Short Course
on
Effective Maintenance Communication

The fundamental function of communication is to deliver a message from one human being to another. Hence, maintenance communication is no exception. In all aspects of maintenance process, communication also fulfills a secondary role as an enabler that makes it possible to accomplish a maintenance task. Based on examination of accident investigations and incident reports, in aviation, military, oil, manufacturing and other industries it is possible to conclude the a significant proportion of them are caused by maintenance induced faults and errors. Analysis of maintenance processes clearly shown that ineffective communication between system designers and maintenance personnel, through maintenance documentation, is well recognized contributor to the occurrence of faulty maintenance task, which in turn could have a significant impact on reliability, availability, safety, cost and effectiveness of a system.

Simplified Technical English (ASD-STE100)

Although English is the official language of aviation industries, there are many forms of English according to the different nationalities of technical writers and users. For that reason, in the late 1970s, the Association of European Airlines (AEA) asked the European Association of Aerospace Industries (AECMA) to develop a "simplified" form of technical English suitable for maintenance documentation. ASD-STE100 (STE) was initially used only in commercial aviation. Then, it became also a requirement for defense projects, including Land and Sea vehicles. Today, primary texts of maintenance manuals and Service Bulletins are mostly written in STE.

STE was first released in 1986 as a guide identified as AECMA Simplified English. In 2004, AECMA became ASD, "The AeroSpace and Defence Industries Association of Europe" and the Simplified English guide became an official Specification, ASD-STE100, with the word "technical" added to its name.

On civil applications, since 1987, STE is a requirement of the ATA Specification i2200 (formerly known as ATA Specification 100).

On many military applications, STE is a requirement of the S1000D Specification, which has been expanded to other domains (Land and Sea Vehicles). S1000D has been also selected as the standard for the Technical Publications on two of the most recent and important civil projects, the Airbus A350 and the Boeing 787.

In addition, the European Defence Standards Reference (EDSTAR) recommends STE as one of the best practices standard for writing technical documentation to be applied for defense contracting by all 26 EDA (European Defence Agency) participating member states.

Today, the success of STE is such that other industries want to use it beyond its intended purpose of maintenance documentation and outside the Aerospace and Defense domains.

STE interest is also growing within the Academic world (Engineering and Language). STE can finally become a help to Machine Translation processes in multi-language projects.

What is ASD-STE100?

STE is a "controlled" language that uses fewer words with specific meanings and parts of speech by means of simplified grammatical structures with maximum benefit to the reader.

Complex technical instructions can be misunderstood and misunderstandings can lead to accidents. STE makes technical texts easy to understand by all readers and can be regarded as an important and valuable resource for technical writing to simplify the correct understanding of the maintenance instructions by the operators, remove linguistic barriers and reduce Human Factors risks.

Why learning ASD-STE100?

STE is not a "simplified version" of English and its purpose is not to diminish the English language or grammar. The correct use of STE assumes a high standard of professionalism on the writer's side and a good command of written English.

The MIRCE Akademy, in cooperation with Secondo Mona, is very pleased to offer the opportunity of learning the basic philosophy and principles of STE. The presenter is the current Chair of the ASD Simplified Technical English Maintenance Group (STEMG) and he is supported by many years of experience and involvement in STE, since the very beginning of the Project.

The Course

The main objective of the course is to provide in-depth knowledge of STE as a mean of communicating technical data. By using the STE writing rules and the dictionary the participants will be able to understand the principles and objectives of this controlled language and appreciate it as a valuable instrument to effective communication. If the participants are technical authors or revivers, they will be able to write clear and easily understandable texts or to proficiently review them.

Who should attend

The course is specially addressed to participants who:

- are competent and experienced technical authors or text reviewers
- wish to learn the principles of this controlled language to implement good and effective communication in general, even outside the maintenance domain
- are interested in controlled languages in general and wish to expand their knowledge by learning the particular and unique features of STE

The participants should have a sufficient knowledge of English to understand the tutorials given in English.

The Program

First day:

Opening remarks by Dr Knezevic, MIRCE Akademy

System Operational Effectiveness
Maintenance induced failures, types and categories
Impact of Maintenance Communication on System Effectiveness

Introduction to ASD-STE100

What is Simplified Technical English?
Why do we need a controlled language? Other controlled languages
History, background and philosophy of STE
Who uses STE? Is it only for aviation and maintenance?
The ASD-STE100 Specification: Part 1 Writing Rules
Overall overview of the Writing Rules
Part 2 Dictionary
How to use the dictionary
Detailed tutorial of the Writing Rules
Section 1 - Words (approved words, Technical Names, Technical Verbs, Part of Speech given)
Section 2 - Noun Phrases (noun clusters, articles and demonstrative adjective)

Second day

Section 3 - Verbs (forms and tenses, active and passive voice)
Section 4 - Sentences (short and one topic sentences, tabular layout, connecting words)
Section 5 - Procedures (sentence length, verbs)
Section 6 - Descriptive Writing (sentence length, paragraphs)
Section 7 - Warnings, Cautions and Notes
Section 8 - Punctuation and Word Count (punctuation marks, parentheses)
Section 9 - Writing Practices (different constructions, word combination, dictionary)
Practical exercises will be proposed after the tutorial of each section

Third day

Final review of the Specification
Practical texts (also proposed by the participants)
Final Test and its correction
Question time, final discussion and course assessment

Closing remarks by Dr Knezevic, MIRCE Akademy

"Probability of maintenance induced failure, due to ineffective communication, during execution of each Maintenance Task is greater then zero."

Certificate Ceremony

Each participant will receive the Certificate of Attendance

Course Materials provided to participants

Each participant will received the following course material:
A copy of the ASD-STE100 Specification (PDF File) for personal use
Course material (syllabus, slides, supplementary notes, exercises, text examples, etc.);
Certificate of Attendance

Presenter:

Orlando Chiarello,
Chairman of the ASD STE Maintenance Group (STEMG),
Honorary Fellow of the MIRCE Akademy,
STE National Coordinator for AIAD - Italy
Product Support Manager, SECONDO MONA S.p.A.
Somma Lombardo (VA), Italy
www.secondomona.com

Venue:

Woodbury Park Hotel, Golf and Country Club, 8 miles from Exeter. Communication between Exeter and other parts of the United Kingdom are excellent.

By road, the M5 motorway links Exeter to London, the Midlands, Scotland and Wales. Regular rapid coaches run services to and from London and Heathrow Airport.

By rail, a regular fast service is available to and from Exeter (St David's Station) and London (Paddington or Waterloo Station, both connected o Euro Star).

By air, Exeter Airport offers regular flights to many British and Continental destinations and is situated near to Woodbury Park. Travel between Exeter and Woodbury normally requires a car or taxi.

Participants are responsible for the arrangement and payment of their own travel and accommodation. Those wishing to take advantage of preferential room rates should contact Woodbury Park Hotel. For reservations, quote 'MIRCE'.
Phone: 01395 233 382, fax; 01395 233 384 web: www.woodburypark.co.uk, email: reception1@woodvurypark.co.uk, Woodbury Park Hotel, Golf and Country Club, Woodbury, Exeter, EX5 1JJ, UK
A list of alternative accommodation in other hotels and guesthouses in the area of the course venue is available from MIRCE Akademy on request.

Dates: 13 – 15, March 2012 and 11 – 13 September 2012

Time: 09.00 – 17.00, Daily

Cost: £ 950.00 (tuition, course material, lunches, light refreshments and certificate) +VAT

***Booking*:** Please complete a Booking Form for each participant and return it to MIRCE Akademy – available to download at www.mirceakademy.com under heading Communication and Training.