"Commissioning from the Ranks: Would the Marine Engineering Sub-Branch of the Irish Naval Service benefit from a regular process?"

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Submitted as part fulfilment of the requirements for the Bachelor of Arts in Leadership, Management and Naval Studies

BA (LMNS)

2016

Irish Naval College / National Maritime College of Ireland.

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Word Count: 6994 words.

Finalised on: 29/09/2016

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Acknowledgements:

I offer my sincere thanks to my mentor LtCdr Ó'Mearáin and my supervisor Lt O'Brien for their encouragement and assistance, their insightful comments often stimulated the author to question his own beliefs and opinions which lead to a more balanced and focused project.

I acknowledge and thank all of those who participated in interviews and those who generously gave their time in completing my survey; without whom these vital elements of my project would not have been possible.

I would like to thank the Naval College staff for their encouragement and support and I must give a special BZ to my fellow students who made the course some of the most enjoyable time I have had in service.

I would like to thank my wife Aoife and my children Aisling, Róisín and Olan for their love, patience and support during the completion of this project and during the many years I have spent absent at sea.

ABSTRACT

"It is only those who do, and are determined to do, all that they can, in whatever position in life they are placed, that will succeed in that position or rise out of the bulk."

Richard 'The' O'Rahilly, 1893.

In examining the question proposed by this dissertation the author was reminded of the famous words of the Irish patriot above. It is the author's contention that he agrees with the spirit of the statement; there should be no limits placed on the career aspirations of any service person with the necessary ability and drive to achieve the required level of education or competency.

Currently, as this research project will show, there at a lack of availability of Marine Engineering Officers (MEOs) within the Irish Naval Service (INS) and there is a requirement from Government to implement the vision of the White Paper on Defence (WP) 2015 which states that 'an ongoing scheme of commissioning officers from the ranks will be developed and incorporated as part of the career advancement programme for enlisted personnel so as to leverage talent'

Given these two facts, the author feels that action must be taken to produce MEOs through a regular commissioning from the ranks (CFR) process. The INS would benefit from the successful identification and commissioning of suitable personnel and the author feels he will show how a number of new pathways to becoming a MEO could be implemented.

Implementing a successful regular process of CFR would harness the talent within the Non Commissioned Officer (NCO) Engine Room Artificer (ERA) ranks to undertake a CFR programme while ensuring that the INS will benefit from the retention of their experience and corporate knowledge of the NCO ERAs.

GLOSSARY OF ABBREVIATIONS

BA Bachelor of Arts

BEng Bachelor of Engineering

DCOS Deputy Chief of Staff

CFR Commissioning from the Ranks

CO Commanding Officer

CoC Certificate of Competency

COS Chief of Staff

CPO Chief Petty Officer

CSO Captains Standing Orders

DOD Department of Defence

Ens Ensign

EOOW Engineering Officer of the Watch certificate

E/R Engine Room

ERA Engine Room Artificer (Irish Naval Service)

FORST Fleet Operations Readiness Standards and Training

FSG Fleet Support Group (Irish Naval Service)

GOC General Officer Commanding

GS An Garda Síochána

HRM Human Resource Management

H&S Health and Safety

HQ Head Quarters

IMO International Maritime Organisation

INS Irish Naval Service

LMNS Leadership, Management and Naval Studies

Lt (NS) Lieutenant (Irish Naval Service)

LtCdr Lieutenant Commander (Irish Naval Service)

Cdr Commander (Irish Naval Service)

Mech Mechanician (Auxiliary Watch-keeper, Irish Naval Service)

MEO Marine Engineering Officer

MoD Minister for Defence

NFQ National Framework of Qualifications

NCO Non Commissioned Officer

NDY Naval Dock Yard (Irish Naval Service)

NMCI National Maritime College of Ireland

NSC Naval Support Command

NWC Naval Watch-keeping Certificate (Irish Naval Service)

PDF Permanent Defence Forces

PDFORRA Permanent Defence Forces Other Ranks Representative Association

PMS Personnel Management Section

PO Petty Officer (Irish Naval Service)

ROI Republic of Ireland

S/Lt Sub Lieutenant (Irish Naval Service)

S/NCO Senior Non-Commissioned Officer

STCW Standard of Training Certification and Watch-keeping 1995

RDF Reserve Defence Forces

RNZN Royal New Zealand Navy

TT Technical Trainee (Irish Naval Service)

TT Technical Training School (Irish Naval Service)

USA United States of America

WP White Paper (Defence Forces)

2iC Second in Command

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This dissertation is presented in part fulfilment of the requirements of the Senior Non-Commissioned Officers (S/NCOs) course and the Bachelors of Arts (BA) in Leadership, Management and Naval Studies (LMNS)

1.2 Topic

Commissioning from the Ranks: Would the Marine Engineering Sub-Branch of the Irish Naval Service benefit from a regular process?

1.3 Research Idea

To assess if there is a need for CFR in the INS and to assess if such a process could be implemented on a regular basis. Also to determine if such a process was implemented, would there be sufficient interest to ensure the successful delivery of candidates for commissioning.

1.4 Current Situation

At the time of writing this dissertation the INS is under actual strength of junior MEOs by 56.5%. The deficiencies are at the ranks of Ensign (Ens), Sub Lieutenant (S/Lt) and Lieutenant (Lt (NS)). The effective strength of junior MEOs is even less at 34.8%, there are currently just eight out of twenty-three Junior MEOs in effective service. (Naval Support Command, 2016)

The MEO occupies a position that is a high priority requirement for a naval vessel to perform it operational duties with maximum efficiency.

As outlined in Captains Standing Orders (CSOs) there is an extensive list of duties to be fulfilled by the MEO and these are included in the Appendix 8.

About the author, I am currently serving as the Chief Petty Officer (CPO) ERA in the Fleet Operations, Readiness, Standards & Training (FORST) unit of the INS and I have 18.5 years of service in the INS.

In researching this dissertation, I have identified a risk of personal bias towards CFR due to my status as a Permanent Defence Forces Other Ranks Representative Association¹ (PDFORRA) elected representative. The risk of bias been, that I regularly advocate on behalf of my enlisted colleagues seeking to improve their welfare and conditions. I will endeavour to overcome this bias by researching and addressing the subject matter in a balanced manner and when analysing the data generated from the research, I will keep an open, dispassionate and non-judgemental mind set.

Through research I hope to find evidence to support the consideration of CFRs and provide a reasonable argument for the establishment of a regular process of CFRs.

1.5 Research Statement

The aim of this dissertation is to conduct research and analysis on CFRs and examine the possibilities of a regular process of CFR competition. The information collected will be presented in a non-biased format; examining the merits and placing any insights gained at the disposal of those who are tasked with the responsibility of ensuring adequate provision of suitability qualified MEOs for the INS.

This research may present a challenge to preconceived or established notions on the viability of CFRs, yet it is presented to contribute both to the advancement of enlisted

.

¹ The Permanent Defence Forces Other Ranks Representative Association is a body representing enlisted personnel on matters concerning pay, conditions of service and other matters. They represent nearly 86% of all enlisted personnel.

personnel and to allow the Marine Engineering sub branch provide a system to deal with the variation in availability of MEOs.

1.6 Structure of Research

This dissertation is presented in six chapters.

Chapter One introduces the topic; the current situation regarding MEOs within the INS, a research statement followed by the structure of the research.

Chapter Two is context; here the roles and structures of the Defence Forces (DF) and the INS are explored. The role of the commissioned officer and NCO is explored. The roles of the MEO and the ERA are examined.

Chapter Three is the literature review; which informs the reader about the research into current human resource management (HRM) best practice. Past reports of independent groups and commissions on this subject are reviewed. DF policy documents and strategy statements are explored. The practises and policies of foreign forces are also reviewed.

Chapter Four is the methodology of the research; which will explain the chosen methodology which will have been designed to deliver data that can be analysed leading to findings.

Chapter Five is interviews and survey results; the interviews are with Officers, NCOs and also retired NCOs. The survey was conducted amongst NCO ERAs from Leading to CPO rank, all currently in service.

Chapter Six is analysis and recommendations; the author uses the knowledge gained from the research to lay out possible solutions which may contribute to the implementation of a successful CFR process.

CHAPTER TWO

THE DEFENCE FORCES

2.1 Introduction to the Defence Forces

The purpose of this chapter is to provide an understanding of the background of the DF. The military structures can be quiet alien to someone looking at the DF from the outside so with a clear examination of the laws, rules and structures the reader shall be able to more completely understand the Irish Military.

On the 1st of October 1924 the Executive Council of the Irish Free State established the DF by proclamation. The DF is the armed force of the Republic of Ireland (ROI). The right to raise or maintain military or armed forces is vested exclusively in the government of the ROI titled an Oireachtas (Bunreacht na hÉireann, 1937). The Supreme commander of the DF is the President of Ireland titled Uachtaráin na hÉireann. The laws governing the DF are set out in the Defence Act 1954.

'It shall be lawful for the Government to raise, train, equip, arm, pay and maintain defence forces to be called and known as Óglaigh na hÉireann or (in English) the Defence Forces' (Dept. of Defence, 1954)

The Minister for Defence (MoD) is responsible for the executive and administrative governance of the DF through the DOD.

'Under the direction of the President, and subject to the provisions of this Act, the military command of, and all executive and administrative powers in relation to, the Defence Forces...shall be exercisable by the Government...through and by the Minister' (Dept. of Defence, 1954)

2.2 Roles and Structure of the Defence Forces

The DF is organised on conventional military lines providing a sufficiently flexible structure to carry out all the roles assigned by Government. The WP on Defence 2015 lays out the main roles of the DF and a full list can be found in Appendix 1. The DF consists of a Permanent Defence Force (PDF) and a Reserve Defence Force (RDF).

The Permanent Defence Force consists of three distinct components being 'the Army retaining an all-arms conventional military capabilities including Special Operations Forces (SOF), the Air Corps (AC) operating both rotary and fixed wing aircraft and the Naval Service' (Dept. of Defence, 2015). The RDF provides the necessary contingent conventional military capability to augment and assist the PDF, when necessary.

The Minister for Defence (MoD) has an office in the Department of Defence (DOD) and in the DF Headquarters (HQ) building which is in Newbridge. The DF Chief of Staff (CoS) liaises with the MoD on all defence related matters.

Managing the DF in the delivery of these roles are the COS, the Deputy COSs (DCOS) Support and Operations. The General Officers Commanding (GOCs) are spilt across the various Brigades, the INS and the AC.

2.3 Roles and Structure of the Irish Naval Service

The Irish Naval Service (INS) is the maritime component of the DF, it operates the state's warships under the direction of the Irish Government through the MoD.

International law defines a warship as a ship belonging to the armed forces of a nation bearing the external markings distinguishing the character and nationality of such ships, under the command of an officer duly commissioned by the government of that nation and whose name appears in the appropriate service list of officers, and manned by a crew which is under regular armed forces discipline. (United Nations Convention on the Law of the Sea, 1982).

The White Paper (WP) on Defence 2015 recognises 'As the states principal sea-going agency, the Naval Service provides a unique sea-going capability', it also reiterates the WP on Defence 2000 recognition that 'Naval Service vessels carry with them unique characteristics as an expression of state sovereignty and political will at sea and in furthering policy objectives in the maritime domain'.

In order to carry out the roles outlined in the WP, each vessel has a clear command structure which is separated into commissioned and non-commissioned officers.

2.4 Commissioned Officers and their roles.

The commissioned officer occupies a role to which they are sworn, under oath to be faithful to Ireland and loyal to the constitution.

Commissioned officers hold their commission from the President of Ireland (Rialtais na hÉireann, 1937). Non-commissioned officers hold no commission and they derive their authority from the delegation of subordinate powers from their commanding officer (Dept. of Defence, 1954)

The responsibilities of the commissioned officer within the complex and demanding modern DF are governed by the DF Regulations (DFRs); these are a vast tome of rules, regulations and instructions by which all routines from regular daily tasks to the minutiae of military law are defined. A deep knowledge of these regulations is required by all commissioned officers in order for them to carry out their duties effectively and efficiently within the organisation.

There are a plethora of Administration Instructions, Training Circulars and Standing Orders which derive from the DFRs to further instruct and order the working principles and guidelines of the DF.

The primary role of the commissioned officer is the exercise and application of command and control over military personnel. This involves the application of managerial skills, leadership skills and providing clear direction. The commissioned officer must be a military expert within their specialist field and also a highly trained manager.

'The commissioned officer is responsible and accountable for everything their personnel do or fail to do' (Defence Forces, 2016).

Command 'Denotes not only personal authority over others (in the uniquely military sense) but managerial authority and responsibility for the direction and the control of military forces. Officers who hold appointments that have command authority and responsibility are designated Commanding Officers (COs) and have special powers and duties imposed on them by the Defence Act which enables them to exercise specific disciplinary authority with the terms of the Act' (Defence Forces, 1992)

The CO is responsible for the health, safety and welfare of the personnel assigned to their command. The education, training, professional development, conduct appraisal, fitness and employment of these personnel are also the responsibility of the CO, as are the military installations, equipment and stores within the command.

2.5 Non-Commissioned Officers and their roles.

The NCO is often called the backbone of the western military structure. A professional NCO cadre is vital to the efficient and effective operation of a modern military. Ireland, in common with major military powers such as the United Kingdom and the United States of America (USA) has professional and permanent NCOs. 'NCOs occupy a unique position within the DF; they are the glue that holds the organisation together and the oil that keeps the cogs moving' (Defence Forces, 2016).

The NCO is vital to interpret the commands and will of the CO, then using their military training and personnel management skills, they apply themselves and their unit to their tasking to achieve the required goal. Senior NCOs (S/NCOs) will act as instructors and mentors to junior Officers and the relationship between NCOs and Officers is a complex one. In western military's it is based on mutual respect and shared beliefs, with clear designated responsibilities and goals.

In those countries where the NCO is not developed or is underdeveloped the basic military standard may be lower; for example Arab nations tend to have a 'highly accentuated class

system bordering on a caste system, and a lack of non-commissioned officer development programme' (de Atkine, 1999).

The Norwegian Army is the only nation of the 27 armed NATO² countries without a professional NCO structure in the Army having eliminated it completely in 1934. This decision was based on egalitarian principles 'Neither socially, nor militarily is there any difference between NCOs and Officers, that justifies the need to maintain a divide between these two classes of officers' (Parliamentary bill 33/1926) (Moe, 1986), it is currently engaged since 2009 in trying to reintroduce a professional NCO structure.

The Swedish armed forces which abolished its professional NCO structure in 1972 found it needed to reintroduce it in 2010, along with sweeping reforms of its armed forces and its transition to an all volunteer force.

It has been said that 'Officers are managers and NCOs are foremen' (Marx, 1867) but that is to understate the work of both as the relationship is complex. This statement 'Commissioned Officers leads, commands and directs, the NCO organises and administers and the soldier executes' (Jackson, 2003) captures it more closely, however it would in the authors opinion require a dissertation in its own right to adequately explain.

2.6 Marine Engineering Officers and their roles.

Within the INS the personnel are split between four branches: Operations, Communications, Logistics and Engineering.

The Engineering Branch is commanded by a Captain (OF 5) who is the Head of the Engineering Branch and he is also the Officer Commanding (OC) Naval Support Command. Below him are a number of Commanders (OF 4) of the various units and branches such as second in command (2IC) Naval Support Command (NSC) & OC NSC HQ staff, OC Mechanical Engineering & Naval Dockyard (NDY), OC Weapons Electrical Unit (WEU).

Lieutenant Commanders (OF 3) (LtCdrs) are in general designated as Officers in Charge of the various sub-units and LÉ Eithne is the only sea-going unit designated as having a sea going LtCdr MEO, while the remaining vessels have Lt (NS) (OF 2) MEOs.

In practise, there are now no longer enough junior engineering officers at sea in the MEO role, so many of the vessels have a LtCdr MEO attached on-board, six out of seven LtCdr MEOs are attached to sea going units at the time of writing in this manner and thus many technical units ashore have not got the senior engineering OiC they require.

² NATO is the North Atlantic Treaty Organisation; it has 27 armed member states, Iceland is the 28th member but has no armed forces of its own.

Naval Service Junior MEO Strength Sept 2016					
Branch	CS4 Establishment	Strength	% Strength	Effective Strength	% Effective Strength
Eng Branch Junior Officers	23	13	56.5%	8	34.78%

Table One: Naval Service Junior MEO Strength, Sept 2016

(FOCNS, 2016)

The role of the MEO is to provide professional technical expertise in Marine Engineering, there are many subjects in which the MEO is required to be proficient and they must be technical and tactically competent for the role. The MEO is responsible to the vessels CO for everything that keeps a ship afloat, moving and habitable.

2.7 Engine Room Artificers and their roles.

The Engine Room Artificer is a tradesman/craftsman or suitability qualified engineer.

Within the engineering branch of a Naval Vessel, the MEO has a multi-disciplined team under their control. Of this team, four are normally ERAs, one CPO and three POs.

The primary role of the ERA is engine room (ER) watch-keeping and their secondary role is the control and supervision of the emergency response teams for DCFF. They have many more duties including physical maintenance work, maritime interdiction team membership and the training & education of junior ER ratings.

The INS train their ERAs to the obtain their National Craft Certificate (NCC) which is set at level six on the national framework of qualifications (NFQ), they achieve this by ensuring that the education delivered by the Technical Training School (TTS) of the Naval College, is benchmarked to achieve those goals as required by the standard based apprenticeship system and also achieve those educational outcomes which the engineering branch requires.

The engineering structure, the training and educational pathways of the INS are different in a number of ways from a merchant vessel, these are outlined in the series of diagrams below.

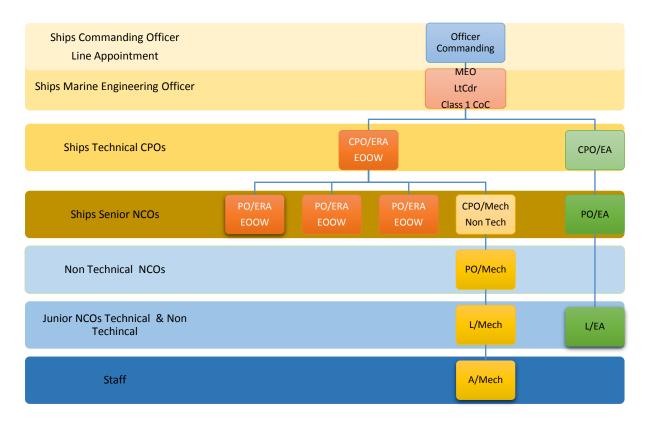


Figure One: Irish Naval Vessel, Marine Engineering Department Structure.

(deBarra, 2016)

MASTER (Captain) ENGINEER CHIEF OFFICER SECOND ENGINEER OILER BOSUN ELECTRONIC SECOND OFFICER ELECTRICAL ENGINEER GREASER CHIEF THIRD OFFICER RDINARY DECK CADET COOK ENGINE CADET

Figure Two: Merchant Vessel, Marine Engineering Department Structure.

(Technical Training Department, 2010)

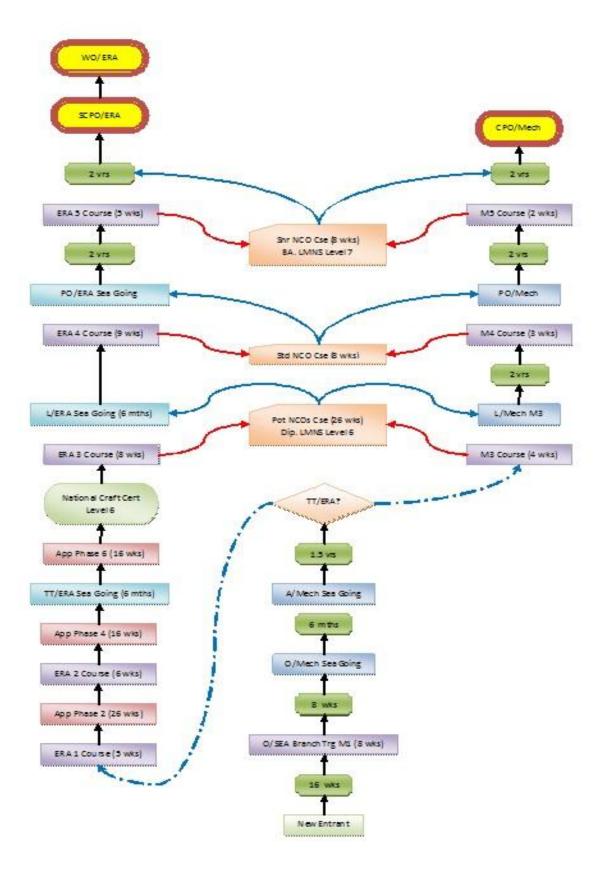


Figure Three: ERA Education & Career Path.

(deBarra, 2016)

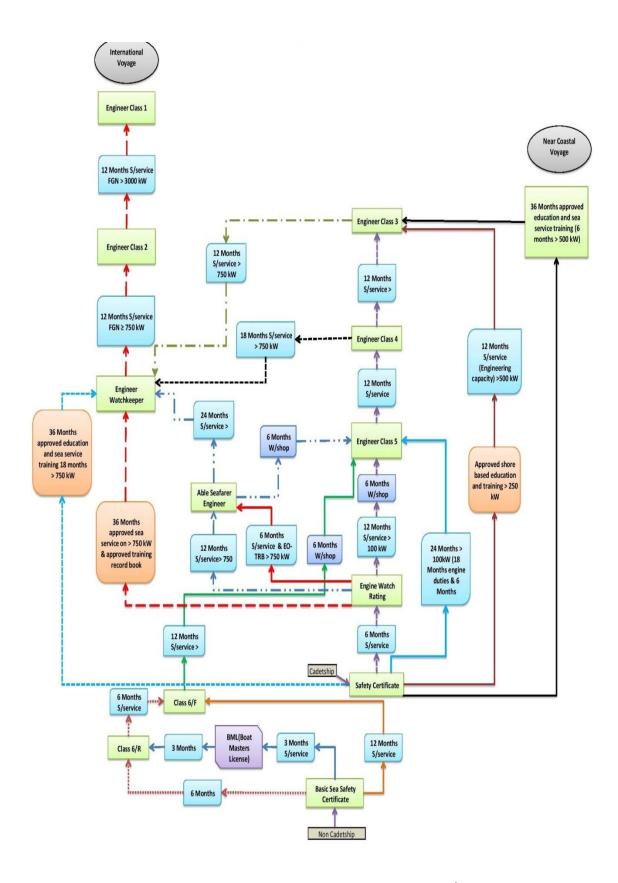


Figure Five: Merchant Marine Engineering Education/Career Path.

(Technical Training Department, 2010)

In 2015 a review of all ERA course syllabi was carried out and the educational material has now been updated. From 2016 a Technical Trainee on completion of all the ERA courses 1, 2, 3 and 4 will be able to apply to sit their Engineering Officer of the Watch (EOOW) examination while still continuing to sit the in-house naval watch-keeping examination.

This means that an ERA will have military certification to hold an ER watch on an INS vessel and also civilian qualifications set at the internationally recognised standard of competency. Also 2015 was the first year that TT/ERAs where offered the option of choosing one of two different pathways; the traditional route or the BEng route.

The traditional one described above, where at the end of the process the PO/ERA produced is dual qualified as a NCC craftsman and an EOOW.

The BEng route sends the TT/ERA to attend on the Bachelor of Engineering in Marine Engineering and at the end of their education they will sit their EOOW examination. They will also complete their in-house ERA training.

The reason for this change is that having engaged in a review process, the Marine Engineering branch has began to implement a policy change in regards the certification and qualifications of the ERAs and MEOs. They have determined that all Marine Engineering officers must now be able to achieve chartered engineer status with Engineers Ireland and must also achieve a Class I certificate of competency (CoC) or equivalent.

This will require the junior officers entering into INS through the Cadet system to undertake the BEng in Marine Engineering and the subsequent EOOW CoC, then advancing to achieve their Class 1 CoC³, which has been deemed to be the desirable level of competency to be in command of the engineering department of an INS vessel at sea. 'I am looking for watch-keepers and I am looking for engineers to make senior engineering decisions' (Roberts, 2016)

The Class 1 CoC will not however be considered sufficient to allow that MEO become the manager of the NDY in the future. The appropriate qualification to manage the NDY and other shore based engineering departments, is a level 8 degree or higher in an engineering discipline that would allow for the granting of chartered engineer status with Engineers Ireland.

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³ Class I, Certificate of Competency is often referred to as the Chiefs Ticket. It does not indicate the rank "Chief Engineer".

Rank	Current INS Requirements	Merchant Vessel/STCW	Future INS Requirements
OC NSC	Capt.	Marine Superintendant	Level 9
	Shore Based	Shore Base	
2iC NSC	Cdr.	Chief Engineer	Level 9
	Shore Based	Only on very large vessels such as Cruise Ships	
OiC NDY	Lt. Cdr	Staff Chief Engineer	Level 9
	Class II	Only on very large vessels such as Cruise Ships	Masters in M.Eng
	Certificate of Competency		Chartered Engineer
MEO INS Vessel	Lt (NS)	Chief or 1 st Engineer	Level 8
VESSEI	B.Eng (Marine Eng)	Class I	B.Eng (Hons) in Mech Eng.
	Class II	Certificate of Competency	BA in Marine Eng.
	Certificate of Competency		Chartered Engineer
CPO/ERA	CPO/ERA	2 nd Engineer	Level 7
	(Naval Watch-keeper)	Class II	BEng in Marine Eng.
		Certificate of Competency	Class II
			Certificate of Competency
PO/ERA	PO/ERA	3rd Engineer	Level 7
	(Naval Watch-keeper)	Class III	BEng in Marine Eng.
		Certificate of Competency	Class III
			Certificate of Competency
L/ERA	L/ERA	Junior 3 rd Engineer or 4 th Engineer	Level 7
	(Nominally a training rank	Class III	BEng in Marine Eng.
	but may hold a watch if examinations have been	Certificate of Competency	Class III
	past)	Very often a training rank.	Certificate of Competency
A/Mech	A/Mech	Motorman/Wiper/Fitter/Oiler	A/Mech
	Engine Room Ratings Cert	Engine Room Rating Cert.	Engine Room Ratings Cert

Table Two: Current INS vs Merchant vs Future INS Ranks, Education & Certification.

(deBarra, 2016)

The planned new level of requirements, when they are fully in place will make the achievement of a CFR programme, while more difficult, still achievable.

At the time of writing there is no policy document would stop an ERA completing their Class I CoC, then been commissioned and then progressing onto become a senior officer.

2.8 The Cadet System.

The current system of cadet training is considered to be the premier system of officer training. It is accessible to all junior enlisted ratings up to the age of 27.

It is acknowledged that the current system of cadetship is going to continue to be the primary route of the sourcing and training of officers.

It is envisioned that all other pathways that are possible such as CFRs, Direct Entry and any other method that can be made available, should be made available to ensure continuity of supply of MEOs with the INS.

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

'Writing a faulty literature review is one of many ways to derail a dissertation' (Randolph, 2009) (Randolph, 2009). The author faced into the literature review with some tredipdation. The subject chosen is not an overly reseached issue in Ireland. The author however was keenly aware that 'a researcher cannot perform significant research without first understanding the literature in the field' (Boote, 2005)

3.2 Human Resource Management

HRM is a vast subject area to explore, the author has tried to concentrate on well-respected or what is considered cornerstone literature of the field. Exploring HRM literature left one in no doubt that a clear path on which an employee can travel in a company's managerial structure based on their merit is not only highly desirable for the individual but also extremely positive for the business or company.

C.H Nortcott considers that 'HRM is an extension of general management, that of prompting and stimulating every employee to make their fullest contribution to purpose of a business. HRM is not something that could be separate from the basic managerial function. It is a major component of the broader managerial function' (Northcott, 1968)

Armstrong feels that a good business plan provide a basis for 'leads to attraction and retention policies and programmes for internal resourcing (identifying talent within the organisation and developing and promoting it)' (Armstrong, 2014)

3.3 Past Reports & Recommendations

There have been a number of reports into the DF since the early 1990s as the DF began its modernisation programme. These detailed reports form the basis of a number of the investigation streams the author has pursued. While overall the information containing in them is voluminous, the relevant sections pertaining to the commissioning from the ranks small.

Some of these reports which I reviewed are:

- 1. The Gleeson Commission on the Remuneration and conditions of service in the DF 1990 (The Gleeson Report).
- 2. The Efficiency Audit Groups reports EAG1 (1991) EAG 2 (1992) and EAG 3 (1994)

- 3. The Price Waterhouse Report on the DF 1994.
- 4. Government White Papers 2000 & 2015

The Gleeson Report recommended an expanded CFR scheme coupled with an increased educational standard in the NCO ranks should significantly increase the number of personnel commissioned from the ranks. (The Gleeson Commission Report, 1990). Part of this recommendation was fulfilled; each NCO who completes the S/NCOs course with the INS since 2009 can now undertake a Degree in Leadership, Management and Naval studies which is set at level seven on the NFQ.

The White Paper on Defence 2000 proposed an updated DF Personnel Management Plan to ensure the DF was keeping pace with 'best practice', a regular scheme of commissioning enlisted personnel as Officers was to be part of this plan; however this was never implemented. (Dept. of Defence, 2000)

Those programs of CFR that have taken place in the DF have been adhoc and used to fill needs at the time, where shortages had been identified. Between 1962 and 1990 there were 140 NCOs commissioned in this fashion (Dept of Defence, J1 Branch, 2016).

From 1990 until the present date there have be 124 personnel promoted through the CFR process. Of these 124 officers there are 42 still serving in the PDF. (Dept of Defence, J1 Branch, 2016). Of the 1138 Officer posistions in the DF this reprents just 3.7 % of the total as been CFR route Officers. Just five of these are in the Naval Service, all of whom are in the Operations Branch.

The author found repeatedly across the reviewed reports that a regular CFR programme has been officially recommended many times, yet never implemented.

3.4 Defence Forces Papers, Policy and Strategy

The DF has many detailed policy papers on a large number of subjects. The DF also publishes strategy statements and annual reports. The first WP on Defence was published in 2000 and was the catalyst for large changes, some immediate but other more incremental. The latest WP was published in 2015 and represents a vision for the DF for the next ten years.

The current White Paper on Defence 2015 states that 'It is recognised that there is wealth of talent within the enlisted personnel of the DF which could be further harnessed. In this regard, an ongoing scheme of commissioning officers from the ranks will be developed and incorporated as part of a career advancement programme as to leverage talent from the enlisted personnel.' (Dept. of Defence, 2015).

DF Policies Brief	Data Policies
DF Policy Brief Presentation Personnel Briefing Slideshow	DF Communication Policy Summary of DF regulations covering Communications
Policy Brief Sign-in Sheet Sign-in to indicate your awareness of these policies	DF Records Management Policy - Admin Instr A8 Ch. 1 Sec 2 starting para 107 on page 14
DF Information Handbook Information for new entrant and serving soldiers	DF Data Protection Policy - Admin Instr A8 Ch. 1 Sec 3 starting para 111 on page 16
Health & Safety	DF CCTV Policy - Admin Instr A8
DF H&S Policy - GRO 05/15 Part One Risk Management DF H&S Policy - GRO 05/15 Part Two Risk Assessment DF H&S Policy - GRO 05/15 Part Three Reporting of Adverse Events DF H&S Policy - GRO 05/15 Part Four Serious Accident Investigation Teams (SAIT) DF H&S Policy - GRO 05/15 Part Five Safety Statements DF H&S Policy - GRO 05/15 Part Six DF Safety Policies DF Asbestos Policy - GRO 02/15	Ch.1 Sec 4 starting para 129 on page 23 DF Policy on Cameras & Recording Devices - Admin Instr A8 Ch. 1 Sec 5 starting para 138 on page 27 DF Policy on Freedom of Information - GRO 03/15 Operation & Admin of FOI in the DF DF Information & Knowledge Management Policy DF IKM Policy DF Information & Knowledge Online Policy IKON User Policy DF Policy on Protected Disclosures - GRO 07/15 This policy gives effect to the provisions of the Protected Disclosures Act, 201 Drugs & Addictive Substances DF Policy on Smoking - GRO 01/15
DF Asbestos Policy & Mangement Programme Administration	Policy on Tobacco and e-Cigarettes
	DF Alcohol Policy DCOS SP Letter 2002
DF Overseas Selection Process - Admin Instr CS5 (New Series) Part 2 Sec 2 starting para 2001 on page 18 DF Selection Policy for Career Advancement Courses - Admin Instr Pt 10 Ch. 5 starting para 501 on page 124	DF Policy on Drugs - Admin Instr A7 Ch. 3 Compulsory Random & Targeted Drug Testing Transport & Energy
DF Policy on Performance Appraisal of Enlisted Pers - Admin Instr 01/96 CH. 13 starting on page 104	DF Energy Policy DF commitment to responsible energy management
DF Policy on Performance Appraisal of Officers - Admin Instr 01/96 Ch. 14 starting on page 121	Personnel Support Overseas Guidance Booklet for DF Families
DF Policy on Complaints Proceedure - Admin Instr A7 Ch. 2 Proceedures regarding Redress of Wrongs	A useful resouces with tips and guides for families of DF personnel serving overseas.
DF Official Languages Policy - Admin Instr A8 Ch. 5 Sec 1 starting para 501 on page 202	DF Mental Health Booklet Information Guide on Mental Health & Well-being
DF Policy on Acting Ranks & Substitution Policy, Business Case Checklist and Application form for Acting & Sub	Stress Information Guide Guidance on dealing with stress
Diversity & Family Policies	Suicide Information Guide
DF Equality, Diversity & Equal Status Policy Including DF Equality & Diversity Statement on page 5	Spotting the signs and taking appropriate action Financial Matters
DF Family Friendly Policy DJ1 Letter on Family Friendly Overseas Appoinments	Pension Information Booklets Superannuation & Other Entitlements for PDF
DF Maternity Policy - GRO 04/15 Guidelines for commanders & expectant/new mothers	CAFNBO Information Subs, FAQs & Other Info for members
DF Action Plan on UNSCR 1325 DFAP on gender based violence in conflict zones	
DF Overseas Booklet for Families Information for Soldiers and Families	

Figure Four: Defence Forces Policy Papers, Sept 2016.

(Dept. of Defence, 2016)

The author finds that the DF own papers clearly state that the DF is obligated to introduce CFRs and such introduction is in line with the DF HRM policy.

3.5 Other Forces

The rank structure and relationships that most closely resemble those between Irish officers & NCO are those of the European & NATO forces.

The system of CFRs that are operating in these countries is an interesting area for investigation, examining how these forces which have a very high operational tempo approach the issue.

The USA has many systems for CFR:

- 1. Officer Candidate School accepts enlisted personnel up to 27 years old; these 'mustangs⁴' complete the standard officer training and are then commissioned. (Fletterich, 2013)
- 2. Limited Duty Officers or Chief Warrant Officers are technical experts who are appointed as their technically specific billet may not be best suited to traditional unrestricted line⁵ officers. (United States Navy, 2011)
- 3. Enlisted Commission Program provides enlisted personnel, who have previous college credit, a full-time opportunity to complete requirements for a baccalaureate degree and earn a commission. (Powers, 2016)

The British Royal Navy has a scheme called 'Upper Yardmen' which is designed to provide opportunities for the promotion of ratings under 30. They also have a scheme called 'Senior Upper Yardmen' for more experienced ratings over the age of 30. (British Admiralty, 2016).

The Royal New Zealand Navy (RNZN) has a system of CFR, for any trade including Marine Technicians. "We allow all trades to CFR, subject to meeting the entry requirements for officer, although the process becomes slightly less defined for our more senior sailors, depending on what level they reached and their technical qualifications." (Begg, 2016). The New Zealand Army finds that a full CFR scheme "works well for people who have advanced quickly through the soldier ranks, and have the potential for a longer career but their trade doesn't offer too many more opportunities." (Begg, 2016)

3.6 Summary

On the whole the literature review has been a very useful and informative exercise. It has for the most part confirmed that the main question posed by this dissertation is worthy of further analysis and investigation.

CFR are desirable in the DF and are in line with DF policy on HRM. CFRs for marine engineering and technical roles are available in other western military forces. Numerous official reports have indicated strongly that there should be a regular process of CFRs, yet such a regular scheme has never been implemented.

⁴ An American colloquialism for those commissioned from the enlisted ranks, they are considered to be wild horses, which are known as "mustangs".

⁵ Executive branch (deck/weaponry) Officers are termed "line" officers.

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

This research project seeks to examine the question, "Would the INS Marine Engineering sub-branch benefit from a regular process of CFRs"?

The researcher will approach the subject matter by carefully reviewing the documents, conducting interviews and collecting data on the subject matter which can then be analysed.

4.2 Methodology

In this dissertation, both quantitative and qualitative research has been conducted. By using both these mixed methods a clear understanding of the problem at hand is achievable.

'All research, whether quantitative or qualitative, must involve an explicit (i.e. auditable), disciplined, systematic approach to finding things out, using the method most appropriate to the question being asked. Consideration should be given to these common goals, although the differences between qualitative and quantitative research have often been exaggerated in the past.' (Beverley Hancock, 2007)

The main source of qualitative research used in this dissertation has been interviews with Commissioned Officers, Serving NCOs and Retired NCOs.

The views expressed in the interviews will allow the researcher to extract the personal observations and perspectives of both enlisted and commissioned ranks. The interviews will be conducted in an open ended manner to allow the interviewee to fully answer the

questions posed to them and also allow their own views to be expressed, thus further areas for investigation or confirmation will be generated to give a greater depth of understanding the main dissertation question.

The main sources of Quantitative research will be a self-administered questionnaire inviting all NCO ERAs from the Leading rate to Chief Petty Officer to reply.

The data gathered will be presented in graphs, charts and percentages as appropriate.

CHAPTER FIVE

INTERVIEWS & SURVEY:

5.1 Introduction

To assess the desirability for a CFR process, a self-administered questionnaire was sent out to all NCO ERAs from L/ERA to CPO/ERA.

A senior Officer, who occupies a key managerial appointment within the Marine Engineering branch of the INS, was interviewed for his views on CFRs. Serving NCOS were interviewed and two retired NCOs were interviewed, to see if a CFR process would have been a positive enticement for their retention.

5.2 NCO ERA Survey:

The survey results were surprising in the author's opinion. Firstly, that so many NCOs responded which would indicate to the author that there is a great depth of feeling on this subject amongst the NCO ERAs and secondly that the respondents were so emphatic in their responses. The full results may be found in the appendix 10.

I include here the main items that I would extract to support the implementation of a CFR scheme. The data is presented in order of the most striking findings in the author's opinion.

- The NCO ERAs very strongly feel that there never will be a CFR programme within their time in service. 90% replied that they do not feel that they will ever be given the opportunity.
- 2. The NCO ERAs have strong feelings that there is bias against NCOs becoming commissioned officers, 69% of the replies indicate this. The author draws from this that there is a perception of a "glass ceiling" effect occurring within the INS and this is having a negative effect on NCO ERAs.
- 3. There is a full consensus that a CFR scheme would benefit some NCO ERAs in service. 100% of respondents agreed that this would be a positive scheme.
- 4. The desire to avail of a CFR scheme is strong: 60% of NCO ERAs would be interested in a CFR programme. Of the 40% (17 of 42 respondents) who said they would have

no interest, 26% stated this was due to the late stage of their careers. If we examine the details of those replies, we can see that these are persons who are approaching or who have exceeded 21 years plus of service, the majority of whom are CPO/ERAs and most have indicated they have between 0-6 years service remaining prior to their seeking retirement/discharge. So if we were to exclude these respondents, the desirability rate for a CFR scheme rises to 70%.

- 5. The NCO ERAs also have a strong feeling that if some NCO ERAs where to become successful CFRs, then they would be retained in service. When the length of service remaining for the ERAs is examined, 47% see themselves as having less than 6 years' service remaining. The author is aware that the survey is only the account of 42 out of 82 requested to submit replies, however the loss of 21 ERAs from the 82 NCO ERAs would have a devastating effect on the sea shore rotation of the NCO ERAs should it come to pass. It is the authors contention that this is an area for future study, to review how the Marine Engineering sub branch are prepared to replace these individuals if or when they leave service. The author would caution that it is unknown if all participants were aware of the variation in possible length of service between a Lt (NS) (54 yrs) and a CPO/ERA (56 yrs) and would include that detail in the survey if repeating it.
- 6. The educational level is high amongst the NCO ERAs, 71 % have a level 7 or higher. From this we can draw that the next step academically should be within the grasp of the majority of those interested in a CFR scheme.
- 7. The impact of the lack of junior MEOs is mixed. 43% feel that a lack on MEOs is impacting their daily work. Some units have multiple CPO/ERAs appointments so the absence of a junior MEO may not have a major impact, a senior MEO which may be present in those units directing and delegating. This is may require a standalone investigation in greater depth

Given the responses, further study must be undertaken by branch management in order to answer some of the serious issues highlighted here.

5.3 Commissioned Officer Interviews:

The author had planned to interview Capt Michael Malone, Officer Commanding Naval Support Command (OCNSC) and the current Head of Branch however due to the time constraints on the author it was not possible.

Cdr William Roberts, Officer in Charge (OiC) Maintenance Management/Planning & Inspectorate Unit (MM/P&I) and second in command (2iC) of the Naval Support Command (NSC) was interviewed and he outlined in great detail what his view of CFR is and how he feels that he must deliver on the commitments made in the WP 2015 to institute a regular process of CFRs. He has very strong views on ensuring that CFRs are implemented only if they are the correct path "I don't support CFRs for CFR sake. In others word I don't think it should be there just to say 'it is there'. I am totally against that. That is just ridiculous". (Roberts, 2016)

He advises that "What we need to do is back up completely and take a much bigger panoramic view of what we are trying to achieve" because his needs as 2iC NSC are "I am looking for watch-keepers and I am looking for engineers to make senior engineering decisions". Highlighting a misalignment of skills in the MEOs as there is "clearly no Watch-keeping in the dockyard" he goes on to state his view that "It is now engineering in its pure form; they are doing ship repair. These guys need to be chartered marine engineers or chartered engineers, to make the decisions and be able to sign off on it." (Roberts, 2016)

He is "reasonable confident" when he expresses his belief that the education level of the shore based MEOs need to rise much higher "we are looking at level 8s and level 9s for Lt (NS) MEOs to qualify to LtCdr so, I want my senior engineering officers to be chartered engineers with a level 9 degree." (Roberts, 2016)

The author had planned to interview WO/ERA Christopher Smith, Naval Support Command and the current NCO Head of the Marine Engineering branch however the subject was not available for interview due to work commitments.

A full transcript of these interviews is contained in Appendix 2.

5.4 Retired NCO ERAs Interviews:

The author interviewed Mr. Mark Murphy and Mr Maurice Plante who spoke about their naval careers and gave their views freely about the impact a CFR system would have had on their own careers has one been in place prior to their departure from service.

A full transcript of these interviews is contained in Appendix 2.

5.5 Summary:

The interviews where a fascinating and informative project. The subjects spoke freely and the author found that many items they raised where thought provoking and insightful.

CHAPTER SIX

FINDINGS:

6.1 Would the Irish Naval Service Benefit?

The author feels that he has demonstrated that the INS would benefit from a regular process of Marine Engineering CFRs. It would satisfy the requirement of the DF to deliver on the WP 2016 goals and fulfil the goals of the many past papers & reports. It would assist in satisfying the need that the INS has for competent professional MEOs within the engineering branch. It would help some NCO ERAs achieve self-actualization.

Maslow describes 'self-actualization as a person's need to be and so that for which the person has a vocation. It is his "calling", a full expression of his or her creative potential. It is to be autonomous and fully-functioning. If these needs are not met, the person feels restless and frustrated, even if successful in other respects'

6.2 How to Achieve a CFR programme.

The author feels, that given the educational requirements that are required, there needs to as many pathways as possible.

1. Cadetship:

The traditional cadetship is a proven and tested method of providing suitable officer candidates. The age limit of 27 and the 10% marks bonus awarded to serving personnel makes it an attractive system. It should be promoted in a more proactive fashion by NSC HQ; targeting those junior ratings they feel have the potential to become cadets. Perhaps an increased bonus for service persons of 15% might encourage more to apply.

2. Early CFR:

A system of early CFR should be created, where using target educational supports, persons are identified after the age of 27 to undergo the Class II examinations and then to undertake a BEng in Mechanical Engineering or equivalent subject so as to permit them to achieve the required competency level to advance from ERA to Lt (NS) MEO and all the way to becoming a senior officer of LtCdr rank and a chartered engineer.

3. Late CFR:

A system of late CFR should be created, where using targeted educational supports, persons are identified at the rank of CPO/ERA who have the ability to return to education and achieve the Class I CoC. This CPO/ERA should then be promoted to SCPO/ERA (MEO) and deployed at sea as the MEO of the INS vessel with a salary commensurate to the officer, who would traditionally occupy the vacancy including the rate of in-charge allowance.

While at sea, their subordinate could legitimately be a junior MEO of Class II CoC or Class III CoC who performs in the traditional CPO/ERA role as part of their professional development.

Focus and weighting would be given to the certification of competency and not to the enlisted/commission divide!

When employed in a shore based appointments there are Lt (NS) MEO roles in the Mechanical Engineering & NDY, Maintenance Management and NSC HQ that such a SCPO/ERA (MEO) would be very capable of discharging effectively.

Given most likely, that very few SCPO/ERA (MEOs) that could be conceived of having a reasonable chance of been in service at any point in time, perhaps one or two, the cost to the INS would be neutral as there will most likely also never be a time when all Lt (NS) MEO vacancies are filled.

There is a certain authority and status associated with the SCPO & WO ranks which might make SCPO/ERA (MEO) a more attractive prospect for a CPO/ERA of 21 plus years of service then having to be commissioned into the rank of Ens or S/Lt.

4. Open and regular process:

We have within the DF an NCO promotion interview system of competency base assessment, where every 18-24 months interview boards are convened and candidates apply, from this process an order of merit for promotion to PO rank and above is produced.

It is the author's contention that a similar system of annual or bi annual interviews should be held by suitable interview boards from which an order of merit is produced. The order of merit would, due to its process of detailed file review and comprehensive interview system serve as a guide to the branch as to where targeted educational supports would be most effective.

This order of merit would then be used to selected candidates for either Early or Late Engineering CFRs as described above.

This would allow an NCO to advance within the engineering field be it to achieve a BEng (Hons) or take the Class I, CoC examinations, with a suitable service undertaking. Once these educational targets where achieved the options of early or late CFR would be considered.

6.3 Summary

The author has shown that implementation a regular CFR program is required by government and DF policy. It is desirable by and would be beneficial for NCO ERAs.

By whichever process the INS decides to implement a CFR program, it is required to be delivered within the lifespan of the white paper which is meant to be implemented by the years 2025/2030.

Using targeted educational supports the author feels it is more than achievable to have a regular process of CFRs for NCO ERAs within the shorter end of that time frame.

However the author feels that defined targets, set goals with reasonable dates for their achievement need to be mapped out and prioritised; in order to move this from the aspirational to the practical, where it can become the achievable.

APPENDICES

Appendix 1: Roles of the Defence Forces.

- 1. To provide for the military defence of the State from armed aggression.
- 2. To participate in multi-national peace support, crisis management and humanitarian relief operations in accordance with Government direction and legislative provision.
- 3. To aid the civil power. This means in practise to assist, when requested, An Garda Síochána⁶ (GS), who have primary responsibility for law and order, including the protection of the internal security of the state.
- 4. To contribute to maritime security encompassing the delivery of a fishery protection service and the operation of the State's Fishery Monitoring centre, and in cooperation with other agencies with responsibilities in the maritime domain, to contribute to a shard common maritime operational picture.
- 5. To participate in the Joint Taskforce on Drugs interdiction.
- 6. To contribute to national resilience through the provision of specified defence aid to the civil authority (ATCA) supports to lead agencies in response to major emergencies, including cube security emergencies, and in the maintenance of essential services, and as set out in memorandum of understandings (MOU) and in service level agreements (SLA) agreed by the DOD.
- 7. To provide a Ministerial air transport service (MATS).
- 8. To provide ceremonial services on behalf of the Government.
- 9. To provide a range of other supports to government departments and agencies in line with MOUs and SLAs agree by the DOD e.g. search and rescue (SAR) and air ambulance services.
- 10. To contribute to Irelands economic wellbeing through engagement with industry, research & development and job initiatives, in support to government policy.

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⁶ An Garda Síochána are Irelands National Police force.

Appendix 2: Interviews with Commissioned Officers

Interview with Cdr William Roberts. 2iC Naval Support Command

Interview in person on the 26th of Aug 2016 via Dictaphone, transcribed by author.

Q1: Could you describe your Naval career please?

I joined the Navy in 1981 as a Cadet. I went to college and completed my level 7 diploma in Marine Engineering. Then we went off too sea for our "tickets" but in those days the tickets were not recognised, so we were given Naval Watch-keeping certificates. I served on Aoife twice and Ciara once, Deirdre once and LE Eithne as MEO. Most of my shore base appointments would be Dockyard and appointments in planning. I was promoted to Cdr about three years ago and I was OC of the dockyard.

I am currently 2iC Naval Support Command. I am the head of the Marine Engineering Sub-Branch. When I was about 40 I went back to college, to night school to become a chartered engineer.

Q2: Would the Marine Engineering Sub-Branch benefit from a regular process of CFRs?

I don't support CFRs for CFR sake. In others word I don't think it should be there just to say "it is there". I am totally against that. That is just ridiculous. What we need to do is back up completely and take a much bigger panoramic view of what we are trying to achieve. We live on a very small island and we have very few marine engineering professionals in training or trained or available to us. We have a capacity problem, which is similar to many other places, Hawaii for example where I did a training course were the first to point it out to me, "you can't afford to have one route for training".

You must keep all of the doors open to get as many people in as you can. You also need to think about people coming out. Because in the maritime community, people tend to come into the area, they do a certain amount of time and due to family circumstances, time way a lot of people then go out. So you need to make it attractive by ensuing that the training that you are doing inside leads on, for instance a lot of the training that you and I both did was pretty much in-house training and you got an in-house certificate.

Whereas now we are very much into giving certificates which are aligned with outside which gives credits to people when they leave. Most of our people don't leave the country so you could think of us as a training institute.

We have got to ask what our requirements are? We have got to ask what kind of vessel will we be operating? Peoples careers could be 30 or 40 years long. So in the main we are talking about STCW or equivalent. We could have set up an equivalent of STCW in house in the past but then it would have had to have been maintained. Constantly going back and reviewing, saying this is adequate or this needs to be changed. Where as STCW do that for us.

You think it is best to see a recognised proven international programme?

Yes, but if we find steps in that are not covered such as weapons, as STCW is civilian, that would allow us to focus on weapons systems and things that a strictly military and put our

efforts into ensuring that is absolutely first class & gold standard. Where is we tried to do that for everything we would find ourselves lagging behind as we simply do not have enough people, who are qualified enough to do that, where as we have the whole world reviewing STCW.

So the standard of engineering watch-keeping on board INS vessels is very much in line with international watch-keeping practises. So the Navy needs watch-keepers and there is no doubt about it, we need watch-keepers and we need engine room watch-keepers. Then we take that up to the next level we also need engineering officers. That raises the question what do engineering officers do in the navy?

Well yes engineering officers at junior level are on board ship but they are not necessarily our watch-keepers, they are watch-keepers while they are training, so we are not using engineering officers as watch-keepers, we are using them as our MEO or our First, the guy that looks after the leadership, the whole administration of the engine room while we are at sea. But still that is at a junior level, once they come ashore what is their role? Well once they come ashore, they job is manage the Naval Dockyard, so the rulebook is no longer IMO, the International Maritime Organisation, which happens to be under the umbrella of the UN, it is now under Irish Law, which is managed by Engineers Ireland.

Because the government has given them the authority, so they are the people who come along and say "these are the qualifications you have to have" so now you have this system running in tandem with the UN system. And what they are saying is that is not Watch-keeping as there is clearly no Watch-keeping in the dockyard. It is now engineering in its pure form; they are doing ship repair. These guys need to be chartered marine engineers or chartered engineers, to make the decisions and be able to sign off on it.

So we have got dual requirements. So we have to stand back and say what am I looking for. I am looking for watch-keepers and I am looking for engineers to make senior engineering decisions, and obviously as they get older and get into appointments like my own & OC dockyard in particular, they are doing the whole strategic leadership sort of stuff. You know where are the funds, where is the training coming from, so once you know what you are looking for and spend the time to focus on that.

So to give you an example where we haven't been doing that is that people have been focused in training people to become marine engineering officers to be watch-keepers, and I have challenged that and said "well, who are the watch-keepers in the marine engineering branch, "the engineers are?", no they are not nor have they been, the watch-keepers in the engineering branch are the PO/ERAs and they always have been. I am not saying that MEOs haven't kept a watch but they are not the watch-keepers, so the MEOs who aren't the "watch-keepers" have been getting the watch-keeping training and then moving on and not been qualified to do the engineering job when they come ashore. So we have to send them back to college.

And the PO/ERA who are the "watch-keepers" have been trained as craftsmen and they are not required to be craftsmen, they are required to be "watch-keepers" so we have had a

mismatch there as well. So the whole focus now is to stand back from this and take of the historical baggage and say "What is it we require?"

And the more you look at that and simply say stop getting caught up with ranks & military names and say "who is keeping the watch" and ok "what ranks is appropriate to that watch" and that is generally linked to pay and responsibilities, and I have no major problem I think that probably the rank is appropriate, the CPO/ERA is the second on board and the MEO as the Class I, but the MEO is a Lt (NS) and the CPO is a reasonably senior middle ranking NCO and then the junior of these senior ranking NCOs. That is pretty all appropriate and the pay is reasonably appropriate for that, but when they come ashore we are moving into degree level engineering, so once we get that ironed down and I think we have got that ironed down, I am reasonably confident that we are looking at level 8s and level 9s for Lt engineering officers to qualify to LtCdr engineering officers so, I want my senior engineering officers to be chartered engineers with a level 9 degree. I have no problem with the word and/or equivalent as long as it stands up to scrutiny.

So when we get that ironed out then we can start looking at the possible routes.

Obviously the clear and simple route to get a chartered marine engineering officer is to have a cadetship programme, so there is the main route straight through and the guy is going pass through doing the EOOW at sea, which is great foundation training for that ultimate chartered engineer, because he now understands who he is supporting at sea. But that ticker that he holds which he required as a junior officer is going to have no traction whatsoever with IEI, because that is about managing the ships operation at sea in a proper manner, whereas managing a naval dockyard and making engineering decisions ashore are very different, we are talking about structural engineering decisions and design engineering decisions and all that kind of stuff and leadership & management of a large organisation with maybe over 200 employees within a civilian building.

So what we have started doing is that the officers have started doing level 8 and level 9s while still doing the watch-keeping certs because we still want them to do that a junior level and as you know this year we have started to send PO/ERAs or rather people who hope to be PO/ERAs instead of doing the crafts certificate they are now going to do the level 7 in the NMCI, so weather they go through the craft and the EOOW or they do level 7 and EOOW, they will now hold the EOOW certification and that is appropriate to sit in the chair and they will both be PO/ERAs.

So innately you might say "well that is great, if you want to be craftsman fine with your EOOW" or if you want to come through the college which is the way 90% of the professional are trained. The problem then arises, when you start looking at the cost of that, the craft route is expensive. Because the guys are an extra couple of years in training which is the same pay, it is expensive because you are adding an extra year, that is probably something we can live with, because at the end of the day if they guy wants to be a craftsman, why should we stop him. But it gets expensive and we have to look at that. Because cost is about everything, you only have so much money to pay for everything.

But where we get into a major problem is the man in charge of those is the CPO/ERA. Well the man in charge of those should hold a second's class certificate of competency, he is the "second", in the merchant navy corps he is the second in command and that is exactly what our guy is, and he is not on a watch chair, he is running that engine room and the appropriate qualifications for him to hold is a seconds ticket.

Now the problem I have is that if a guy has done the level 7 in marine engineering, he has all the academic stuff done on that course to allow him to accrue sea time and take the exam. A chap, who has come through the trade route, has an enormously useful set of skills, but they are not all focused on getting the watch-keeping certificate which is where the focus has to be, because that is what we are training. So when he has got his EOOW he now has got to go and do about 3/4s of the level 7 degree, so effectively he now has to go back to college and do the degree, to get the seconds and that becomes a major barrier, because you are no talking about maybe two years back in college on top of his original, so you could say it was a bit pointless sending him on the craft, not necessarily if he is happy to come in and do the craft and work as a craftsman and have his EOOW and keep the watch, but then where is he going next? If he was thinking "I like working as a craftsman", which is great the country needs craftsmen, we don't nearly have enough.

But if he wants to work as a craftsman then his next role is either out of the service which is not in our interest or maybe down to the naval dockyard as a civilian employee, which is great because that is a route we shouldn't close off, because at the end of the day, this would be a person who has experience on our ships and it binds in with knowledge retention. That's the kind of logic of that. But if the guy is keen to go on and become a CPO and I would hope the majority are, then that is not the training route for them. The training route for them is to do the level 7, take the EOOW off you go to sea. Within the next two years they are at sea they are still doing they task books and all that goes with that, because they are accruing the sea time to go and do their seconds. And that is where I align the seconds with the ERA 5 for CPOs.

So effectively we will write into ERA 5 the second class certificate of competency.

Now obviously we have to add in a little bit of military training, leadership training, but that is where that would be focused. A CPO/ERA will be a seconds. So the guys now got a seconds and to go on and do class ones is just sea time. So now the guy is a CPO/ERA but by the time he has his second sea time as a CPO/ERA is going to have the sea time accrued to get his class one. Now the navy doesn't need him to be a class one as it's not how he is been employed, but it is in the navy's interest to pay for that examination to take place and to encourage it to take place. Because if he has got a class one and the MEO is on leave, there is no reason why the CPO/ERA holding a class one cannot be the MEO of the ship.

And like wise if the MEO becomes incapacitated the second is capable of stepping up. That is in our interest as well. Now that then leads us back to where we were talking about, CFR. Well why not make that a more permanent basis. Which is absolutely correct, why not make is a more permanent basis? Well then the problem I now have is at what rank?

There is no problem at all with the CPO with the Class I certificate of competency stepping up to be the Lt (NS). MEO, so we commissioned the CPO so no ok you are a Lt MEO. With that qualification he is now only qualified for watch-keeping at sea, the minute he steps on to the shore, he hasn't the educational qualifications required to work in the Naval dockyard, which is level 8 or level 9, to be competent with the IEI scheme.

Now in the Royal Navy they have an term "Upper Yardy" who are Senior CPOs, who have the qualification and are commissioned towards the end of their careers, so the late commissions function in life is to be MEOs at sea, so we have to be very careful than when we bring them ashore how do we employ them. There are opportunities ashore in areas such as our RHIB repair department FSG but all of the current appointments requires the LtCdr to be a level 8, because they are all the engineering decision making positions. So if we want to bridge that gap we have to look weather we have a CFR late and where that might work to is, that I have appointments for so many engineering officers, something like 23Lts., we could given, the nature of the length of training of these junior MEOs, we could use our "Upper Yardys" or CFR late to fill these appointments until the engineers in training are available in 5 or 6 years.

Now all that would have to be thought of because of negotiations on pay, because if we were doing that Defence would say, "wait a second, I am paying the wages of these people under training and now you want me to do CFRs so I had 23 and now I will end up with 23 plus maybe 6?"

So what I am trying to do is align them, so that guys are coming through with their level 7 instead of their craft, and the cadets are starting off with their cadetship level 8 and moving on. And it's the point then where do we jump off or cut across. So we have to ask ourselves are we bringing CFRs in purely to look after ships but we then can't use them in a shore unit but they are not qualified for it? Or are there some shore appointments where a watch-keeping certificate is acceptable?

Are there positions within the administration on the engineering side?

There are very few, if any administration appointments, they are engineering positions. So we have places such as the college so academically, the person holding the college appointment should be of a higher qualification, he should be a level 9 if not higher. But then you have the DCFF school where you have Lt (NS). appointment, now there is somewhere where a very experienced CPO, but the problem is that we are still saying he is not going further that Lt (NS). and if you look at the pay scales and the retirement packages of a Lt (NS). vs a CPO it may not be as attractive.

We would be capping him as a Lt (NS). so I am not sure that is where we want to go, if we want to bring a guy across, we have to be sure why we are doing this, there has to be something in it for both. The other thing you are looking at positions such as the damage control school, those are really not jobs for 54 year olds. Even for a reasonably fit person, they are dragging and lumping, the type of job a young fella does. But perhaps in Lt (NS). appointments in the dockyard working with the civilian craftsmen, but at the end of the day we are lifting plant, taking davits of ships, looking at structural issue on them.

Deciding on repairs, carrying out those repairs and signing off on those repairs. That is engineer territory and you should be appropriately qualified to be going down that road, and we have had some areas where we have cringed when we look back on it and say "wow, that was wrong". And it was well meaning, guys who had been trained to be watch-keepers on ships, who came ashore and found themselves working in a structural or design engineering area, where they were patently not qualified to do. These are historical issues and we have learned, but best practice is where we want to be. So to go back to where we were, I am would have no hesitation whatsoever in saying I would be very happy to have a CPO/ERA with his class I to be the MEO of a ship. He is qualified to be the MEO of a ship.

That brings us to the role of the divisional officer, he may not be the divisional officer another officer on board may have been appointed to be the divisional officer, because he hasn't been trained to be the divisional officer, but he is still the divisional NCO. You could also find a situation where his second is a junior officer who has his seconds but need to serve to get his firsts, now in the past we have left the CPO on board, but we don't have to do that, why not take the CPO off the ship and say you need to do this as the second so in you go. So you could see the MEO on the ship, the decision maker in the engine room is actually a senior CPO or rather a CPO with his class I certificate and he is responsible for the training and the management of an officer and the officer may be the divisional officer and we need to be able to be capable of doing that, of saying yes the officer is holding the rank but he is not responsible for the engine room, he is under technical training, and that might give the opportunity to get a CPO ashore for a short period as the officer is only passing through under training and the CPO ashore may be able to undertake a project or be sent off to college to do his own Class Is, so we need to make best advantage of these things as they go. And that sort of thing goes on in industry all the time. A person walks in he may be more senior but he is not qualified at what he is doing and he need to listen to the people below him.

You yourself have been on ships when the MEO walks in and says "CPO how do I go about this?" He is seeking advice because the area he is seeking advice in is craft, how do I do this? He knows what needs to be done, he has already made that decision, I am going down this route, but now he is getting into specifics, exactly how do I repair this. That is not his area of competency. That's the craftsman area of competence. You have to use the people and the competencies you have that does not belittle you as the boss or the decision maker. But you need to understand those and the engineers need to understand what it is the craftsman do, but they also need to understand they are not craftsman and these guys are specialist craftsman. And when you need advice from craftsman, you need craftsman. Once you have got it and how you use it in your decision making.

And that is what I say to people who say why cannot the CPO take over as MEO, they are in essence to different people trained to take over two different roles, that work in an interlocked way. Yes, there is an enormous overlap but one is moving on into a more senior role and the other is coming up through the craft route. And trying to align and marry those so that the other can keep going, is where we are going.

So CFR early is the next logical place to look, at the moment my view is that CFR early starts after 27 and the reason I pick that age is up until that age you can apply for cadetship, so

therefore anyone within the service, that we see talent within, that we say we see this guy as a potential officer, that person should be plucked. We need to make that system more user friendly. Because there is a kind of reluctance to go there, you have been around the block and you have seen these guys not go for cadetship and it is often because of fear of failure. Because I am in the ratings mess and I go for this and I don't get it, or I get it and I don't see it through, you know the embarrassment to go back there. And that seems to be blocking good guys from coming through. We need to break down those walls and say "look, lads this is normal procedure, you put yourself forward for a potential NCOs course and you don't get it and you have no issue with applying?" "Well why can't you go further?"

Why are we blocking people because of games that are going on in people's heads? The main I think to get across is the age of 27, I this starts at 27; I don't think we need a parallel system of CFRs below 27. Because, up until then we can feed people into the cadetship. And that is our premier system to produce officers. That's the fast track, that's where we want them to. In the past where I have seen CFRs, one of the great failing of the systems, is we bring the guys through and they do some form of cadetship but not quite a cadetship and that is pretty ok. And then we just forget about them, where in fact they then sort of slip back to old habits, yet they are on a different track now, you have to progress down this road. We need to be better at managing that. So, really getting people into that cadet system, that school system regardless of age, I mean it sued to be a school boy thing but not it is up to the age of 27. Most of the guys in there have a degree if not two degrees; it's a much more senior group of people. Much more mature people may be a better way of saying it.

We need to get them in there because we are trying to get people to think at a different level. Guys, I want you to think about an operational level, managing people and getting them to want to do what it is we are doing and then take it on board and get the buy in. That's what we are trying to do. It's not about hands on anymore. If you think of the three levels "The Tactical, the Operational and the Strategic"

The tactical guy is the guy at the coalface, he is the guy in the corner with the spanner, he is the guy that is doing things, and he is focused completely on doing this thing correctly. That guy is important and we need a huge amount of those guys. But you also need a guy that is thinking about "what do we need to do here?" and all these guys beavering away "how is all that coming together" because that is the operational and that in essence is the ship, it the team on the ship. Then there is the strategic, well then there is the strategic, and the strategic is about how do I train people to be prepared to carry out missions in 15 years' time. We have to try to predict the future. "How do I get the money to pay for the new generation of ships?" "What sort of ships do I build?" "Will those ships that we are building today, that we sat thinking about 7 years ago, will they still be effective in 30 years' time?" or "Will they be non-effective by the time they hit the water? "Will the skill bases of the people I am training will they be adequate in 15 years' time?" and they are the challenges, you know completely different things.

So this guy at 27 is most likely a PO, at that stage maybe even a CPO, a guy who is beginning to flourish and shine and somehow you have missed him. You probably should have really pushed him towards to cadet system. So how do we do a CFR early for a guy who is 27 or 30

rather than late 40s. And I must admit we are a bit challenged with that at the moment, some of the things we are thinking about are; well would we offer a supported degree in the same way we offer maths now.

Where we make no promises that if you get through the math and get a minimum of a B in pass math, no promise is made that you will be picked up by the apprentice scheme, but the majority actually are. And I think that has worked.

So then we might say why don't we offer a degree in mechanical or electrical each year, just put it out there, we will fund it, we may get takers we may not get taker. And a guy would be funded to go to college, in which case he would come out with his degree in our case this would be mechanical, that would be a full level 8. So you would be talking about starting that sometime in his late 20s or early 30s, so they may possible be qualified 34/35, it's a little late but it's not too late, now then the problem arises will there actually be a vacancy to offer the CFR, because at the end of the day it is about vacancies, you can see that CS4 says you can have 23 qualified people, so we will have those kind of systems running, we will have the cadet system running, and hopefully that will fill all the spaces, but we say we don't want to fill all the spaces we want to keep a few for CFRS, so let's say we keep one or two back each year back for CFRs, so this year we need 6 or 7 but we will run to parallel systems one will be for cadets and the other will be for CFRs, so really that is about as far as we have gotten to the thinking out of it. In that we have the white paper which says we have to start thinking about it and that is where we are with that.

Everything is based on saying "We are not doing CFRs for CFRs sake" we are talking about training people and getting the people through with the competencies to do the jobs that we need done. And in this case it is opening all the possible routes, even internally be it ABs into cadets or middle ranking NCOs into CFRs candidates. We need to develop system to employ people like that.

Because we need to start aligning the qualifications and the training to the jobs and when we do that then CFRs will become far more manageable and possible. And the other thing we have to remember is that it is going to be a little trickle, it's not going to be a flood, the premier system the one we must have is our cadet system. At the moment we have the crafts system to train ERAs which is why we are moving to the level 7, we are moving to level 7 to make CFR possible and to push guys through. And to be properly qualified because at the moment we have guys out there, that I don't think are appropriately qualified.

Ultimately we are training engineering leaders; they need to go to sea as young officers, to go play with the toys because they need competent with what these guys are doing, to make the decision to support them. That's all about watch-keeping and operations, that doesn't qualify you to hold any appointment on the shore. It gives you*u enormous experience to understand the people you are working for. In the same way that I as OC dockyard must understand what my craftsmen are capable of doing for me, because I am making decision about their future, about their equipment buying, about their training and about where the dockyard is going, to be in a position to do what is required off it in 25 years' time. So you cannot but a line manger down as manager of the dockyard, because yes he is probably a

very capable leader but he would need people to provide him with the information he needs to do his job.

So at what stage is the conversation at about how do we turn the CPO/ERAs we have now into Class IIs?

Well the problem we have with the CPO/ERAs we have now, we would even for those with their Class IIIs is that I would nearly have to send him back to do the whole degree, its wouldn't be the whole degree, but there would be so much of it there to do, when you lay out all the modules that they haven't done. Nearly all the course except for workshop time would have to be done. And there is the barrier, you would have to be on full pay, how do I this? Well maybe we have to say hang on, maybe we cannot fix it for the people who are there but maybe we can fix it for the people who are coming in and when we get that settled maybe we can come back and fix it for the people who are there. So we have an enormous barrier, it is not insurmountable. We have see it with people who have done in the past, through night school etc. it is a difficult road. We can't afford to do that for everybody, but we can't close that door if we want to address those people who could be affected by it. But what we need to do is to make sure we don't grow anymore people who are not going to be able to get to seconds. We are going to have to start training our watch-keepers in the same way the merchant trains their watch-keepers, however they call them officers where as we call our NCOs, as we are training our officers to be the senior engineers ashore making the structural engineering decisions. We are training the superintendents if you like. Which is what the merchant calls them, and yes many of these merchant superintendents come from the watch-keeping back ground.

At what point do we say "It is now a requirement for a CPO to be a Class II or do we always have to continue with a dual system?"

If I had my way I would come out with that bold statement almost immediately, but common sense prevails and if I do that, I ground the fleet. What we have to do is say "Where are we and where do we want to go and then I have to map my route to get there." And the simple reality is I cannot just go to a CPO and say "CPO go gets your second class ticket" and he would say "Great, I am on my way" but I cannot afford to have my CPOs to march off to college for three or four years. The first thing I do is not produce any more CPOs who are appropriately qualified so we start with the training system and we have done so this year we have the first two doing the level 7. So hopefully these guys are the best and we get a win and in the future we say this is the core route. So these guys who are starting now they won't qualify to be ERAs for 6 or 7 years so it will be that length of time until we see the seeds begin to flourish out of the ground, it will be 10 or 12 years before we say it is now it can be enshrined. So that's where we are and it these type of things that are strategically in play. We are planting seeds and we will one day have a great oak. Because I can't just click my heels, I am not Dorothy.

There is a feeling that the lack of CFRs is because of a bias or elitism, that they don't want the commissioned ranks opened up to NCOs.

I don't think so; I think I can honestly say that the working relationship between our engineering officers and our NCOs is incredible. I can honestly say that to this date some of my best friends are NCOs who have left now. I have always had very close working relationships with my senior NCOs. We are the engineering team.

As I said earlier we need to stop training people with the inappropriate skills. Crafts skills are vital to us, but they belong in the dockyard. The appropriate skill is EOOW, seconds then class Is. The sooner we start doing that, which we have, then the sooner we start to see a benefit from that.

I don't think that statement stands up, we have been trying to get the EOOW scheme up and running and we have many people with it, we have now started our first two on the EOOW course which is the same course the officers do and we are starting to talk about what a CFR scheme would possibly look like. We must use international best practice and nor try to rewrite this book.

Is the lack of junior MEOs in the service having an impact on operational capability of the fleet?

The answer to that is No but it is not as simple as that. What we have the moment is we are operating 10 vessels. 8 of which are operational. So we have MEOs on 10. CS4 is actually written around 7. So we have three MEOs doing jobs that are not even written in CS4. The next thing we have is that we have 6 out of 7 LtCdrs at sea, 6 of them should have been OiC of the different sections ashore. These are key appointments. So what has happened is all of those have become dysfunctional. Because they are not being held by appropriately qualified people. But they don't have an immediate impact on the fleet, so at the moment we don't have a LtCdr. at OiC Technical Training, whose job is long term producing for the future, so that has taken a big hit. But the reality is the support and the long term support of our ships is seriously impacted. And that is something that will impact on us progressively.

One thing we have that we don't make best use of is the senior chief rank, why not promote these people with their class Is as different, have them stand out as different because they are. Why could we not have five or six senior chiefs paid appropriately, there is the potential to say we don't go CFR with our Class Is, we could make them senior chiefs with appropriate pay and they already have a different uniform. We might then say do we need to commission him? There is already a rank there and we are not trying to hold anyone back. Change it to mean that a SCPO/ERA is a SCPO engineer with a class I and this guy can be posted to take a ship to sea.

Now the remuneration for that needs to be appropriate. You could say that a guy wearing a SCPO uniform and seen to be at the pinnacle of his rank better off than wearing the uniform of a junior officer? I would say to my mind as a senior officer when I look down the line and see the Warrant Officer and a junior Lt (NS). coming towards me, my mind is saying the WO is the far more experienced person. If people might preserve that trying to keep people down but that's not what it is about and that rank is there I don't think we have made best use of it. You are not talking about lots of them; you are talking about one or two. That CFR late may not become a CFR at all, because you might to say is it in the interest of the service or the man to commission a guy that late. Unless he can become a LtCdr and we have already said it will be nearly impossible to become a LtCdr. if he only holds a class I certificate of competency, but it is very possible for him to become a SCPO. I want a guy to be a chartered engineer before he becomes a LtCdr and I want a guy to be a class II before he becomes a CPO.

It all about having the qualification and opening up the routes, it isn't making the navy feel good about themselves or the people feel good about themselves. It really is about saying "why would you hold good people back?", if you have got people who can go on and do it, and I have already said that to me is about nearly nigh on every single ERA I have ever meet, but if every single ERA I have ever met actually wants to do the thousands of hours of academic study required to qualify and then if he actually wants to work at that, is questionable as well. And that is going to be a small group.

Interview with LtCdr Kelly Begg, MIntlSys, RNZN

Interview conducted via email 26th Aug 2016

Does the RNZN have a system of CFRs?

The short answer is yes, the Royal New Zealand Navy does has a system where you can commission from the ranks – for any trade, including Marine Technicians.

We allow all trades to CFR, subject to meeting the entry requirements for officer, although the process becomes slightly less defined for our more senior sailors, depending on what level they reached and their technical qualifications.

What are the age limits?

We don't have an age limit to CFR, but for older sailors one key considerations is the expected length of their career after commissioning, and I know there have been cases in the past where people have been given a limited offer of service to CFR – in the early 2000's (I think around 2004) we ran a series of two courses to commission some Warrant Officers to LT, as admin officers, where we could then provide career progression in their branches, but retain their corporate knowledge. The intention was that they would spend ~3 years as an officer and then leave, although several subsequently received further extensions, including one who subsequently progressed to CDR before retiring, and a couple who remain serving today (as LT CDRs).

Could you describe your system of CFRs?

There are different processes for junior and senior sailors, depending on the rank and qualifications that they achieve before they apply to CFR, as these will impact their officer and professional training requirements, and there is some advancement / seniority usually given to them compared to an ab-inito candidate who joins as an officer from outside the organisation. This reflects the advantage that they have in terms of service knowledge and the skills and competencies that they have already demonstrated.

There are also practical differences, dependant on the officer branch that the person commissions into, and the requirements for ongoing training. Our Engineering Officers have to have a Bachelors level Engineering degree, and complete the Systems Engineering Management Course (SEMC) in either the UK or Australia before going on to complete sea training and charge qualifications at sea.

For example, a Able Marine Technician, who has completed their AB training, but no leadership training or university level qualifications, would usually receive a small amount of seniority as a Midshipman after commissioning, but would still need to complete a university degree before going through the usual Marine Engineering Officer pipeline. A Leading Marine Technician would usually do a similar process, albeit they would receive more advancement.

What are the qualifying criteria?

To be eligible to commission, this person would need to submit a request through the Divisional System, and demonstrate that they have the potential to become an officer. They are reviewed by a CFR Selection board, run through the Organisational Psychology department in conjunction with Career Management, and if successful will be given a position on the Final Officer Selection Board (FOSB) which is run for all CFR and ab-initio officer candidates to determine who is awarded the different places on an intake. If successful at FOSB, and selected for the position on Officer training, the CFR then receives their Offer of Service to commission, which includes details around seniority etc. The person would then join the next Junior Officer Common Training (JOCT), and be expected to complete the whole course.

Once they reach the rank of Petty Officer or Chief Petty Officer (NCO) it will differ depending on the qualifications that they already have, and how these translate into the qualifications of a Marine Engineering Officer. A Warrant Officer that wanted to commission would have to have completed their charge qualification, so would be able to CFR direct to the rank of LT and skip the charge qualification process. The opportunity to do this can be very situation and person dependant as we do not run routine WO-LT CFR courses (although can do them). It is less common for a NCO to CFR; it is usually sailors at the AB level who apply to do this.

The references and specific information that covers these process are all in the NZBR series (New Zealand Book of Reference), which are not publically available.

In comparison, the New Zealand Army have two CFR schemes for their senior soldiers, one which is a limited CFR, whereby a SSGT / Warrant Officer can become a limited CFR, where they commission to CAPT and work in their corps, but are capped at MAJ for the remainder of their careers. Or, they can do a full CFR course, where they have a cut down officer training but then do all professional training in their corps and have a slightly slower progression at the start, but no cap. This scheme works well for people who have advanced quickly through the soldier ranks, and have the potential for a longer career but their trade doesn't offer too many more opportunities.

Appendix 2: Interviews with Non-Commissioned Officers

Interview: CPO/ERA David Owens.

Interview in person on the 08th of August 2016.

1. Could you describe your naval career please?

I joined the Naval Service Sept 1997. I then commenced training as a Mech in Dec 1997. After this I served on P21

I became a Technical Trainee ERA in Jan 2000.

I successfully completed trade in 2004 and then the 31st potential NCO course in 2006. I was then promoted to L/ERA and having received my Naval Watch-keeping Certificate in 2005, I then Served on P41.

I successfully completed the Standard NCO course in 2006.

After which I was promoted to PO/ERA in 2007 and posted to P22 for a 2 year rotation.

I then served in Naval College after my two year posting working mainly with Tech Trainee in Marine Engineering & Watch-keeping subjects.

I returned to serve on P51 for two years from 2011 to 2012.

I was then posted to the Naval College NMCI and I successfully completed the EOOW course in 2015.

I was promoted to CPO/ERA in 2015 and I am currently posted to P61.

2. During your service has there ever any discussion of your being able to become a CFR MEO?

No.

3. During your service, were you aware that there are many prior reports that had said they should be a CFR process?

No I never knew that or heard about.

- **4.** If you were offered a CFR competition would you compete for it? *Yes*.
- 5. If one was ran do you think that it would be a good thing for NCOs? Yes. Without a doubt.
- 6. What thoughts would you have on a "glass ceiling" within the INS that some NCO ERAs feel exists?

I think that this is true.

7. Did you feel that officers are bias against NCOs for wanted to advance themselves in this manner?

Yes. I would say so, however I think it is because of the rank structure within the Defence Forces, that they want to keep us as NCOs because that is what we choose at the start of our careers to train for.

Interview: PO/ERA David O'Brien.

Interview in person on the 08th of August 2016.

8. Could you describe your naval career please?

I joined the Naval Service Sept 1997. I then commenced training as a Seaman Gunner in August 1998.

After this I served on P42, I completed the Naval Diving course in 1998.

I became a Technical Trainee ERA in Jan 2001.

I successfully completed trade in 2005 and then the 31st potential NCO course in 2006. I was then promoted to L/ERA and having received my Naval Watch-keeping Certificate in

2005, I then Served on P51.

I successfully completed the Standard NCO course in 2006.

After which I was promoted to PO/ERA in 2007 and posted to P52 for 2 year rotation.

I then served in FSG after my two year posting working mainly from the Naval Diving Section. I returned to serve on P31 for two years from 2011 to 2012.

I was then posted to the Naval College NMCI and I successfully completed the EOOW course in 2015.

I am currently posted to P61.

9. During your service has there ever any discussion of your being able to become a CFR MEO?

No.

10. During your service, were you aware that there are many prior reports that had said they should be a CFR process?

No, I only knew about one successful technical CFR who was a LtCdr Electrical Officer.

- **11.** If you were offered a CFR competition would you compete for it? *Yes.*
- 12. If one was ran do you think that it would be a good thing for NCOs? Yes.
- 13. What thoughts would you have on a "glass ceiling" within the INS that some NCO ERAs feel exists?

Yes I feel one exists, if there was a CFR it would encourage people to go higher and higher and it would it courage people to stay.

14. Did you feel that officers are bias against NCOs for wanted to advance themselves in this manner?

I don't think they are bias but there is a certain amount of a class divide between commissioned & enlisted, that some would not be too interested in NCOs coming up through the ranks.

Appendix 3: Interviews with Retired Non-Commissioned Officers.

Interview: Mr Mark Murphy.

Interview conducted via email on the 24th of Aug 2016.

15. Could you describe your naval career please?

I joined the Army Apprentice School as an Apprentice Fitter Turner Sept 1990. I then graduated from the Army Apprentice School and received an award for topping my apprentice class July 1993.

I then reported to the Irish Naval Service and commenced training as an Engine Room Artificer (ERA) in August 1993.

After this I served on P21 & P23.

I successfully completed the 23rd potential NCO course in July 1998.

I was then promoted to L/ERA and received Naval Watch-keeping Certificate Sept 1998. I then Served on P20 & P21.

I successfully completed the Standard NCO course in Sept 1999.

After which I was promoted to PO/ERA in 2000 and posted to P23 for 2 year rotation.

I then served overseas in Africa between Dec 2002 to July 2003 with UN.

I returned to serve on P51 between 2003-2005 & 2007 - 2009.

I successfully completed the EOOW course in 2007.

I then completed the Senior NCO course and Level 7 Degree in 2010.

I received my exemption for Class 2 exams in 2010 after years of self-study to allow me complete the 2^{nd} Engineer course.

I applied for a place on the 2ne Engineer course for Feb 2011 and got turned down by the Navy (no surprise there!).

This lead me to sign off in April 2011 and I started the 2nd Engineer course in Sept 2011.

16. Could you describe your civilian career please?

I Received my Class 2 COC at the start of 2012 and joined Disney Cruise Line as a 3rd Engineer in April

A few weeks into my second contract with DCL I was promoted to 2nd Engineer.

I then left DCL at the start of 2014 and joined Seadrill in the offshore industry.

I spent 10 months in shipyard in China assisting Project team with commissioning the new build Rig Sevan Developer.

After this I moved to South Korea where I was involved in the mobilization of new drill-ships out of the shipyard and down to drilling operations in Brazil.

I finished offshore in Dec 2015.

I started employment in March 2016 in Pfizer, Ringaskiddy as Plant Maintenance Engineer for the new product technology lab (NPTL) formerly OSP-2.

17. When in service was there ever any discussion of your being able to become a CFR MEO?

There was talk back when the first class completed the OOW back in 2005 that there might be a path to become an Engineering Officer from the ranks. (Talk is all it was)

18. While you were in service, were you aware that many prior reports that had said they should be a CFR process?

No I wasn't aware of reports.

19. If you had been offered one would you have stayed?

Yes, I would have stayed

20. If one was ran, do you think that it would be a good thing for NCOs based on your experiences after becoming a civilian officer?

It would have been great, the experience many ERAs have coming from O/Mech level up to PO/Chief/ERA. You can't buy that experience. It was only when I joined the Merchant I realised how highly trained and experienced our guys were compared to some of these officers that I came across.

21. What thoughts would you have on a "glass ceiling" within the INS that some NCO ERAs feel exists?

Not sure.

22. Did you ever feel that officers were bias against NCO for wanted to advance themselves in this manner?

The senior old school Engineers were definitely biased towards us NCOs progressing. I found this out when I was on my path to bettering myself doing exams etc. The younger generation of NMCI trained Engineers and Direct Entry Engineers were very helpful.

23. Does your company have a pathway from a fitter/NCO type work, where a talented person can compete for or be selected to allow them become Engineers/Officers etc?

Yes, many people here in Pfizer start out as Craft and eventually progress to becoming Plant Engineers and Lead Plant Engineers.

My current boss started as an apprentice and now is Plant Lead for OSP 3 and NPTL. If you show initiative and up skill you are not held back in CV Street, not like the Navy where you are nearly knocked back for bettering yourself.

Interview: Mr Maurice Plante.

Interview conducted via email on the 30th of Aug 2016.

1. Could you describe your naval career please?

My Naval career has been a successful, rewarding and fulfilment on many aspects The Naval Service have facilitated me in achieving many first's such as Third Engineering certification, the First Unlimited Second Engineering Certification and the First NCO's Course to complete a level 7 degree. I have also had success in promotion during my 26 year service.

2. Could you describe your civilian career please?

My civilian career just beginning has been a decision taken very carefully in order to achieve my Chief Engineering Certification which was not available in the Naval Service at the time. This certification has now opened new opportunities within my present company. I have to also emphasize that my naval career has contributed greatly in my civilian endeavours.

3. When in service was there ever any discussion of your being able to become a CFR MEO?

No this discussion was never raised in my presence at any time.

4. While you were in service, were you aware that many prior reports that had said they should be a CFR process?

During my career I was never made aware of any reports discussing or recommending that a CFR program should be implemented in the Defence Forces.

5. If you had been offered one would you have stayed?

Yes I would, both I and the Naval Service have invested a lot of time and resources in my naval career. I achieved the highest Certification available for engineering officers. I believe I had much more to offer the Naval Service. Due to age grounds and the surplus of Engineering Officers at the time, the offer of a CFR was never a reality.

6. If one was ran, do you think that it would be a good thing for NCOs based on your experiences after becoming a civilian officer?

As a Marine Engineering Officer and not a Military Officer, providing a structured career path and selection process for NCO who wish to be considered for promotion to Officer rank would be an advantage to the Naval Service. However this would have to be weight against investment of time, cost and further education of a potential candidate to that of a direct entry Engineering Officer. Another consideration would be the impact of removing NCO's from their original role.

7. What thoughts would you have on a "glass ceiling" within the INS that some NCO ERAs feel exists?

I presume you meant "Class", a military organisation requires strong leadership to operate and function efficiently therefore, officer rank is recognised as senior management and leadership level. Officers have more privileges than NCO's and

NCO's have more privileges than ratings, this is also normal in civilian marine structure. Privileges are not an indication of class existence Many officers have come from ordinary working class back grounds so I do not believe that a class structure exist in the Naval Service. You can't have an organisation full of leaders.

8. Did you ever feel that officers were bias against NCO for wanting to advance themselves in this manner?

As mentioned earlier I have achieved many firsts in the Naval Service, during all this time I received nothing but support, admiration and congratulations from ships captains, Engineering officers and department heads. There was a lot of work and planning from many people in the back ground, in order for me to achieve what I did. I don't believe that any officer would be bias towards any person willing to advance themselves.

24. Does your company have a pathway from a fitter/NCO type work, where a talented person can compete for or be selected to allow them become Engineers/Officers etc?

No, any fitter or mechanic would still have to complete the Engineering Officer certificate on their time and at their cost. Following certification, the company will support a candidate in advancing their career with some undertaking to the company. The company like many others have a Cadet program also.

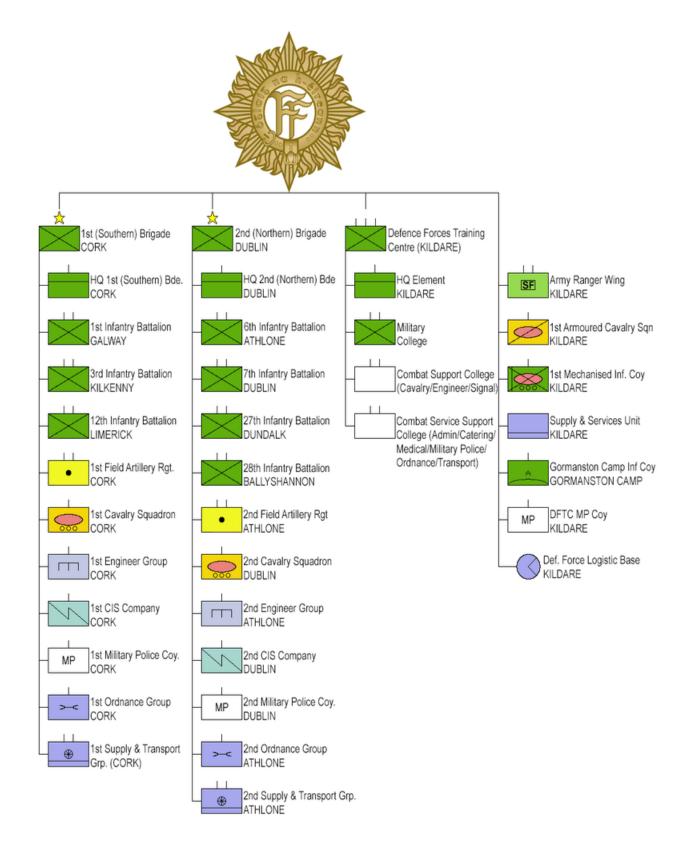
Appendix 4: Irish Naval Service Ranks, Commissioned Officers.

Rank:	NATO Code:	Insignia:	Army Equivalent:
Lea-Aimiréal	OF-8		Lefteanant-Ghinearál
Vice-Admiral			Lieutenant-General
Sheachaimiréal	OF-7		Maor-Ghinearál
Rear Admiral			Major-General
Ceannasóir	OF-6		Briogáidire-Ghinearál
Commodore			Brigadier-General
Captaen	OF-5		Coirnéal
Captain			Colonel
Cheannasaí	OF-4		Lefteanant- Coirnéal
Commander			Lieutenant- Colonel
Lefteanant-Cheannasaí	OF-3		Ceannfort
Lieutenant-Commander			Commandant
Lefteanant	OF-2		Captaen
Lieutenant			Captain
Fo-Lefteanant	OF-1		Leifteanant
Sub-Lieutenant			Lieutenant
Meirgire	OF-1		Dara-Leifteanant
Ensign			Second Lieutenant
Dalta	OF-Cdt		Dalta-Sinir
Cadet			Senior Cadet
	OF-Cdt		Dalta-Sóisir
			Junior Cadet

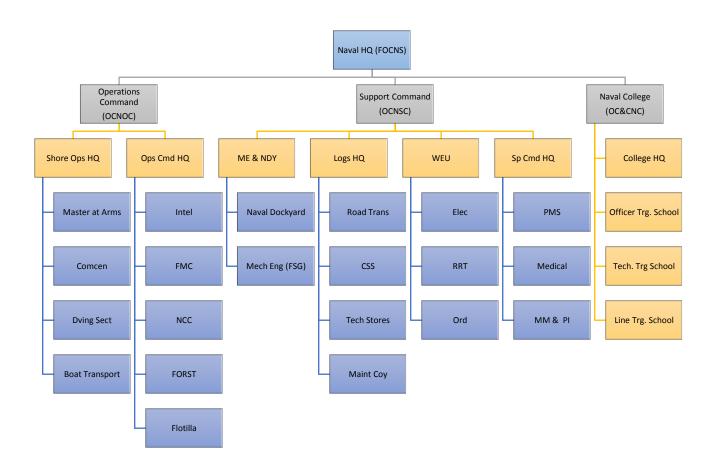
Appendix 5: Irish Naval Service Ranks, Non-Commissioned Officers.

Rank:	NATO Code:	Insignia:	Army Equivalent:
Oifigeach Barántais	OR-9		Maor-Sáirsint Reisiminte
Warrant Officer		65	Regimental Sergeant Major
Ard-Mhionoifigeach	OR-8		Ceathrúsháirsint Reisiminte
Sinsearach			Regimental Quartermaster
Senior Chief Petty Officer			Sergeant
Ard-Mhionoifigeach	OR-7		Sáirsint Complachta
Chief Petty Officer			Company Sergeant
Mhion-Oifigeach Sinsearach	OR-6		Ceathrúsháirsint Complachta
Senior Petty Officer			Company Quartermaster
			Sergeant
Mhion-Oifigeach	OR-5		Sáirsint
Petty Officer			Sergeant
Mairnéalach Ceannais	OR-4		Ceannaire
Leading Seaman			Corporal
Mairnéalach Inniúil	OR-3	<i>A</i> .	Saighdiúr Singil, 3 Réalta
Able Seaman			Private, 3 Star
Mairnéalach	OR-2	A	Saighdiúr Singil, 2 Réalta
Ordinary Seaman			Private, 2 Star
Earcach	OR-1		Earcach
Recruit			Recruit

Appendix 6: Irish Defence Forces Structure (Army):



Appendix 7: Irish Naval Service Structure:



Appendix 9: Captain Standing Orders; (MEO) LE Samuel Beckett.

MARINE ENGINEERING OFFICER

- 1. The MEO shall be responsible for the operation, condition, cleanliness, performance, security, maintenance and good order of the Main Engines and all Auxiliary Machinery, Bow Thrusters, Steering apparatus, Cranes, Refrigeration equipment, Motors, Alternators, Sewage Plant, Outboard engines, Ventilation System and all other equipment in his charge.
- 2. He shall report any defects in machinery, which may affect other Departments to the Departments Head as soon as possible.
- 3. The responsibility for maintenance of the Ships capstan and windlass is vested in the MEO. He shall ensure that the routine maintenance is carried out by a competent rating at required intervals. He will ensure that any defects in the capstan/windlass, or associated equipment, are notified promptly to the XO.
- 4. He shall be the Account holder for the Ships Technical Account.
 - a. He shall ensure that the account is administered i.a.w. Army Order 2/87 and relevant instructions including IMS instructions.
 - b. He shall advise the Captain of any deficiencies or difficulties in the account. All Naval Stores shall be requisitioned through the MEO.
 - c. He shall countersign all ships technical requisitions, including those initiated by other Departments.
 - d. He shall make the necessary adjustments to the account on receipt of information from NSO either by IMS or AF447.
 - e. He shall be afforded the opportunity to sight all stores on receipt.
 - f. He shall balance the ledger and conduct the necessary stores check on the first day of each year, or as soon as possible thereafter and carry out stock check on IMS.
 - g. He shall forward a Losses Overboard voucher to the NSO at the end of each quarter and amend the account accordingly. He shall cause preventative measures to be undertaken to minimise the risk of losses overboard.
 - h. He shall locate all items of deck, communications and navigation equipment to the relevant account holders.
- 5. He shall be responsible for all water, oil and lubricants carried onboard.
 - a. He shall keep fuel and water accounts and records, and shall report to the Captain daily levels of fuel, petrol and fresh water onboard and expended since 1200 (this is when MCR Logbooks are completed) hrs the previous day, together with an explanation of any abnormal consumption rates.
 - b. He shall ensure that onboard reserves are kept to an acceptable level.
 - c. He shall report to the Bridge when the Engine Room Department is ready for sea.
 - d. He shall report any serious problems or problems that may delay sailing to the Captain.
- He shall ensure that all machinery, the ships whistle, steering gear; ER Telegraphs and Standard Operation Checks have been carried out as required before the time ordered for main engines.
- 7. He shall ensure that the ER is properly manned at all times particularly when SSD men are closed up.

- 8. His SSD position shall be in the ER or MCR when SSD are closed up or when ordered by the Captain. He shall NOT leave his SSD position without the permission of the Captain.
- 9. He is responsible for the correct generation and maintenance of all electrical supplies onboard and for the correct operation, maintenance and repair of all electrical equipment.
- 10. He shall be the Divisional Officer for Mechanician's Division. He is responsible for the organisation, welfare, administration, training and good order of his Department. He shall ensure his personnel are advanced as soon as possible after qualifying. He shall keep a Divisional Diary for each member of his division.
- 11. He shall be responsible for the organisation and training of the Fire Fighting and Damage Control organisation and training onboard.
 - a. He shall liaise with OIC TTD, through the Naval College, regarding periodic FF & DC courses ashore.
 - b. He shall advise the Executive Officer on the personnel composition of the SSFP & DC parties for inclusion in the Watch and Station Bill.
 - c. He shall be responsible to ensure that all personnel are familiar with the DCFF equipment and procedures onboard.
 - d. He shall ensure that all outboard engines are checked by a PO/ ERA each morning at sea at 0800 and their condition reported to the XO on completion.
- 12. He shall be the Ships Safety Officer as per Admin Instruction 07/05. He shall have the following duties as Safety Officer:
 - a. He shall implement and supervise a Ship Safety Programme, including the training of ships staff in safety procedures.
 - b. He shall advise the Captain on any changes necessary in implementing the Ships Safety Statement.
 - c. He shall ensure risks are identified, assessed and controlled.
 - d. He shall review safety statement and risk assessments on the change of key personnel or annually.
 - e. He shall investigate and report all accidents/incidents onboard by means of an AF 482 and will complete and submit on the UCS as required.
 - f. He will oversee safety meetings onboard
 - g. He will identify and oversee areas that require safety briefs onboard ship and will ensure that all briefs are correctly logged as required.
 - h. He shall submit quarterly and annual safety reports to the Officer Commanding and shall ensure that these are forwarded to the FSO in a timely fashion.
- 13. He shall be responsible for the efficient and correct running of the Ships Canteen. He shall ensure that the Welfare Float is accounted for during handovers.
- 14. He will pay particular attention to ensure that NO pollution occurs when oil or sludge is being transferred and he should ensure that SOPEP requirements are met.
- 15. He shall ensure that all propulsion machinery systems and other systems He is responsible for are run up and tested prior to commencing patrol. This should normally happen on the Thursday prior to sailing. He should immediately notify the Officer Commanding of any defects.
- 16. He shall be responsible for the watertight integrity of the ship.

- 17. He shall be responsible for the maintenance and updating of the Oil Record Book and SOPEP's.
- 18. He shall be the Wardroom Bar Officer unless this task has been designated to another Officer by the Mess President.

Appendix 9: Captain Standing Orders, (CPO/ERA), LE Eithne

0309 THE CHIEF PETTY OFFICER ENGINE ROOM ARTIFICER

- 1. He shall report directly to the MEO.
- 2. The Chief ERA is the Senior Rating in the Engineering Branch. In the absence of an Engineer Officer he shall carry out the duties normally carried out by the Engineering Officer.
- 3. He shall be the administrative NCO for the ERAs.
- 4. In the absence of the CPO/ERA, the senior PO/ERA (by date of promotion) shall assume the role with the assistance of the MEO.
- 5. His primary responsibility will be the maintenance of the capability to provide propulsive power and electrical generation for the vessel, during all stations and evolutions.
- 6. He shall be responsible to the MEO for the care, maintenance and efficiency of all machinery in the charge of the MEO.
- 7. He shall be responsible for the discipline and cleanliness of the Engineering Department as a whole.
- 8. He shall ensure that the Engine Room Department observes best health and safety practices in regard to the operation of plant and machinery.
- 9. He shall ensure that all CSOs, Engine Room SOs, Engineering SOPs, Temporary Memoranda and all other such directives as may be issued from time to time by the MEO, best practice and/or the manufactures' guidelines. These orders must be kept up to date and strictly adhered to by all personnel when operating any machinery, plant or equipment.
- 10. Where the C/ERA feels that an addition, alteration or amendments to any of the above (para 09) would assist in the more efficient, economical or safe running of the Engineering Department, he is to make written representations concerning same to MEO.
- 11. He shall ensure that all machinery and systems are operated in accordance with the requirements of the machinery manufacturers. Where any doubt exists the MEO is to be contacted.
- 12. He shall ensure that all engineering evolutions are carried out in accordance with sound engineering and watch-keeping principles and are conducted in a safe, logical and methodical manner.
- 13. He shall take daily rounds of all machinery spaces to ensure cleanliness of the spaces, good work practices and the maintenance of an efficient engine room in a safe working environment.
- 14. He shall report all defects immediately to the MEO.
- 15. He shall not hesitate to take any immediate action necessary in his view to prevent the loss of life, serious injury, damage to machinery or the hazarding of the vessel. When exceptional circumstances dictate, immediate action must be taken as always based upon sound engineering and watch-keeping principles.
- 16. He shall personally assign work to the ship's ERAs and supervise the satisfactory completion of work so assigned.
- 17. He shall, subject to the dictates of the MEO, regulate the ERAs in watches at sea and detail duties in harbour or alongside.
- 18. He shall keep a daily work book (LA 120) and a defects book (LA 12). He shall submit these to the MEO weekly for inspection.
- 19. He shall maintain on computer a detailed record of the following:
 - a. Machinery Hours and submit the same quarterly to Naval Planning.
 - b. Machinery History files documenting all works, services and occurrences on all engineering plant and machinery.
 - c. Planned Maintenance Schedule and record the implementation of the same as laid down by Naval Planning. He shall submit the same quarterly to Naval Planning.

- d. Lubrication Oil Spectrographic Analysis results for all required systems. Any results of note are to be brought to the MEO attention for immediate action.
- 20. He shall inspect the Log Books at 0745 daily at sea, and at 0845 in port, and initial same. He shall bring any omissions, defects or mistakes to the attention of the PO/ERA concerned. He shall report any defects or unusual readings to the MEO immediately.
- 21. He shall ensure that all Log Books are written up in a neat and orderly way, and that all routine and emergency evolutions are entered. He shall implement any changes as required by Naval Planning on the Log Book return sheets.
- 22. He shall ensure that all machinery is run-up and tested satisfactorily prior to getting underway. Timings shall be as detailed by the MEO. He shall report "Confidence Test complete, all machinery and communications tested and ready to clutch in" to the MEO, five minutes before stations.
- 23. He shall always be in the MCR, or any other such location as detailed by the MEO, on entering and leaving harbour, manoeuvring at sea and at all such other times as his presence is required.
- 24. All machinery, tanks or void spaces opened up for inspection or overhaul are to be reassembled or boxed up without the C/ERA being informed, so that he may be able to examine it and report its condition to the MEO.
- 25. After major repairs to engines the Chief ERA will carry out a thorough crankcase inspection immediately prior to the fitting of crankcase doors.
- 26. He shall ensure that bilges are NOT pumped directly overboard at any time. Bilges may only be pumped overboard to save the ship or a life.
- 27. He shall ensure that all emergency equipment is run on test weekly, and that all such tests are recorded in the Log Book.
- 28. He shall not authorise any NCO or rating of Engineering Branch to leave the vessel without first having the permission of the MEO or the OOD.
- 29. He shall ensure that ratings from other departments operating machinery or equipment on charge to the Engineering Department; are fully aware of any SOPs and manufacturer's instructions for the operation of such equipment. Any and all departures from the above shall be reported to the MEO who shall instigate whatever action necessary to ensure such departures or transgressions are not repeated.
- 30. He shall take charge of the Standing Sea Emergency Party. He shall be responsible for the training and drilling of the same.
- 31. He shall have permission to grant leave to ERAs not exceeding one week, provided no relief is required without prior consultation with the MEO, subject to the exigencies of the service.
- 32. He shall ensure that Naval Engineering Standing Orders and best safe practice are strictly adhered too in relation to any Asbestos Containing Material or Compressed Asbestos Fibre onboard the vessel. Asbestos Removal SOPs are to be strictly following
- 33. He shall organise and supervise the engineering education and training as well as the relevant health and safety training of all engineering branch personnel and the remaining ships company as appropriate, required or requested.
- 34. He shall personally supervise the training of apprentices/technical trainees or direct entry engine room artificers as per the appropriate TI and shall present Task Book, where applicable, to the MEO for inspection as required.
- 35. He shall personally conduct all Auxiliary Watch-keeping Examinations onboard prior to personnel advancing for their oral tests. This "walk around" test will be vigorous and thorough.
- 36. He shall be required to perform the duties of OOD when alongside Naval Base.

Appendix 10:

NCO Survey Results:

The following survey was distributed to all NCO ERAs in the INS from L/ERA to CPO/ERA.

There were seventy-nine (79) questionnaires and information packs sent out via internal INS mail, they were addressed to each individual NCO ERA on the date of mailing which was 4th of July 2016.

An informed consent information letter was attached to each survey and a signed informed consent receipt was received for completed self-administered questionnaire which has been used in the compilation of the survey results.

The last completed self-administered questionnaire was returned and complied into the project on the 17th of Aug 2016.

The author includes full copies of all the documents in this appendix.

INFORMED CONSENT FORM FOR RESEARCH PARTICIPANTS

Information Sheet:

Purpose of the Survey:

As part of the requirements for the award of a Bachelor of Arts in Leadership, Management & Naval Studies through the Naval College and CIT, I have to carry out a research project. The research project is concerned with the Marine Engineering Branch and the process of Commissioning from the Ranks.

What will the Survey involve?

The survey will involve a list of questions to be answered by NCO Engine Room Artificers.

Why have you been asked to take part?

You have been asked because you are an NCO Engine Room Artificer.

Do you have to take part?

No, participation is completely voluntary. Your assistance in the project and participation in this survey would be greatly appreciated and acknowledged. By taking part you will be assisting this student in providing your opinion and views on the subject of Commissioning from the Ranks and your answers to this student's question "Would the Marine Engineering branch benefit from a regular process of CFR?"

Will your participation in the study be kept confidential?

Yes. I will ensure that no clues to your identity appear in the thesis. Only quantitative data from this study will be used. Any data that is quoted in the thesis will be entirely anonymous. Your signed consent form will never be kept in the same file as your answer sheet.

What will happen to the information which you give?

The data will be kept confidential for the duration of the study. On completion of the thesis, they will be retained for a further six months and then destroyed. The consent forms and answer sheets will never be kept in the same file. You may retain this information sheet and if you wish photocopy your consent form while forwarding the original to this student.

Signed consent forms are needed by this student in case of a review or audit by the academic awarding body to prove that this student, did in fact carry out the survey.

What will happen to the results?

The results will be presented in the thesis. They will be seen by my supervisor, my mentor and the external examiner. The thesis may be read by future students on the course. The study may be published in a research iournal.

What are the possible disadvantages of taking part?

I don't envisage any negative consequences for you in taking part. You may withdraw from the survey at any time prior to the publication of the thesis, by contacting me via the details below.

Any further queries?

If you need	l any furthe	er information,	you can	contact me:	Ruairí de	Barra,	0861540587	, ruairidebarra@	@gmail	.com
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form overleaf.

If you agree to take part in the study, please sign the consent
Thank you very much.
Is mise le meas,
(Ruairi de Barra)

Consent Form.

BA in Leadership, Management & Naval Studies.

I agree to participate in Ruairí de Barra's research surve	у.
The purpose and nature of the study has been explained to me in writing.	
I am participating voluntarily.	
I understand that I can withdraw from the study, without repercussions, at any time, whether the starts or while I am participating.	her
I understand that I can withdraw permission to use the data prior to the publication of research project, in which case the material will be deleted.	the
I understand that anonymity will be ensured in the editing by removing my identity.	
Signed: Date://	

NCO ERA Survey - Commissioning from the Ranks.

Question 1:

- o L/ERA
- o PO/ERA
- o CPO/ERA

Question 2:

How many years have you been in service?

- o 0-5 years.
- o 5-10 years.
- o 10-21 years.
- o 21+ years.

Question 3:

How many more years do you see yourself remaining in service?

- o 0-3 years.
- o 3-6 years.
- o 6-9 years.
- o 10+ years.

Question 4:

Would you be interested in a Marine Engineering, Commissioning from the Ranks programme?

- o Yes.
- o No.

Question 5:

If you answered No to question 4 above, please tick as many of the statements below that you feel are true for you?

- No, Not at this late stage of my career.
- \circ $\,$ No, I would never want to be a commissioned officer.
- \circ $\,$ No, I feel I wouldn't be able to take on the academic or professional work needed for the role.
- o No, I feel that the conditions of service and remuneration of officers is not attractive enough.
- o Other reason: ______.

Question 6:

What is the highest level of Education that you have?

- Level 6.
- o Level 7.
- o Level 8.
- o Level 9.
- Other:

Question 7:
Do you feel that a regular CFR programme would benefit NCO ERAs?
o Yes.
o No.
Question 8:
Do you feel that the lack of Junior MEOs is having an impact on your own work?
o Yes.
o No.
Question 9:
If you answered Yes to question 8 above, please tick as many of the statements below that you feel are true for you?
 Yes, I am doing work that is normally completed by an MEO.
 Yes, There is often no MEO in my workplace to get support from or permission from etc.
 Yes, My MEO changes often, so there is no continuity in management.
o Other reason:
Question 10:
Do you feel that there is no regular CFR programme, because Commissioned Officers are biased against NCOs
o Yes.
o No.
Question 11:
Do you feel that a regular CFR programme would help retain some NCOs in service?
o Yes.
o No .
Question 12:
Do you feel that a regular CFR programme will ever happen in your time in service?
o Yes.

o No.

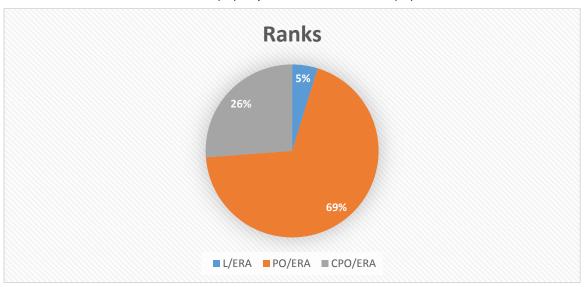
37.

NCO ERA Survey - Commissioning from the Ranks (Results)

Question 1:

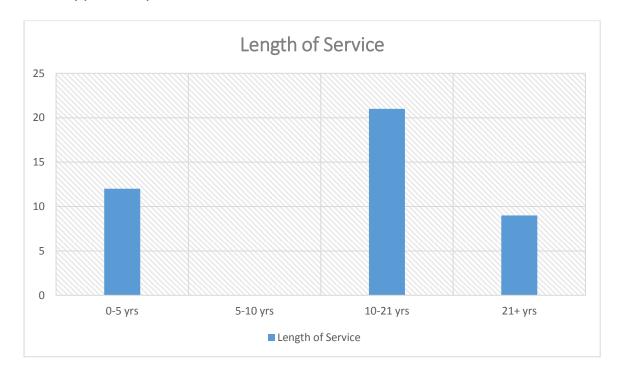
What rank do you currently hold?

- o L/ERA: There were two (2) respondents of the three (3) L/ERAs in service.
- o PO/ERA: There were twenty-nine (29) respondents of the fifty-seven (57) PO/ERAs in service.
- o CPO/ERA: There were eleven (11) respondents of the nineteen (19) CPO/ERAs in service.



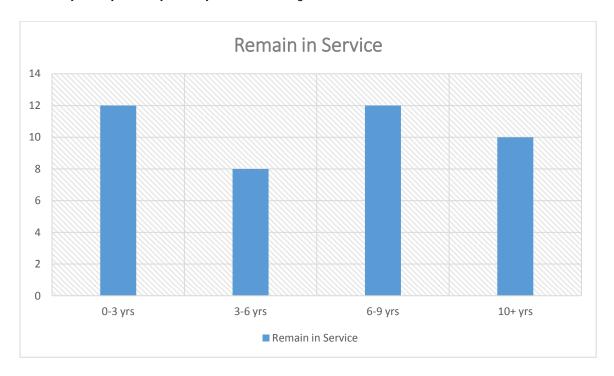
Question 2:

How many years have you been in service?



Question 3:

How many more years do you see yourself remaining in service?



Question 4:

Would you be interested in a Marine Engineering, Commissioning from the Ranks programme?

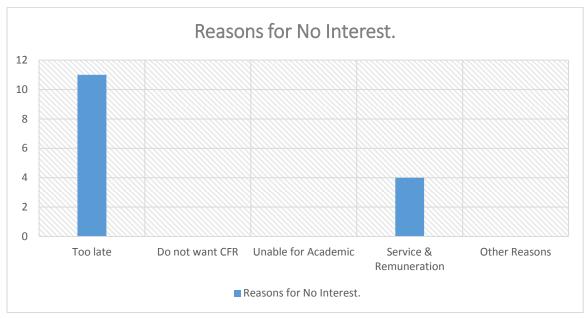
- o Yes.
- o No.



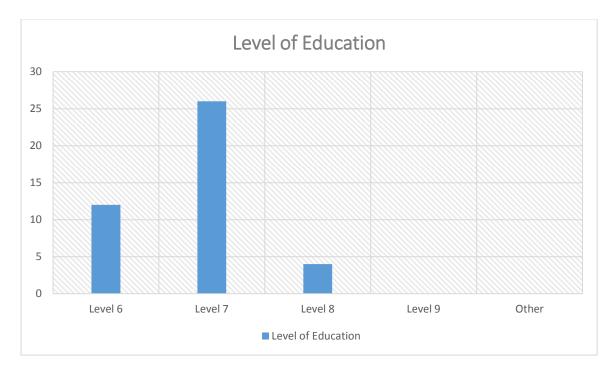
Question 5:

If you answered No to question 4 above, please tick as many of the statements below that you feel are true for you?

- o No, Not at this late stage of my career.
- o No, I would never want to be a commissioned officer.
- o No, I feel I wouldn't be able to take on the academic or professional work needed for the role.
- o No, I feel that the conditions of service and remuneration of officers is not attractive enough.
- o Other reason:

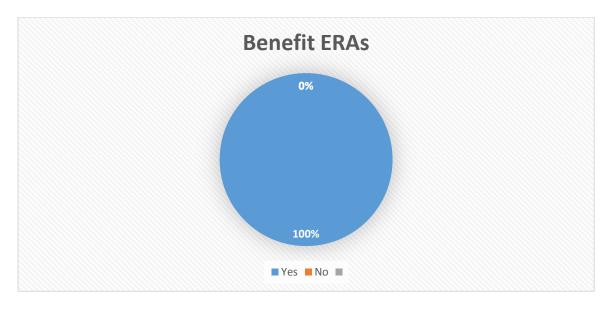


Question 6: What is the highest level of Education that you have?



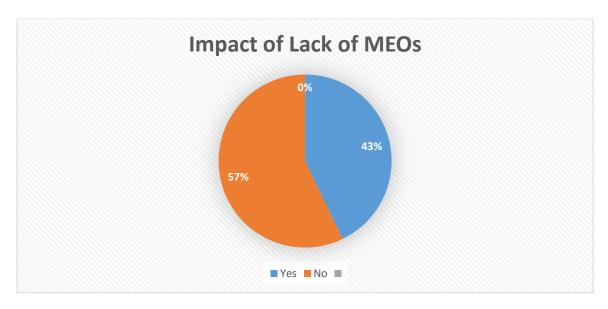
Question 7:

Do you feel that a regular CFR programme would benefit NCO ERAs?



Question 8:

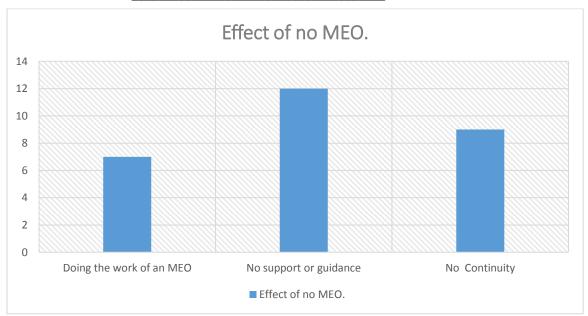
Do you feel that the lack of Junior MEOs is having an impact on your own work?



Question 9:

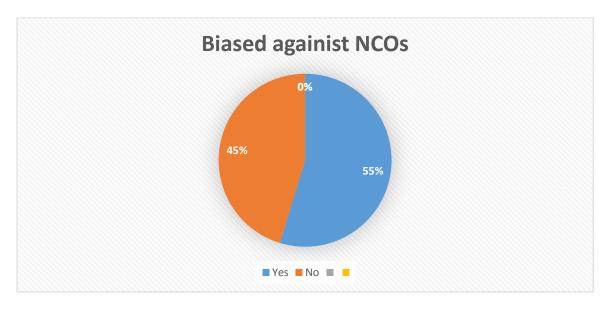
If you answered Yes to question 8 above, please tick as many of the statements below that you feel are true for you?

- o Yes, I am doing work that is normally completed by an MEO.
- Yes, There is often no MEO in my workplace to get support from or permission from etc.
- o Yes, My MEO changes often, so there is no continuity in management.
- o Other reason:



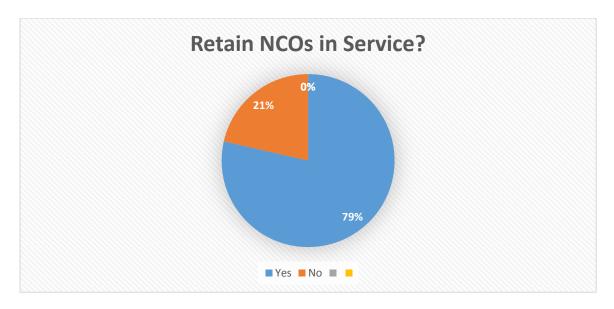
Question 10:

Do you feel that there is no regular CFR programme, because Commissioned Officers are biased against NCOs?



Question 11:

Do you feel that a regular CFR programme would help retain some NCOs in service?



Question 12:

Do you feel that a regular CFR programme will ever happen in your time in service?



Appendix 11: Civilian Marine Engineering Structure

The following appendix is taken from Seamax International Cruise Ship Employment Services.

The Engine Department of a cruise ship is part of the Marine Operations Division. The Engine Department team is primarily responsible for the safe and smooth operation of the ship's propulsion systems, main and auxiliary engines as well as for all technical operations and mechanical equipment onboard the cruise ship - electrical system, safety and fire fighting systems, HVAC and waste disposal systems.

The Engine department aboard a cruise ship offers jobs for two types of personnel:

Engine Officers (Chief Engineer; Staff Chief Engineer; 1-st, 2-nd, 3-rd Engineer;

Hotel Services Engineer; Electrical Engineer; HVAC Engineer; Engine Cadet) and

Engine Ratings (Engine Storekeeper, Motorman, Fitter, Plumber, Oiler, Wiper / Engine Utility).

Chief Engineer:

The Chief Engineer is responsible for the entire technical operations of the vessel including engineering, electrical, and mechanical divisions. The Chief Engineer is the head of the entire Engine Department aboard the cruise ship, the highest-ranking officer within the department and...

Staff Chief Engineer:

The Staff Chief Engineer is the second in charge and second highest-ranking officer within the Engine Department of a cruise ship. The Staff Chief Engineer must be fully conversant with all of the Chief Engineer's functions and be able to assume his/her duties and take charge of the ship's Engine Department at...

1st Engineer:

The 1st Engineer is responsible for the daily maintenance and operations of the engineering and technical aspects of the vessel as directed by the Chief Engineer and Staff Engineer. The 1st Engineer is directly responsible for all work performed in the engine room and...

2nd Engineer:

The 2nd Engineer is performing duties as delegated by the Chief Engineer and the Staff Engineer. The Second Engineer acts as Engineer Watch Officer in the engine control room

overseeing the operation, maintenance and repairs of subordinate engineers and engine ratings members of...

3rd Engineer:

The 3rd Engineer performs duties as delegated by the Chief Engineer and the Staff Engineer. He/ she may be assigned to engine control room watch duties and in this case assists the Engineer Watch Officer by...

Engine Cadet / Junior 3rd Engineer:

The engine cadet closely follows the instructions of the First Engineer and attends the engine control room usually as part of the First Engineer's watch. *The Engine Cadet assists in.*

Hotel Services Engineer:

The Hotel Services Engineer is managing the entire hotel technical department of the cruise ship. He/ she is responsible for the maintenance and repair of all machineries, equipment and systems outside the main engine room. The Hotel Services Engineer is in charge of all...

<u>Chief Electrical Engineer / Chief Electrician</u>:

The Chief Electrical Engineer/ Chief Electrician has the responsibility of overseeing the operation and maintenance of the electrical plant and associated electrical systems throughout the cruise ship. The Chief Electrician ensures that all electrical...

Electrical Engineer / Electrician:

The Electrical Engineer is responsible for the proper maintenance and repairs of the electrical systems on board the cruise ship as directed by the Chief Electrician. The responsibility for maintenance and repairs of the ship's various electrical systems/equipment is distributed among the...

Electronic Engineer:

The Electronic Engineer is responsible for the maintenance and repair of all electronic equipment and systems aboard the cruise ship and works under the supervision of the Chief Electrical Engineer. The ship's equipment/systems maintained by...

Electronic Engineer Junior – Communication:

On some cruise ships in addition to Electronic Engineer positions there is also a specialized Electronic Engineer Junior - Communication position. The Electronic Engineer Junior Officer works under the supervision of The Electronic Engineer Officer and the ship's Chief Electrical Officer. The Electronic Engineer Junior Officer is directly responsible for the for the maintenance and repair of ship's communication systems, such as satellite communication systems, C-Band satellite communication, telephone System, ship's internal communication systems including portable VHF radios and pagers, satellite TV system and public address system. Job Requirements: relevant college degree and professional experience. Computer literacy and good verbal and written command of the English language required. Salary range: \$2600-3600 U.S. per month, depending on the cruise line. Possibilities for promotion to Electronic Engineer position.

Chief Refrigeration / HVAC Engineer:

The Chief Refrigeration Engineer is a three stripe officer that oversees and supervises the operation, maintenance and repair of the ship's HVAC equipment/ system, domestic refrigeration plant, ventilation, cooling, freezing, provision equipment, all air conditioning throughout the vessel plus ice...

<u>Refrigeration / HVAC Engineer</u>:

The Refrigeration Engineer reports to the Chief HVAC Engineer and under his/ her supervision ensures that maintenance and repair of the ship's HVAC equipment/ system, domestic refrigeration plant, ventilation, cooling, freezing, provision, equipment, all air conditioning throughout the...

Motorman:

Job description: the Motorman is responsible for the daily maintenance and cleaning of specific engine parts as directed by the Chief Engineer. Cruise Ship Motorman

Job Requirements: experience with minimum one to two years on board ships required.

Diploma from accredited maritime training school or facility and good English Language skills required. Cruise Ship Motorman salary range: \$1800-2800 U.S. per month, depending on the cruise line.

<u>Fitter:</u>

Job description: responsible for the daily maintenance and cleaning of engines and mechanical equipment as directed by the Chief Engineer. Cruise Ship Fitter

Job Requirements: experience with minimum one to two years on board ships required.

Diploma from accredited maritime training school or facility and basic English Language

skills required. Cruise Ship Fitter salary range: \$2000-3200U.S. per month, depending on the cruise line.

Oiler:

Job description: the Oiler is an engine department rating position. The job of an Oiler onboard is to assist ship engineers lubricating bearings and other moving parts of engines and other mechanical equipment aboard the cruise ship. The Oiler participates in the general maintenance of ship's main power plant, auxiliary engines and generators in order to ensure that oil temperature is within the standard limits and oil gauges are all working properly. Cruise Ship Oiler Job Requirements: previous work experience in a related field and willingness to train. Basic command of the English language required. Cruise Ship Oiler salary range: \$1400-1800 U.S. per month, depending on the cruise line. Possibilities for promotion from Oiler to Fitter rating position.

Wiper/ Engine Utility Man:

Job description: the Engine Utility Man/ Wiper is an entry level rating position within the engine *department* of the cruise ship. The Engine Utility Man/ Wiper provides general assistance to licensed engineers and superior engine room ratings in different tasks in the engine room, such as general maintenance and repair of the various machinery and equipment, material handling equipment throughout the ship including elevators and winches, general cleaning and painting of the engine room, trash pick up, tools and instruments pick up and cleaning. Cruise Ship Wiper Job Requirements: previous work experience in a related field and willingness to train. Basic command of the English language required. Cruise Ship Engine Utility salary range: \$1200-1600 U.S. per month, depending on the cruise line. Possibilities for promotion from Wiper/ Engine Utility Man to Oiler rating position.

Plumber:

Job description: responsible for the maintenance and repair of all plumbing. Cruise Ship Plumber Job Requirements: experience with minimum one to two years on board ships required. Basic English Language skills required. Cruise Ship Plumber salary range: \$1800-2500 U.S. per month, depending on the cruise line.

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