IWCF Operations Limited

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Practical Assessor Handbook – Addendum Virtual Practical Assessments

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Contents

Document Revisions

Date	Version Number	Document Changes
07 Oct 20	1.0	New document to align with the Virtual Practical Assessments

1. Purpose

The purpose of this document is to provide practical assessors guidance on conducting virtual practical assessments. It is to be used in conjunction with the Practical Assessor Handbook (AC-0018).

Note: the word virtual means that the candidate sits the assessment remotely from the assessor and any other candidate.

2. Scope

This document applies to all IWCF accredited practical assessors using a virtual simulator. Please note that the numbering used in this document matches that within the handbook, so Section 4 below matches Section 4 in AC-0018 Practical Assessor Handbook.

3. Practical Assessor Responsibilities

In addition to the responsibilities stated in the handbook and AC-0021 Practical Assessment – notice to Assessors, the assessor must incorporate the following responsibilities:

3.1. Workspace Security

The assessor must ensure that the virtual candidate's workspace has only those permitted items available. No other person is to be in the workspace that can interfere or assist the candidate in any way. A second independent camera, additional to the computer camera, must be placed in the workspace to give a broad view of the candidate's worktable and computer. It must be connected to a reliable communication media such as Zoom or Teams. Before starting the assessment, the candidate must do a 360 degree sweep of the work area with the second camera to satisfy the assessor that the area is clear. If an IWCF auditor is monitoring the assessment, they may also request a camera sweep of the area. If the assessor is assessing a Driller and a Supervisor at the same time, the assessor will observe each candidate plus the two workspaces simultaneously. In addition, the IWCF will have access to audit the assessment at any time.

3.2. Simulator and Assessment Environment Familiarity

The main objective here is to reduce stress of the candidate. Being assessed creates enough stress in itself without the addition of being unfamiliar with the simulator. Before an assessment, each candidate must receive training, from the training school, in how to log-on and use the simulator for well control operations. The candidate may not be fully familiar with the simulator in use, therefore the assessor must make it clear to the candidate that assistance can be given in finding the correct screen/controls to perform a function. In the classroom situation the assessor can see, through body language, if a candidate is having problems. In the virtual situation it will be more difficult to see body language, hence the need for enhanced communication with the candidates.

3.3. Screen Distraction:

On many classroom-based simulators the candidate may only have one screen or one piece of equipment to concentrate on. For example, the Supervisor spends most of the time on the choke panel when killing the well. Virtual simulators can offer the candidate many screens to view. This can be a great distraction and cause the candidate to lose concentration on the actual operation. Candidates should be trained to minimise 'screen-shifting' during critical operations.

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4. The Simulator

The centre must ensure that the virtual simulator is approved by IWCF and must be set up according to IWCF rules.

4.1. The following must be considered in addition to the handbook:

4.1.1. Internet Speed

The speed and reliability of the internet is an important part of the virtual assessment. This must be tested with your simulator supplier and the candidates to ensure that the assessor and candidate has sufficient bandwidth. The chosen simulator may use more or less bandwidth depending on manufacture. This has to be tested in advance for broadband width and reliability. It is important that the Assessor informs the candidates of the procedure to follow if someone loses connectivity. It should involve a communication that informs others that connectivity is lost and what action to take. In the event of a loss of connection by a candidate the simulator should be paused until connectivity returns. In the event of a long-term connectivity issue, the assessor should save the exercise at that point before continuing with the remaining candidate. At a later time, the assessor can re-start the simulation at the point in time it was paused to complete the other candidate's assessment. Training schools must document their procedures for handling internet problems. The written procedure will be audited by IWCF.

4.1.2. Computer Screen Size:

It is important that the Assessor can monitor the simulator screens and the Zoom/Teams screen at the same time. A laptop is unlikely to provide suitable viewing. A 24" (600mm) screen can accommodate both screens easily. Two computers or a computer and tablet can also be used together. Training companies must ensure their Assessors have suitable equipment to view both simulator operations and monitor candidates simultaneously, without having to flip back and forth between screen tabs. It is important to solve these issues during the training sessions. The minimum size screen for a candidate is a tablet, but the larger the screen the more beneficial it is to use the controls on the simulator screen.

4.1.3. Notice to Candidates/Assessor (AC-0021 and 0022):

In the classroom setting these notices are positioned on the wall for the candidates to read. In the virtual setting the candidates must be sent these for review as part of the pre-assessment paperwork.

4.1.4. Pump Control Panel and Choke Panel

The handbook references pump control and choke panel positioning for portable simulators. This requirement is not relevant to the virtual simulator.

4.2. Simulator Exercises:

For the chosen simulator, there must now be at least six different exercise wells for each stack type to be used during a practical exercise, all based on the virtual simulator model checklist. Practice exercise requirement is unchanged.

5. Before the Practical Assessment

5.1. Pre-Assessment Checks

    a) This will include checking of candidate ID, if not already done by the Assessor during the training phase. If the assessment is the first time the assessor has seen

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the candidate/s, then the ID must be shown. The visual communication media camera, e.g. Zoom, can be used to view the candidates ID.

b) Normally the pre-assessment paperwork is handed to the candidate at the start of the assessment. This is not possible in the virtual setting, so at a time before the assessment, the candidate/s must have received the relevant paperwork. This is:

- Kill Sheet and Kill Data Sheet to Supervisor (optional for Driller)
- Drilling Data Sheet to Driller
- Well Kill Data Sheet to Driller (optional for Supervisor)
- Notices to Candidates and Assessors AC-0022 and 0021
- Protocol for Internet Communication Failure

This requires the candidates to have the capability to read and print a pdf document. If the Kill Sheet is built into the simulator programme, then the kill sheet is not required to be sent to the candidates.

c) All other pre-assessment checks are to be carried out as per section 5.1 of the handbook.

5.2. Pre-assessment Briefing

a) During this briefing, the Assessor should make clear how the Supervisor will 'leave the room' at specific times. Breakout/chat rooms may be the preferred solution with some of the communication media (Zoom/Teams).

b) During the briefing, the assessor must confirm with the candidates the protocol to use if someone loses a connection. Each candidate should receive the protocol in their paperwork.

c) Candidates should be informed that the IWCF may access the assessment at any time for audit purposes.

d) Communications: Communication between Driller and Supervisor, and communication with the Assessor is a vital part of the assessment. It must be stressed during training that a proportion of the marks in the assessment are related purely to Driller – Supervisor communication.

e) In the classroom assessment communication can be written, verbal or physical. In the virtual situation there is very little written communication as well as physical (body language) communication. The primary means is verbal, and here we rely on the clarity of the voice being transmitted over internet media.

f) The Assessor will lose a lot of the body language communication between the candidates that normally replaced verbal communication; for example, the Supervisor pointing to the BOP's to be operated during a shut-in. This is not possible in the virtual assessment. Where one of the candidates is not transmitting or receiving a communication in his or her primary language, certain difficulties can arise. These potential problems need to be emphasised in the pre-assessment training sessions and pre-assessment briefing.

g) Candidates should be encouraged to repeat instructions and double check understanding. Likewise, the Assessor should ask a candidate to repeat what they said if it was not clear to the Assessor.

5.3. Permitted Materials

In the classroom environment this is easy to manage. In the virtual environment the assessor must check that the workspace is clear of non-permitted materials. A close watch on the visual media (Zoom/Teams) must be maintained throughout the assessment.

Immediately prior to starting the assessment, the candidate should take the workspace camera and do a 360º view of the room to make sure that the space behind the candidate is clear.

The assessor must provide the candidates with the drilling parameters for WOB, RPM and SPM.

6. Practical Assessment Procedure

6.1. Supervisor Leaving the Room

The supervisor must leave the room following the pre-assessment briefing and when the Driller starts drilling. With media like Zoom, Teams etc. place the Supervisor in a 'breakout' room where communication between Driller and Supervisor is not possible. The Assessor can then bring the Supervisor back into the room at the time required.

6.2. Choke Position

The Driller has to set the choke position after instruction from the Supervisor. If the virtual simulator you are using does not allow the Driller access to the choke operation, then that part of the assessment cannot be graded (section 2 of the Driller's grading sheet). In this case the assessor will give 0 (zero) marks to the Driller but reduce the total marks that can be awarded by 1 (one). For example, the maximum marks for the Surface Driller using the Drillers Method is 69. In this case it would now be 68 marks. The assessor must write on the grading sheet why the maximum mark was reduced by 1 (one)

6.3. Collecting Shut in Data

The grading sheet requires the supervisor to physically check the key shut in data. In the virtual environment this will not be so easy to see. The assessor must be watching the supervisor closely to ensure the data is being checked. It is important that candidates are continuously verbalising their actions, this can help the grading process.

6.4. Kill Sheet

In the classroom situation the supervisor would hand the kill sheet to the assessor for checking. As this is not possible in the virtual environment, the assessor must ask for a number of items of data to check that the calculations are correct. These are:
1. What is the Kill Mud Weight?
2. What is the ICP?
3. What is the FCP?
4. From the Step-Down Chart, what will the pump pressure be at 300 and 700 strokes? (The stroke values may be different depending on the exercise parameters).

If these four values are correct, then the kill sheet calculations are acceptable. Any other calculations on the kill sheet are not part of the assessment process. Following the assessment, the Supervisor will then scan or photograph the Kill Sheet and email to the Assessor.

For simulators with a built-in kill sheet the assessor can check the calculations and later printout and send it to IWCF. It is not mandatory to use a built-in kill sheet. A paper version can still be used if preferred by candidate.

6.5. Instant Failure

An instant failure will require one of the candidates to leave the simulation following a debrief from the assessor. This will require the failed candidate to log out from the simulator and the communication media. The graph up to the point of failure will need to be signed by the failed candidate.

6.6. Showing the Graph and Signatures

In the virtual environment the candidates can be shown the graph using a screen share facility on Zoom or Teams. But signing the graph can present problems. Software programs like Adobe Sign allows the Assessor to email the graph to the candidate for e signature and return. The system should be secure and trackable. Evidence of the signature can then be sent to IWCF. Training

companies are required to set this up and confirm in the application to IWCF to run virtual simulator assessments

7. Re-Sit Options

The re-sit options remain as per the normal IWCF resit criteria.

8. Practical Assessment Documentation

Documents required by IWCF for virtual assessments is the same as a classroom assessment.

The training centre must not update the supervisor's FORUM record until the kill sheet and signed graph have been received from the candidate/s.

9. Conclusion

The above content is to be read in conjunction with the Practical Assessors Handbook. Where an action required in the handbook is not stated in this addendum, then the assessor must follow the handbook. As simulators with virtual capability are approved there may be a requirement to modify the addendum.

10. Reference Documents

Document Name	Reference	Department
Practical Assessor Handbook	AC-0018	Accreditation
Practical Assessment – Notice to Candidates	AC-0021	Accreditation
Practical Assessment – Notice to Assessors	AC-0022	Accreditation
Virtual Simulator Model Checklist	AC-0126	Accreditation