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The Journal of Navigation Instructions for Contributors

(Version 2018-1, dated May 2018)

The Journal of Navigation is an international journal publishing original work on the latest research developments and historical aspects of navigation on land, at sea and in the air; it also provides a forum for navigators, engineers and academics to raise more controversial topics for discussion.

These Instructions are to be closely followed, and authors will be required to declare that they have read and complied with them in the final stage of the submission process. Failure to follow the Instructions will result in the paper being returned. Authors are to pay particular attention to the quality of written English, formatting and to the length limitations set out below.

1. SUBMISSIONS. All submissions to *The Journal* are to be made via the dedicated website at http://mc.manuscriptcentral.com/nav where authors can register an account. Registration is straightforward, and manuscripts are uploaded directly to the site. All correspondence with respect to the submission, including review results and requests for amendments will be conducted via the site and e-mail, and alternative methods of submission will only be entertained when the author does not have web access. In this case, authors should contact the Editor-in-Chief via the RIN postal address in the front of *The Journal* or via e-mail at journal@rin.org.uk. Microsoft (MS) Word format is preferred for submissions, although Portable Document Format (pdf) will be accepted initially. MS Word format will be required for final production and publication. Non-compatible formats will not be accepted. Authors are responsible for ensuring that all manuscripts (whether original or revised) are accurately typed before final submission. Manuscripts should be submitted in a similar style to previously published papers in *The Journal* and may be returned to the author with a set of these instructions if they are submitted in a form substantially different to this style.

1.1. *Length.* Articles intended for consideration in the 'Main' section of *The Journal* may be up to 6,000 words long. *The Journal* encourages accurate and succinct writing. Articles that exceed this length **will** be returned to the submitting author for shortening unless an extended word count has been pre-negotiated with the Editor-in-Chief. Relaxations of article length will only be considered in exceptional circumstances. Papers should be presented in single column 12-point Times New Roman with 2·54 cm margins. Total submission page length should be no more than 20 sides including Figures and Tables. Figures and Tables must all be clearly legible. For subjects that require significantly higher page counts, two-part papers should be considered but this must be discussed with the Editor-in-Chief in advance of submission. The 'Forum' section exists for the expression

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of opinion, and allows authors to submit material which might not be appropriate for full length papers but which contain ideas worthy of publication and discussion (up to 2,500 words).

1.2. *Figures and Tables.* All Figures should be supplied in an appropriate size and the specified file formats (see further details in Section 4 – Figures). Figures and Tables should be incorporated into the submitted text, so reviewers can see them in context. Separate Figures and Tables may also be uploaded, particularly if high-resolution images are included.

1.3. *Original, Unpublished Material.* Contributions are normally received on the understanding that they comprise original, unpublished material and are not being submitted for publication elsewhere. Corresponding authors will be asked to confirm this and to state whether earlier versions, even those in a less-developed or abbreviated form (e.g., conference proceedings, websites, magazines or other journals, etc.) have been published. Such earlier versions will not necessarily preclude publication in *The Journal* but full details will be required. Papers are peer-reviewed to ensure both accuracy and relevance, and amendments to the submission may thus be required before final acceptance. On acceptance, contributions are subject to editorial amendment, but authors will receive proofs for approval before publication.

1.4. *Capacity Limitations.* There is limited capacity to publish work in *The Journal.* It is entirely possible that work that has been recommended for publication by reviewers will not be published due to space constraints. **Every effort will be made to publish all worthy articles but the Editor-in-Chief reserves the final decision on publication.**

2. PRESENTATION OF MANUSCRIPTS. Manuscripts should conform as closely as possible to *The Journal* style. Previously published papers should be consulted for guidance. Text is to be presented in single column. International Standard Size A4 page size is to be used.

2.1. *Submission Format.* When submitting papers in MS Word (*The Journal's* preferred medium) the following global settings should be applied:

- The spelling language should be set to English (United Kingdom).
- All acronyms, even those considered to be commonplace, should be decoded on first usage e.g., Global Navigation Satellite Systems (GNSS).
- Automatic numbering of paragraphs, Figures, Tables etc., should be switched OFF throughout the paper. Manual numbering (Arabic numerals) should be input instead.
- Automatic linking / hyperlinks within the paper should NOT be used.
- Font should be set to 12-point Times New Roman. Bold font should NOT be used for headings.
- Formatting should be kept as simple as possible, with single line spacing and paragraph spacing (before and after) set to '0'. Indents should NOT be used.
- Text should be fully justified. Tables and Figures should be sequentially numbered from '1' (e.g. Table 1, Table 2; Figure 1, Figure 2 etc.) and centre justified. Each Table caption should be placed above the Table and each Figure caption placed below the Figure.
- All Equations should be numbered sequentially from '(1)'. Equations should ideally be placed in a full-width 2-cell table with borders suppressed, with the mathematical expression centre-aligned within its cell and the Equation number right aligned

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within its cell (see example below – cell borders have been shown here for clarity). **Equations are to be in an editable format and not "picture" formats that has been cut and pasted from another document as this significantly delays typesetting and raises the risk of errors being made in transcription.**

$$T = e^T Q_e^{-1} C_e (C_e^T Q_e^{-1} C_e)^{-1} C_e^T Q_e^{-1} \quad (1)$$

2.2. *Layout of Papers.* The layout of papers should be as follows:

- *Title Block.* The title block should contain a short title (up to 40 characters), subtitle (if desired), authors' names, affiliations and **only** the corresponding author's e-mail address (this e-mail address is particularly important, as it will be used by the typesetters for forwarding proofs of papers accepted for publication). The respective affiliations of co-authors should be clearly indicated by superscript numbering.
- *Abstract.* A self-contained 'Abstract' of up to about 150 words should outline in a single paragraph the aims, scope and conclusions of the paper. See also notes below on the 'Conclusions' section.
- *Keywords.* A maximum of four 'Keywords' are permitted. **These must be the same as selected when submitting the paper to ScholarOne**. Suggestions for new Keywords should be forwarded to the Editor-in-Chief at journal@rin.org.uk.
- *Main Text.* The main body of text should be suitably divided with numbered main paragraphs, with headings in capitals. Related, numbered sub-paragraphs may be used, for which headings (headings in italics, with first letter of each word capitalised) are optional but recommended. Paragraph / sub-paragraph numbering should follow the convention shown in the following example (e.g., 3., 3.1., 3.1.1. etc.).
- *Footnotes.* Footnotes may be used, but their use should be kept to a minimum.
- *Conclusions.* A concise, self-contained 'Conclusions' section should outline the outcome of the paper, its perceived benefits to the wider community and any intentions for further research. The Abstract and Conclusions are of major importance as many busy readers look at these two sections first, to see if the main paper is worth reading. It is thus essential that Abstract and Conclusions do the paper full justice.
- *Acknowledgements.* You may acknowledge individuals or organisations that provided advice, support (non-financial), but *The Journal of Navigation* should NOT be mentioned. Formal financial support and funding should be listed in the following section.
- *Financial support.* Please provide details of the sources of financial support for all authors, including grant numbers. For example, "This work was supported by the Medical research Council (grant number XXXXXXX)". Multiple grant numbers should be separated by a comma and space, and where research was funded by more than one agency the different agencies should be separated by a semi-colon, with "and" before the final funder. Grants held by different authors should be identified as belonging to individual authors by the authors' initials. For example, "This work was supported by the Wellcome Trust (A.B., grant numbers XXXX, YYYY), (C.D., grant number ZZZZ); the Natural Environment Research Council (E.F., grant number FFFF); and the National Institutes of Health (A.B., grant number GGGG), (E.F., grant number HHHH)". Where no specific funding has been provided for research, please provide the following statement: "This research received no specific grant from any funding agency, commercial or not-for-profit sectors."

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- *Conflict of interest.* Please provide details of all known financial, professional and personal relationships with the potential to bias the work. Where no known conflicts of interest exist, please include the following statement: "None."
- *Ethical standards.* Where research involves human and/or animal experimentation, the following statements should be included (as applicable): "The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008." and "The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional guides on the care and use of laboratory animals."
- *References.* The reference end-list should be in alphabetical order of family names of the first author of each reference (see further details at Section 3 – References).
- *Appendices.* Appendices (lettered A., B., etc.) may be used for supporting information which is not appropriate for inclusion in the main text (i.e., descriptive or explanatory passages, supporting equations or proofs etc). Figure, Table and Equation numbering in Appendices should start again from 1, but be prefixed by the Appendix letter (e.g. A1., A2., etc.).
- *Additional Material.* There is currently no facility to publish material "online only" or host video material. This material should not be submitted. It may be hosted elsewhere and referred to by hyperlink and listed appropriately in the Reference list provided it will remain available for at least two years after publication.
- *Copies of Figures and Tables.* A copy of all Figures and Tables should ideally be uploaded to ScholarOne as separate files in their original format (this may bundled in .zip or .rar format for convenience). This helps to speed up the typesetting process for papers selected for publication and can significantly improve the quality of reproduction.

2.3. *Style of Writing.* Authors are urged to write as concisely as possible but not at the expense of clarity. Particular attention should be paid to the correct use of English vocabulary, punctuation and grammar. Papers will be returned if the standard of language is such that the paper is difficult to read.

2.4. *Units, Symbols and Abbreviations.* Units, symbols and abbreviations should conform to the recommendations contained in the Royal Society publication Quantities, Units and Symbols (1975).

2.5. *Experimentation.* Where appropriate, every effort should be made to include real-world experimentation results. Papers with only simulation as verification of concept will be generally judged less favourably than those with extensive experimentation.

3. REFERENCES. The preferred reference system in *The Journal of Navigation* is the Harvard style system. References are hyperlinked in the online version of the paper and so it is essential that they are formatted correctly, so that the hyperlinking may work properly.

3.1. *Reference Citations in the Text.* References should NOT be numbered. Reference citations in the text should give authors' names (no initials) and date e.g., (Kemp, 1998), or (Steele and White, 1996) or for more than two authors (Cole et al., 2007). Specific pages should be added only in the case of direct quotations, e.g., (Kemp, 1998. P. 29). Where the context demands it, the name(s) may be moved out of the brackets e.g., ".... Kemp (1999) states that ...".

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3.2. *Reference End List.* References should NOT be numbered. The reference end-list should be in alphabetical order of family names of the first named author of each reference. Full details should be included, even if the list of authors is extensive in any particular reference. The reference formats should conform to the current *Journal* style, as in the following examples:

- *Example for The Journal of Navigation.*

Rosenkrans, W. A. (1978). Aeronautical Charts. *The Journal of Navigation,* **31**, 39-51.

- *Example for Other Journals.*

Smart, W. M. (1946). On a Problem in Navigation. *Monthly Notices of the Royal Astronomical Society,* **106,** 124-127.

- *Example for Books.*

Skolnik, M. I. (1976). *Radar Systems.* McGraw-Hill, Inc.

- *Example for Websites or Website Access.*

Open Geospatial Consortium. (2011). *OGC Making Location Count*. http://www.opengeospatial.org. Accessed 12 January 2018.

- *Example for Proceedings.*

Helwig, A. W. S., Offermans, G. W. A. and van Willigen, D. (1996). Implementation and Testing of Eurofix in Standard Loran-C Receiver Technology. *Proceedings of the 25th Annual Technical Symposium of the International Loran Association,* San Diego, CA.

- *Other Publications.* Where there is doubt, include all bibliographical details.

4. FIGURES. All graphs, diagrams and other drawings should be referred to as 'Figures', which should be numbered with Arabic numerals, consecutively from '1'.

4.1. *Colour.* Any figures supplied in colour will automatically be published in colour online, but will be printed (hard-copy) in black and white unless accompanied by specific instructions to be printed in colour. There is a charge for hard-copy colour printing (in 2018, the cost was UK£200 for one figure up to a maximum of UK£1000). This charge will be invoiced directly to the author. Authors are reminded that it is their responsibility to ensure that figures supplied in colour are still meaningful when printed in black and white.

4.2. *Size.* All figures should be sized to final publication size (see the latest issue of *The Journal* for the page width) and ideally supplied in the recommended file formats. Following these guidelines will result in high-quality images being reproduced in both the print and the online versions of the journal. Recommended file formats are:

- *Line Artwork.* Format: tif or eps. Colour mode: black and white. Resolution: 1200 dpi.
- *Combination Artwork (Line/Tone).* Format: tif or eps. Colour mode: greyscale. Resolution: 800 dpi.
- *Colour or Black and White Halftone Artwork.* Format: tif. Colour mode: CMYK colour or grayscale. Resolution: 300 dpi or higher.

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- Have you told readers, at the outset, what they might gain by reading your paper?
- Have you used clear, concise, correct English vocabulary, punctuation and grammar?
- Have you made the aim of your work clear?
- Have you explained the significance of your contribution?
- Have you set your work in the appropriate context by giving sufficient background (including relevant references) to your work?
- Have you addressed the questions of novelty, practicality and usefulness?
- Have you identified future developments that may result from your work?
- Have you structured your paper in a clear and logical fashion?
- Are your Figures and Tables appropriate, legible and clearly labelled.

The following sample structure may also be useful:

Abstract
Keywords

1. Introduction - Provide a brief context to the readers, address the problem, identify existing solutions and their limitations (review of state-of-the-art), inform what is hoped to be achieved by your research.
2. Methods - Describe how the problem was studied, include detailed information on methods used (provide sufficient detail to allow your work to be reproduced), refer to previously published solutions, but do not describe them in detail.
3. Results - Be clear and easy to understand, highlight the main findings, underline unexpected findings, visualise the results (include illustrations and figures).
4. Discussion (this section can be combined with Results if needed) - Analyse what the results mean, make the discussion correspond to the results, compare results published by others with your own.
5. Conclusions - Provide a reader with a justification for your work, explain how you advance the present state of knowledge, identify limitations of the presented research, mention envisaged future research on the topic.

References - Always ensure you have fully absorbed material you are referencing and refer to it precisely in the text, avoid excessive self-citations (preferably no more than two self-citations), avoid citations of publications hard to access.

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