

SNAME Journals Paper Template*

*Authors MUST adhere to formatting guidelines.

Author name(s): First Name Middle Initial (if desired). Last Name¹ (Membership: M; AM; SM; FL; V)

1. Work Affiliation of author(s), to include name of company or institution and department, etc. as appropriate, e.g. School of Ships, The University of Ships, Washington DC, USA

A short explanatory abstract should be included here. In this document, we describe and provide the formatting guidelines for submissions to SNAME Journals. Please read these instructions carefully, as many frequently asked questions are answered for authors in this document. We recommend downloading this template and inserting your information where applicable. The text of the abstract should be in Times New Roman 10-point italics, full justification, with 11.9 mm (0.5") left and right margins. The Title is mixed case (initial capitals followed by lower case on all words except articles, conjunctions, and prepositions, which should appear entirely in lower case). The Abstract is a brief description of the entire paper, including the scope, the methodology and the key conclusions. It should be no longer than 250 words.

KEY WORDS: For library indexing and on-line searching, list up to seven key words. Please separate the keywords with semicolons. Example: Wire; cable; rope; tension. A list of useful keywords is available on the SNAME website under [Research & Publications / Author Opportunities / Author Resources](#) from the SNAME homepage. Scroll down the page for the list.

NOMENCLATURE

Optional, but papers with multiple equations should include it. Symbols for all variables and parameters should be in italic to be distinguished from words and operators such as sin, cos, exp, etc. In the Nomenclature, symbols should be listed in alphabetical order. First include Roman symbols, then Greek symbols separated by an empty line, and finally the list of acronyms in Roman font also separated by an empty line. When possible, variables and parameters should be made of one symbol, with the exception of nondimensional groups (e.g. *Re*, *Fr*, etc.). If necessary, use a subscript instead of two symbols. If the subscripts are made of more than one letter, use Roman font, otherwise use Italic (for example, F_x and I_{beam}). It is recommended that bold font is reserved for multidimensional variables and parameters such as vectors and arrays. The units of all symbols should be included in squared brackets without using fractions and separated by a space (for example, $[\text{m s}^{-1}]$), while acronyms should not have units and should not be used in equations.

C_x	Aerodynamic force coefficient in the x -direction [-]
D_{ij}	Shear stress tensor [Pa]
\mathbf{F}	Aerodynamic force vector [N,N,N]
F_x	Aerodynamic force in the x -direction [N]
I_{beam}	Area moment of inertia of the beam $[\text{m}^4]$
p	Hydrostatic pressure [Pa]
U_∞	Free stream velocity $[\text{m s}^{-1}]$
τ_x	Skin friction in the x -direction [Pa]
ρ	Fluid density $[\text{kg m}^{-3}]$

CFD	Computational Fluid Dynamics
EFD	Experimental Fluid Dynamics

INTRODUCTION

The body of the paper begins with the Introduction. The Introduction should include a comprehensive critical review of the relevant literature to highlight the lack of knowledge that the paper aims to fill. The literature review should be followed by an explicit statement the purpose of the paper, or author's aim, so that the reader will have a clear concept of the objective(s). Following the Introduction, text should be organized into logical parts or sections that describe the problem, the means of solution, technical data or substantiation, and other information necessary to qualify properly the results presented and conclusions drawn. Do not designate sections by number. Acknowledgments (where applicable), References, and Appendices (where applicable) follow the Conclusions.

FORMATTING

Page Size

The page size must be set to Letter (8-1/2" x 11") on "Page Setup" or "Page Layout" on your Word screen homepage. This places all material in a rectangle of 19.19 x 24.00 cm (7.55" x 9.45"), beginning 1.30 cm (0.51") from the top of the page. The left and right margins are set as 1.20 cm (0.47"). The text should be in two 9.15 cm (3.60") columns (Newspaper style) with a .89 cm (.35") center gutter. A typical paper should not exceed 25 pages.

Text

Text must be single-spaced using Times or Times New Roman 10-point font throughout the paper, except for titles and headings. Read below for specific formatting instructions for titles, section headings, subsection headings, author names, etc. Text in the columns must be fully-justified.

Title of Paper

The paper title, in Times or Times New Roman, bold-faced in 18-point font, should be centered in upper and lower case at the location shown above, and is limited to a maximum of ten words. Two lines may be used.

Author Name(s)

Author names in 12-point **bold** font should consist of first name and middle initial followed by the complete last name in upper and lowercase, left-justified under the title in bold.

SNAME Membership Status

Use upper 10-point normal font following each author name. Membership status should be indicated with caps in parentheses that represent the first letter of the member's status, i.e. (M) for Member, (AM) for Associate Member, (SM) for Student Member; (FL) for Fellow; and (V) for Visitor (i.e. Non-member).

Section and Subsection Heads

Headings and subheadings appear throughout the text to divide the subject matter into logical parts and to emphasize major elements and considerations. Do not number sections. When necessary, use Column Break to avoid finishing a page with a heading.

SECTION HEADINGS

These should be flush left in all UPPERCASE (capital) letters, as shown, normal 12-point font.

Subsection Headings

These should be bold 12-point font, flush left in upper and lowercase, as shown. As in usual title format, words like *the* or *a* are not capitalized unless they are the first words of the header.

Sub-subsection Headings should be treated as a bold paragraph lead-in. Sub-subsection heads should be 10-point, *bold-italic*, upper and lowercase, and the paragraph full-justified.

TABLES, FIGURES AND EQUATIONS

Number tables, figures and equations consecutively and use their number when referring to them (e.g. Table 1, Fig. 1, Eq. 1 or Tables 1,3-6, Figs. 1,3-6, Eqs. 1,3-6) in the text. Use the abbreviation Fig(s). and Eq(s). followed by the figure/equation number(s) unless it is the first word of the phrase, as in the following example. Figure 1 appears before Fig. 2 and the other figures. Use a non-breaking space between the word Table(s)/Figure(s)/Fig(s)/Equation(s)/Eq(s). and the number to avoid the number to appear on a separate line. Each appendix should have individual table/figure/equation numbers, for example, APPENDIX A equations should start at A1, A2, etc.

A caption must be placed above and below the Table and the Figure, respectively. The caption must be left-justified, consisting of an abbreviated number followed by full stop, for example Fig. 1, with a brief title also followed by full stop.

Tables

It is often advantageous to place information in a tabular format as shown below. When necessary, use Column Break to avoid breaking a table across columns.

Table 1. Table captions should be placed above the table, left-justified.

Margins	Left Column	Right Column
Top	0.51" (1.3 cm)	0.51" (1.3 cm)
Left	0.47" (1.2 cm)	4.42" (11.24 cm)
Right	4.07" (10.35 cm)	8.02" (20.39 cm)
Bottom	9.96" (25.3 cm)	9.96" (25.3 cm)*

* SI Units must be used for all weights and measures. If other units are used, the equivalent SI Unit should be included as shown above.

Equations

Equations must be included using the command Equation in the tab Insert. Please use punctuations as appropriate together with the equations (see Eqs. 1-2 as examples). Equations should be numbered consecutively using numbers enclosed in parentheses. The equation number can be added including # followed by the equation number between parentheses at the end of the equation. For example, within the Equation environment, typing $a=b,(1)$ and hitting return results in

$$a = b, \quad (1)$$

where the meaning of each symbols such as a and b should be defined in the text before or immediately after, such as here, when they are used for the first time. Another example is as the follow. The drag coefficient, which is defined as

$$C_D = \frac{1.328}{\sqrt{Re_L}}, \quad (2)$$

depends on the Reynolds number, Re_L , based on the ship length L .

Use the Equation environment also in the main text to avoid that the symbols appear with different fronts in the equation and in the text (for example, a vs a , and L vs L). Every symbol must also be included in the Nomenclature at the beginning of the article.

It is possible, but not necessary to force lengthier equations into two-column format. Insert a section break and center the equation on the page, with the equation number tabbed to the right for clarity. It is the responsibility of the author(s) to check equations. Please take care to type accurately and check equation numbers thoroughly. Check again after the document has been converted to PDF for publication or posting online.

Figures and Illustrations

As a general rule, graphics in the printed version of Transactions and symposium proceedings will be depicted in black and white. In digital and online versions, graphics will be portrayed in color wherever possible. Please be aware of the quality of your figures, illustrations, and photos, and take into account the difference between color and grayscale images. Authors should also consider that color blind people would have difficulties in

distinguishing between green and red.

For good legibility, lines, letters and symbols must be of sufficient weight (or darkness), and thickness. The font size must be minimum 8 points and maximum 11 points, and symbols should appear in the precisely identical font type as in the Nomenclature. Avoid using shades or colors so that patterns will read more clearly. Figures should be produced electronically where possible, in .jpg, .gif, or .tif formats.

Place figures/images in the text as close to the reference as possible. Figures may extend across both columns to a maximum width of 190 mm (7.5"). It is preferable that figures fit within columns, but legibility and clarity must also be a consideration. Figures that are line-art should be scanned at 600 dpi, whereas screened figures should be scanned as grayscale at 300 dpi.

Please scan photos at 300 dpi, use the grayscale setting on your scanner, and place the photo into position on your electronic document.

OTHER FORMATTINGS

Citations

Within the text of an article, references are to be cited by last name of author(s) and year of publication. Each reference should include last names of all authors. When the citation is part of the sentence, the citation includes the Author's last name and, between parentheses. For example, Bowman (1988) showed that this is a good citing style. Conversely, when the citation is not part of the sentence, then also the Author's name is within parentheses (Bowman, 1988). Append lower-case letters to the year in cases of ambiguity (Bowman, 1989a). Multiple Authors are treated as Bowman and Skipper (1988) when there are two Authors and, in the case of three or more Authors, we list only the first Author followed by et al. in italic. For example, see Bowman et al. (1988). Multiple citations that are not part of the sentence should be separated by semicolons (Bowman 1989; Skipper 1990).

Last Page

The two columns on the last page should be as close to equal length as possible. This can be achieved by adding a Section Break (Next Page).

Length

A typical paper is between 3000 and 8000 words and includes maximum 10 illustrations.

CONCLUSIONS

A brief summary of your research results should be included in this section toward the end of the paper. This section may include a brief summary of the scope and of the methodology of the article, and a detailed list of conclusions in order of importance.

ACKNOWLEDGEMENTS

Acknowledgements may be made to those individuals or institutions not mentioned elsewhere in the paper who made an

important contribution. Financial contributions from funding bodies should also be stated here. This work received funds from the National Science Foundation, grant no. XXX.

AUTHOR CONTRIBUTIONS

It is possible, but not compulsory, to add a section with the author contribution. For example, A.B. and B.C. carried out the experiment, which was designed by A.B. and E.F, while A.B. and D.E. processed the data. A.B. wrote the first draft of the manuscript, which was reviewed, edited and approved by C.D. D.E. and E.F. E.F. conceived the original idea and led the project.

REFERENCES

In general, follow guidelines as set out in *The Chicago Manual of Style*. References to original (not secondary) sources for cited material are to be listed together at the end of the paper. References should be materials published or online (excluding computer program manuals) accessible to the public. Internal technical reports may be cited only if they are easily accessible to the public or any reader. Private communications should be acknowledged within the text, not referenced, e.g., (Coyle, personal communication).

In the REFERENCES section, list references alphabetically by primary author's name, as in the following examples. Use the author's full name, where available, left justified:

- Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin, 2006.
- Ward, Geoffrey C., and Ken Burns. *The War: An Intimate History, 1941–1945*. New York: Knopf, 2007.
- Abbott, J. "1988 Computer-Aided Wheelhouse Systems." *Journal of Maritime Engineering*, 12:3 (1988): 64-72.
- Tobin, S. and M. Darman. *Elementary Naval Architecture*. New York: McGraw-Hill, 1957.
- Fash, Barbara W. and William L. Fash. "Saving the Maya Past for the Future: Copan's New Sculpture Museum." *Peabody Museum of Archaeology*, 1996, www.peabody.harvard.edu/profiles/default.html (17 September 1999).

Please note that contemporary punctuation style places commas and periods inside quotation marks, and other punctuation marks — e.g. question marks and exclamation points — outside quotation marks.

APPENDIXES

Appendixes may be used to provide descriptions (or more detailing) of apparatus, complex illustrations, and other related material that is not essential to the general presentation of the subject. In a highly mathematical paper, it is advisable to detail the development of equations and formulas in an appendix.

MANUSCRIPT FOR REVIEW

Authors should read the general instructions for submitting papers on the SNAME website under [Research & Publications / Author Opportunities / Publication Policies](#).

FINAL MANUSCRIPT PUBLICATION

The final version of the manuscript must be converted into PDF before submitting it to a SNAME journal. Equations, tables and figures must be checked carefully along with the text after converting to PDF and maintain a copy of the Word file for the technical editor to edit and format as necessary.

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