

MARITIME ENGLISH TESTING – CURRENT STATE OF AFFAIRS

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Introduction

Training and assessment have always been interrelated as the two sides of a coin. This relation becomes crucial especially when taking into account what is measured, how and why. Assessing Maritime English competency adequately and reliably at an international level then rises as a major issue because it reaches out equally to merchant marine officers and cadets and Maritime English Training (MET) institutions, maritime administrations, ship owners, etc.

It is indisputable that designing standards for Maritime English (ME) assessment as well as establishing an overall ME testing system is essential, even though somewhat delayed. The fact that legal instruments, namely SOLAS 2004 and STCW 95, set out guidelines and make recommendations regarding the seafarers' training and education does not alleviate the problems encountered in the attempts to harmonize ME proficiency standards for assessment and further certification at all levels.

The aim of this paper is to discuss the current state of affairs in ME testing in terms of tests availability, criteria for measuring ME, test administration and so on. First, it will focus on several tests designed for the purpose of measuring ME in maritime context – MARLINS, TOMEK and MARTEL, and comment on their format, skills tested, scoring and interpretation of results. Then, it will discuss the recently promulgated Yardstick of ME competence for ship officers as an instrument likely to affect positively both ME training and testing.

Background

IMO has explicitly set out requirements for English Language competence as a working language both in SOLAS, Chapter 5 and the STCW convention and code. Under the latter document *Officers of the navigational watch* require adequate knowledge of written and spoken English to understand charts, nautical publications, meteorological information and messages concerning the ship's safety and operation. They also need to communicate with other ships, coast stations and multilingual crew, and to use the IMO Standard Marine Communication Phrases (SMCP) – see Table A-II/1 of STCW Code.

GMDSS radio operators, which in practice now include most deck officers, require a knowledge of English, both written and spoken, for the communication of information relevant to the safety of life at sea (STCW Code Table A IV/2).

To make the picture complete, *engine watchkeepers* are required to demonstrate an ability in English adequate to interpret engineering publications written in English and to speak clearly and comprehensively when making communications needed to perform engineering duties.

The ISM Code, too, emphasizes on effective communication in the execution of crew's duties which in practice is usually made in English. (STCW Code Table A-III/1) [1]

However, the requirements formulated above are not broken down in a detailed form to be readily applied either in the classroom or on board. They do not reflect the difference in language competence expected from deck officers and engineer officers. They refer to knowledge, understanding and proficiency but not skills or subskills. Trenkner and Cole argue that the wording is made deliberately in order to enable each maritime administration to apply and implement the above requirements depending on national educational training and curricula as well as testing. [2]

Roenig and Uriasz, on the other hand, consider that the STCW restricts the knowledge of English to a set of phrases, called the SMCP. According to them, it is debatable whether "such a limited command of English relying only on the knowledge of the phrases can ensure appropriate level of navigational safety and provide for adequate communication on board the vessel." [3]

In our opinion the SMCP are a means of ensuring both intership and intraship communication but they do not cover all activity areas the shipping industry can get ship officers involved into. Furthermore, they are intended for users of limited language proficiency. What if they have a good or high command

of English? Even though Maritime English is more part of General English than any other language for specific purposes, it is a restricted language which is best used if accompanied by a corresponding level of General English proficiency [4]

Yet another point to consider is that ME competence should be understood as the ability of communicating effectively in English while accomplishing professional tasks assigned to a given position and rank. Although not clearly defined, ME competence also involves having to play various social roles functioning in a multinational and multicultural environment at all times.

Tests of Maritime English

Taking this into consideration tests are usually developed as tools of measuring seafarers' abilities and skills required for performing efficiently at a certain professional level – support, operational or management – and a given job position and rank.

The MARLINS language test is among the most widely known and used tools for assessing English proficiency in maritime context. It is computer based and delivered which makes it suitable for individual testing. It comes in two CDs – one aimed at testing listening and reading, the other – speaking. Each test comprises three principal sections - Listening (40 items), General Comprehension (50 items) using multiple choice questions (MCQ), matching, and sentence completion in the areas of vocabulary, grammar and phonology. The third part titled Practical Comprehension, is based on paragraphs extracted from actual written instructions on everyday shipboard activities. The task requires gap-filling to demonstrate understanding of the text (10 items). The results are scored out of a 100 but not subject to interpretation. It is at the crewing agencies' discretion to decide what MARLINS score they consider suitable for their ranks and ratings. [5]

The test of spoken English is distinctively shipping oriented but does not test subject knowledge. It is conducted as an interview using visual prompts to elicit natural spoken English. The interlocutor evaluates proficiency at three levels – elementary, lower and upper intermediate focusing on spoken fluency, spoken accuracy and listening comprehension. The tasks involve description of job routine procedures, comparison, narration and discussion eventually leading to clarifying points and supporting opinions. [6]

Compared to MARLINS the TOME (Test of Maritime English Competence) is free and appropriate for testing a large group of students simultaneously, but not available online any more. Developed as a result of a joint project between the Tokyo University of Marine Science and Technology (TUMSAT) and the California Maritime Academy, it was originally intended to be an achievement test assessing learners' improvement but turned out to be a tool for both screening and measuring Maritime English competence as well. The test consists of listening comprehension (Parts 1, 2, and 3), basic grammar and vocabulary (Part 4), and reading comprehension (Part 5). In terms of administration it is an audio tape/CD-based, paper and pencil, multiple-choice type of test which is also easy to score.

Since TOME has been designed to assess the knowledge of ME as required by the STCW 95, the items included in it cover maritime communications (onboard, ship-to-ship and ship-to-shore) and nautical publications for the deck department, whereas the questions pertaining to the engineering department have focused on engineer's ability to perform engineering duties and understand engineering publications.

In its latest format the test consists of 4 versions – 2 for deck officer cadets and 2 for engineering cadets, each comprising 50 questions (25 listening, 15 grammar/vocabulary and 10 reading questions) planned to be covered in a 90-minute class.

In Part I, a statement that best describes a picture must be chosen among four statements. In Part II, a question or statement is played and test takers are to choose one of the four possible answers/responses to the question that are also aurally presented. In Part III, examinees listen to a conversation or announcement, and they are to answer a question written on the booklet.

Part IV is a reading comprehension section designed to test basic grammar and vocabulary. The grammar questions included in this part of the TOME test the knowledge of tenses, voice and suitable use of content words and function words while vocabulary items cover basic maritime and technical terms and their collocations. The final part of the test is created to assess the reading

comprehension of practical authentic materials that engine or deck cadets must be able to read and understand in order to carry out their duties properly. Students are presented with a set of questions based on a selection of authentic reading materials such as sailing directions, international regulations and conventions, manuals, etc., which they must read through in order to answer the questions correctly.

The authors have modeled the TOMEK test on the TOEIC (Test of English for International Communication), still working on its validity, reliability and discriminability. When successfully completed, they hope MET institutions will be provided with a convenient tool of evaluating maritime English competence as required by the STCW 95, which will be a step toward global standardization of maritime English assessment. [7]

There are a few points to remember though: it is hard to have a test fulfilling all types of purposes – pre-screening, achievement and proficiency; it is difficult to assess language competence based on two skills only; scoring may be easy but how are scores to be interpreted and against what rating scale?

The MARTEL (Maritime Tests of English Language) Test which is still under development aims to provide an online learning and assessment platform. This ambitious Leonardo da Vinci Project is designed at three different levels or standards:

- i) Foundation – Elementary, Intermediate and Advanced,
- ii) Officer – Deck and Engineering, and
- iii) Senior Officers – Deck and Engineering, also senior officers at port and pilots.

All levels include active skills i.e. Speaking, Comprehension and Writing. The content is intended to be based on active learning and on maritime terminology and usage with less emphasis on grammar. The Foundation test at advanced level benchmarks the well-known English qualification standards TOEFL 500 and IELTS 5.5 in terms of testing methods rather than their contents (equivalent to STANAG 6001 level 3 or intermediate). The Officer standards are based on TOEFL 550 and IELTS 6.0 standards (equivalent to STANAG 6001 level 3+ or upper intermediate) but content is primarily based on Navigation English and Marine Engineering English. These tests focus on all skills but with less emphasis on grammar. The senior officer standards are equivalent to TOEFL 600 or IELTS 6.6 (equivalent to STANAG 6001 level 4 or advanced). Again the emphasis is on active skills. For the senior officers in charge of vessels over 3000 GRT, the standard includes a section on language requirements for these vessels. All standards for Officer and Senior Officer Levels have different weights on different skills and different proficiency requirements at different ranks and duties. For example, a Chief Engineer should be competent on comprehension (especially reading) and writing but a more moderate level of speaking may be tolerated. The success would lead to vocational qualifications in Maritime English and usage which is expected to be recognised Europe-wide. The proficiency tests are computer-based and delivered with multiple choice questions, 100 in number, selected randomly and made accessible by Internet applications. [8]

In a nutshell, the three tests presented, irrespective of the stage of development they have reached, share a few common features:

1. They all use predominantly the multiple choice technique while it is an alphabetical truth that testers should ensure they use more than one method for testing an ability. [9]
2. They focus on listening and reading comprehension mostly with vocabulary, grammar and phonology taken into account, while speaking and writing are somewhat underrated.
3. They all use visuals, such as drawings, pictures and photos, etc.
4. They define the content of the tests rather vaguely using formulations like “English in maritime context”, “Maritime English terminology”, etc.
5. They are unclear on score interpretation. Actually, this stems from the lack of standards for ME proficiency, the need for revision of the STCW Convention and the IMO ME course model in this respect.

The Yardstick

This major problem relating to competency in ME for the well-being of seafarers and those working in the shipping and maritime industries including ports was addressed independently by at least two working groups.

The first approach was suggested by the MARTEL project – to rely on well-known testing standards such as TOEFL and IELTS more in terms of testing methods rather than content. The second approach consisted in offering an entirely new “Yardstick of English language competence for ship officers” [10] This document which covers abilities to be performed at an operational and management level has recently been revisited and considerably revised by adding depth and more accurate content to the descriptions and identifying the minimum band levels expected of the various officer ranks. [11].

The authors state that the yardstick was modeled on the English speaking Union framework performance scales for English language examinations which present this tool for measuring language performance as a scale with a number of levels specified in bands in terms of topics covered, skills development, tasks and criteria for assessment. Such a document comes closest to the idea of test specifications which would logically underlie the corresponding tests for measuring ME proficiency.

Upon investigation we find that the bands pertinent to our particular situation range from 4 to 7. We can now analyse them and see what they provide as a starting point.

7	Good User (Junior Navigation Officers/ Junior Engineer Officers) Minimum required for certification as Chief Officer	Uses Maritime English effectively but may need to take special care in complex and difficult situations; meets the Maritime English requirements as laid down in the STCW Convention. Communicates well enough on radio complying with the Radio Regulations. A few lapses in accuracy, fluency, appropriateness and discourse and in conveying or comprehending the content of a message, but communication is effective, consistent and unmistakable. Conversant with the IMO-SMCP. Can give clear and succinct orders to ratings. Understands written and spoken instructions in how to use, maintain and repair equipment. Any lack in Maritime English skills does not hinder safe ship operations. Able to draft the messages, reports and letters required for ship business occasionally using dictionaries, glossaries and/or correspondence guidelines.
6	Competent User (Junior Navigation Officers/ Junior Engineer Officers) Minimum required for certification as OOW/EOW	Uses Maritime English with confidence in moderately difficult situations; meets basically the Maritime English requirements as laid down in the STCW Convention. Noticeable lapses in accuracy, fluency, appropriateness and discourse that may lead to difficulties in complex situations. Communication is effective on most occasions. Can communicate on radio under the supervision of senior officers applying selected standard phrases and occasionally using manuals in order to comply with the Radio Regulations. Speaks, reads and writes Maritime English sufficiently well for ship operations. Is familiar with the IMO-SMCP. Competent use of language in giving and executing orders. Able to respond competently in emergencies. Able to comprehend nautical/engineering publications. Able to write up logbook without causing misunderstandings.
5	Effective User (Assistant Navigation Officers/Assistant Engineer Officers)	Uses the language independently and effectively in all familiar and moderately difficult situations. Can read and pronounce the IMO-SMCP applicable to the working sphere. Frequent lapses in accuracy, fluency, appropriateness and discourse, but usually succeeds in communicating. Basically abilities as at band 6 but permitted to act only under constant supervision. Effective use of Maritime English in giving and carrying out orders.
4	Modest User	Uses basic range of Maritime English, sufficient for familiar and non-pressure situations. Many lapses in accuracy, fluency, appropriateness and discourse that restrict continual communication so that frequent efforts and guidance are needed to ensure that the communicative intention is achieved. Renders the minimum level required to follow specialist instruction in Maritime English using the IMO-SMCP. Able to ask and answer basic questions referring to the vessel, its cargo, equipment and machinery. Can pass on distress/urgency and safety messages and ask for assistance in cases of emergency using the relevant IMO-SMCP.

Bands 4 and 5 are rather underdeveloped. The topics covered need to be re-defined. It seems that reading and writing are not required at this level. Basic abilities include strict adherence to the SMCP. No mention of tasks is made but criteria such as accuracy, fluency, appropriateness and discourse aim at achieving the communicative intention. Bands 6 and 7 are more balanced in that they provide for development of the four skills. The topics given are again not specified – what do we define as a complex or difficult situation? The SMCP are a prerequisite for successful communication but not the only one. Listening and reading comprehension is required for VHF communications and nautical or engineering publications. Speaking and writing skills required at band 6 are somewhat minimal compared to those at band 7. Obviously, according to the authors the tasks testing such abilities should stem from the description and criteria for assessment need to be set out in advance – whether verbally or numerically. An interesting point to note is the inclusion of study skills, eg the use of dictionaries, glossaries and/or correspondence guidelines.

What follows from the band descriptors is that either the Yardstick needs to be refined or ME lecturers should contribute to the content specifying various tasks for assessment and rating scales for each skill. On the other hand, even if incomplete, the document does serve as a benchmark for designing both ME syllabuses and ME tests as it clearly aims at establishing standards for ME training.

Conclusions

The current state of affairs in ME testing provides us with a distinct piecemeal approach. Various tests are developed – both commercial and non-commercial (for being in-house materials). They are either paper-based or computer-based, mostly multiple choice type and therefore easy to score. However, the rating process and interpretation of scores is rather blurred, because it is not based on test specifications, thus making the tests not sufficiently valid and reliable. Multiple choice tests can be complemented by other techniques, such as short answer questions, sentence completion, gap-fill, etc. which will provide more valid ways of assessing language proficiency. [12]

The Yardstick for Maritime English Competence does identify the minimum levels expected from the various officer ranks trying to incorporate the STCW requirements for effective communication in performing crew's duties. Still, it is a standard not properly applied (if at all), therefore it does not serve its purpose yet.

If ME proficiency standards for assessment and further certification are the ultimate goal, then tests and specifications should go together. Only at this point the efforts of administrators, lecturers, assessors and end users will hopefully be rewarded.

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