

Careful how you say that!

Why it's crucial to use Simplified Technical English for technical documentation

Maria MacDonald explains why it pays to choose your words carefully when creating product and maintenance documentation. A qualified linguist with over 30 years' experience in technical translation and over a decade as a trainer of technical authors and engineers in Simplified Technical English (STE), Maria is the UK's National Coordinator for STE and a member of the STE Maintenance Group for the AeroSpace and Defence Industries Association of Europe (ASD). She provides courses in STE as part of the UK Council for Electronic Business (UKCeB) a non-profit organisation whose mission is to transform secure information sharing for through life collaboration in defence acquisition and support.

The majority of the lifetime of an aircraft is spent flying and being maintained. So, after the aeronautical designers, engineers and constructors have done their job, the maintenance crews take over, keeping aircraft reliably airborne over many years. Key to lifetime maintenance is the technical documentation in the form of maintenance manuals, instructions, service bulletins, warnings, cautions and the like. The international language for such documentation is English.

However, it is crucial that technical documentation should be accurate, unambiguous and intelligible, particularly to users for whom English is a second language. To avoid ambiguity, a specialised "controlled" STE language is necessary, with a much reduced subset of words from the 500,000-or-so that are in the full English lexicon, one that dwarfs that of most other world languages.

The ASD-STE100 is the "international specification for the preparation of maintenance documentation in a controlled language". It was initially developed by the European Association of Aerospace Industries (AECMA) in conjunction with the Aerospace Industries Association of America (AIA) to standardize the readability of maintenance documentation in the aircraft industry. This specification is the industry standard and the basis for Simplified Technical English (STE). It is widely used across other manufacturing sectors such as automotive, rail and marine.



The principle for STE is of one word for one function, procedure or object with a set of Rules to help the writing process and explanations of how to use Keywords and Approved Examples. Let's compare some examples of **Non-STE** and STE sentences:

- Non-STE:** *If unfavourable meteorological conditions are being forecast, it is essential for the ship to be moored securely*

STE: **If bad weather is possible, moor the ship safely**
- Non-STE:** *At no time during the folding operation should the blade be allowed to "take charge"*

STE: **Control the blade fully during the folding operation.**

- **Non-STE:** *The temperature value should be checked by the operator to ensure it gets to 10 degrees.*

STE: **Make sure that the temperature decreases/increases to 10 degrees.**

These examples indicate that STE is a way of writing based on a combination of simpler sentence structure using the active voice and precision in use of a 'controlled' vocabulary that avoids unambiguous wording and phrasing. However, native English speakers sometimes need convincing of the perils of using everyday language for documentation.

What difference does it make using STE? Liability in the event of accidents and damage resulting from faulty or inadequate maintenance is a potentially very serious issue for both individuals and organisations. Claims can arise due to inadequate, unclear or inaccurate product and maintenance information. Producing and updating documentation to the STE standards will minimise the chances of human errors in both manufacture and maintenance and thereby prevent harm and avoid damaging reputational and financial costs. Further benefits are that STE facilitates reusability and data exchange that saves time and costs.

For more information about STE, including training courses, visit www.ukceb.org and for details about the ASD-STE100 Specification visit www.asd-ste100.org.