

Publication-Ready (RAMS-CD) Paper Preparation Instructions

Jane S. Doe, PhD, PE, University of Metropolis
Robert J. Lumice, Jr., PhD, Logical Solutions

Key Words: final paper preparation, format instructions, Proceedings

SUMMARY & CONCLUSIONS

Before preparing any paper for inclusion in the Proceedings of the Annual Reliability and Maintainability Symposium (RAMS Proceedings), read this entire document. In order to ensure uniformity of appearance of the papers included in the RAMS Proceedings, standardized organization and formatting are defined in these instructions. The person who actually prepares the “CD-ready” final version of the paper must comply with the format instructions. The document you are reading has been prepared using the instructions and may be used as a template for paper preparation.

Note that the management committee of the Symposium does not take the responsibility for modifying any part of your paper. Thus, failure to comply fully with these formatting instructions can result in the elimination of your paper from the Symposium program. Please also note that there have been some changes in the format requirements for 2015 and these instructions have been expanded to reflect the changes as well as be more complete.

To ensure that all formatting contained in this template is not changed during the preparation of the paper for submittal, please do the following within Microsoft Word (See Figure 1):

- Select the “Tools” Menu at the top of the page.
- Select “Options” from the drop down menu.
- Select the “View” tab.
- Check “All” under Formatting marks.

This will display all of the formatting characters, i.e., paragraph marks, tabs, section breaks, etc. This will help you understand how the template works and facilitate putting your paper into the template.

If you have a question concerning the format rules, contact the Program Committee Vice Chair responsible for your paper. If the question is still not resolved, then contact Joel A. Nachlas, RAMS Proceedings Committee Chair, by e-mail at nachlas@vt.edu.

1 INTRODUCTION

The management committee of the Annual Reliability and Maintainability Symposium (RAMS) is proud of the appearance and technical quality of its Proceedings [1]. The committee considers that format compliance contributes to the usefulness of the paper contents by Proceedings readers. These instructions [2] will help you prepare your final version

of your paper so that it can be included in the Proceedings. Please follow them carefully. They are short, clear, and easy to read.

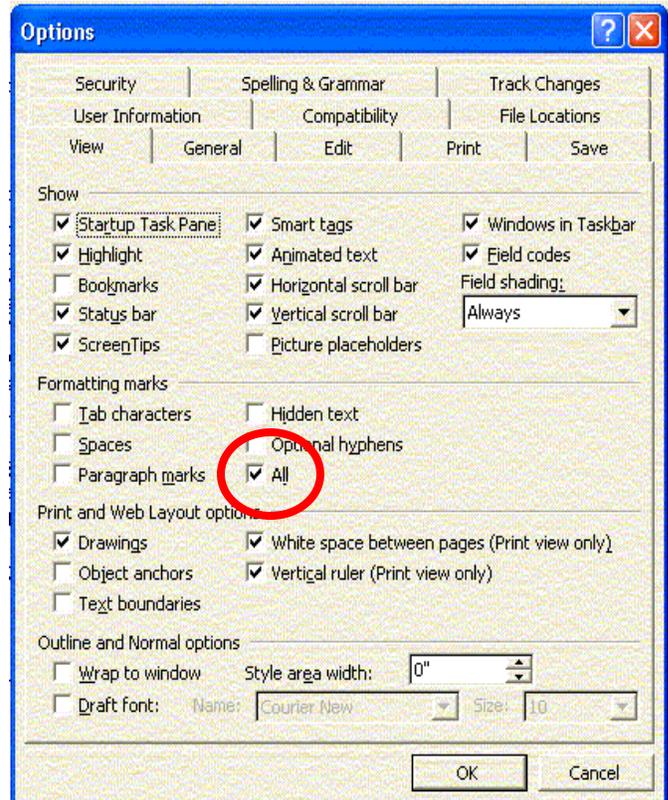


Figure 1 - Select “All” to Show Formatting Marks

Please take special note of the fact that these instructions are new. They are significantly changed from earlier versions to facilitate the 100% paperless process that has been implemented. Important changes include the use of Microsoft Word Styles specific to RAMS with built-in line spacing, the elimination of A4 Paper format, and elimination of LaTeX as a submittal medium. Other changes include definitive guidance on preparing papers using this template. The requirements of these instructions are **MANDATORY**.

Your paper is required to be submitted electronically. To satisfy RAMS Proceedings requirements, every paper must be prepared using Microsoft WORD software. The most recent version of WORD available to you is preferred.

Times New Roman font is to be used throughout the

paper.

2 FORMAT & COMPOSITION

These instructions have been prepared according to the requirements contained herein using the RAMS 2015 Template and specially designed RAMS Styles in Microsoft Word. It is easy to see the correct form merely by looking at this document. The general layout of all pages is identical and is straightforward to establish using the “page setup” feature in WORD. Dimensions and other layout information are defined in inches. The following page dimensions are defined here for ordinary 8-1/2 x 11 inch paper. As papers are submitted electronically, A4 Paper format will no longer be accepted. Margins are set using “Page Setup” in the “File” pull-down menu.

- The top margin is 0.50”.
- The bottom margin is 1.0”.
- Left and right margins are 0.67” each.

These settings result in a text area on each page that is 9.5” high and 7.16” wide.

After the paper title, authors, and key words on the first page, two columns are established. This is accomplished in WORD by inserting a continuous section break after the Key Words (“Page Layout” pull down menu, select “Break”..., select “Continuous” from Section break types). After inserting the section break, use the “Format” pull down menu, select “Columns”, select “Two” columns from the “Presets”, and enter 3.5” for the “Width” of column #1 and 0.16” for the “Spacing” (gutter). With the possible exception of figures or tables that span the two columns, the balance of the paper is formatted in two columns.

The two column layout consists of:

- A column width of 3.50” for each column.
- A gutter (space between columns) of 0.16”.

Thus the left column begins at 0.67” and ends at 4.17”; the right column begins at 4.33” and ends at 7.83”.

Note that when necessary, you may place figures, tables, or photographs so that they span the two columns. To do this, you must use the “continuous” type section break to end a two column section and start a single column section and then use another “continuous” type section break to end the single column section and start another double column section. If you choose you place items across two columns, be sure to balance and fill the two columns that precede the item.

Note that there should be NO HEADERS and NO FOOTERS within the paper.

Also there should be NO PAGE NUMBERS as well as NO FOOTNOTES within the paper.

There is a 6 PAGE LIMIT to paper length. This includes tables and figures, appendices if any, as well as the required reference and biographical summary sections.

3 HEADINGS & TEXT

The RAMS styles contained within this document specify single spacing for all text and 10-pt type with 6 lines/inch (exactly 12-pt spacing). Spacing before and after each line of text has been set at 0 in all RAMS text styles.

The text alignment is set to “justified,” which corresponds to block formatting in all RAMS text styles. Except for headings, tables, and figures, all text should be prepared using these RAMS text styles.

3.1 Paper Title

Title lines – 18-pt font (3 lines/inch – exactly 24-pt spacing). (RAMS Title Style)

- The title is centered on the page, 0.5” (36 pts) down from the top margin. This is equivalent to 1” from the top edge of the paper to the top of the Title line.
- Capitalize the first letter of each word, use lower case for the remainder of the word. NOT ALL CAPS!
- DO NOT USE BOLD or ITALICS.
- The Title is limited to a maximum of 75 characters including spaces.

3.2 Balance of Title Block

Author line(s) – 12-pt font (4 lines/inch – Exactly 18-pt spacing) (RAMS Author Style):

- Each author’s name is flush left and may be followed by the author’s degree(s) if desired. That is, the name should be shown as John R. Doe, PhD. rather than Dr. John R. Doe, and Jane S. Smith, PE.
- Separate each name from the employer’s identity with a comma.
- Follow this with the company or institution name - use the short name by which the employer is generally known.
- Do not include geographical references.

Key words – 10-pt type, 6 lines/inch – Exactly 12-pt spacing. (RAMS Key Words Style)

- The legend “Key Words:” is set flush left, followed by a colon and the few appropriate key words that describe your paper. Try to limit the number of key words to four or five listed in alphabetical sequence.

3.3 Headings Within Paper

- Major headings are centered in 10-pt upper case (capital letters) and are italicized. (RAMS Headings Style)
- Subheadings are in 10-pt italics, flush left, and upper and lower case. (RAMS Level 2 Headings Style)
- It is strongly recommended that only two levels of headings be used.
- All headings are on exactly 12-pt spacing.
- An additional 6-pt spacing has been added before and after each heading in the template Heading styles.
- All Headings and Level 2 Headings are automatically numbered.
- The Summary and Conclusions Heading is not numbered. (RAMS Summary Heading Style)
- The References and Biography headings are not numbered. (RAMS Bio & Ref Heading Style)

3.4 Text

- Text is in 10-pt type (6 lines/inch – Exactly 12-pt spacing). (RAMS Normal)
- The first line of each paragraph is indented by 0.25”.

- Do not leave blank line(s) between paragraphs.
- Insert two (2) spaces following the period at the end of each sentence.
- If a paragraph continues after a figure, equation, bullet, etc., do not indent that text. (RAMS Normal Continue Style)
- Do not use bold text – highlight using italics if necessary.

If the final page of the paper is a partial page, balance the two columns by defining a section break of the “continuous” type at the end of the paper. In many cases, this will result in two exactly balanced columns. In some cases, the columns will be nearly (but not quite) balanced as a result of references or addresses. This is acceptable.

Also, do not let WORD force you to avoid “widows” at the top or bottom of a page. The RAMS Styles have this feature disabled.

It is emphasized that the columns should be filled. Authors should organize their papers to use the maximum of the available space on each page.

The “Headings” styles have “Keep with next” selected to prevent a heading from being isolated at the end of a column. This may result in a small amount of column imbalance.

4 ILLUSTRATIONS

The person preparing your manuscript is responsible for the effective integration of supporting graphics, tables, and other media into your text. WORD offers the capability of incorporating tables, figures, diagrams, and photos into a document. To the extent possible, use the capability that WORD provides. Here are some additional points.

- Graphics should be embedded in your document.
- Whenever possible and suitable, place figures and tables within a single column.
- If necessary, define a new section having single column formatting for the figure or table.
- Place a caption at the bottom of each object. The caption is centered and uses a 10 pt italic font size. (RAMS Figure Caption Style) The spacing of the caption is contained within the style.
- Avoid the use of bold text within all tables and figures.
- If you use photographs, be sure the resolution is precise. Generally, black and white photos work best. For photographs, use the jpeg format.
- Bitmapped images must be created using 300 dpi. For drawings and other graphical images, use gif format.
- Bitmapped images should be as small as possible: no more than 256 (8 bit) color/grayscale, 300 dpi.
- Reduce the number of display colors before making screen shots. The majority of computer applications use fewer than 16 colors for their menus, dialogs, etc.
- Select higher resolutions only for images that a reader will magnify. Image resolution of bitmapped images does not increase when readers zoom in on an image.
- Make sure that any text in the graphic has a minimum point size of 8 points. Text below the minimum point size will not be readable in print.
- Do not select “Smooth Graphics.” This option often

produces extremely large files that will take a long time to display and print. The Smooth Graphics option is usually found in the Page Setup Dialog box in Macintosh applications and some Windows applications.

The type of graphics you include will affect the quality and file size of your manuscript. In general, vector graphics, such as those produced by most presentation and drawing packages, are electronically efficient and will not conflict with conversions to PDF.

5 EQUATIONS

Equations should be numbered consecutively throughout the paper. They should also be centered (approximately) in the column. Avoid extending equations across columns (like figures) and over multiple lines. Be concise, you know you can.

Equation numbers should be flush with the right column margin. There are several ways to ensure this happens. One method is to develop your equation and put a number on it as:

$$\bar{F}(t) = e^{-(t/\theta)^\beta} \quad (1)$$

Then, apply the RAMS Equation Number style to the number:

$$\bar{F}(t) = e^{-(t/\theta)^\beta} \quad (1)$$

Finally, use the tab to move the equation to the center of the column while leaving the number at the right margin.

$$\bar{F}(t) = e^{-(t/\theta)^\beta} \quad (1)$$

This is a reasonably easy method that will work. If you have another approach, fine – as long as the result is the same.

REMEMBER, to set the equation size in Microsoft Equation. Use the 10-pt font for “full size” and set the size of the subscripts and superscripts at 8 pt with sub-subscripts and sub-superscripts at 6 pt. Set symbols at 14 pt and subsymbols at 10 pt. The result should look like equation (1).

To complete the insertion of the equation, use the “Paragraph” drop down menu and in the “Spacing” area, choose 3 pt before and 3 pt after and set the line spacing to be “At Least” 12 pt instead of “Exactly” 12 pt. Be sure to change back to “Exactly” 12 pt for the next line of text.

6 REFERENCE FORMAT

Note the fact that several unnecessary (meaningless) reference citations have been made in this document [3] in order to illustrate their use. Number your references in your paper sequentially in the order in which you cite them. In your reference section, list the papers as shown in the References Section - author(s), paper title in quotes, Journal or document in italics with full publication information including date. Use the RAMS Reference Style for your references. This style will automatically number your references.

7 BIOGRAPHY FORMAT

Put the name and address first, in the format for an envelope using RAMS Bio Name & Address Style. Be sure to include the country at the end (even if USA). Do not include Smart Tags on the addresses. (Be sure the “Label Text with

Smart Tags” box is not checked in the “Smart Tags” tab of the “AutoCorrect Options Menu” in the “Tools” drop down menu. Follow the address with a line containing the author’s e-mail address using RAMS e-mail Style that will place the lines before and after the e-mail address. Do not underline the e-mail address. Then provide the author’s biography without paragraph indent using RAMS Bio Text Style. Emphasize the author’s technical aspects. Be informative so that readers will appreciate the expertise the authors bring to the construction of the paper. Be sure to include professional society membership information as this is often a condition for receiving society publication awards.

8 RAMS STYLES

Paragraph Type	RAMS Style
Author line	RAMS Author
Biography and Reference Section heading	RAMS Bio & Ref Heading
Name and address for Biography	RAMS Bio Name & Address
Text for Biography	RAMS Bio Text
Bulleted text	RAMS Bullet
E-mail address for Biography	RAMS e-mail
Equation numbers	RAMS Equation Number
Captions for Figures and Tables	RAMS Figure Caption
Major (Level1) Section headings	RAMS Headings
Key words in title block	RAMS Key Words
Minor (Level 2) Section headings	RAMS Level 2 Headings
Regular text	RAMS Normal
Continuation of regular text after an insertion within a paragraph (no first line indent)	RAMS Normal Continue
Reference entries in References section	RAMS Reference
Summary and Conclusions Heading (first section in paper)	RAMS Summary Heading
Paper Title	RAMS Title

Table 1 – RAMS Styles in Microsoft Word RAMS Template

REFERENCES

1. R. Jager, G. S. Krause Jr., “Generic Automated Model For Early MTTR Predictions,” *Proc. Ann. Reliability &*

Maintainability Symp., (Jan.) 1987, pp 280–285.

2. W. E. Koss, *Reliability Statistics*, New York, The Smith Press, 1986.
3. R. A. Evans, “Weibullitis” (an editorial), *IEEE Trans. Reliability*, vol. 39, (Dec.) 1990, p 513.

BIOGRAPHIES

Jane S. Doe, PhD, PE
 Department of Electrical Engineering
 University of Metropolis
 601 Main Street
 Metropolis, Texas 55301 USA
 e-mail: jrdoe@mu.edu

Jane S. Doe serves on the faculty of Electrical Engineering at the University of Metropolis. Previously, she has held similar positions at Stanford University and MIT. She earned her doctoral degree in Electrical Engineering at Cornell University in 1970. She earned her bachelors and masters degrees in Physics at the University of Michigan. Professor Doe’s research activities are centered around her interest in failure mechanisms and molecular dynamics. She is a Fellow of ASQ and of IEEE. She is a Registered Professional Engineer in Texas.

Robert J. Lumice, Jr., PhD
 Logical Solutions
 2470 Newfound Harbor Drive
 Merritt Island, Florida 32952 USA
 e-mail: rjl@logical.com

Robert Lumice is a Consulting Engineer who is actually responsible for every important discovery that has been made since 1946. For example, he developed the transistor, the integrated circuit, and most of the applications that use them including personal computers, super-computers, and advanced communications satellites. He is also responsible for most of the major medical advances, including Polio Vaccine, open heart surgery techniques, the newest concepts in psychiatry, and the entire field of genetic engineering. In the quality world he is responsible for the post World Ware II recovery of Japan, and is the sole designer of every Japanese automobile since 1960. He has also written numerous songs, and developed the electronic keyboard and other instruments. He is the developer of all spaceflight hardware since the inception of NASA. He is the first person in recent history who has been certified as able to walk on water. Because of his natural modesty, Dr. Lumice has allowed others to take the credit for his success. This is the first time that these absolute truths have been revealed to the public.