

# How to Prepare Manuscript for Transactions of JSASS\*

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This is the manual for how to prepare your paper for Transactions of the Japan Society for Aeronautical and Space Science (JSASS). All the papers should be written by appropriate word processors or TeX with the format specified in this manual. Abstract should be placed here. If the contribution is the one which has already been presented at the JSASS conference, specify name of conference and date by using footnote. The class file “tjsass.cls” can be used for Aerospace Technology Japan, and APISAT special issue by choosing the corresponding option.

**Key Words:** Format Sample, Transactions of JSASS, LaTeX

## Nomenclature

$V$	:	velocity
$X$	:	position
Subscripts		
0	:	initial
f	:	final

## 1. Introduction

These guidelines include complete descriptions of the fonts, spacing, and related information for producing your manuscripts. Please pay extreme attention to keep the original format shown in this file. Authors using LaTeX may use “tjsass.cls” file and sample manuscript (this file) provided by JSASS. But it should be noted that the manuscript should be submitted in PDF format as in Section 5., and that no support for this sample manuscript and the class file is provided by JSASS.

### 1.1. Style

The maximum pages of the submitted manuscripts of paper size of A4 are 15, 15, 4, and 1 for Full Articles, Survey Articles, Research Notes, and Miscellaneous, respectively. Leave top, bottom and side margins of 25, 21 and 17 mm, respectively.

### 1.2. English standard

Manuscripts should be written in clear, grammatically correct English. Authors who are not fluent in English are encouraged to have their manuscript checked by a fluent English speaker or by an editing service prior to submission. If a manuscript is not clear due to poor English, it may be re-

jected without undergoing peer review.

### 1.3. Format

Each manuscript should comprise the sections as outlined in this template file. If the content of the submission has been previously presented at the JSASS conference, specify the name and date of the conference in the footnote below.

## 2. Cover of the Manuscript

### 2.1. Title

The title should be brief and concise (maximum of 20 words), without the use of acronyms or abbreviations. The title should be centered, and in Times 14-point, boldface type. Capitalize the first letter of nouns, pronouns, verbs, adjectives, and adverbs; do not capitalize articles, coordinate conjunctions, or prepositions (unless the title begins with such a word). Leave a blank line after the title. The space between the lines is 17.5 point.

### 2.2. Author name(s)

Provide the full names, with capitalized last name(s), of the author(s). Author names are to be centered beneath the title and printed in Times 10-point, non-boldface type. Only primary contributors should be listed in authors list; others may appear in Acknowledgment.

### 2.3. Affiliation(s)

Affiliations should follow on the line next to the author names. Provide the full names and addresses of institutions (including department, institute and/or university, and city, state/prefecture, zip code and country). When authors belong to different institutions, their respective addresses should be indicated by superscript numbers. Where authors have a new affiliation after the original submission, the names should be given in a footnote and should be indicated by superscript symbols (such as \*, †, ‡ and §). The affiliations are centered, italicized and in Times 8-point, not bold. Leave a blank line after the affiliations. The space between the lines is 10-point.

### 2.4. Key words

Specify three to five key words preferably including at least one keyword selected from the “JSASS Standard Key Words” list, if possible. Key word should be centered, in Times 9-point, not bold. Begin by “Key Words:” (in Times 9-points, boldface type, and 2 letters blank) at the top.

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## 2.5. Abstract

Each full article must be accompanied by a 100- to 200-word abstract that is indented 4 letters, written as a single paragraph, stated in Times 9-point, not bold, flush left. Leave 30 mm in both sides. The space between the lines is 11.5-point. Leave one blank line after the abstract.

It should be a summary and complete in itself. The abstract should express the basic content of the paper in a single paragraph and should include the problem addressed, objectives, approach, main results and findings, and conclusions. Research notes and miscellaneous do not have abstracts.

## 3. Main Text

Type your main text in 10-point Times, single-spaced. All paragraphs should be indented 2 letters. Be sure your text is fully justified. The space between the lines is 12 point.

### 3.1. Major-headings

For example, “**1.**(2 letters blank)**Introduction,**” should be Times 10-point boldface, with the first letter capitalized, flush left, with one blank line from last, leaving one blank line to next. Use a period (“.”) after the heading number, not a colon.

### 3.2. Sub-headings

For example, “**4.4.**(2 letters blank)**Second-order headings**”, should be Times 10-point boldface, initially capitalized, flush left and with no blank line from last.

#### 3.2.1. Sub-sub-headings

For example, “**4.4.1.**(2 letters blank)**Third-order headings**”, should be Times 10-point boldface, initially capitalized, flush left and with no blank line from last.

### 3.3. Nomenclature

A nomenclature section is required for papers containing more than a few symbols; nomenclature definitions should not appear in the text. Nomenclature should be beneath the key words as follows: “Symbol (V, X etc.) - : (colon) - (2 letter blank) - Definitions”. The position of colon is 35 mm from the left end of the page.

Please use standard symbols whenever possible. The symbols are in 10-point and the definitions are in Times 10-point, not bold. Symbols are listed in alphabetical order. Greek symbols must be listed in Greek alphabetical order after English alphabet. Please use standard symbols whenever possible. All symbols need to be defined.

### 3.4. Introduction

The manuscript must start with an Introduction except for Nomenclature – a brief assessment of prior work by others and an explanation of how the manuscript contributes to the field.

### 3.5. Symbols and units

Use standard symbols whenever possible. Mathematical symbols should be italicized. To save space, the solidus (/) must be used for fractions in the text and for simple fractions in equations. The use of metric system of units (SI) is mandatory, except for unavoidable cases.

## 3.6. Equations

The symbols should be in 10-point and centered. The equation numbers should be right flush, as (1).

$$A + B = C, \quad (1)$$

and

$$D + E = F. \quad (2)$$

Other example equations are shown in the following. One is the definition of  $St_n$

$$St_n = \frac{f_n L}{U_\infty} = \frac{n}{\left[ \beta M_\infty \cdot \left( 1 + \frac{\gamma - 1}{2} M_\infty^2 \right)^{-1/2} + \frac{1}{K} \right]} \quad n = 1, 2, 3, \dots \quad (3)$$

and another one is differential equation

$$\langle \nabla^2 \phi \rangle_i = \frac{2d}{\lambda n^0} \sum_{j \neq i} \left[ (\phi_j - \phi_i) w(|\mathbf{r}_j - \mathbf{r}_i|) \right], \quad (4)$$

where

$$\lambda = \frac{\sum_{j \neq i} |\mathbf{r}_j - \mathbf{r}_i|^2 w(|\mathbf{r}_j - \mathbf{r}_i|)}{\sum_{j \neq i} w(|\mathbf{r}_j - \mathbf{r}_i|)}. \quad (5)$$

Please use “Eq. (1)”, not “Equation (1)” nor “(1)” in the text.

## 3.7. Tables

Number tables consecutively using Arabic numerals (Table 1, Table 2, etc.). A title should be given to each table. Avoid detailed explanations of the experimental conditions used to obtain the data shown in tables (which should be included in other sections as relevant). An example of a formatted table is provided in Table 1.

Table captions should be 8-point Times and centered. For example: “Table(a letter blank)1.(2 letters blank)Form of the paper.” Capitalize only the first word of each caption. Table captions must end with a period. The captions are to be over the tables.

Table 1. Format of the full article.	
Items	Values
Paper size	A4
Maximum page	15
Maximum file size	5 MB
Margin	Top: 25 mm and under: 21 mm and side: 17mm
Font	Times-Roman and Symbol
File format	PDF

## 3.8. Figures and Illustrations

Figures and illustrations must be self-explanatory and should be numbered consecutively with Arabic numerals (i.e., Fig. 1, Fig. 2, etc.). Each figure should have a short title placed below each figure. Figure legends should include sufficient experimental details to make the figures intelligible; however, duplicating the descriptions provided in other sections should be avoided. Line drawings must be clear and sharp. Lettering should be large enough to be legible after reduction. Hatching can be used for figures, but shading is



Fig. 1. The symbol of JSASS. Only the first letter in a sentence should be upper case. Single-line caption should be centered. In plural-line caption, lines before the last one both sided, the last one flush left. Captions must end with a period.

not allowed. Symbols used in figures and illustrations should be italicized in accordance with the symbols in the text.

Each figure must have a caption. Figure captions should be 8-point Times and centered. For example: “Fig.(a letter blank)1.(2 letters blank)The symbol of JSASS.” Capitalize only the first word of each caption. Figure captions must end with a period. The captions are to be below the figures. Please use “Figure 1” or “Figures 1 and 2” at the beginning of sentences. Otherwise, use “Fig. 1,” or “Figs. 1 and 2” in the text. All figures must be referred to in numerical order in the text.

### 3.9. Quoted figures

If figures, tables, statistics, etc. are quotations from writings of others, the source of information should be noted in the captions. It is the author’s responsibility to secure such approvals as this may be required for the quotations.

### 3.10. Acceptable file format

Acceptable electronic reference (supplementary material) file formats are PDF, JPG, JPEG, BMP, ZIP, LZH, WMV, and MP4.

## 4. References

Only readily accessible documents should be referenced. References must be listed at the end of the manuscript and numbered in the order of their citation in the text. All references in the References list must be cited in the main text.

Formats for references should fit to the followings: All references must be listed and numbered in the order of their citation in the text in 8-point Times at the end of your paper. The space between the lines is 10–10.5-point. When references are cited in the text, write the numbers referred to as A,<sup>1)</sup> or B,<sup>2,3)</sup> or C,<sup>4–10)</sup> after a comma,<sup>11)</sup> or a period.<sup>12–23)</sup> If the numbered reference citation is a word of the main text, write it as in the following example. “As shown in Ref. 23), the three-body problem should be taken into account for mission design.” For website references, access date must be added after each website reference.<sup>22–25)</sup> The sample is shown at the end of this guideline. The heading of should be “**References**” that is 10-point, bold, centered.

If you want to use “.bib” file for listing references, it is necessary to insert the following two latex commands before “\end{document}.”

```
\bibliographystyle{tjsass} % tjsass.bst
\bibliography{references} % references.bib
```

If a required entry is missing from the “.bib” file you are using, **the missing item will be automatically displayed in red as a warning**, as shown in Refs. 26–28). In such cases, you should add the missing entry to the corresponding reference

in the “.bib” file.

In the reference list, book titles and article titles shall conform to the following capitalization rule: prepositions are written in lowercase except when appearing as the first word, and, apart from abbreviations, all other words from the second word onward shall begin with a capital letter. The provided “tjsass.bst” is designed to automatically format references in accordance with this rule. However, its performance cannot be guaranteed under all circumstances, and authors bear full responsibility for ensuring the accuracy of their references.

## 5. PDF File Conversion

The author must convert the manuscript into a 600 dpi PDF before submission. The maximum file size of the PDF is 5 MB. The PDF file must be readable regardless of the machine used to access it, and therefore the use of any special fonts, such as Japanese fonts, is not permitted.

## 6. Supplementary Material

Supplementary Material adds, but is not essential, to a reader’s understanding of a manuscript. Electronic reference files including additional information (“Supplementary Materials”) can be included with each manuscript submission and made available at the article page, at an additional charge (see the ‘Article Processing Charges and other fees’ section). Supplementary Material does not undergo formal peer review, but will be approved by the Editorial Board prior to publication.

Each article published at the journal’s website may include a maximum of five files of Supplementary Material. (File size is to be less than 5 MB per file and no more than 10 MB in total.) Acceptable file formats are: PDF, JPG, JPEG, BMP, ZIP, LZH, WMV, and MP4.

## 7. How to Use tjsass.cls

To use the tjsass class, installation of some packages is required. Please check RequiredPackages in the sample file.

To prepare a draft for the conference, please use

```
\documentclass[TJSASS]{tjsass} % Trans. JSASS
```

To make the final version of the accepted paper, please insert the option “pubform” as follows:

```
\documentclass[TJSASS, pubform]{tjsass}
```

```
% The packages below should be installed
```

```
% on your PC
```

```
\usepackage[dvipdfmx]{graphicx}
```

```
\RequirePackage{multicol}
```

```
\RequirePackage{amsmath}
```

```
\RequirePackage{varg}{txfonts}
```

```
\RequirePackage{bm}
```

```
\RequirePackage{array}
```

```
\RequirePackage{color}
```

```
\RequirePackage{xurl}
```

```
\RequirePackage[hang]{footmisc}
```

```
\RequirePackage{tjsasscite}
```

```
% The following two commands must be set
\newcommand{\bhline}{\noalign{\hrule height
0.8pt}}
\renewcommand{\UrlFont}{\rmfamily}
```

```
% year of publication
\pubyear{2018}
% volume number
\bookvolume{14}
% issue number
\bookissue{2}
% starting page number
\setcounter{page}{1}
```

```
% submission date
\receiveddate{21 June 2018}
% revision date
\revisiiondate{21 August 2018}
% acceptance date
\accepteddate{20 September 2018}
```

```
%conference information
\confinfo{Presented at APISAT 2018}
```

The following command will be used by the journal office for Transactions of JSASS papers.

```
\AEname{} %Associate Editor's name
```

```
% paper title
\title{Title}
% paper subtitle only when necessary
\subtitle{sub title}
%author name
\author{\NAME{Ichiro}{Koku}\thanksNum{1}}
\CorresAuthor{koku@jsass.org}
% affiliation
\thanksOrg{affiliation }
```

```
\begin{abstract}
write abstract here
\end{abstract}
```

```
\keywords{Key word}
```

```
\begin{document}
\maketitle
write text here
```

```
\bibliographystyle{tjsass} % tjsass.bst
\bibliography{references} % references.bib
```

```
\end{document}
```

## 8. Conclusion

The Conclusion section should be placed in the last section of the manuscript. Conclusion should be clearly stated.

## Acknowledgments

This section should be brief. In the interests of transparency, all authors must declare any conflicts of interest in relation to their submitted manuscript. Authors should list all funding sources for their work in the Acknowledgments section. The heading “**Acknowledgments**” is 10-point, bold, flush left. The editorial office appreciates authors’ efforts to fully follow this template style. This text should be in 9-point.

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