



# HUMAN POWER

## Submissions to Human Power

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**H**uman Power (HP) is the technical journal of the International Human Powered Vehicle Association (IHPVA). Our aim is to produce two to three issues each year. The North American affiliate, the HPVA, also publishes *HPV News* four to six times a year. We prefer to see *Human Power* publish contributions of long-term interest, leaving *HPV News* to concentrate on shorter news items, notices of events, "lighter" articles and reports, advertisements and the like. (There are separate guidelines for submissions to *HPV News*.)

We hope to attract an increasing number of high-quality contributions. These guidelines are intended to help you and the editors achieve the highest possible standards. Writing is hard work, especially when equations, illustrations, tables and references are involved.

Editing and producing a journal are extremely time-consuming tasks—and extra effort by contributors can save many hours for the production team. We, like you, are unpaid volunteers—and we'll do our best to be considerate of your work—we depend on it. Following are specific guidelines.

### Types of contributions

**Articles:** major contributions; maximum length: about 4,000 words

**Reports, technical or other notes:** shorter contributions about progress on projects underway, or technical information about e.g., races; maximum length: about 1,000 words

**Literature reviews:** reviews of books, papers, conference proceedings, etc.; maximum length: 1,000 words

**Letters:** should be about previous contributions or about technical or scientific aspects of human power; maximum length: 500 words

### Style

We like to strike a balance between writing that is dry and formal and writing that is excessively chatty and informal. We have readers in Japan and Russia, for instance, and the writing must be clear and free of jargon and slang for all to understand it. Contributions should advance the readers' knowledge and should avoid commercialism. If a product or new development is being described, it's acceptable to state that it performed well so long as the data and conditions are fairly reported for the reader to judge.

### Form of contributions

Contributions should be typed, *unformatted*, in a computer word processor and sent to Dave Wilson or

to one of the associate editors in both hard copy *and* on a 3-1/2" diskette or by e-mail (as an attachment). Dave Wilson uses a PC with Lotus WordPro, which can translate from most PC formats. Jean Anderson, who provides the final pre-press layout, uses a Macintosh PowerBook G3. John "LRaV" Stephens, who prepares the final high-resolution images, uses Windows and Macintosh computers. We produce the page layouts in Adobe InDesign™.

Please arrange to send your contribution electronically, as well as in print format (we do not have volunteers to type your material). Note that all figures, photos, charts and complicated equations should be prepared separately, and indicate where in the text each should appear. Before you send anything, follow the checklist on page 2.

### Letter of transmittal

Start with a short letter of transmittal giving the name(s) of the author(s); the full address (needed by the editor, and needed also to put with your article so that readers may write directly to you if they wish, rather than to the IHPVA); the title or heading of the contribution (even for a letter)—if possible, begin the title with a word useful for indexing and information retrieval; and a one- or two-sentence statement of the purpose and point of your contribution.

### Manuscript

On a new sheet, repeat the title and your name, starting your formal contribution. Next, give a summary of your conclusions. For an article or report, the summary should be indicated by a sub-heading like those above. For a shorter contribution, the first sentence or two should be the summary. The rest of the article is, up to a point, your choice. However, if you request it Dave will send more detailed guidelines written for MIT students.

Include your full name and address and/or e-mail address at the end of your article/letter, so that readers can write to you directly. If you've written an article please give a one- or two-sentence description of yourself for the readers' enlightenment. For instance, Dave might write: "Dave Wilson is editor of *Human Power*, a past-president of the IHPVA, and has worked on the design of HPVs since organizing an international HPV competition in 1967."

### Units

As an international body, we use international, SI, units (US units may be included in parentheses). Lengths are in km, m, mm, etc. (**not** cm). The SI unit

of speed is a meter/second, or m/s, not km/hour. The SI unit of force is a Newton (N), **not** a kilogram-force. The SI unit of pressure is a Pascal or N/sq.m.

## References

Please reference publications and computer software completely so that any reader in any country can locate them. Jean uses author-date citations and reference lists (see examples, next page).

## Illustrations and photographs

*Human Power* is printed with black ink on uncoated white paper, submitted to the printer in electronic format. Optimal images for our use would be 220 x 360 mm (8.5" x 11") black-and-white, high-resolution photographic prints (**not** laser or inkjet prints).

**Photographs.** Make sure all photos show the subject clearly on a clean, uncluttered background. Use Post-It™ notes to number and write captions for each photo (do not write on the back of photos!). Provide figure number; file name (if on disk); captions; photographer; description; location in article.

**Digital image formats.** We can receive, convert and use images in many electronic formats. If you generate your images electronically, as with a digital camera, we generally prefer your source format (often RGB or JPEG). If you have a choice of source formats we prefer the following:

TIFF (with or without lzw compression), or Scitex ct

EPS (plain, or compressed with Stuffit or ZIP)

Adobe Photoshop™ native

BMP or PICT

Other formats supported by Photoshop 5 or greater

We prefer to have the best possible images to choose from at production time. We can accept CD-ROMs, Jaz or Zip disks, as well as digital files uploaded to specific servers. If you have questions, please ask John "LRaY" Stephens **before** sending images.

**Hard-copy illustrations.** Submit any original art work on clean, hard-surface white paper in black ink, as very clear black-and-white photographs, or as EPS or TIFF files. Pencil drawings do not scan cleanly.

All line drawings, graphs and the like should be camera-ready. These will be scanned and saved in EPS or TIFF format for submitting to the printer. Each illustration needs to fit the format of and be able to lie flat on our desktop scanner surface: 220 x 360 cm (8-1/2 x 14"). Do **not** send high-value originals or photocopies.

**For illustrations published elsewhere.** You may send very clear black-and-white photographs, for example, of graphs in other publications—but only if you have permission to publish them. Be sure to send a copy of your letter of permission with each illustration.

**Very important.** Do **not** send any file with illustrations, graphs or diagrams embedded in a word-processing file; each illustration must be saved in a separate file and printed on a separate sheet of paper—with the title printed at the bottom of the

page. If you send a graph generated from a spreadsheet, be sure to include the spreadsheet file as well. If you are unclear about this, please contact Jean Anderson.

**Equations and tables.** because of the difference in many symbols between DOS/Windows and Macintosh, Jean requires clean, black-and-white, printed copies of equations and tables. That way, she can be sure they will appear in print as the author intends. Jean uses MathType™ software for equations (similar to EquationEditor found in some word-processing applications). If you have questions, please contact Jean.

## Editing

Dave and co-editors will change your work in any way that they feel will increase comprehension by the average reader. If our editing is more than a few minor changes we will try to send you a copy of our revisions to your work within four weeks of its receipt by us so that you may object to what we want to do to your creation—and even refuse to have us publish it, if you wish.

If we can, we like to send articles to people who will write a short review or comment. If we have time before publication we then send these comments to you, so that you have a chance to reply or rebut.

## Using personal titles

Our general rule is to omit titles, but to give job descriptions where relevant. Example: "John Jones, professor of anatomy at Case...", rather than "Professor John Jones". However, we recognize that non-Americans often give titles and no first names.

## Compensation

Small volunteer journals like *Human Power* quite often operate at a loss—in the case of HP, not too large—since no one gets paid except those doing the layout, printing and mailing (including postage).

## Copyright

We copyright each issue of *Human Power*.

## Closure

That's all we can think of. We all greatly appreciate the efforts of our authors. Our requirements are similar to those of most professional journals—the results of need and experience.

## Checklist

*Before you send anything to use, please check your submission to make sure that:*

1. your manuscript is double-spaced and that you have **not** put an extra paragraph return after each heading, sub-heading or paragraph;
2. you have **not** used all caps in any headings or sub-headings or centered any text or headings;
3. you have indicated *within the text* just about where you want each photograph, table, graph or other illustration to go;
4. you have provided clear captions on Post-It™ notes or labels affixed to the back of each photo (do not write on the backs of photos!);

5. if you have any tables, you have not used more than one tab between any of the columns (what looks great on your monitor/display will not look the same on mine or after typesetting);
6. you have not used tape on any part of the contents of your envelope (if you like, you may put photos into an envelope and lightly tape the envelope to a piece of cardboard or stiff paper); and
7. you have provided a clean, printed copy of your double-spaced manuscript and illustrations (each printed on a separate sheet of paper).

If you follow the above suggestions, editing, typesetting and preparation of figures and illustrations will be much easier for you, as well as for the editorial and production team! Many thanks for your contribution/s to *Human Power*.

If you have questions...

**Editor**

Dave Wilson (see page 1)

**Production team**

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**Print references**

- Scientific style and format: The CBE manual for authors, editors, and publishers, 6th ed. 1994. Council of Biology Editors. Cambridge: Cambridge University Press.
- Strunk, W., and E. B. White. 1979. The elements of style, 3rd ed. New York: Macmillan.
- University of Chicago Press. 1993. *The Chicago manual of style*. 14th ed. Chicago: University of Chicago Press, 637-699.
- Xerox Corporation. 1988. Xerox publishing standards: A manual of style and design. New York: Xerox Press-Watson Guptill.
- Zinsser, W. K. 1990. On writing well., 4th ed. New York: Harper Collins.

**Internet references**

- [http://www.liunet.edu/cwis/cwp/library/workshop/cit\\_chi.htm](http://www.liunet.edu/cwis/cwp/library/workshop/cit_chi.htm)
- <http://www.lu.se/IIIEE/library/referens.html>

**Colophon**

Text: ITC Century book, *Century book italic*,

**Century bold** and ***Century bold italic*** – 9.6 pt

Sans-serif text, headings and subheadings:

ITC Franklin Gothic book and *Franklin Gothic book oblique*; Franklin Gothic demi and *Franklin Gothic demi-oblique*);

Article titles: **AG Old Face (bold)** (20 pt or larger);

Others include: Symbol, Mathematical Pi, Universal Greek/Math Pi, and MathType™ type faces.

Title (no caps)

Author/s only

Abstract (do not use caps or periods for subheads) [subhead level 1]

Tubing stiffness is a function of both shape and material composition. This article discusses the contribution of both characteristics to the overall stiffness.

Introduction [subhead level 1]

Structural stiffness is important

Obvious conclusions are that bigger, but thinner, is better. Notice that there is not a significant difference between titanium and aluminum in our example. For the same stiffness, aluminum is only slightly lighter than titanium. In a practical sense, though, available tubing wall thicknesses will constrain any design.

-- Figure 1 should go about here --

Summary [subhead level 1]

To maximize the stiffness of a tube:

1. make the outer dimensions or diameter as large as practical;
2. make the wall thickness as thin as possible without causing the problem of local buckling;
3. next to last item; and
4. possibly split the load-carrying duties.

References (Examples; author-date style)

Author, Initial/s. date. Title of book. Place: Publisher. Pages [if applicable]

Beer, F.P. and Johnston, E.R. 1972. Vector mechanics for engineers: Statics and dynamics. NY: McGraw-Hill. [Book, author entry]

Benjoseph, J.J. 1988. On the anticipation of new metaphors, Cuyahoga Review 24 :6-10. [Journal article]

Gledhill, N. and Jamnik, R. 1995. Determining power outputs for cycle ergometers with different sized flywheels. Medicine and Science in Sports and Exercise 27:134-135.

Hull, M.L. and Gonzalez, H. 1988. Bivariate optimization of pedalling rate and crank arm length in cycling. Jl. of Biomechanics 21:839-849.

Inbar, O., Dotan, R., Trousil, T. and Dvir, Z. 1983. The effect of bicycle crank-length variation upon power performance. Ergonomics 26:1139-1146.

Kyle, C.R. 1982. Bicycling 23:59-66.

Merritt, F. S. 1983. Standard handbook for civil engineers, 3rd ed. NY: McGraw-Hill.

Sharp, A. 1977. Bicycles and tricycles. Cambridge, MA: The MIT Press. (Originally published in London by Longmans, Green, 1896.)

Too, D. 1991. The effect of hip position/configuration on anaerobic power and capacity in cycling. International Jl. of Sports Biomechanics 7:359-370.

About the author [subhead level 1]

John Author <jauthor@dac.edu> Mr. Author's interest in wheeled transport first surfaced when he was four years old.

After...

Address where author/s can be reached