INTRODUCTION

The seafarer has often inspired a romantic, even heroic, image in the arts. Walt Whitman's poem *A Song for all seas, all ships* inspired Ralph Vaughan Williams' magnificent Sea Symphony, which depicts the pleasures and perils of being a seafarer. Modern reality, as always, is more prosaic. Indeed, the history of the working lives of seafarers is one of a hard, sometimes dangerous, and quite often short, working experience.¹

The manning of the world fleet is the raison d'être of seafaring activity. It creates the demand for seafarers, which is derived (just as the demand for the ships themselves) from the demand for transportation services. In a sense, both ships and seafarers are factor inputs that are jointly demanded to generate the transport service. The demand for seafarers is driven by the number of ships that constitute the world's fleet, together with the national and international rules that determine how those ships may be legally operated. The rules include regulations that cover working conditions, employment rights, manning agreements, training, qualifications, and wages. In many countries, the demand for seafarers, if measured in terms of the needs of the national fleet, has been in decline, while non-national fleets have grown. The overall growth in the world fleet might be expected to stimulate the demand for seafarers, but this simple relationship has to be modified to allow for the changing employment needs for each vessel, whilst the increased technological sophistication of the vessels over time has transformed the nature of the seafarers' job at sea. In many nations, the supply of

¹EDITOR'S NOTE.—The author would like to acknowledge the comments of two anonymous referees, who have helped to significantly improve the content of this article. All remaining errors and omissions are of course, his own.

seafarers to serve the national fleet is only a small proportion of the supply provided to the world as a whole, whilst in others, the nationally owned fleet is served by a mix of seafarers of several nationalities. Seafaring is a truly global, multinational, and multicultural occupation.

This article provides an overview of recent research activity into seafarer numbers, quality, training, and government policy. The area is notable for the relative lack of research literature, of either an academic or practical nature. Despite the output of the Seafarers International Research Centre (SIRC), there appears to be an absence of a well defined body of theory relating to seafarer demand and supply; what is reviewed in this paper tends to be partial and draws on different methodologies. The evidence on seafarer numbers and their characteristics is also notably poor, when contrasted with data available for many other industrial occupations.

WHAT IS A SEAFARER?

A seafarer is either a rating, a cadet, or an officer. The seafarer's occupation can be segregated by skill/qualification level, and by departments on board ship, for example, deck, engine. The competencies needed to obtain a given qualification have been codified by the implementation of the Convention for Standards of Training, Certification and Watchkeeping (STCW'78 and STCW'95), which came into force on 1 February 2002. General workers are represented by ratings, who are relatively unskilled and have less training than the officers. Trainee officers, or cadets, provide the necessary new input into the industry. The training period for cadets varies, but generally takes 3 or 4 years before the trainee obtains the most junior certificate. There are two principal officer classifications, deck and engineer. The former train to operate and direct the vessel, whilst the latter train to manage and maintain the engines and other equipment vital to the safe operation. In addition, there are a number of other officer departments, such as radio officers, pursers or hotel managers (these are limited to cruise ships); but the most significant are the deck and engineer.

However, measuring the number of seafarers involved in the industry requires a little more consideration. The occupation is peripatetic by nature, because of its characteristics. First, it is an occupation with very high spatial

2. The Seafarers International Research Centre (SIRC), based at Cardiff University, United Kingdom, was originally set up with the objective of researching the economic and social aspects of seafarers' working lives and their environment.

3. This International Maritime Organization Convention regulates the Standards of Training, Certification and Watchkeeping that all member countries are required to achieve in their national administrations (STCW'95). It supersedes an earlier convention, first introduced in 1978 (STCW'78).