishes to complete the remaining aspects for the benefit of learning.
- 2.1.4. In case the candidate failed to demonstrate the competency in some of the aspects, or is assessed as not competent, a DFE should:
 - 2.1.4.1. Ask questions as required to confirm the assessment;
 - 2.1.4.2. Inform his client with the outcome of the test or check;
 - 2.1.4.3. Substantiate the reason(s) for his assessment and decision;
 - 2.1.4.4. Inform the candidate that he or she may not exercise the privileges of his or her licence or rating as specified in the SACAR 61.01.5;
 - 2.1.4.5. State what the retest or recheck requirements will be;
 - 2.1.4.6. Discuss the recommended remedial training.

3. PROCEDURE IN CASE OF AN UNSATISFACTORY OVERSIGHT

- 3.1. 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 the SACAA to correct any addressing observed shortcomings, because this is critically important to protect the security and reliability of the larger licensing system.
- 3.2. During the debriefing at the end of an oversight, a DFE is expected to sign the DFE Oversight Report as an acknowledgment that the oversight was conducted. This remains a requirement, irrespective of the outcome of the oversight.
- 3.3. A DFE 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.
- 3.4. The remedial actions following an unsatisfactory oversight are described below. None of these is designed as a punitive measure, but to correct the underlying reason for unsatisfactory performance. As such, a DFE 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 or potential disputes to be resolved harmoniously.
- 3.5. The SACAA will assist with guidance and corrective input, as well as accepting reasonable suggestions and factual input regarding improvements in its own oversight processes.
- 3.6. In cases where it is necessary for a DFE to take responsibility for addressing shortcomings, this becomes an important part of any constructive remedial process.
- 3.7. 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.
- 3.8. No re-designation will be done until deficiencies are corrected and a successful oversight undergone.
- 3.9. Every unsatisfactory oversight shall be followed by a moderation interview between the DFE 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 DFE is invited to share his or her perspective as examiner. Such feedback is invaluable to help inform accurate oversight by the SACAA. A transparent and open discussion will also help give the SACAA with a better understanding of general areas where guidance to examiners might be needed.
- 3.10. The moderation interview may not be conducted on the same day as the unsuccessful oversight.
- 3.11. 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 DFE, as well as the attending AOs.

- 3.12. 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.
- 3.13. Procedures following the interview are as follows:
- 3.13.1. 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;
 - 3.13.2. In a case where only the Pre-flight briefing section was unsatisfactory, the AOs have the prerogative to moderate the oversight and accept the outcome as satisfactory, following a successful interview result;
 - 3.13.3. In a case where the only the Ground Evaluation section was unsatisfactory, the DFE is required to undergo a follow-up oversight. This will include the Introduction, Ground Evaluation and Debriefing sections of the oversight report;
 - 3.13.4. In a case where the only the In-flight Evaluation section was unsatisfactory, the DFE is required to undergo a follow-up oversight. This will include the Introduction, Pre-flight briefing, In-flight and Debriefing sections of the oversight report;
 - 3.13.5. In a case where the only the Debriefing section was unsatisfactory, the DFE is required to undergo a complete follow-up oversight, including all sections of the oversight report;
- 3.14. In a case where multiple sections were observed to be unsatisfactory or where deep-rooted or complex deficiencies are observed, the SACAA may require a combination of the above for a follow-up oversight and schedule one or more additional debriefing sessions for further remedial input.
- 3.15. 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.
- 3.16. Special procedures:
- 3.16.1. DFEs 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;
 - 3.16.2. 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. DFEs are advised not to expect a follow-up interprovincial oversight within less than 3 weeks;
 - 3.16.3. Where a DFE 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.

ANNEX A

CODE OF CONDUCT

1. Introduction

A DFE (DFE) is appointed by the Direction of Civil Aviation in terms of relevant provisions of SACAR to carry out high-stakes licensing actions on behalf of the Director. A DFE is therefore a representative of both the Director of Civil Aviation and the government of the Republic of South Africa. He or she has a statutory obligation to demonstrate a high standard of behaviour and professionalism.

A DFE shall abide by the content and spirit of this Code of Conduct

2. Purpose of the Code of Conduct

The purpose of this document is to assist a DFE to know and understand the minimum standards of conduct and behaviour expected of him or her as a representative of the Director of Civil Aviation.

By signing this code of conduct, a DFE or applicant for DFE designation undertakes to comply with the provisions of the Civil Aviation Regulations, 2011 and the associated legal framework which govern any test or check activity, which will or might result in licensing action, which he or she conducts or intends to conduct.

3. The role of a Designated Flight Examiner

- a. A DFE is appointed to assess pilot performance against SACAA standards, and to:
 - i. evaluate the pilot's ability to apply the required knowledge and perform the tasks assigned by the DFE to the required level of skills;
 - ii. identify and deal with hazardous (inappropriate) behaviours;
 - iii. promote safety at all time;
 - iv. encourage learning;
 - v. assist training organizations with training standard improvement;
 - vi. maintain efficient line of communication with SACAA.
- b. A DFE has the obligation to provide a prompt service to any person who wishes to undergo a test or check, provided that such person complies with all regulatory requirements pertaining to such test or check.
- c. A DFE is expected to honour appointments unless circumstances warrant cancellation or postponement. It is the DFE's responsibility to reschedule a test or check if the postponement is at the DFE's request. If a DFE cancels a test or check without rescheduling, the DFE should recommend another DFE or instruct the candidate to visit the SACAA website which provides the names of another DFE or may arrange to conduct the test or check at a mutually acceptable date and time.
- d. Every DFE should endeavour to understand and adopt the guidelines contained in this TGM, as well as the relevant guidelines and instructions in the accompanying document "TGM for the development and revision of examinations and test items" as closely as possible.

4. Professional Etiquette

A DFE should endeavour to maintain a high level of knowledge in his or her areas of expertise as well as in the relevant SACAR, SACATS and applicable SACAA Aeronautical Information Publications.

As representative of the DCA, a DFE is also required to be:

- a. professional,
- b. punctual and suitably dressed,
- c. respectful, polite and courteous, yet neither overly familiar nor timid,
- d. strict but fair,
- e. unbiased and uncompromised,
- f. well familiar with the SACAA website;
- g. A DFE undertakes to refrain from defaming the character of SACAA and its staff. Such behaviour will be viewed in a serious light and might lead to a suspension of a designation;
- h. In case of a dispute or disagreement, a DFE is invited to communicate with the SACAA Personnel Licensing department to settle such differences in a respectful and constructive manner.

5. Acknowledgement

I acknowledge that I have received an updated copy of the SACAA document "TGM for DFEs and Oversight" and confirm that I am familiar with the content of this document

I herewith commit to abide by this code of conduct and to represent the Director of Civil Aviation in a professional and uncompromised manner.

I understand that a breach of any part of this Code of Conduct may lead to enforcement action and removal of my appointment as DFE.

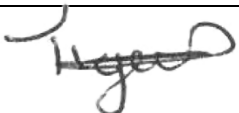
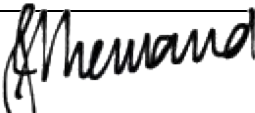

SIGNATURE OF DFE	NAME IN BLOCK LETTERS	DATE

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21 DOCUMENT AUTHORISATION

RESPONSIBLE PERSON:		
	NEO GOUWE	05 MARCH 2024
SIGNATURE OF M: L	NAME IN BLOCK LETTERS	DATE
REVIEWED & VALIDATED BY:		
	JOHAN NIEMAND	05 MARCH 2024
SIGNATURE OF SM: PEL	NAME IN BLOCK LETTERS	DATE
APPROVED BY:		
	ERIC MATABA	05 MARCH 2024
SIGNATURE OF E: SSA	NAME IN BLOCK LETTERS	DATE

END