"A day in the life of the S-Series"

ASD-STE100 - International specification for preparation of technical documentation in a controlled language

Simplified Technical English

Presenter Name: Stefano Tedeschi
Title: General Manager
Organization: ISSELNORD

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ASD-STE100 (STE) - Simplified Technical English

International specification for preparation of technical documentation in a controlled language

The specification is available at no cost www.asd-ste100.org

ASD is the owner of the specification
Basic principle of STE

STE provides a set of writing rules and a dictionary of controlled vocabulary.

The main purpose of STE is to make technical texts easy to understand by all readers.

STE is an adaptable and flexible resource for writing accuracy.

STE supports the other ILS specifications (in particular S1000D) as a language tool for effective technical communication.

The STE controlled general vocabulary has sufficient words to write any technical sentence.

In addition to this general vocabulary, STE allows the use of unrestricted words which are defined as ‘technical names’ and ‘technical verbs’.
Purpose of the presentation

- Raise awareness, especially for Technical Writers, that STE exists
- Explain the reasons why this ‘controlled language’ has been formed the way it has
- Explain the STE basic principles, rules and structure
- Explain why a STE document uses restricted grammar rules / wording and differs from a document written in “everyday English”
- Give information on where STE material could be obtained from
- Give information about STE certified training
In the late 1970s, the Association of European Airlines (AEA) asked the European Association of Aerospace Industries (AECMA) to investigate the readability of maintenance documentation in the civil aircraft industry and find a solution to standardize the language used to write such documentation.

AECMA asked the Aerospace Industries Association (AIA) of America to assist in this project. Two project groups from AECMA and AIA were formed.

The two project groups explored the existing controlled languages and researched texts in maintenance manuals.

The AECMA Simplified English Working Group was founded and the AECMA Simplified English Project started in 1983.

The product of this effort was the AECMA Simplified English Guide (first release in 1986) which at subsequent stage (2005) became the ASD Simplified Technical English Specification.
Why a controlled language for aviation?
The increasing complexity of air vehicles
The increasing complexity of documentation and data

- 100 pages: One manual in one volume
- 1000 pages
- 20000 pages
- 250000 pages
- 500000 pages: The largest in up to 30 volumes

Timeline:
- 1910
- 1930
- 1950
- 1970
- 1990
- 2010

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The increasing number of readers (the users) who are non-native English speakers

- Non-English Speaking: 80%
- English Speaking: 20%
The information / data that must be:

1. ACCURATE = conforming to a standard with total accuracy
2. COMPLETE = having all necessary information
3. RELEVANT = having connection with the subject
4. CONCISE = express much in few words
5. CONVINCING = causing to believe the truth
6. MEANINGFUL = having a meaning for the purpose
7. UNAMBIGUOUS = causing no doubts and leading to only one conclusion
A standard became necessary
A standard having

small number of words
words with defined meanings
words with defined parts of speech
a simplified structure

for the maximum benefit of the users!
The ASD-STE100 specification
How it is used

Part 1: Writing rules
(65 rules in 9 Sections)
Part 2: Dictionary
(869 approved words)

Latest issue is 6 – January 2013
PART 1 – STE primary writing rules

The **basic principle** of STE is to keep texts as **simple** and **readable** as possible

- Choose the words from:
  - Approved words in the Dictionary (controlled)
  - Technical Names (19 categories, not controlled, not listed in the Dictionary).
  - Technical Verbs (4 categories, not controlled, not listed in the Dictionary).
- Use the approved words only as the part of speech given in the Dictionary.
- Keep sentences short (20 words maximum for procedures, 25 for descriptive text).
- Use the active voice.
- Do not write more than three nouns together.
- Whenever appropriate, put the article before nouns.
STE primary rules

- Make the instructions as clear as possible.
- Use only the form of verbs that are listed in the dictionary.
- Do not use the “-ing” form of a verb unless it is a part of a technical name.
- Keep to one topic per sentence.
- Use the vertical layout for complex text.
- Write only one instruction per sentence.
- In an instruction, use the imperative “command” form.
- Write only one topic in each paragraph.
- Do not write more than 6 sentences in each paragraph.
- Start a warning or a caution with a simple and clear command.
- Identify your command correctly as a warning or a caution.
- Write notes so that you give information, not commands.
- Use a different construction to rewrite sentences when a word-for-word replacement is not sufficient.
## PART 2 - Dictionary

<table>
<thead>
<tr>
<th>APPROVED KEYWORD</th>
<th>Approved meaning/ALTERNATIVE</th>
<th>APPROVED EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INJURY (n)</td>
<td>Damage to a person</td>
<td>BEND THE ENDS OF THE LOCKING WIRE TO PREVENT INJURY.</td>
</tr>
<tr>
<td>INNER (adj)</td>
<td>Nearer to the center (TN) of an object</td>
<td>THE INNER SURFACE OF THE PART IS BLACK.</td>
</tr>
<tr>
<td>inoperative (adj)</td>
<td>OFF, NOT OPERATE (v)</td>
<td>MAKE SURE THAT THE SYSTEM IS OFF BEFORE YOU DRAIN THE FUEL.</td>
</tr>
<tr>
<td>Not approved Keyword</td>
<td>Suggested Alternative</td>
<td>MAKE SURE THAT THE DEMISTING SYSTEM DOES NOT OPERATE.</td>
</tr>
</tbody>
</table>

Not approved

Make sure the system is inoperative before you drain the fuel.

Ensure demisting system is inoperative.
Examples of rewriting

If damage has been noted, return the engine to the repair shop with details of rectifications required.

If you find damage, send the engine back to the repair shop with instructions for the necessary repairs.

If there is damage, send the engine back....

When securing mainshaft in clamps do not damage protective finish on mainshaft.

When you attach the mainshaft to the clamps, do not cause damage to the protective layer on the mainshaft.

When you hold the mainshaft in the clamps, do not cause damage to the protective layer on the mainshaft.
Examples of rewriting

Position a gasket on the right-hand outlet of the diffuser case; locate the tube, together with the support bracket for the inlet tube of the bearing air cooler, to the outlet. Secure tube and bracket to the outlet with the four bolts; torque-tighten bolts to 4 Nm.

1. Put a gasket on the right outlet of the diffuser case.

2. Put the tube, and the support bracket for the inlet tube of the bearing air cooler, in the outlet.

3. Attach the tube and the bracket to the outlet with the four bolts.

4. Torque each of the four bolts to 4 Nm.
The Simplified Technical English Maintenance Group (STEMG)

STE is maintained by the ASD STEMG, a non-profit group, consisting of representatives from ASD member countries and non-ASD member countries.

The STEMG is a well balanced group of professionals having technical and linguistic backgrounds of experience.

- Keeps the Specification up-to-date
- Processes change requests
- Reports to the ASD PSG
- Provides advice to users
- Controls the master file
- Promotes ASD STE in general

The STEMG is not connected or affiliated with any commercial enterprise.
The STEMG current membership
How you learn to use STE

Author’s side

Prerequisites

- Good writing skills
- Good command of written English
- Good technical know-how and knowledge of the matter being treated

Steps

- Careful study of the specification (writing rules)
- Writing practices (necessary to master the controlled vocabulary)
How you learn to use STE

Author’s side

Training

- Members of the STEMG are authorized trainers (traditional classrooms)
- In November 2013, ASD and the International Telematic University UNINETTUNO, Rome, signed a Memorandum of Understanding for certified STE training (on line platform)

Authoring tools

- Software products and authoring tools (like syntax and grammar checkers) that support STE are available on the market. Software tools will not think in author’s place and will not write STE texts for them!
- ASD and the STEMG do not endorse authoring tools

Users do not necessarily have to learn STE. They simply should receive a text that is easy to read, and perfectly understandable
Training opportunity

Certified training (officially recognized by ASD) based on a web online platform is available worldwide at UNINETTUNO University.

UNINETTUNO is the authorized ASD Training Center for ASD-STE100

Rue Montoyer 10, Brussels, Belgium

Useful links:
ASD www.asd-europe.org
ASD-STAN www.asd-stan.org
ASD STEMG www.asd-ste100.org

5 course sessions have been completed in 2015 with students from Japan, USA, UK, India, Sweden, Germany, France, Mexico, Spain, Italy, and Brazil.
How to prepare a document in STE

- There are no fixed rule or schemes
- Skill and competence of the author is a key factor
- The STE author should be able to:
  - Write a new text directly in STE
  - Convert existing texts from standard English into STE
- The author MUST always have the reader in mind (!)
- A familiarization training is recommended
- Authoring tools are also helpful but the author MUST always have the last word on its text
The role of STE in communication

- STE gives a common code to be shared among people
- The STE vocabulary is restricted to 879 approved words
- STE shows you how to use the approved words
- Each word has a defined meaning
- Each word has a defined part of speech
- STE gives the rules that help you write clearly
- STE helps to remove language problems where English is not the native language
- STE helps the translation of English texts into other languages
- STE helps the Machine Translation process

"With STE we may, at last, be on the threshold of making English logical and tidy."
(The Times)
A worldwide success

More than 3000 copies of Issue 6 have been distributed in 79 Nations since the January 2013 release

- 42% within Aerospace and Defense and 58% outside it
- More than 50 Airlines requested copies
- More than 200 copies requested by Universities and Academic Centers worldwide
- Leading companies in various sectors of industries
More information?

Please visit: 
www.asd-ste100.org

Please contact: 
info@asd-ste100.org

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