





# **RECRUITING CONSIDERATIONS FOR CLEARANCE DIVING**

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### **JCSP 45**

### Exercise Solo Flight

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### **PCEMI 45**

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#### EXERCISE SOLO FLIGHT – EXERCICE SOLO FLIGHT

#### **RECRUITING CONSIDERATIONS FOR CLEARANCE DIVING**

By Lieutenant-Commander William Barter

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## RECRUITING CONSIDERATIONS FOR CLEARANCE DIVING INTRODUCTION

The Clearance Diver (Cl Dvr) occupation has a history dating back to World War II. The term "clearance" is used as divers cleared harbours and ports of obstructions and eventually sea mines using underwater explosives. The first Royal Canadian Navy (RCN) clearance diving unit was formed in 1954, making this 2019 the 65<sup>th</sup> anniversary of the branch. The occupation has greatly evolved over the decades with both technology and a greater understanding of the physiology of diving. In the Canadian Armed Forces (CAF) today Cl Dvrs play a vital role in neutralising explosives both underwater and on land. For the most part within the CAF the occupation is employed at Fleet Diving Unit Atlantic (FDU(A)) and Pacific (FDU(P)). The core capabilities provided by divers in these units include Mine Countermeasures (MCM) operations, Explosive Ordnance Disposal (EOD), Battle Damage Repair (BDR) and Force Protection (FP) support. These capabilities are conducted by approximately 120 Cl Dvrs and 30 Clearance Diving Officers (CLDO). Additional capabilities and tasks for FDUs include training for all CAF divers, maintenance of all CAF diving and life support equipment, operation of recompression chambers and Submarine Search and Rescue (SUBSAR) support. A subspecialty within the occupation is Improvised Explosive Device Disposal (IEDD). This expertise became a well-recognised asset during the war in Afghanistan as Cl Dvrs deployed as IEDD operators alongside Canadian Army (CA) Combat Engineers (Cbt Eng). The most recent tool to be added to the already full tool box of the Cl Dvr is the operation of autonomous underwater vehicles (AUVs) to conduct searches of the sea bottom.

The selection and training of these divers is conducted annually and selected from existing members of the CAF. Cl Dvrs are now recruited pan CAF from any occupation and CLDOs positions are only open to the Naval Warfare Officer (NWO) occupation. While the strength of both Cl Dvr and CLDO is not currently at a shortage, the small population of the occupation could be put in jeopardy with a relatively small number of retirements. This paper will investigate if recruiting to Cl Dvr as a direct entry occupation would work in the CAF as it does in other Navies. It will also look at the possibility of opening up the CLDO director level to occupations other than NWO. The thesis of this paper is that permitting direct entry for Cl Dvr and opening the CLDO sub-speciality beyond NWO will not only increase candidate numbers for selection but result in an increase in quality candidates.

#### **CLEARANCE DIVER SELECTION**

The Cl Dvr "occupation differs from others in that potential candidates must have completed Developmental Period (DP) 1 in another trade before being considered for selection into the CL DVR occupation."<sup>1</sup> Prior to 2017, the selection phase was only open to applicants that held a current military diving qualification. More specifically, previous "candidates required a military dive speciality or sub speciality such as, Ship' Team Diver (STD), Search and Rescue Technician (SAR TECH), Port Inspection Diver (PID), or Combat Diver."<sup>2</sup> The selection process, previously known as the "prelim", was a ten day selection phase over a two week period that was assessed by FDU members only.

<sup>&</sup>lt;sup>1</sup> Department of National Defence, Problem Definition Paper Clearance Diver Occupation, Director Navy Personnel and Training, (September 2017). 2.

<sup>&</sup>lt;sup>2</sup> *Ibid.*, 2.

Historically the success rate on this selection was 35-40%.<sup>3</sup> The prelim was replaced by the current Clearance Diving Assessment Centre (CDAC) in 2014. The CDAC process was spearheaded by CAF Personnel Selection Offices (PSOs) and was modeled after Joint Task Force 2 (JTF2) and Maritime Tactical Operations Groups (MTOG) selections. The CDAC selection process was reduced to six days and was designed with the goal of increasing successful numbers of quality applicants on the selection. The number of overall applicants to CDAC from the existing military diver pool still did not increase numbers of successful candidates to load a Cl Dvr course with the maximum number of candidates (12).

With annual Cl Dvr courses running at less than maximum occupancy a new avenue for entry into the occupation was opened. The July 2017 CANFORGEN stated the "clearance diver entry programme has changed to allow voluntary occupational transfers from any trade within the CAF."<sup>4</sup> It went on to confirm that "previously, candidates had to hold a military dive specialty...however, no previous diving qualification is required.<sup>5</sup> Results of the last two years have not shown an increase over the past. The Commanding Officer of FDU(P) stated, "The number of candidates did not increase this year from last. It was the same (38). The interesting thing was that there were more army and AF candidates that we had in the past."<sup>6</sup> The generation of CA and RCAF candidates is a success of the CANFORGEN and recruiting drive. However, with no significant increase in successful candidates clearly identified in opening the

<sup>&</sup>lt;sup>3</sup> Greg Richards, Training Officer FDU(A), email correspondence with the author, 6 May 2019.

<sup>&</sup>lt;sup>4</sup> Department of National Defence, Clearance Diver Occupation Entry Changes, CANFORGEN 122/17, (July, 2017).

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Richard Kappel, email correspondence with the author 30, April 2019.

occupation to all currently serving occupations and with no requirement for dive experience, it may be time to investigate direct entry applicants as in done in the United States Navy (USN) and Royal Navy (RN) for example.

#### **CLEARANCE DIVING OFFICER SELECTION**

The CDAC selection process is exactly the same for officers as it is for NCMs. The CLDO sub-specialty however, comes solely from the NWO occupation. Once promoted to Lt(N), an NWO is eligible to select CLDO as one of six Director Level (D-Level) options to specialise in. Historically, CLDOs have always come from the NWO occupation as they are qualified bridge watchkeepers in the RCN and therefore able to be the Officer in Charge (OIC) of a FDU dive tender. With the rigorous CDAC selection process and completion from other D-Level options, the quantity of NWO candidates attempting selection varies from year to year. With IEDD and AUV operations having an increased focus in the diving community, the requirement for all CLDOs to be BWK qualified may not be justified. In following the past processes identified in opening the Cl Dvr to more occupations it may be time for the CLDO sub-specialty to follow. Much like the NCM selection process prior to 2017, perhaps currently qualified military officers with a diving qualification could be considered. Specifically the RCN Marine Systems Engineering Officer (MSEO) and the CA Combat Engineering Officer (ENGR) could be candidates.

#### **TRAINING AND PRODUCTION**

"Candidates who successfully complete this assessment phase are offered a transfer to the Cl Dvr occupation. Members who accept this offer are loaded onto the next available Cl Dvr training course."<sup>7</sup> The course commences annually in September and is conducted at FDU(P). During the course "candidates can expect to spend eleven months training on numerous types of diving equipment as well as exploring areas related to dive medicine, recompression treatment, demolition, underwater cutting and welding..."<sup>8</sup> Upon successful completion of training, Cl Dvrs are posted to a FDU and operationally employed with one of the core capabilities previously described. After a period of consolidation in a FDU, Cl Dvrs proceed to the USN EOD School (NAVSCOLEOD) in Florida to complete a seven month course in Advanced EOD.

CLDO training mirrors Cl Dvr training. The eleven month course at FDU(P) is basically identical with a few exceptions, such as dive supervision, for the officer candidates. The biggest difference in training is that the CLDO candidates proceed to NAVSCOLEOD at the first available opportunity in order to become fully qualified in EOD as well as diving. Historically, there is no attrition in either of the courses by either Cl Dvrs or CLDOs. The attrition as discussed in the section on selection is in the CDAC process. Given that, getting increased numbers on CDAC should result in an increased in successful candidates in order to maximum load courses. Direct entry could be a method to increase candidates.

#### FORCE GENERATION

"The CL DVR Trained Effective Strength (TES) versus Preferred Manning Level (PML) ratio indicate that although there are lower numbers at junior rank level, the

<sup>&</sup>lt;sup>7</sup> Michelle MacArthur, Elliot, Loh, Work Analysis: Clearance Divers: Identification of Competencies for Non-Commissioned Members, Defence Research and Development Canada. (April 2016). 2.

<sup>&</sup>lt;sup>8</sup> M.L. Girard, Job Analysis: Clearance divers: Identification of core competencies and selection recommendations for direct entry applicants, Director General Military Personnel Research and Analysis Technical Note. Defence Research and Development Canada. (October 2009). Executive Summary iii.

occupation is relatively healthy."<sup>9</sup> The issue evident here is the lower number at the junior rank level and would indicate that an increase of personnel on course annually would solve this shortage. The Projected Status Report for the Cl Dvr occupation from 2018 indicates a shortage at the Leading Seaman (LS) rank of four for FY 2018/2019 and a shortage of eleven for FY 2019/2020.<sup>10</sup> With a projected shortage of eleven LS in 2020, direct entry should be considered to increase the number of Cl Dvr candidates beyond that of existing CAF members. The Problem Definition Paper goes on to indicate "challenges with force generating personnel and dive teams within the current establishment of 128 divers given the additional demands placed on the occupation that are not captured in the current construct."<sup>11</sup> Furthermore, the "occupation has experienced a steady rise in operational tempo and responsibility over the past decade. FDUs have reported an increase in EOD/MEOD man-hours by 45% when compared to 2003."<sup>12</sup> With a projected shortage at the LS rank, challenges force generating personnel and an increased operational tempo the requirement to attempt additional methods to generate personnel such as direct entry should be explored.

The issue for generating CLDO candidates is similar. The 2018 Projected Status Report for the NWO occupation at the SLt/Lt(N) level indicated a variance of -120 for FY 2018/2019 and -175 for 2019/2020.<sup>13</sup> The latest RCN Quarterly Report actually puts

<sup>&</sup>lt;sup>9</sup> Department of National Defence, Problem Definition Paper Clearance Diver Occupation, Director Navy Personnel and Training, (September 2017). 3.

<sup>&</sup>lt;sup>10</sup> Department of National Defence, Projected Status Report, Clearance Diver Occupation, (March 2018).

<sup>&</sup>lt;sup>11</sup> Department of National Defence, Problem Definition Paper Clearance Diver Occupation, Director Navy Personnel and Training, (September 2017). 3.

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Department of National Defence, Projected Status Report, Naval Warfare Officer Occupation, (March 2018).

the NWO Lt(N) rank at 90% trained effective strength versus position.<sup>14</sup> Regardless of the number, with any projected shortage at the junior officer level, the CLDO D-Level must compete with all other D-Levels for candidates. Opening CLDO training to MSEO and ENGR would definitely be a benefit to increase the number of candidates in the CLDO pool during this shortage and in future years.

#### **RECRUITING DRIVE**

With the opening up of the Cl Dvr occupation to "allow voluntary occupational transfers from any trade in the CAF"<sup>15</sup> a Canada wide recruiting drive commenced in 2018 in order to increase CAF knowledge of the change. The recruiting drive is continuing the push in 2019 and has been highlighted in CAF newspapers, posters and information sessions. A recent article in CFB Halifax's Trident News was titled "Candidates wanted for the Clearance Diver occupation."<sup>16</sup> The article highlighted dates and locations across bases in each region of Canada that CAF members who are interested in becoming Cl Dvrs could attend. It also states the requirement for candidates to be "OFP qualified in their current occupation, meet the medical and fitness requirements, and have 48 months of continuous service."<sup>17</sup>

#### **COMPARABLE MODELS**

#### **United States Navy**

The USN model for divers is different from the CAF as they separate into two distinct diving communities, Navy Fleet Divers (NDs) and Navy Explosive Ordnance

<sup>&</sup>lt;sup>14</sup> Royal Canadian Navy, RCN Quarterly Report FY 2018/2019 Q4, 8.

<sup>&</sup>lt;sup>15</sup> Department of National Defence, Clearance Diver Occupation Entry Changes, CANFORGEN 122/17, (July, 2017).

<sup>&</sup>lt;sup>16</sup> Zach Johnson, "Candidates Wanted for the Clearance Diver Occupation", *Trident News*, Maritime Forces Atlantic, (February 2019). 16.

<sup>&</sup>lt;sup>17</sup> *Ibid*.

Divers (EOD Diver). NDs "perform underwater salvage, repair, and maintenance, submarine rescue, and support Special Warfare and Explosive Ordnance Disposal while using a variety of dive equipment. They also maintain and repair dive systems."<sup>18</sup> EOD divers "dismantle and render safe unexploded ordnance to include underwater mines, land mines, and IEDs."<sup>19</sup> They are experts in "explosives, diving, parachuting, as well as tactical skills of a combat fighter. The men and women of Navy EOD are capable of rendering safe explosives to include conventional, improvised, underwater, chemical, biological and nuclear."<sup>20</sup> Although the USN separates diving into these two separate streams, the recruiting method for each can be an example to look at for Cl Dvr direct entry options.

USN NDs are recruited as directly entry candidates or direct "off the street." To apply to be a ND a direct entry candidate must meet the eyesight requirements, achieve a minimum score on the Armed Services Vocational Aptitude Battery (ASVAB), pass a diving medical, be 30 years or younger and be a U.S. citizen.<sup>21</sup> The process is similar to CAF occupations accepting direct entry applicants. Once enrolled NDs complete basic training and then go directly into dive training. As described in the USN careers website "training to become a Navy Diver challenges your willpower, intelligence and physical strength – and puts your desire to the test. Complete training and you'll rank among the world's elite underwater adventurers."<sup>22</sup> The current Cl Dvr recruiting drive in the CAF

<sup>&</sup>lt;sup>18</sup> United States Navy, "ND – Navy Diver," last assessed 29 April 2019, https://www.navy.com/careers/navy-diver

<sup>&</sup>lt;sup>19</sup> United States Navy, "Explosive Ordnance Disposal Technician Careers," last assessed 29 April 2019, https://www.navy.com/careers/explosive-ordnance-disposal-technician.

<sup>&</sup>lt;sup>20</sup> *Ibid*.

<sup>&</sup>lt;sup>21</sup> United States Navy, "ND – Navy Diver," last assessed 29 April 2019, https://www.navy.com/careers/navy-diver.

<sup>&</sup>lt;sup>22</sup> *Ibid*.

draws a similar theme to the USN in this respect. The training itself commences with a 7 week dive preparation course followed by 15 weeks of more advanced training. The interesting aspect of ND training to potential Cl Dvr direct entry is the dive preparation course. The course is conducted at "Naval Training Command, Great Lakes, Ill. For training in basic electrical and engineering courses, water adaptability and physical fitness.<sup>23</sup> Although about two weeks longer than a CAF STD course (29 training days) there are parallels in this initial training. Perhaps the STD course in Canada could mirror the USN dive preparation and be conducted post basic training as an initial introduction to CAF diving. As per the US ND model more advanced dive courses would follow after this initial training. Of note, to complete the comparison with the USN ND model, is that the ND occupation was selected from other serving USN occupations until 2006. In 2006 the direct entry model of today was introduced with the ranks E1 (Navy Diver Seaman Recruit) to E9 (Master Chief Navy Diver).<sup>24</sup> Master Diver Don Roberts (retired) has stated the direct entry model is doing well, especially with the prep dive course in the Great Lakes.<sup>25</sup>

The officer occupation in the ND stream is known as Engineering Duty Diving and Salvage Officer (EDOs). USN EDOs are "responsible for all aspects of ocean engineering, including salvage, underwater ship repair, towing, and diving, salvage equipment development and procurement."<sup>26</sup> They are volunteers from the USN engineering duty officer occupation who want the technical expertise of diving and

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Robert Mayer, U.S. Navy Diving – An Overview, (Spring 2010). 3.

<sup>&</sup>lt;sup>25</sup> Master Diver (retired) Don Roberts, telephone conversation with author, 8 April 2019.

<sup>&</sup>lt;sup>26</sup> Naval Sea Systems Command, "Engineering Duty Divers," last assessed 29 April 2019, https://www.navsea.navy.mil/Home/SUPSALV/ED-Divers/

salvage. The training of EDOs is similar to that of the NDs they will lead, but there is an increased focus on dive salvage. Most EDOs have a mechanical engineering or naval architect background but it is not mandatory.<sup>27</sup> If the RCN were to open recruiting of CLDOs outside the NWO occupation the MSEO officer occupation is a great comparison to the USN EDO occupation. The engineering background and knowledge of ships systems and characteristics, including ballast, could be a good knowledge base for battle damage repair and salvage diving as per the USN model.

The other stream of USN dives are EOD Divers. Once again, these divers are recruited directly off the street. The entry requirements are virtually identical to the ND requirements with the addition of a Navy physical screening test. The USN careers site on EOD diver's states, "becoming an EOD Technician is no easy process. While the rigorous 51 weeks of training are both physically and mentally grueling, you will be rewarded with unrivaled leadership opportunities, first rate compensation and respect."<sup>28</sup>The length of EOD Diver training is very similar to Cl Dvr, as well as most of the tasks, so this model is a good comparison. Much like the ND model, EOD divers first complete basic training prior to dive training. "The EOD training pipeline starts with the preparatory training in Great Lakes, Ill. Candidates work on swim stroke development, long range swims and physical conditioning."<sup>29</sup> Advanced dive training and EOD training at NAVSCOLEOD follows the prep training. Although timelines are different between the two streams it is interesting to note both start with preparatory dive training prior to commencing advanced training. This model could work well for direct entry Cl Dvr

<sup>&</sup>lt;sup>27</sup> *Ibid*.

<sup>&</sup>lt;sup>28</sup> United States Navy, "Explosive Ordnance Disposal Technician Careers," last assessed 29 April 2019, https://www.navy.com/careers/explosive-ordnance-disposal-technician.

<sup>&</sup>lt;sup>29</sup> Ibid.

candidates within the existing STD course. Of particular interest in the EOD diver is that fail out rates are highest during the advanced EOD training at NAVSCOLEOD. The overall attrition rate from 2004-2008 averaged 27 per cent<sup>30</sup> with the attrition rate spiking to 42 percent in 2011.<sup>31</sup> Fortunately the attrition rate for Cl Dvrs on this course has been near zero. Perhaps one conclusion to this difference is that Cl Dvrs attend the course as seasoned LS with perhaps six or more years of service while the USN candidates would be in their first years of service. This should not change if direct entry was considered for Cl Dvrs as they gain experience during consolidation time at the FDUs prior to this training.

The officer occupation in the USN EOD stream is simply known as EOD diving officers. After completion of basic officer training EOD officers undergo the same training pipeline as the EOD divers.<sup>32</sup> EOD officers are not selected from the fleet as per the CAF model. They are strictly specialised in diving and EOD and do not have a background in the surface fleet as per the current CLDO model. The scope of the direct entry into EOD officer is beyond this paper, as this paper will only investigate opening the CLDO sub-specialty to other trades and not consider direct entry.

#### **Royal Navy**

Like the USN the RN also recruits divers through direct entry. The RN is the same as the RCN in that there is only one stream of diver, called mine clearance diver in the RN. "Being a RN Mine Clearance Diver means you're part bomb disposal master,

<sup>&</sup>lt;sup>30</sup> Trevor Ritland, Sarah E. Turse, "Grade Point Average as a Predictor of Success in Explosive Ordnance Disposal Training," Naval Postgraduate School Professional Report, (December 2009). 3.

<sup>&</sup>lt;sup>31</sup> Commander EOD Group 1 Public Affairs, "EODGRU1 Targets Early Mentoring Opportunities with Students," last assessed 29 April 2019, https://www.navy.mil/submit/display.asp?story\_id=67826.

<sup>&</sup>lt;sup>32</sup> USN EOD officer career path presentation.

part sub-aqua specialist. Because there's only a handful of divers on any ship, you'll form close bonds with your team and be central to their – and crewmates' safety."<sup>33</sup> Eligibility for direct entry is simply British citizenship, aged 18-39, with a minimum height of 151.5cm and a healthy body mass index.<sup>34</sup> A preference for applicants with previous diving experience is also noted, which is an interesting difference from the USN models. This may be a good consideration for a CAF direct entry model. Once initial requirements are met the RN diver applicant would progress to a recruiting test, interview, dive medical, fitness test and potential diver's assessment. This is all standard application requirements that could be conducted through CAF recruiting centres for Cl Dvrs off the street. The interesting part of this model is the potential diver's assessment. It is described as "a challenging, pass or fail, 2 <sup>1</sup>/<sub>2</sub> day programme to gauge fitness and suitability for being a Navy Diver."35 Unable to ascertain exactly what this assessment entails while writing this paper, it would be of interest to investigate further if direct entry was considered in the future for Cl Dvrs. Successful RN applicants proceed from the assessment to basic training followed by dive and EOD training much like the USN model. The direct entry recruiting method appears to be successful in the RN as well. In discussion with a RN warfare branch manager, he indicated that "interest in joining the RN Diving Branch is very high, therefore they can take the best performing individuals on the PDA (Pre Diving Assessment) course."<sup>36</sup> He also stated that the success rate on the

<sup>&</sup>lt;sup>33</sup> Royal Navy, "Mine Clearance Diver," last assessed 29 April 2019,

https://www.royalnavy.mod.uk/careers/roles-and-specialisations/services/surface-fleet/mine-clearance-diver.

<sup>&</sup>lt;sup>34</sup> Ibid.

<sup>&</sup>lt;sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Jed R. Luke, WO1 RN, email conversation with author, 01 May 2019.

PDA course is approximately 50%.<sup>37</sup> The high interest in joining RN diving, even with a known 50% attrition rate on the entrance assessment, displays the success of direct entry recruiting in the UK.

The RN dive officer occupation is known as a Mine Clearance and Diving Officer (MCDO). The MCDO stream in the RN is the same as the RCN with the MCDO selected from the RN warfare officer community. Similar to the RCN D-Level path for NWOs, RN warfare officers have the "opportunity to specialise as a Fighter Controller, Hydrographic, Meteorological and Oceanographic Officer, Mine Warfare or Mine Clearance Diving Officer..."<sup>38</sup> As the RN model only recruits from the warfare officer community, as per the current RCN construct, it will not be investigated in this paper.

#### **Royal Australian Navy (RAN)**

The RAN also recruits for divers directly off the street. The RAN describes their Clearance Divers as specialist divers whose tasks include complex diving missions, surface and underwater demolitions, and the rendering safe and disposal of explosive ordnance and IEDs.<sup>39</sup> Entry standards for direct entry are aged 17-53, grade 10 with Math and English, a dive medical and a dive physical fitness test that includes a swim test. Once through the application process candidates attend basic training followed by clearance diver selection and then the yearlong clearance diver course. The selection test and course length are almost identical to the RCN. Of particular interest in this model is the selection test and the warning that unsuccessful candidates may be required to

<sup>&</sup>lt;sup>37</sup> *Ibid*.

<sup>&</sup>lt;sup>38</sup> Royal Navy, ""Warfare Officer," last assessed 29 April 2019, https://www.royalnavy.mod.uk/Careers/Careers-Introduction/~/media/Files/CNR-PDFs/Warfare%20Officer.pdf.

<sup>&</sup>lt;sup>39</sup> Royal Australian Navy, "Clearance Diver," last assessed 29 April 2019, https://www.defencejobs.gov.au/jobs/Navy/clearance-diver.

"transfer to another employment workgroup (subject to Navy requirements) or discharge at own request."<sup>40</sup> This could be an argument against direct entry in the CAF. If the CDAC was still used, as per the selection test in the RAN, and the fail out rate remained in line with current statistics what happens to these direct entry candidates? Would occupation transfer or discharge from the CAF work as it does in the RAN? This would require further investigation and input from CAF Recruiting and Director Naval Personnel and Training.

The RAN dive officer occupation is Mine Clearance Diving Officer (MCDO). Like the RN and RCN they are selected from the navy warfare officer community through an assessment centre process. Once, again this mirrors the current CLDO model and is thus not investigated in this paper.

#### **QUALITIES REQUIRED OF APPLICANTS**

A 2009 DRDC job analysis on Cl Dvr investigated core competencies for direct entry applicants. The aim of the study was "to conduct a thorough analysis of the Clearance Diver position in order to identify the core competencies required to successfully perform that role."<sup>41</sup> As physical and medical fitness were already screened for in the selection process this study looked at personality traits. The study recommended that "in addition to the normal CF screening process, direct entry applicants should be administered a personality measure to assess the personality domain."<sup>42</sup> The study went further to suggest that these competencies could be easily

<sup>&</sup>lt;sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> M.L. Girard, Job Analysis: Clearance divers: Identification of core competencies and selection recommendations for direct entry applicants, Director General Military Personnel Research and Analysis Technical Note. Defence Research and Development Canada. (October 2009). 1.

<sup>&</sup>lt;sup>42</sup> *Ibid.*, Executive Summary.

adapted to fit the current selection process at CF recruiting centres.<sup>43</sup> The study identified personality and cognitive ability traits that would be desirable for success as a Cl Dvr. Other nations have completed similar studies and identified traits or characteristics that may lead to success in certain military occupations.

A 1996 USN study looked at personality characteristics in NDs. The study asserts that "diving personnel manifest personality traits that are adaptive to these work demands and that attract them to the diving occupation."44 The Millon Index of Personality Styles (MIPS) was used to evaluate current divers during the study. MIPS measures adaptive and non-adaptive personality traits.<sup>45</sup> The study developed a set of definable personality traits for diving personnel. A similar study conducted in 2007 on bomb disposal technicians indicated that those concerned with selecting the "most appropriate candidates for a particular occupation or area of specialisation...that measuring intelligence strengths and learning style preferences may be one mean by which to achieve his or her goal."46 A third South African study yielded similar results and stated that informed decision in recruitment and selection could "be achieved by providing insight into key characteristics to look for in identifying candidates with highest potential of obtaining career success."47 The study concluded that over and above physical fitness, there are personality and motivation factors that influence success.<sup>48</sup>This is just a few in a list of studies that have investigated methods to determine common characteristics or

<sup>&</sup>lt;sup>43</sup> Ibid.

<sup>&</sup>lt;sup>44</sup> Thomas J. Beckman, Rakesh, Lall, "Salient Personality Characteristics among Navy Divers," Military Medicine Vol 161, (1996). 717.

<sup>&</sup>lt;sup>45</sup> *Ibid.*, 718.

<sup>&</sup>lt;sup>46</sup> Edwin, Bundy, Roderick, Sims, "Commonalities in an uncommon profession: Bomb disposal," Proceedings Ascilite Singapore, (2007). 93.

<sup>&</sup>lt;sup>47</sup> Ishreen Rawoot, Adelai van Heerden, Laaiqah Parker, "Operational Forces soldiers' perceptions of attributes and skills for career success," SA Journal of Industrial Psychology, (July 2017). 8.

<sup>&</sup>lt;sup>48</sup> *Ibid.*, 7,8.

personality traits that may lead to success in certain military careers. If the CAF were to conduct direct entry recruiting for Cl Dvr, the development of a new or use of a current test, could be utilised in the selection of candidates.

#### COUNTERARGUMENT

One of the greatest counterarguments for not using direct entry as a recruiting option for Cl Dvr is that the current model of selection through other CAF occupations is working. With the recent occupation entry change to open selection to all CAF occupations it is argued that the greater numbers will attempt CDAC and therefore a greater number of candidates will be successful. On the most recent CDAC conducted earlier this year, FDU(P) CO commented that the "quality of candidates has increased. 12 total candidates were chosen of 18 that completed CDAC. These 12 were strong and received unanimous recommendations (from the staff)."<sup>49</sup> However, this should not affect the decision on opening up Cl Dvr to direct entry. As can be seen by the comparison to some of Canada's closest allies, recruitment from the street for clearance diving is a regular entry method in those navies.

A second argument would be that this was attempted in the Search and Rescue Technician (SAR TECH) occupation and it did not prove successful. SAR TECH opened up the occupation to direct entry in 2006. The occupation was unable to recruit sufficient new members through in service selection. Direct entry candidates were required to be qualified Primary Care Paramedics. The trial of using direct entry as a recruiting method for the SAR TECH occupation was deemed unsuccessful and has reverted to in service applicants only. The cancellation of direct method was due to low success rates on

<sup>&</sup>lt;sup>49</sup> Richard Kappel, email conversation with the author, 30 April 2019.

selection and training of direct entry applicants.<sup>50</sup>This paper asserts that the comparison to the SARTECH direct entry trial is not a valid one, in that, a professional prerequisite (Primary Care Paramedic) was required for SARTECH with no such equivalent being suggested for Cl Dvr.

A third argument against recruiting from the street is the age and inexperience of the diving candidates. Port Inspection Divers (PIDs) for example, do recruit through direct entry but have noted they are "having struggles with the dive medical standard at the recruit level and that 97% of PID release from the reserves within five years."<sup>51</sup> PID is a Primary Reserve occupation and not intended for long term service. Once again, the models of direct entry of the USN, RN and RAN prove that direct entry does work and age and inexperience do not matter. Using effective recruiting methods is the key to training success.

The argument against officer candidates coming only from the NWO stream is due to the BWK qualification obtained as required as OIC of dive tenders. This requirement will not change and dive tenders are an important asset to FDUs. However, other officer trades could attain a tender qualification. In fact, Cl Dvrs at the PO1 and CPO2 are trained in FDUs to obtain a tender qualification and are required to pass a tender charge board similar to the tender command board that is completed by officers.<sup>52</sup> The MSEO and ENGR officer occupations identified in this paper would be able to complete this qualification along with Cl Dvr senior NCMs if required. In addition, as

<sup>&</sup>lt;sup>50</sup>Andrew Tiffin, Chief Petty Officer First Class (retired), telephone conversations with the author, 6 May 2019.

<sup>&</sup>lt;sup>51</sup> Department of National Defenc, Record of Decisions – Clearance Diver/Port Inspection Diver Sponsor Advisory Group 1 Meetin, Director Personnel Generation Requirements, (December 2017). 2.

<sup>&</sup>lt;sup>52</sup> Department of National Defence, Job Based occupational Specification for the Clearance Diver Occupation, Director Personnel Generation Requirements,(March 2015). 2-3, 2-4.

highlighted previously, the ship maintenance knowledge of the MSEO and EOD background of the ENGR would be force multipliers within the CLDO sub-specialty.

#### RECOMMENDATION

The Cl Dvr occupation could benefit from considering direct entry. With a projected lower numbers at the junior rank level<sup>53</sup> an additional method of recruiting to the occupation will certainly assist. As indicated in the 2009 DRDC study, pre-screening in the cognitive and personality domain combined with physical and medical suitability, direct entry could be successful.<sup>54</sup> Other studies identified in this paper also suggest methods for selecting candidates for success on assessment phases. The USN, RN and RAN all successfully use direct entry successfully through their own selected recruiting methods. This paper does not suggest to use a particular method or model for direct entry recruiting, but notes that there are models in use that are successful. Followed by selection at a CAFRC and successful completion on basic training a STD course should be the next step in the pipeline similar to how the USN diver model is conducted. This is put forward only as a consideration as the changes to Cl Dvr entry to all CAF occupations was only opened in 2018 and sufficient data has not been collected to determine if it will be successful. A sample size over a larger number of courses will be required to effectively evaluate the current CAF Cl Dvr model.

The CLDO sub-specialty could also consider opening to the MSEO and ENGR officer occupations along the career path similar to the CLDO D-Level. MSEO and

<sup>&</sup>lt;sup>53</sup> Department of National Defence, Problem Definition Paper Clearance Diver Occupation, Director Navy Personnel and Training, (September 2017). 3.

<sup>&</sup>lt;sup>54</sup> M.L. Girard, Job Analysis: Clearance divers: Identification of core competencies and selection recommendations for direct entry applicants, Director General Military Personnel Research and Analysis Technical Note. Defence Research and Development Canada. (October 2009). 1.

ENGR would be required to volunteer for the CDAC at the similar junior Lt(N)/Captain career point. Once qualified the officers would have the option, as NWOs do currently, of returning to their occupation to continue in that stream after consolidation time at a FDU. This could prove successful in increasing the pool of candidate for CLDO as well as an increase of diving and EOD expertise in other areas of the CAF. Both the MSEO and ENGR officer occupations could benefit from this knowledge and expertise returning into the respective career streams.

#### CONCLUSION

Clearance Diving has been an occupation within the RCN for the past 65 years. The first significant policy change in the recruitment and selection of Cl Dvr candidates did not occur until 2017 when the assessment centre was opened up CAF wide to all occupations with no previous dive training required. With the requirement to have a CAF dive qualification lifted the next logical step to increase the pool of Cl Dvr candidates is to open up a direct entry option. Some of our closest allies recruit directly off the street and have professional dive teams operating around the world. The CAF could look at the recruitment and selection models utilised in these other countries to increase the number of candidates attending Cl Dvr selection. The same argument can be put forward for CLDO recruiting and selection. The pool of NWOs attempting CLDO as a D-Level is under completion from all other D-Level courses and numbers in the NWO community are decreasing. Taking an initial step to recruit from other officer occupations that have CAF dive qualifications, such was originally done in the Cl Dvr trade, could be a good start to increase the number of officer candidates on the assessment centre. With the operational tempo of FDUs at an all-time high and no sign of a decrease in sight, opening up recruiting efforts to all available options would be a good starting point to ensure both the Cl Dvr trade and CLDO sub-speciality remain strong for another 65 years.

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