MARITIME ENGLISH

Don't write off your writing skills

In all the effort to get multinational crews speaking English, have we forgotten how to write? Many safety-critical documents aren't clear, say the experts, and even our routine communications could be better. SARAH ROBINSON reports...

Dr Nadya Naumova of the Nikola Vaptsarov Naval Academy in Bulgaria

Catherine Logie, manager of UK-based maritime training firm Marlins

Engagement and disengagement of the turning gear is effected by displacing the pinion and terminal shaft axially. To prevent the main engine from starting when the turning gear is engaged, the turning gear is equipped with a safety arrangement which interlocks with the starting air system.

Ready to give up on this article now? That's how a lot of engineer officers feel when they read stodgy, confusing technical information — especially if English is not their first language. Dr Nadya Naumova of the Nikola Vaptsarov Naval Academy in Bulgaria has recently been researching this topic, and her findings should make the industry reconsider the way that engineers are trained, and how technical manuals are written. In addition, she has discovered how a system of Standardised Technical English from the aerospace industry could offer a way forward for marine engineering documentation.

Meanwhile, Catherine Logie of maritime training firm Marlins has identified a related problem concerning technical communications between ship and shore. Her suggestion is that the principles of Plain English could be brought into the mix, and her own experience of running writing courses for maritime professionals has shown how effective this can be.

Both trainers are members of IMLA, the International Maritime Lecturers' Association, and Dr Naumova's research was presented to IMLA's International Maritime English Conference this summer in Terschelling, Netherlands. Her paper first explores the challenges facing engineers when they try to translate scientific concepts from one language to another, because 'the conceptual metaphors used in the cognitive process of learning science in the native language may differ from the conceptual metaphors underlying this conceptualisation process in other languages'.

For example, she says, there are two theories of electricity used around the world: the 'electron flow' and the 'conventional current flow'. Engineers taught in English are encouraged to view electricity as a current cognitively analogous to 'water flow' or 'freely moving crowd', while the 'conventional current flow' relates electricity to voltage, which forces the 'moving crowd'. So two engineers working side-by-side in a multinational crew could be visualising the same phenomenon in different ways, which may influence not only the terms but also the linguistic structures they use — and this could have a significant impact on the way they try to solve engineering problems together.

This issue of shipboard problem-solving is further complicated by the need for engineers to switch between different styles of English, points out Dr Naumova. It's actually a very difficult skill (known as 'reading for speaking') to study a technical manual written in a formal, academic style and then discuss this with a colleague in the informal, conversational style required for working together effectively.

It would help with both of these problems, suggests Dr Naumova, if marine engineering had its own standards, principles and vocabulary which could be taught at all nautical colleges worldwide and implemented in written documentation and shipboard discussions. But at present the industry can't even agree on what to call a technical manual: 'We speak of instruction manual, user guide, manufacturer's handbook, operation manual, technical operating manual, instruction book, even project guide.'

Adding to the stylistic difficulties of this documentation, she notes, these texts usually have several authors, 'who may (or may not) be engineers, native or non-native speakers of English. Translation might further reduce readability if technically-incompetent multiple translators convey meanings they don't understand.'

> "People at all levels of the shipping industry rely on information exchanged via writing"

There is a strong argument, says Dr Naumova, for developing and using a controlled simplified language and setting this as the standard language for onboard technical documentation. In the aerospace industry, she points out, such a language has already been approved as an international specification for the preparation of maintenance documentation, and it is known as Simplified Technical English (STE). 'STE controls meaning by using approved vocabulary and terms which are further supplemented with an extensive set of rules for using that vocabulary in approved grammatical constructions.' Here are just a few examples of the numerous STE guidelines:

- General vocabulary words must be used only as the part of speech given: *close* is a verb, not an adverb. Therefore *Do not go near the landing gear* is acceptable, but *Do not go close to the landing gear* is not.
- One word — one meaning. Each word is restricted to one meaning: to fall means to move down by gravity, therefore *the pressure decreases* is acceptable, but *the pressure falls* is not.
- Active and passive voice — only active voice is accepted in procedures. *Oil and gas are to be removed with a degreasing agent* should be changed to: *Remove oil and grease with a degreasing agent.* Active voice should be used as much as possible in descriptions, thus instead of: *The circuits are connected by a switching relay*, writers should say: *A switching relay connects the circuits.*

If we apply STE guidelines to the extract at the beginning of this article, this is what we get:

Move the pinion and the end shaft axially to engage or disengage the turning gear. A safety device on the turning gear blocks the starting air system. It does not let the main engine start when the turning gear is engaged.

Most people would agree that the STE version is easier to read and understand, but is it enough of an improvement that the shipping industry should go to the trouble of developing its own version of STE, and of training technical writers to use it? Nadya Naumova certainly thinks so. She explains in her paper: 'The most important positive impact of STE resides in the fact that it eliminates one of the potential diversities hampering engine room communication — it provides the same simple language for equipment that differs in design, manufacture and operational condition and for a group of people of different background knowledge and language proficiency.' With respect to education, she adds, 'it will provide the terminological minimum required for

When multinational engineers work together to solve a problem, they are often hampered by poorly-written technical manuals Picture: Eric Houri

successful communication, the minimum to be mastered and tested respectively.'

The other potential positive result of a move to STE relates to spoken communication: 'When the engine room team relies on a simple and readable text, there will be no need for the reader to transfer complex formal constructions into informal technical speech, because the writer of the text has already done the hard work, and the reader could use ready phrases. The circumstantial result will eventually be increased spoken communication, and a reduced number of accidents caused by communicative failures.'

When Catherine Logie encountered her IMLA colleague's paper at the Terschelling conference, it really struck a chord. 'Nadya made a persuasive argument for developing STE in marine engineering,' she says, 'which is something very important for the industry to consider, especially as, for marine engineers, the ability to read and understand engineering manuals is an STCW competency. This issue of clear technical writing goes beyond enginerooms, though, and it's not just about multinational crews. I think we should be pushing harder throughout the industry to improve the standard of written communications.'

At Marlins, Ms Logie explains, she and her colleagues provide various types of short-course training for maritime professionals — some of whom are in senior roles. 'They are experts in their field, and often their English language skills are very good, at least when it comes to speaking, listening and reading. But we have found that their writing skills don't always match up to their other abilities, which can suddenly prove to be a problem when they are promoted into a position where they have to produce more written documentation.'

An example of this is when senior officers move ashore to become superintendents or take up other roles in which they need to write technical reports.

'It can prove a challenge for native speakers of English just as much as for non-natives,' Ms Logie points out, 'and many people really appreciate the opportunity to take a course focussing on their writing skills for perhaps the first time since they were at school.'

A good way to improve writing skills is to apply the principles of Plain English, she says. This doesn't involve learning a rigorous system of simplification and standardisation such as STE — instead, it's an opportunity to reconsider the clarity of your own writing and how your words come across to others. On a Marlins report-writing course, maritime professionals are taught the following tips:

- Ensure you write with the reader in mind. Before you write, think about what the reader knows already and what you need to explain.
- Adapt your style to what you are writing. The block capitals used in telex can offend readers if used in emails; overly formal language used in instructions can be confusing; a casual style is not suited to some cultures. Aim to be neutral.
- Plan what you want to say before you write.
- Use short sentences, simple words.
- Look at examples of the passive form — do you need to use it? If you are not sure, try to rewrite the sentence using the active form and check how this simple change can give your writing instant impact.
- Place important information first. In the first part of the sentence; in the first paragraph.
- Grammar, spelling and punctuation matter — mistakes can alter your meaning and give a poor impression.
- Always check your writing before you finish.

These are based on principles developed by the Plain English Campaign, which has worked for over 30 years to persuade British workplaces to improve the clarity of their written communications (and which also offers courses to help workers brush up their writing skills).

'Plain English' doesn't mean 'dumbing down', stresses the Campaign — writers are encouraged to find the right style for the particular document, and to write more elegantly.

Course participants at both Marlins and the Plain English Campaign study real-life examples of writing from their own field of expertise, and are often very pleased to see how much these texts can be improved by applying Plain English principles.

The following extracts, supplied by Marlins, are from a vessel inspection report and a company Safety Management System, and they highlight particular language issues often observed by Marlins tutors. Under each one Catherine Logie explains how we can use Plain English principles to analyse and improve the text:

WBMP and SOPEP were class endorsed however the generic company WBMP requires to be populated with information from the Class approved WBMP. Similarly, the EGP, VGS and SEEMP require data to be entered into them.

CL: The use of many abbreviations assumes the reader is familiar with all the terms. Consider your reader's knowledge: do you need to write the term in full the first time it is presented?

> "Consider the types of writing your job requires of you"

Garbage was observed to have been allowed to accumulate excessively by the previous crew.

CL: Use of the passive form makes the sentence too long and complicated. 'Excessively' could be replaced by 'too much' which is simpler, more factual and gives better emphasis, e.g. 'The previous crew allowed too much garbage to accumulate.'

Emergent from the familiarisation it was decided to renew the instructions for emergency steering, and to stencil signage to prevent critical valves from being kept shut inadvertently.

CL: One long sentence which can be split into two short sentences. The choice of words can be simplified and the meaning made more accurate. 'Inadvertently' could be simplified. Signs do not prevent valves from opening or closing, people do. Signs can only warn people so this could be rephrased as: 'After the familiarisation, the (who?) decided to renew the instructions for emergency steering. (He) also stencilled signs warning that critical valves must not be shut accidentally.'

Doors required to be self-closing are not to be fitted with hold back hooks.

CL: Although this sentence is short, it contains two passive forms, which makes it complex. The reader has to read to the end to get the important point. The reader also has to understand that 'self-closing' and 'hold back' describe a type of door and a type of hook. This could be rephrased more effectively as an instruction: 'Hooks must not be fitted to hold back self-closing doors.' Or 'Do not fit hooks to hold back self-closing doors.'

The importance of careful span calibration cannot be over emphasised as the gas detection or analysing equipment will only give accurate readings if calibration is carried out strictly in compliance with the manufacturer's instructions and using the correct calibration gases.

CL: The language here is formal and the sentence is three lines long. Given that this is a critical safety message, perhaps it would be more effective to use 'you' to address the reader in the active form. E.g. 'Careful span calibration is essential for accurate readings. You must follow the manufacturer's instructions exactly when using gas detectors and analysing equipment. You must also use the correct calibration gases.' The repetition of 'you must' is not elegant but it is emphatic.

Some people reading this article might be thinking, 'Hmm, nouns, verbs, actives, passives — that stuff isn't really for me.' But these are just the tools by which we can all educate ourselves to do a better job. In the shipping industry, writing well isn't just a courtesy to colleagues; it's a way to get across information that could save lives.

'Consider the types of writing your job requires of you' adds Ms Logie: 'emails, SMS messages, meeting notes, reports, checklists, forms; perhaps you also need to write formal documentation including legal contracts, proposals and presentations. People at all levels of the shipping industry rely on information exchanged via writing, yet writing skills training seems rare in shipping companies employing seafarers and shore based staff.'

Whether we go as far as developing a form of Standard Technical English for marine engineering, or simply try to improve our written documentation on a day-to-day basis, we can all join the effort to communicate better within our industry. Take a writing course if you can get a place on one, or just follow the tips in this article — everyone can do their bit to achieve the IMO goal of clear and effective communications, and the sea will be a safer place for it.