



CLEARANCE DIVER SELECTION PHYSICAL FITNESS EVALUATION

OPERATIONS MANUAL









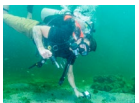
SECOND EDITION

June 2024

Canadian Forces Moral and Welfare Services (CFMWS)
Personnel Support Programs (PSP)



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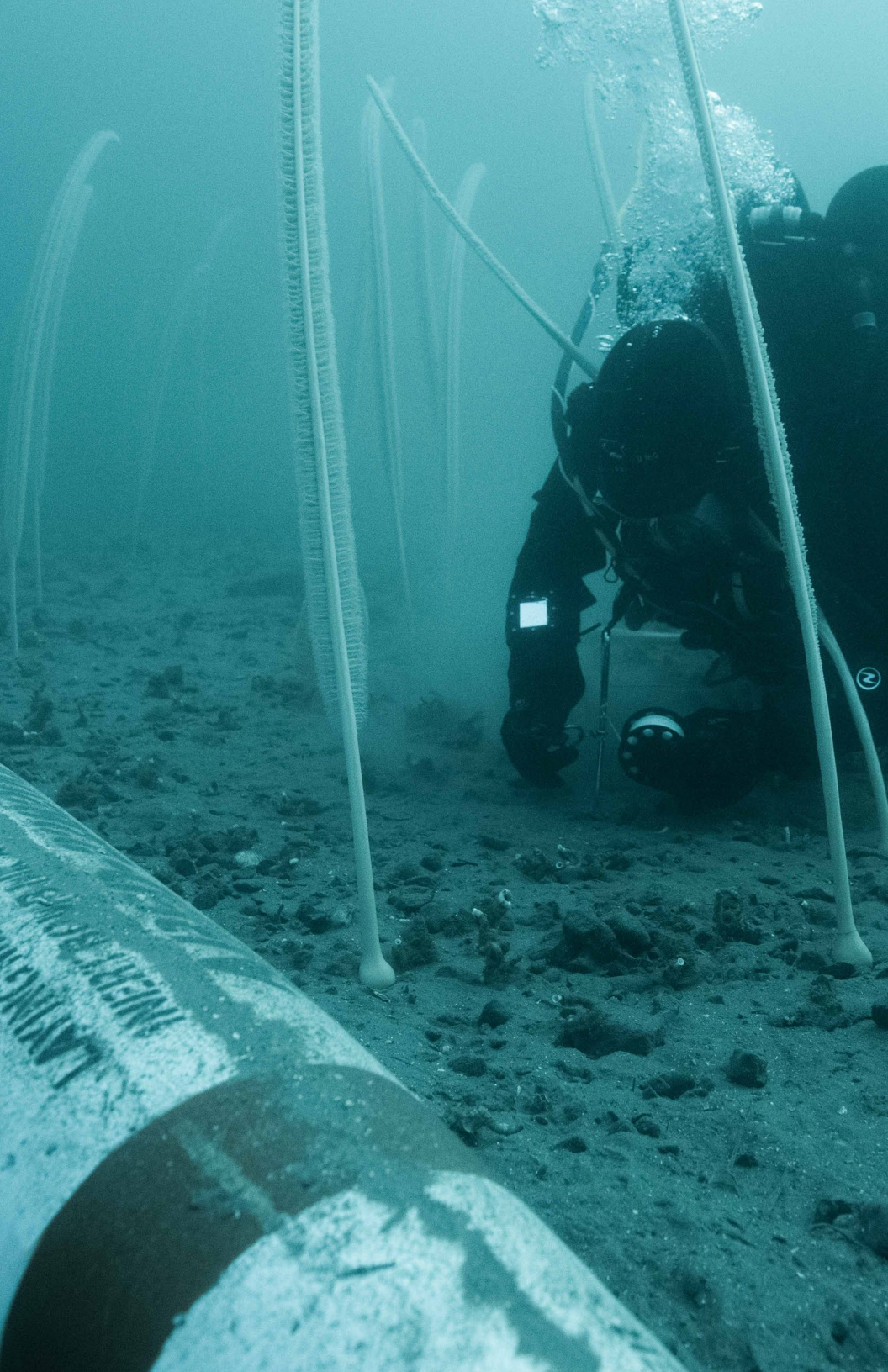
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FOREWORD

1. The Second Edition of this Operations Manual has been prepared to provide instructions and guidance for conducting the Royal Canadian Navy (RCN) Clearance Divers (CL DVR) Selection Physical Fitness Evaluation (PFE) for the purpose of Pre-Selection to the Clearance Divers Assessment Center (CDAC). This evaluation is delivered at the base level as part of the application process.
2. RCN CL DVR Selection PFE was developed for the CDAC, under the supervision of the Canadian Forces Morale and Welfare Services (CFMWS), Directorate of Programs (D Prog); Personnel Support Programs (PSP).
3. This new version of the manual replaces the First version (2022). This operations manual is the only reference for conducting the CL DVR Selection PFE for the Pre-Selection of candidates to the CDAC.
4. Revisions to this operations manual may occur by D Prog when required. The updated operations manual will be distributed formally after any review.
5. It is essential that the evaluation protocol and instructions provided in this operations manual be strictly adhered to and administered with care and attention in order to ensure valid and reliable results.
6. Evaluators must familiarize themselves with the instructions and ensure that each evaluation is conducted in the safest manner and environment possible.
7. Should you have any questions with the protocols or descriptions found within this Operations Manual you are asked to contact your Manager, Fitness, Sports & Recreation (or equivalent) or D Prog office at dfit-cphysd@cfmws.com.

Daryl Allard
Director, Programs
Personnel Support Programs





CHAPTER 1: INTRODUCTION

Background

1. The Directorate of Naval Personnel and Training (DNP) requested the research and development of a scientifically valid [Selection Physical Fitness Evaluation \(PFE\) for the pre-selection of Clearance Divers \(CL DVR\) for the Clearance Diver Assessment Center \(CDAC\)](#). To this end, a Selection PFE was developed for applicants wanting to challenge the CDAC. The CL DVR Selection PFE was approved by the DNP of the Royal Canadian Navy (RCN) in May 2021.
2. The CL DVR Selection PFE was designed based on the physical demands and abilities required for the safe and effective completion of the CL DVR course and operational physical tasks. Based on realistic but demanding scenarios, the CL DVR Selection PFE is comprised of two components, one on the land and one in the water. The following are an overview of the operational scenarios used to guide the development of the CL DVR Selection PFE:
 - a. **Component 1: Land** Conducting dismounted patrols for Explosive Ordnance Disposal/Improvised Explosive Device Disposal (EOD/IEDD) requires CL DVR deployment with light infantry units. CL DVRs carry bomb suits and gear, neutralizing threats following Standard Operation Procedures (SOPs) when identified. They must promptly respond to emergencies anytime during or after the patrol.
 - b. **Component 2: Water** CL DVRs swim/navigate with fins for shallow water mine countermeasures. They wear diving gear, swim to and from clearance points, demonstrating good technique and safety. Remaining attentive and focused, they follow SOPs to complete tasks, with reserve capacity for emergencies during or after the swim/dive.

General

Evaluation summary

3. The CL DVR Selection PFE has two components:
 - a. **Component 1: Land** The land component starts with the completion of a 5 km ruck march followed by a 5 min transition. Once the transition is over, a slightly modified [FORCE circuit](#) is initiated. The FORCE circuit is completed as fast as possible and consists of similar events to the four (4) tasks of the [FORCE Evaluation](#) and are completed in the same order, without the rest periods in between tasks: 20 m Rushes (20m R), Sandbag Lift (SBL), Intermittent Loaded Shuttles (ILS) (slightly modified) and Sandbag Drag (SBD). Once the FORCE circuit is completed, another 5min transition is required before starting the deadlifts. The deadlifts are completed lifting a 75 kg barbell for as many repetitions as possible without pause.

- b. **Component 2: Water** The water component starts with treading water for up to 02:30 mm:ss with hands out of the water followed by a 2 min transition. Once the transition is over, the 500 m swim is initiated. The 500 m swim is completed as fast as possible using the sidestroke technique.

Evaluation timelines

4. The two components of the CL DVR Selection PFE **must be completed separately with a minimum of 24 hrs between evaluations, but a maximum of 14 days**. The two components can be completed in any order. CAF members applicant to the CL DVR Selection PFE should **be advised of the required equipment needed 48hrs before each evaluation**.

Evaluation validity period

5. The CL DVR Selection PFE **must be completed up to six (6) months prior to the CDAC to be considered valid and acceptable for the CDAC**. The CDAC is typically held in February; therefore, both components of the test should be completed from August to January.

Evaluation attempts

6. **Two (2) attempts of each evaluation component are permissible per CDAC application cycle**. Regardless of the performance level achieved on the first attempt, CL DVR applicants can re-attempt the CL DVR Selection PFE a second time to improve their score. **There should be at least 30 days in between evaluations, or less at the evaluator's discretion. The CL DVR fitness preparation program is highly recommended**. Candidates should allow for proper preparation and recovery in between evaluation attempts and PSP Fitness staff should be mindful of the time and resources used to administer such evaluation.

Evaluation durations

7. The CL DVR Selection PFE has two components.
- The land component should take 1.5 hrs to administer per applicant.
 - The water component should take approximately 0.5 hrs to administer per applicant.

These timings are only related to the test administration.

Evaluation performance objectives

8. Each component of the evaluation represents an important aspect of the CL DVR occupation. **The applicant must complete each component**. There is no specific level of performance associated with a "passing or failing score". However, **there are performance objectives**. That said, every evaluation's result will be submitted once completed, no matter if the performance objectives were attained, or not. With the CDAC being a competitive process, applicants are encouraged to do their best in all components of the CL DVR Selection PFE.

Aim

9. This Operations Manual provides guidance and direction to local PSP Fitness staff on how to administer CL DVR Selection PFE to CAF members. **Qualified PSP personnel Fitness Staff are the only ones that can administer this evaluation.** The evaluators must follow the CL DVR Selection PFE protocols in this operation manual to ensure the evaluation results are valid and reliable for all candidates.

Requirements and Responsibilities

10. The following orders, directives, and publications are associated with the CL DVR Selection PFE and this Operations Manual.
- [DAOD 5045-0, Canadian Forces Personnel Support Programs;](#)
 - [DAOD 8009-0, Canadian Forces Diving;](#)
 - [Latest active version of the FORCE Evaluation Operations Manual](#)

CL DVR Selection PFE Evaluator's responsibilities

11. The CL DVR Selection PFE is only administered by PSP staff after completing the qualification on-the-job training (OJT). Annually, the PSP CDAC OPI will ensure that local PSP Fitness staff have the qualification training to administer the CL DVR Selection PFE. (qualification expires every 2 years)
12. Ensure that the facility has all the required equipment and space to administer the CL DVR Selection PFE, prior to the evaluation.
- Component 1: Land** PSP Fitness staff should consult [TOOL 2: Component 1 – Land: Equipment List](#) to ensure they have all the required equipment to administer this portion of the evaluation.
 - PART I: Ruck March** The ruck march must be performed on a flat surface/terrain, hazard-free, and without elevation. Acceptable routes are indoor track, outdoor track, outdoor field with a pre-established route, outdoor pre-established route. The 5 km route must finish close (<100 m) to the FORCE circuit set-up.
 - PART II: FORCE Circuit** A part of the land component evaluation should take place in the same location as a typical FORCE Evaluation.
 - PART III: Deadlifts** The barbell set-up must be located nearby (<100 m) the FORCE circuit setup.
 - Component 2: Water** PSP Fitness staff should consult [TOOL 6: Component 2: Water-Equipment List](#) to ensure they have all the required equipment to administer this portion of the evaluation.
 - PART I: Treading water**
 - PART II: 500m side-swim**
 Must have access to a pool for both parts.

13. It is recommended that local PSP Fitness staff should be organized in such a manner as to ensure that the following maximum ratio¹ for evaluator-participant is achieved, to ensure a standardized delivery process:
 - a. **Component 1: Land**
 - i. One-to-Four (1:4) for the Ruck march event of the land component
 - ii. One-to-One (1:1) for the FORCE circuit event of the land component
 - iii. One-to-One (1:1) for the Deadlift event of the land component
 - b. **Component 2: Water**
 - i. One-to-Four (1:4) for the Treading Water event of the water component
 - ii. One-to-Four (1:4) for the 500 m Swim event of the water component.
14. Be aware that cold or heat can exacerbate the physiological strain of exercise and thus may influence CAF member's performance. The ideal environmental conditions for the conduct of the CL DVR Selection PFE Evaluation are between 20-22 degrees Celsius with a relative humidity of less than 60 percent and adequate airflow²
15. When the CL DVR Selection PFE is properly administered, there are minimal risks to the applicant. **Nevertheless, the emergency protocol developed by each local PSP Fitness staff in conjunction with their respective locations Standard Operating Procedures will be reviewed.** It should be ensured that:
 - a. All Evaluators are First Aid and Cardio-Pulmonary Resuscitation (CPR) qualified.
 - b. Evaluators have briefed all applicants on safety requirements and emergency procedures before the start of the CL DVR Selection PFE;
 - c. The location of the closest Automated External Defibrillator (AED) has been identified, when available; and
 - d. During the water component, there must be a National Lifeguard (NL)-certified lifeguard at the pool. The local PSP Evaluator cannot act as the lifeguard and evaluator at the same time.
16. Completion and accuracy of all sections of [TOOL 1: CL DVR Selection PFE Reporting Form](#).

CL DVR Applicant/Candidate responsibilities

17. Consult the [Candidate-Aide for the CL DVR Selection PFE](#).
 - a. Bring all necessary equipment and follow pre-evaluation listed in the Candidate-Aide.
 - b. Prepare for the CL DVR Selection PFE with the guidance of the [12 Week Physical Fitness Program](#) available to all candidates on the CFMWS website.
18. Comply with the evaluation protocol as directed by PSP Fitness staff.

¹ The ratio for evaluator-participant can also be lower (1:3, 1:2, or 1:1).

² American College of Sports Medicine [ACSM], 20141





CHAPTER 2: REGISTRATION

Evaluation scheduling

1. The evaluation needs to be scheduled in advance via the local PSP Fitness Coordinator or Fitness Instructor. Candidates should be advised to consult the [Candidate Information Pamphlet for CL DVR](#) to know more about the requirements.
2. Given that the **CL DVR Selection PFE performance results are valid for six (6) months** and that CDAC is typically held in February, the administration of the evaluation may typically start in August. Evaluation schedules /booking procedures will vary by location.

Information protection

3. The [CL DVR Selection PFE Reporting Form](#) is 'Protected A' once completed and must be treated as such.
4. Firmly and legibly print all service particulars in the boxes located on the applicable Reporting Form. If a number has fewer digits than the allocated spaces on the form, use zeros, beginning at the left side (for example, record MOS ID of 00010 as 0001000000).

Section A: Service Particulars - Détails du service

Surname - Nom										Init.		Rank - Grade				Military ID - Piece d'identité militaire			
																<input type="checkbox"/> Yes - Oui <input type="checkbox"/> No - Non			
DOB - DN (YYAA)			(MM)		(DJ)		Age - Âge			SN - NM									
Location - Lieu				Unit - Unité						UIC - CIU		MOS ID - ID SGMP							

CL DVR Selection PFE Reporting Form - Section A: Service Particulars / Screenshot of the section of the form / Figure 2.1
Section A: Services Particulars





CHAPTER 3: PRE-EVALUATION ADMINISTRATION

Evaluation set-up

Component 1: Land

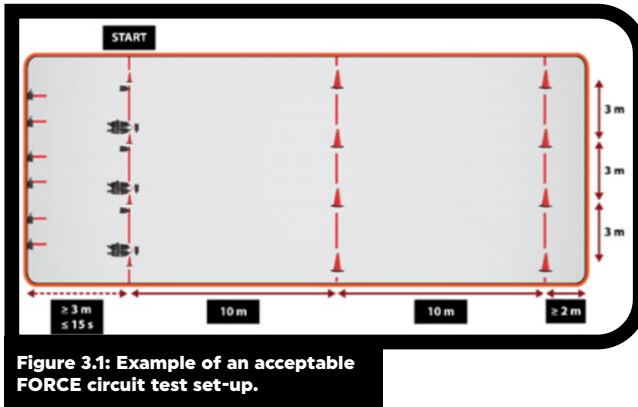
1. PART I: Ruck March

- a. The PSP must ensure that a 5 km march route is clearly established and marked.
- b. The ruck march must be performed on a flat surface/terrain, hazard-free, and without elevation.
 - i. Acceptable routes are indoor track, outdoor track, outdoor field with a pre-established route, outdoor pre-established route.
 - ii. The evaluator must be able to always see the applicant.
- c. The applicant will fill their backpack with weights at their discretion. The PSP Evaluator will provide instructions for the candidate to load their backpack following [TOOL 4 - Component 1: Land - Instructions for Load Carriage Packing and Fitting](#), explaining how to properly adjust and add weight into the backpack. The PSP Evaluator will weigh the backpack to ensure the total weight of the bag is 35 kg (+/- 0.5 kg).
- d. The 5 km route must finish close (<100 m) to the FORCE circuit set-up.

2. PART II: FORCE Circuit

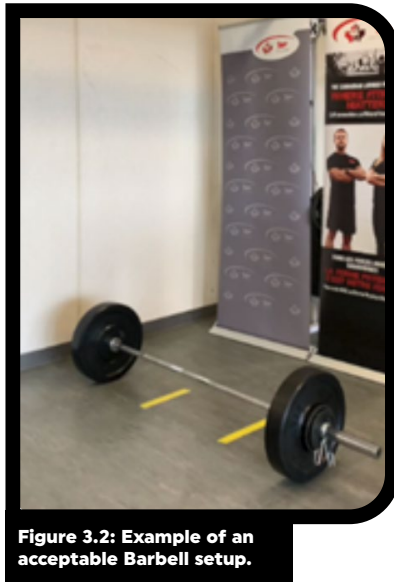
- a. PSP Fitness staff should refer to [latest valid FORCE Evaluation Operations Manual](#) for this portion of the evaluation.
- b. Unique FORCE Evaluation lanes are established for the FORCE circuit of the land component.
 - i. The applicant is assigned to a test lane consisting of a 20 m long straightaway used for the 20 m R, ILS, and SBD separated by no more than 20 m transit to a SBL set-up. This transit may not be obstructed by any hazards or other test lanes. In certain locations, the SBD test lane is separate from the 20 m R and ILS lane, this is acceptable, but the transit should be minimized (<20 m) and free of any hazards ([Figure 3.1](#)).

- c. PSP Fitness staff should make sure that they have an (1) additional sandbag available for the ILS task, as two (2) sandbags are necessary for the first two (2) loaded shuttles (only).
- d. The sandbags and drag surface must be calibrated to 20 kg +/- 0.2 kg, and 330 N +/- 9.8 N (33.6 kg +/- 1 kg) respectively.
- e. The FORCE circuit must finish close (<100 m) to the deadlift set-up.



3. PART III: Deadlifts

- a. The PSP Fitness Evaluator will load an Olympic-size barbell to 75 kg (165 lbs) ([Figure 3.2](#)).
 - i. The acceptable barbell is Olympic-sized (25 to 32 mm hand grip diameter and 15 to 20 kg (35 to 45 lbs)).
 - ii. The weight plates used for this event should be 20 kg (45 lbs), 5 kg (10 lbs), and 2.5 kg (5 lbs).
 - iii. The barbell grip must be 18 to 22 cm off the ground.
 - iv. The loaded barbell must have the safety clips to ensure the weight plates are secured.
- b. PSP staff evaluating will ensure the maximal width between their feet during the lifts is clearly identified on the ground: 60 cm (24 inches).



Component 2: Water

4. PART I: Treading water

- a. PSP Fitness Staff must ensure to have access to a pool to administer CL DVR Selection PFE.

5. PART II: 500m swim

- b. PSP Fitness Staff must ensure to have access to a pool to administer CL DVR Selection PFE.
- c. Fins of the appropriate size should be selected by the candidate before starting the evaluation and left on the side of the pool for the second part of the evaluation (500m side-swim).
- d. PSP Fitness Staff should be aware of the length of the pool in order to advise the candidates on how many laps they will be required to complete.

Information briefing

6. Before the warm-up and movement preparation, the PSP Evaluator will provide a clear explanation of the component being performed using the applicable script ([TOOL 5: Component 1: Land - Script](#) & [TOOL 8: Component 2: Water - Script](#)). During the CL DVR Selection PFE explanation, the PSP Evaluator will provide a walk-through of the events of the component being tested, as applicable. For example, the Ruck March route should be clearly outlined, the FORCE circuit should be demonstrated, the Deadlifts ideal technique should be demonstrated, and the treading water technique and sidestroke technique should be discussed.
7. The PSP Evaluator will provide support in loading of the rucksack by providing explanations and following [TOOL 4 - Component 1: Land - Instructions for Load Carriage Packing and Fitting](#).
8. The PSP Evaluator will make sure the candidate has brought all the necessary equipment of their own listed in the [CL DVR Candidate-Aide document](#).

Pre-evaluation administration

CL DVR Reporting Form - Section B

9. The PSP Staff should have the candidate fill out section A - Service Particulars and to through section B - Health Appraisal with the candidate.

Section B: Health Appraisal - Évaluation de la santé

<p>This questionnaire is a screening tool to identify personnel for whom fitness evaluation and physical activity might be contraindicated at this time.</p> <p>1. To the best of your knowledge do you have a medical condition or Medical Employment Limitation (MEL) which restricts you from participating in a maximal fitness evaluation or a progressive training program? <input type="checkbox"/></p> <p>2. Is there any other reason you should consult with a physician prior to your fitness evaluation or training program? <input type="checkbox"/></p>	<p>Yes Oui</p> <p>No Non</p>	<p>Ce questionnaire est un outil visant à identifier les personnes pour lesquelles une évaluation de la condition physique et l'activité physique sont actuellement contre-indiquées.</p> <p>1. À votre connaissance, souffrez-vous d'un trouble médical ou avez-vous une contrainte à l'emploi pour raisons médicales (CERM) qui vous empêchent de participer à une évaluation de la condition physique avec effort maximal ou à un programme de conditionnement physique progressif?</p> <p>2. Y a-t-il d'autres raisons pour lesquelles vous devriez consulter un médecin avant de participer à l'évaluation de la condition physique ou d'entreprendre un programme de conditionnement physique?</p>
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Date - (YYAA) (MM) (DJ) Name (print) - Nom (en lettre moulées) Signature

Figure 2.1: CL DVR Selection PFE Reporting Form – Section B





CHAPTER 4: EVALUATION

Protocols

Component 1: Land

PART I - 5km Ruck March		
STEPS	Instructions	TOOL
INFORMATION BRIEFING	Before the warm-up and movement preparation, the PSP Evaluator will ensure the candidate is aware of the Emergency Action Plan (EAP) and provide a clear explanation of the evaluation component being performed using the applicable script. The candidates are encouraged to ask questions about this CL DVR Selection PFE if they have any. Then the warm-up and movement preparation are initiated.	<p>TOOL 3: Component 1: Land -Warm- up/ Evaluation preparation movements</p> <p>TOOL 5: Component 1: Land - Script</p>
EVALUATION	Candidates complete their 5 km Ruck March route under the observation of the PSP Fitness Staff evaluating, warning them if they move faster than a 10km/h pace (6min/km) and letting them know if they move slower than 5km/h pace (12min/km)	
FINISH	This portion of the evaluation is finished once the 5 km route is complete. It must finish close (<100 m) to the FORCE circuit set-up.	
TRANSITION	The 5km Ruck March is followed by a 5min transition period, before starting the FORCE Circuit.	
PART II - FORCE Circuit		
STEPS	Instructions	TOOL
INFORMATION BRIEFING	Instructions have already been provided at the initial briefing of the land component evaluation. Reminders can be provided for the next steps during the 5min transition period.	<p>TOOL 5: Component 1: Land - Script</p> <p>Latest valid FORCE Evaluation Operations Manual</p>
EVALUATION	<p>Candidates complete their FORCE Circuit which consists of similar events to the four (4) tasks of the FORCE Evaluation and are completed in the same order: 20 m Rushes, Sandbag Lift, Intermittent Loaded Shuttles and Sandbag Drag. However, the circuit differs from the standard FORCE evaluation in three (3) ways:</p> <ol style="list-style-type: none"> 1. No "rest/pause" in between tasks. 2. For the Intermittent Loaded Shuttles, the first two (2) shuttles are completed holding two (2) sandbags instead of one (1). The remaining three (3) loaded shuttles will be completed as per standard FORCE Evaluation protocol. 3. For the Sandbag Drag, the candidate is allowed to stop moving (fall or rest), but their time will continue to be recorded. They are required to complete the full length of the sandbag drag as per regular FORCE Evaluation protocol. 	
FINISH	This portion of the evaluation is finished once the FORCE Circuit is completed. It must finish close (<100 m) to the Deadlifts set-up.	
TRANSITION	The FORCE Circuit is followed by a 5min transition period, before starting the deadlifts.	

PART III - Deadlifts

STEPS	Instructions	TOOL
INFORMATION BRIEFING	Instructions have already been provided at the initial briefing of the land component evaluation. Reminders can be provided for the next steps during the 5min transition period.	
EVALUATION	<p>Candidates start their deadlifts under the observation of the PSP Evaluator, who ensures that:</p> <ul style="list-style-type: none"> - They do not use any lifting aids (Straps, chalks, hooks, gloves); - They use the same grip throughout the entire event (can use regular (pronated) or mix (pronated and supinated) grip (Figure 4.1); - They maintain a safe lifting technique throughout the repetitions. Their spine must stay neutral, and their feet, knees, and hips aligned (Figure 4.2); - The maximum width between their feet during the lifts is 60 cm (24 inches); - They wear shoes during the completion of the event (any type of shoes are permitted). No barefoot; - They stand fully erect at the top position for every repetition; - The barbell plates touch the ground gently to complete a repetition; - They do not drop the weights or rebound on the floor; - They do not rest between repetitions, there must be continuous movement during the execution. 	<p>TOOL 5: Component 1: Land - Script</p>
FINISH	If a candidate breaks any of the rules/procedures, the PSP Evaluator will give a warning (say aloud the issue, e.g. maintain neutral spine, do not rest between repetitions, do not drop the barbell). Candidates are allowed two (2) warnings, before a third (3) warning is given, after which the deadlifts part of the evaluation will be terminated. The evaluator must always keep in mind the candidate's safety first.	
TRANSITION	A 5 min supervised recovery walk within the evaluation area must take place upon completion of the CL DVR Selection PFE components, allowing applicants to physically recover. If requested by the applicant, guidance will be provided for an active recovery with stretching.	



Figure 4.1 Example of allowed grips:
A) Under-Over (mix); B) Over-under (mix); and C) pronated (regular)

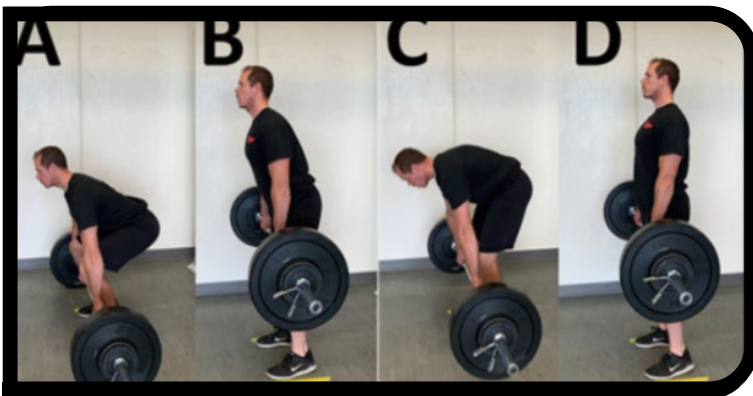


Figure 4.2 Example of deadlift positions:
A) Adequate bottom position; B) Incomplete top position (not fully erect);
C) Rounded back; and D) Adequate top position.
Note that B and C would result in a warning.

Component 2: Water

PART I - Treading water		
STEPS	Instructions	TOOL
INFORMATION BRIEFING	Before the warm-up and movement preparation, the PSP Evaluator will ensure the candidate is aware of the Emergency Action Plan (EAP) and provide a clear explanation of the evaluation component being performed using the applicable script. The candidates are encouraged to ask questions about this CL DVR Selection PFE if they have any. Then the warm-up and movement preparation are initiated.	<p>TOOL 7: Component 2: Water - Warm-up / Evaluation preparation movements</p> <p>TOOL 8: Component 2: Water - Script</p>
EVALUATION	Candidates must tread with their hands (wrist line and above) out of the water and must remain in a vertical position (no starfish position) (Figure 4.3).	
FINISH	If the hands (wrist line and above) move below the water surface or if the candidate loses the vertical position, a warning (1) will be given. If a second (2) warning is given, this portion of the evaluation will be terminated. If one (1) or no warning has been given, candidates are stopped at 02:30 mm:ss.	
TRANSITION	The treading water part is followed by a 2 min transition before initiating the 500 m sidestroke swim. At this point, candidates are required to pull themselves out of the water, put their fins on and jump back in the water and wait for the next instructions.	

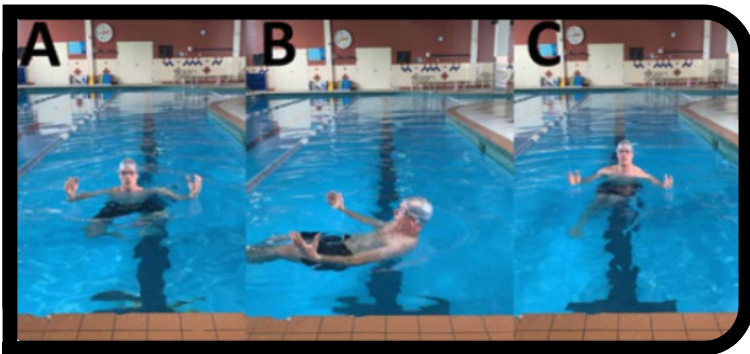


Figure 4.3 Examples of treading water positions:
A) adequate vertical position with hands above the water line;
B) inadequate position, not vertical (starfish); and C) hands at water line.
Note that B and C would result in a warning.

PART II - 500m side swim		
STEPS	Instructions	TOOL
INFORMATION BRIEFING	Instructions have already been provided at the initial briefing of the land component evaluation. Reminders can be provided for the next steps during the 2min transition period.	TOOL 8: Component 2: Water - Script
EVALUATION	Candidates must use a sidestroke technique and can only switch sides on the sidestroke at the pool ends (Figure 4.4). Candidates are allowed to push-off the end of the pool after each length, but they are not allowed to do flip turns. In they do so, they are given a warning, and the length is not counted towards the 500 m. A warning is also given if they stop moving (rest) at any point in the pool.	
FINISH	The test finishes once the candidate has completed the 500m swim length or if a second (2) warning is given; then the test is terminated.	
TRANSITION	A 5 min supervised recovery swim and/or walk within the evaluation area must take place upon completion of the CL DVR Selection PFE components, allowing applicants to physically recover. If requested by the applicant, guidance will be provided for an active recovery with stretching.	

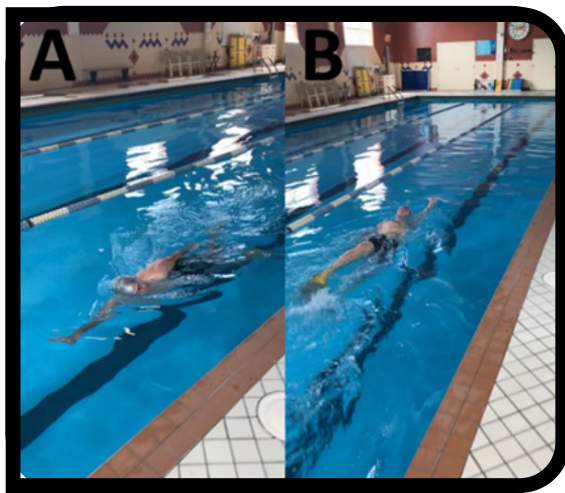


Figure 4.4 Examples of swim techniques: A) Adequate sidestroke technique; B) inadequate technique, backstroke. Note that B would result in a warning.

1. During any of the transitions, the applicants can rest, visualize further events, drink water, use the washroom (if they have sufficient remaining time in the transition), and/or warm-up for the following event. If the applicant is not ready in time during the transition, the component will be cancelled (incomplete result), and it will count as an attempt of the CL DVR Selection PFE.

Performance objectives

2. The CL DVR Selection PFE is designed to simulate the most physically demanding tasks of the CL DVR course and occupation tasks.

Performance objective - Component 1: Land

Performance level	5km Ruck March (mm:ss)	FORCE Circuit (mm:ss)	Deadlifts (repetitions)
Needs improvement	More than 60:00	More than 6:35	Less than 8
Acceptable	60:00 or less	6:35 - 5:51	8 - 27
Average		5:50 - 5:26	28 - 35
Good		5:25 - 5:15	36 - 43
Excellent		5:14 or less	44 or more

Performance objectives - Component 2: Water

Performance level	Treading water (mm:ss)	500m swim (mm:ss)
Needs improvement	Less than 02:30	More than 10:17
Acceptable	02:30	10:17 - 9:13
Average		9:12 - 8:32
Good		8:31 - 8:12
Excellent		8:11 or less

3. As the CDAC is a competitive process, applicants are encouraged to give their maximal effort for all components of the CL DVR Selection PFE.

Evaluation termination

4. A CL DVR Selection PFE is terminated when one of the following scenarios occurs:
- The applicant completes all specific events of the CL DVR Selection PFE component being administered.
 - The applicant chooses not to continue. Reasons for this could be fatigue, pain, injury, etc.
 - The PSP Evaluator becomes concerned for the applicant's safety due to immediate signs of serious distress. In the event of a medical issue, activate Emergency Medical Services.

- d. A physical incident occurs, resulting in the applicant being physically unable to continue.
 - e. An equipment failure (e.g. broken fin, sandbag, facility issue) occurs and requires immediate actions by the PSP Evaluator.
5. When the CL DVR Selection PFE is terminated for reasons enumerated in the first 4 situations listed in the previous paragraph (a, b, c, d), the test attempt does not result in a performance score level and is reported as Incomplete, but still counts towards the maximum of two (2) trials per CDAC attempt (year). Only when the CL DVR Selection PFE is terminated for last situation enumerated in the previous paragraph (e), the applicant can re-attempt the CL DVR component after a mandatory 15 min rest.
6. Important note: If it is evident that an applicant will not reach performance objectives of the CL DVR Selection PFE, the PSP Evaluator may allow them to continue until exhaustion. This is encouraged to provide specific fitness programming and training recommendations to the applicant as part of their debrief.





CHAPTER 5: POST-EVALUATION ADMINISTRATION

Cool down

1. A 5 min supervised recovery walk/swim within the evaluation area must take place upon completion of the CL DVR Selection PFE components, allowing applicants to physically recover. If requested by the applicant, guidance will be provided for an active recovery with stretching.

Evaluation results

CL DVR Selection PFE Reporting Form - Section C: Test results

2. Section C is divided into two (2) sub-sections, one for each of the CL DVR Selection PFE components. The sub-sections are designed to allow the PSP Evaluator to directly record the results as the CL DVR Selection PFE is administered. The PSP Evaluator must write the date when each of the CL DVR Selection PFE is administered.
3. Upon completion of each CL DVR Selection PFE component, the PSP Evaluator must record the result in the box designated for each respective CL DVR Selection PFE component:

Section C: Test Results - Résultat de l'évaluation

Attempt # - # de la tentative: 1 2

Water Component - Composante aquatique

Completed 02:30 mm:ss of treading water - A réussi la nage sur place en 02:30 mm:ss.

Did NOT complete 02:30 mm:ss of treading water - N'a PAS réussi la nage sur place en 02:30 mm:ss.

: : Completion Time (mm:ss) for the 500 m swim - Temps d'achèvement (mm:ss) de la nage de 500 m.

Land Component - Composante terrestre

Completed the 5 km march in 60:00 mm:ss or less - A réussi la marche de 5 km en 60:00 mm:ss ou moins.

Did NOT complete the 5km in 60:00 mm:ss or less - A échoué la marche de 5km en 60:00 mm:ss ou moins.

: : Completion time (mm:ss) for the FORCE circuit - Temps d'achèvement (mm:ss) du circuit FORCE.

Number of repetition of the Barbell deadlift - Nombre de répétition du soulevé de terre avec barre.

Figure 5.1 Section C: Test Results

- a. Component 1: Land
 - i. Check-off the appropriate box for the completion (or not) of the ruck march component in 60:00 mm:ss.
 - ii. Write down the completion time (mm:ss) of the FORCE circuit. If not completed, write "Incomplete" in the field.
 - iii. Write down the number of repetitions of the 75 kg deadlift. If not completed, write "Incomplete" in the field.

- b. Component 2: Water
 - i. Check-off the appropriate box for the completion (or not) of the 02:30 mm:ss of treading water.
 - ii. Write down the completion time (mm:ss) of the 500 m sidestroke swim. If not completed, write "Incomplete" in the field.

Debrief

- 4. The PSP Evaluator must debrief all applicants upon completion of their respective CL DVR Selection PFE component. The applicants must be provided with their completion time and performance level.

CL DVR Selection PFE Reporting Form - Section D: Certification of evaluation

- 5. The PSP Evaluator will print and sign their name in the space provided.

Figure 5.2 Section D: Certification of evaluation

CL DVR Selection PFE Reporting Form - Section E: Certification of understanding

- 6. The applicant must sign and date their acknowledgment of the Evaluation results. In cases where the applicant refuses to sign, the Evaluator must note "member refused to sign" in this Section.

Figure 5.3 Section E: Certification of Understanding

Processing evaluation results

- 7. The CL DVR Selection PFE Reporting Form will be the only form used to record the candidate's results. Following the Privacy Act, once completed, the reporting form is a Protected A document and must be treated as such.
- 8. Completed CL DVR Selection PFE Reporting forms will be distributed by the Local PSP Evaluator following the process below:
 - a. **Copy 1: CL DVR Applicant**
The applicant has the responsibility to share with the appropriate authority (Personnel Selection Officer) for CDAC application.
 - b. **Copy 2: Kept by the Local PSP Staff** responsible of the Specialty Trades Evaluations and stored securely for future reference, if need be.



Component 1: Land

TOOL 2: Component 1: Land - Equipment Checklist

Equipment list required for the conduct of the land component of the CL DVR Selection PFE	
Weights (35 kg total) including padding, that can easily be set in the CAF backpack day bag or hiking backpack equivalent. Suggested:	
– 6 x 3 kg concrete or clay bricks or one 20 kg sandbag	<input type="checkbox"/>
– Five 2.5 kg weight plates	
– Towels (approximately 10 small)	
– Small sealable bags of sand	
Olympic Barbell loaded to 75 kg	<input type="checkbox"/>
Measuring tape, minimum 25 m in length	<input type="checkbox"/>
FORCE Evaluation setup (Latest valid FORCE Evaluation Operations Manual) *An (1) additional sandbag for modified protocol specific to CL DVR Selection PFE*	<input type="checkbox"/>
2 x stopwatch	<input type="checkbox"/>
Clipboard	<input type="checkbox"/>
Pen	<input type="checkbox"/>
Multiple CL DVR Selection PFE Reporting Form (TOOL 1)	<input type="checkbox"/>
CL DVR Selection PFE Operations Manual	<input type="checkbox"/>
A local Incident Report Form	<input type="checkbox"/>

TOOL 3: Component 1: Land - Warm up / evaluation preparation movements

1. Before the land component of the CL DVR Selection PFE, applicants must undergo this warm-up and evaluation preparation lead by the PSP Evaluator.
2. Mandatory dynamic movements (5-8 minutes) performed before the Land component:
 - Light aerobic activity x 2-3 min
 - Air Squats x 3
 - Forward / backward Lunge complex x 3 each side
 - Lateral Lunge (alternating) x 3 each side
 - Hand release Push-up to Get up x 5; and
 - Applicant self-selects any additional warm-up drills they want to add to be prepared x 2-5 min.

TOOL 4: Component 1: Land - Instructions for load carriage packing and fitting**Hip belt sizing**

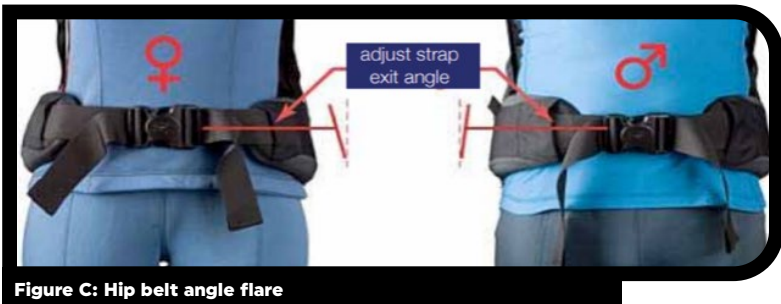
1. Locate the Iliac Crest, (the top of the most prominent point of the hipbone) and measure around the hips on this point.
2. When the hip belt is properly centered on the hip crest and tightened, the ends of the pads should extend at least 8 cm past the hip crest.

Shoulder strap adjustments

3. The shoulder straps should contour smoothly and be in contact throughout the entire length of the shoulder strap padding.
4. The adjustment buckle at the lower end of the shoulder strap should be positioned roughly even with the center of the armpit.

**Fine tuning: Hip belt angle flare**

5. Adjust the angle at which the 2-inch webbing exits the front of the padding. Most female (left picture) require slightly more flare than male (right picture) (the angle at which the belt sits on the hips).



Fine tuning: Load lifters

6. The purpose of the load lifters is to slightly lift the shoulder straps from the shoulders, not to bring the pack in against the back.
7. The ideal angle for the load lifter straps is 45 degrees; however, an angle of 30 to 60 degrees is quite acceptable.
8. Minimal tension is required for each strap to do its job if the pack is correctly adjusted.



Figure D: Load lifters

Fine tuning: Load stabilizer

9. Reduce movement of the load weight by maximally tightening the strap.



Figure E: Load stabilizer

Organization of load weight

10. Materials:
 - Six 3 kg concrete or clay bricks or one 20 kg sandbag
 - Five 2.5 kg weight plates
 - Towels (approximately 10 small)
 - Small sealable bags of sand

11. Technique:

- Place a heavy rolled towel in the sleeping bag compartment of the backpack leaving the separating zipper open. Stuff this compartment as full as possible.
- Roll each brick in a towel and stack them in the main section of the backpack (two (2) layers of three bricks) or insert the 20 kg sandbag.
- Pack extra weight plates and towels around the bricks/sandbag for padding and stability.
- Place another heavy rolled towel at the top of the pack to fill the volume of the pack.

12. Check the weight of the pack to ensure that the load is 35 (+/- 0.5) kg.

- If the pack is too light, fill a small sealable bag with some sand, and pack it into the main section of the backpack. This method will allow small adjustments to bring the weight of the pack to exactly 35 (+/- 0.5) kg.
- If the pack is too heavy, remove a towel and then use the small sealable bag to adjust the weight to 35 (+/- 0.5) kg.



Figure F: Organization of load weight

TOOL 5: Component 1: Land - Script

The purpose of the following script is to provide the PSP Evaluator with a standardized explanation of each component of the CL DVR Selection PFE protocol.

For each component, the PSP Evaluator must use the appropriate script. This script is for land component evaluation.

1. *The purpose of this component is to assess your physical ability to conduct EOD/IEDD-like operations.*
2. *You will now take some time to fill your rucksack with weights (total of 35 kg). Make sure your rucksack is adjusted properly. The test will not be paused if you need to adjust your gear. You are allowed to carry a water bottle during the ruck march. Once completed, I will walk you through today's component protocols.*
3. *For safety reasons, you are not allowed to have headphones on during the entire component.*

Give the applicant time to fill-in their rucksack and provide Instructions for Load Carriage Packing and Fitting ([TOOL 4](#)), explaining how to properly adjust the backpack. Weigh the rucksack using a luggage scale or regular weight scale. Total weight must be 35 +/- 0.5 kg.

4. *The first event of the land component consists of a 5 km ruck march. Once ready, I will give you a 3, 2, 1, GO countdown, to start the 5 km ruck march. You are not allowed to run during this task. Pay attention to this demonstration of walking versus running.*

Demonstrate few steps walking / running and explain the flight phase during the run, exactly like during Intermittent Loaded Shuttles of the FORCE evaluation.

5. *You must complete the 5 km in 60:00 mm:ss or less. This is a 12 min/km pace, but you may not exceed a pace of 10 min/km. You are allowed/encouraged to wear tactical boots for this task.*
6. *I will monitor your progress and pace during the completion of the 5 km march. I will let you know if you are going faster than 10 min/km or slower than 12 min/km so you can adjust your pace accordingly.*
7. *Once the 5 km march is completed, there will be a transition during which you will have 5 min to doff your rucksack, change your boots to your running shoes, and get ready for the FORCE circuit.*
8. *Once the 5 min transition is over, I will give a 3, 2, 1 GO countdown to initiate the FORCE circuit. Remember, your time will not be paused between the FORCE events, if you decide to take a pause, it will count towards your overall completion time.*
9. *I will now explain and demonstrate the safe execution of 4 events of the FORCE circuit along with the transit path to follow between the events.*

- a. *The first FORCE circuit event is the 20 m Rushes. The 20 m Rushes are completed as per standard FORCE evaluation. Pay attention to this demonstration.*

Demonstrate the starting position, and first three-line touches, prone, hand-release, then outline the transit path to the sandbag lift station.

10. *The second FORCE event is the Sandbag Lifts. The Sandbag Lifts are completed as per standard FORCE evaluation. I will count the lifts out loud.*

Demonstrate three lifts, then outline the transit path to the Intermittent Loaded Shuttles.

11. *The third FORCE event is the Intermittent Loaded Shuttles. For this event, you will carry 2 sandbags instead of 1 for the first two loaded shuttles. For the remaining three loaded shuttles, the event will be completed as per standard FORCE evaluation. I will count the shuttles aloud.*

Demonstrate the first loaded shuttles with 2 sandbags, interspaced by an unloaded shuttle, then outline the transit path to the sandbag drag station.

12. *The last FORCE event is the Sandbag Drag. The Sandbag Drag is mainly completed as per standard FORCE evaluation. However, during this evaluation, you are allowed to stop moving (fall or rest), but your time will continue to be recorded. You are required to complete the full length of the drag (20m).*

Demonstrate the first 5 m of the Sandbag Drag.

13. *Once you have completed all four (4) events/tasks, I will say out loud CLEAR, to indicate the completion of the FORCE circuit.*
14. *Your performance level is based on the overall completion time of the FORCE circuit.*
15. *Following the FORCE circuit, there will be a 5-min transition before completing the deadlifts.*
16. *For the deadlifts:*

- a. *You cannot use any lifting aids (straps, chocks, hooks, gloves, weight belt).*
- b. *You must wear shoes during the completion of the event.*

Demonstrate adequate grip position ([Figure 4.1](#)).

- c. *You can use regular (pronated) or mix (pronated and supinated) grip, but you must keep the same grip throughout the entire event.*

Demonstrate neutral spine and alignment with feet, knees and hips ([Figure 4.2](#)).

- d. *You must maintain a safe lifting technique throughout the repetitions. Your spine must stay neutral, and your feet, knees, and hips aligned.*

Demonstrate maximum 60cm in between feet.

- e. *The maximum width between your feet during the lifts is 60 cm (24 inches).*

Demonstrate full erect position.

- f. *You must stand fully erect at the top position, or the repetition will not be counted.*
- g. *You are not allowed to take a rest between repetitions, there must be continuous movement during the execution, or you will be given a warning.*

Demonstrate touching the ground gently with the barbell.

- h. *I will count aloud for each repetition, when the bar touches the ground.*
- i. *The barbell plates must touch the ground gently to complete a repetition, or the repetition will not be counted.*
- j. *You cannot drop the weights or rebound on the floor, or the repetition will not be counted. This task simulates a casualty evacuation. Treat the barbell as a casualty. Continue deadlifting the barbell until you cannot lift the barbell safely.*
- k. *At any point, if your lifting technique becomes unsafe, I will give you a warning. On the third warning, the test will be terminated.*

Demonstrate deadlifts positions ([Figure 4.2](#)), clearly showing the adequate as well as the inadequate techniques (the staff can demonstrate the positions without holding the barbell if they wish).

- 17. *Once the barbell deadlifts are completed, the land component of the CL DVR Selection PFE is completed.*
- 18. *You will then have a 5-10 min recovery walk in the facility within view of the evaluator.*
- 19. *Once the recovery is completed, I will debrief you on the performance of the land component and ask for a Certification of Understanding signature. As a reminder, the performance objectives for this component are:*

Review [Performance objectives - Component 1: Land](#).

- 20. *Any questions?*

Answer any questions.

- 21. *I will now walk you through the standardized warm-up before starting the evaluation ([TOOL 3](#)).*

Component 2: Water

TOOL 6: Component 2: Water - Equipment Checklist

Equipment list required for the conduct of the water component of the CL DVR Selection PFE

Swimming pool with swimming lanes (swimming lanes are highly encouraged to minimize lateral swimming). Pool length must be measured to calculate the number of laps required to complete the 500 m swim.	<input type="checkbox"/>
Swimming Fins (Figure G) Different sizes of the rubber color-coded Aquam swimming fins are provided (by PSP Evaluator) to ensure the applicant can choose their appropriate size (SKU # P-ER-AQ07440)	<input type="checkbox"/>
Measuring tape, minimum 25 m in length.	<input type="checkbox"/>
Pylons/Cones	<input type="checkbox"/>
Stopwatch	<input type="checkbox"/>
Clipboard	<input type="checkbox"/>
Pen	<input type="checkbox"/>
Multiple CL DVR Selection PFE Reporting Form (TOOL 1)	<input type="checkbox"/>
CL DVR Selection PFE Operations Manual	<input type="checkbox"/>
A local Incident Report Form	<input type="checkbox"/>



Figure G: Aquam swimming fins of different sizes

TOOL 7: Component 2: Water - Warm up / evaluation preparation movements

1. Before the water component of the CL DVR Selection PFE, applicants must undergo this warm-up and evaluation preparation lead by the PSP Evaluator.
2. Mandatory dynamic warm-up (5-8 min) that can include any combination of the following must be performed before the Water component:
 - Light Aerobic Activity in stationary position x 2-3 min
 - Light swim x 50-100m
 - Arm circles in both directions x 20
 - Chest hugs x 20
 - Arm windmill x 20
 - Jumping jacks x 20
 - Supine flutter kicks x 20; and
 - Applicant self-selects any additional warm-up drills they want to add to be prepared x 2-5 min

TOOL 8: Component 2: Water - Script

The purpose of the following script is to provide the PSP Evaluator with a standardized explanation of each component of the CL DVR Selection PFE protocol.

For each component, the PSP Evaluator must use the appropriate script. This script is for the water component evaluation.

1. *The purpose of the water component is to assess your comfort in the water and ability to navigate in open water.*
2. *After completing the standardized warm-up and placing the appropriately sized fins by the pool deck, you will get in the deep end of the pool. You will then hold onto the side of the pool.*
3. *On a 3, 2, 1, GO countdown, you will push off from the side of the pool and start treading water with your hands (wrist line and above) out of the water. Your back must maintain a vertical angle. You will receive a warning if your hands (wrist line and above) go in the water, or if your back becomes horizontal (no starfish). On the second warning, this event will be stopped. You may use your preferred treading water technique. You are not allowed to touch the sides of the pool or swimming lanes at any time. Failure to follow the instructions will have the event stopped and reported as Incomplete.*
4. *If you wish, I will provide you with the following time checks: 00:30, 01:00, 01:30, 02:00, 02:15, and 02:30 mm:ss/CLEAR.*

5. *When the 02:30 mm:ss are completed and you hear the CLEAR command, you will come back to the side of the pool, pull yourself out of the water, put your fins on, jump back in the water and hold on to the side (end) of the pool. You will have 2 min to complete this transition.*
6. *Once the 02:00 mm:ss transition is over, I will provide a 3, 2, 1, GO countdown to initiate the 500 m swim. You must use the sidestroke technique. You are allowed to push-off the end of the pool after each length, but you cannot stop moving (rest) at the ends or middle of the pool, this will count as a warning. On the second warning, this event will be stopped. You are not allowed to do flip turns, or the just-completed length will not be counted.*
7. *In this pool:*
 - a. *(If 18 m), you will complete 13.89 laps (27.78 lengths) for a total distance of 500 m.*
 - b. *(If 20 m), you will complete 12.5 laps (25 lengths) for a total distance of 500 m.*
 - c. *(If 25 m), you will complete 10 laps (20 lengths) for a total distance of 500 m.*
8. *I will count each lap aloud.*
9. *(if applicable) For your last lap, I have placed a pylon at the side of the pool (here) to indicate the end of the 500 m swim.*
10. *When the 500 m are completed, I will say aloud: CLEAR. You will then have a 5-10 min recovery swim/walk in the pool facility.*
11. *Your performance level is based on the completion time of the 500 m swim.*
12. *Once the recovery is completed, I will debrief you on the performance of the water component and ask for a Certification of Understanding signature on the reporting form.*
13. *The CL DVR Selection PFE is a competitive process, and you should give maximal effort. As a reminder, the performance objectives for this component are:*

Review the [Performance objectives - Component 2: Water](#).

14. Any questions?

Answer any questions.

15. *I will now guide you through the standardized warm-up before starting the evaluation ([TOOL 7](#)).*





ACRONYMS AND ABBREVIATIONS

- 20 m Rushes
20m R 5, 10, 13, 28
- Automated External Defibrillator
AED, 9
- Canadian Forces Morale and Welfare Services
CFMWS, 4
- Cardio-Pulmonary Resuscitation
CPR, 8
- Clearance Diver Selection Physical Fitness
Evaluation
CL DVR Selection PFE, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 33, 34, 35, 36, 37
- Clearance Divers
CL DVR, 4, 5
- Clearance Divers Assessment Center
CDAC, 4
- Directorate of Naval Personnel and Training
DNP, 5
- Directorate of Programs
D Prog, 4
- Emergency Action Plan
EAP, 15, 18
- Explosive Ordnance Disposal/Improvvised
Explosive Device Disposal
EOD/IEDD, 5
- Intermittent Loaded Shuttles
ILS, 11
- National Lifeguard
NL, 9
- Personnel Support Programs
PSP, 1, 4
- Physical Fitness Evaluation
PFE, 4, 5
- Royal Canadian Navy
RCN, 4, 5
- Sandbag Drag
SBD 5, 10, 13, 29
- Sandbag Lift
SBL 5, 10, 13
- Standard Operation Procedures
SOPs, 5





REFERENCES

[Latest valid FORCE Evaluation Operations Manual](#)

American College of Sports Medicine [ACSM]

[Clearance Diver Info Pamphlet](#)

[Clearance Diver Candidate-Aide](#)

[Clearance Diver 12-week Physical Fitness Program](#)

[Clearance Diver Selection Physical Fitness Evaluation - Evaluator's training](#)