



Guide for Authors

AHS Aeromechanics Specialists' Conference

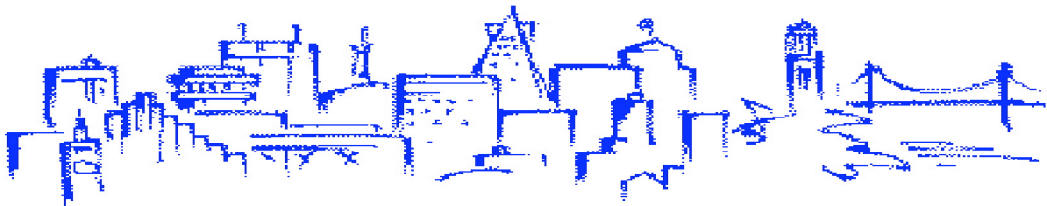
Holiday Inn Fisherman's Wharf

San Francisco, California

Jan. 20-22, 2010

Sponsored by

The San Francisco Bay Area Chapter



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Visit the AHS Web Site for the most current information regarding all aspects of the AHS including the Society's staff, the Forum, Technical Committees, Specialists' Conferences, AHS Awards, etc.

<http://www.vtol.org>

Overview

The information in this package will help you prepare your paper and presentation. Please review this document carefully and submit the proper materials in accordance with the instructions and deadlines listed. Detailed guidance materials for your paper and presentation at the conference are included at the end of this document.

A. Important Dates

Monday, November 30, 2009 -- Deadline for submitting Speaker Information Form

Your "Speaker Information Form" must be received by the conference Technical Chair by this date (email to gloria.k.yamauchi@nasa.gov or FAX to Gloria Yamauchi, fax number 650-604-6717).

Wednesday, December 16, 2009 -- Deadline for submitting Paper and Copyright Form

Instructions for uploading your paper in PDF format will be sent prior to December 16.

Your "Assignment of Copyright Ownership" form must be completed and received at AHS International Headquarters by this date (fax to 703-739-9279 or mail to AHS International, 217 N. Washington St., Alexandria, VA 22314-2538).

B. General Guidelines

Note: Even though the document that authors create may exist only in electronic format and never actually be printed on paper, in these guidelines the document is referred to as a "paper." The word "printed" should be interpreted as how the image of the document will look on either an electronic display or a piece of paper.

B1. Hints for Paper Preparation

When preparing your paper: Write it ... THEN format it.

Write the paper being fully aware of ultimately required formatting ... but don't spend unwarranted time formatting and reformatting as you are writing and rewriting.

Look at your final paper on someone else's computer screen.

Be sure the paper appears as you expect.

Print your final paper from someone else's computer on a black & white printer.

Be sure the printed paper is formatted as you expect.

The appearance (format and layout) of your final paper is very, very important for many reasons. However, your first task should be to write the words and create the graphics for your paper. Once the paper has been written (and probably rewritten a few times) then

work on the formatting. Write the paper being fully aware of the ultimate formatting requirements, but don't spend an inordinate amount of time on formatting until your paper is very near to its final content. This approach should save you time in the long run.

Requirements and guidelines for the overall format for the paper and the layout of pages are described in Section C (Detailed Guidelines).

You may use color in the electronic version of your paper (i.e., in the file which will be included on the CD-ROM of the Proceedings). There will be NO printed versions of the conference proceedings.

B2. Clearance for Publication and Presentation

Your paper and presentation must be cleared by your organization or agency prior to submission for publication and presentation. The author is responsible for determining and acquiring the appropriate types and levels of clearances -- internal and external -- for the paper to be published and presented. For example, in the U.S., clearance typically includes vetting through a public-release approval process for Government personnel and company approval for public release of internally-generated material for others. Obtaining such clearance may take time -- particularly if your paper has authors from more than one organization. In order to avoid surprises, you should immediately initiate the action to get guidance from your organization (and that of the organizations of your co-authors, if any) on the steps that must be accomplished. Getting a clearance can easily take four to six weeks ... or more. **Start early.**

Note that the conference is open to all interested parties of all nationalities and all organizations. **Therefore, absolutely no classified or otherwise restricted material will be published or presented in conjunction with the conference.**

B3. Assignment of Copyright Ownership

The Assignment of Copyright Ownership must be received by AHS Headquarters no later than **December 16, 2009**. The form can be submitted by fax (703-739-9279), email to staff@vtol.org or by regular mail to AHS International, 217 N. Washington St., Alexandria, VA 22314-2538. A copy of the form is included in Section C1 of this document.

The copyright laws require written transfer of copyright. This transfer protects you from unauthorized use of your presentation and gives the AHS permission to publish your paper.

Please sign the release where indicated. In the case of multiple authors, only one signature is required (each author does not need to sign). In the case of a "work made for hire," an authorized representative of your employer should sign the release. If you are a U.S. government employee, you may still sign the form because you are only signing to the extent transferable, or you may include a separate letter of explanation from a representative of your government agency or department. A copyright release, or letter of explanation, is required for each paper. Government employees may also use the following copyright statement in the bottom left of the first page: "Presented at the American Helicopter Society Aeromechanics Specialists' Conference, San Francisco, CA, January 20-22, 2010. This is a work of the U.S. Government and is not subject to copyright protection in the U.S."

B4. Speaker Information Form

A Speaker Information Form must be completed for the individual who will actually be making a presentation at the Forum. A copy of this form is found in section C2. Only one copy of this form is needed for each paper regardless of the number of authors. However, if more than one person will be presenting, information for all presenters should be included. The information on this form will be used for the following:

- To provide a point of contact for your paper
- To list your presentation correctly in the official conference program
- To introduce presenter(s)

This form must be received by the Technical Chair no later than **Monday, November 30, 2009**. Please email the form to gloria.k.yamauchi@nasa.gov or FAX to Gloria Yamauchi, fax number 650-604-6717.

B5. Electronic Format and Submittal of Paper

All papers **MUST** be submitted in Adobe Acrobat's Portable Document Format (PDF). This is the file format in which papers will be written on the CD-ROM conference Proceedings. By converting your manuscript to PDF, you can personally control the appearance of your paper when read and printed from the CD-ROM.

Instructions for uploading your completed paper will be provided by December 1.

B6. No Paper – No Podium Rule

A general “No Paper – No Podium” policy will be in effect for contributed papers. This policy means that an author will not be scheduled to speak if a written paper has not been received by **December 16, 2009**.

B7. Conference Registration and Hotel Reservations

On-line registration and hotel information is available from the AHS web site at <http://www.vtol.org>. Click on the Calendar of Events link and scroll down to the Aeromechanics Specialists' Conference. ***Please monitor the website regularly for registration and reservation deadlines.***

B8. Journal Publication

Papers presented at the conference may be suitable for publication in the *Journal of the American Helicopter Society*. Guidelines for submitting a paper may be found in each issue of the Journal. If you have additional questions, please contact AHS Headquarters or the Editor-in-Chief of the Journal, Professor Kenneth S. Brentner at his e-mail address – ksbrentner@psu.edu.

C. Forms

C1. Assignment of Copyright Ownership

C2. Speaker Information Form

C1. ASSIGNMENT OF COPYRIGHT OWNERSHIP

AHS International -- The Vertical Flight Society

Aeromechanics Specialists' Conference

January 20-22, 2010

Holiday Inn Fisherman's Wharf

San Francisco, California

I, _____, (hereinafter, "the author") as author(s) (or employer, in the case of work made for hire") of the article entitled:

(hereinafter "the article") hereby grant and assign to the American Helicopter Society (hereinafter, "the publisher") all rights of copyright ownership now and hereafter protected in the article (for U.S. Government employees, to the extent transferable) effective if and when the article is accepted for publication in the *AHS Aeromechanics Specialists' Conference Proceedings*, including, but not limited to, derivation rights, the right to reproduce and distribute the article as part of the issue, and the right to grant or refuse permission to third parties to republish all or part of the article.

Provided, however, that the right to grant or refuse permission to third parties to republish all or part of this article (subject to giving proper credit including the copyright notice) shall also be held by the author.

And further provided, however, that the author reserves the right as author or editor to republish or use all or part of this article in future works, but not limited to lectures, press releases, reviews, or textbooks.

Name: (Print) _____

Signature: _____

- Author
- Employer (if the paper is the result of "work made for hire")

To ensure that you and the AHS are protected from unauthorized use of copyright material, we request that you (or, in the case of "work made for hire", your employer) sign and return this transfer agreement to the American Helicopter Society International, 217 N. Washington St., Alexandria, VA 22314-2538. This must be received before your article can be accepted for publication.

This form is due no later than **Wednesday, December 16, 2009**.

AHS International

217 N. Washington St., Alexandria, VA 22314-2538

Tel. (703) 684-6777, Fax: (703) 739-9279

Email: staff@vtol.org

C2. AHS AEROMECHANICS SPECIALISTS' CONFERENCE SPEAKER INFORMATION FORM

January 20-22, 2010 • Holiday Inn Fisherman's Wharf • San Francisco, California

Please fill out this form completely and email to gloria.k.yamauchi@nasa.gov or FAX to Gloria Yamauchi, fax number 650-604-6717 by **Monday, November 30, 2009**. The information on this form will be used to publicize your presentation.

Session: _____ Chair: _____

Title of Presentation/Paper: _____

Author(s) (List full name, job title & employer for each author)

1. _____
2. _____
3. _____
4. _____
5. _____

Presenter: _____

Phone: _____ E-mail: _____

Fax: _____

Please confirm your intention to comply by placing an "X" in each box:

- Author will submit an electronic file of the paper by **December 16, 2009**.
- The process for publication and presentation clearance has been initiated.

If unable to comply, please explain: _____

Brief speaker biography (will be used to introduce speaker):

I have read and agree to abide by the requirements set forth in the AHS's Guide for Authors.

Signature: _____ Date: _____

D. Detailed Guidelines

D1. Format requirements for papers to be included in the Proceedings of the AHS Aeromechanics Specialists' Conference.

The requirements that follow help ensure that your paper will be well formatted for inclusion in the conference Proceedings. Responsibility for the successful implementation of these requirements falls not only on the authors, but also on the Session Chairs, the conference Technical Chair, and the many volunteers who participate.

Meeting the date requested for receipt of your paper is very important. If your paper arrives late, you risk that the paper will not be included in the Proceedings.

Top-Level Format Requirements

- The paper should be formatted for printing on 8.5-inch by 11-inch paper.
- (European-sized pages should NOT be used. The use of electronic publishing should minimize the impact of this requirement.)
- Margins should be at least 0.75 inches and not more than 1.0 inch (top, bottom, and sides).
- A standard proportional font (such as Helvetica or Times) should be used throughout the paper.
- The font size in the title block is at the discretion of the author, but should never be less than 10 point. All of the rest of the paper should be 10 point.
- The title block and abstract should be centered across the width of the first page.
- Except for the Title Block, fully justified text throughout the paper is preferred. Left justified is acceptable.
- The body of a paper should be single-spaced and in two columns of equal width (with a 0.20 inch "gutter" between columns).
- The first page must include a Copyright Statement. The statement should be a footnote at the bottom of and within the left column.
- Elements of the paper plus the sections and subsections within the body of the paper should NOT be numbered or lettered.
- The titles for the elements of the paper plus the sections and subsections may be in bold or underlined, but should not be both.
- The use of color should be limited to Figures and Tables. When using color, remember that the printed version of the Proceedings will be in black and white ONLY. You must satisfy yourself that anything in color will be readable and intelligible when printed in black and white.
- Pages should NOT be numbered.

Organization

The paper should consist of the following elements. Except for the "Source Footnote," the elements should be arranged in exactly the following order:

- Title Block
- Source Footnote
- Abstract
- Notation (optional)
- Introduction
- Main Body (including text, figures, tables, and equations)
- Conclusions
- Appendix or Appendices (optional)
- Acknowledgments (optional)
- References

When included in a paper, an element listed in bold should start with exactly the name shown.

Description of Elements

Title Block

The Title Block should consist of the title itself and information on each author.

Title: The title should be brief and concise. Clever and catchy titles that are appropriate for informal presentations are not generally appropriate for archival publications. Avoid unnecessary acronyms, symbols, abbreviations, and punctuation (hyphens, slashes, colons and question marks).

Author Information: Place the author's(s) full name(s) below the title and include e-mail address, official title, employer, and simple address (city and state [and country for non-US authors]) on three separate lines below the author's(s) name. For multiple authors with the same employer, formatting approaches that minimize repeating the same information are encouraged (e.g., a block for the organizational name and address with names of authors evenly distributed above it, and footnotes for individual titles). Do not include academic degrees, sub-levels within the organization, or the full mailing address.

Source Footnote

A footnote should be placed at the bottom of the left column of the first page to show the source of the paper. It should include the specific Forum, the location, and the date. The second line should indicate copyright. Please refer to the example below:

Presented at the American Helicopter Society 65th Annual Forum, Grapevine, Texas, May 27-29, 2009. Copyright © 2009 by the American Helicopter Society International, Inc. All rights reserved.

Abstract

An abstract of approximately 150 words is required. It should consist of a single paragraph only. It should be a summary, not an introduction, and be complete in itself. It should not contain any numerical references to figures or references contained in the paper. The abstract should indicate the subject covered in the paper and should state the objectives of the investigation. Newly observed facts and conclusions must be stated in summary form. Readers should not have to read the paper to understand the abstract. The abstract should be centered across the width of the first page.

Notation

This section is optional if only a few symbols or simple equations are used. In this case, the symbols should be defined in the text when introduced. If more than a few symbols or equations are used, a Notation section should be included. It should list and define the symbols used (including units). Place the symbols in alphabetical order, English first, Greek next, and then subscripts. The metric and dual system (metric and English) should be used if possible. If used, this section is the first section in the two-column format.

Introduction

The introduction should introduce the subject, provide some background, including a brief assessment of prior work by others (citing relevant references), and an explanation of how the paper contributes to the field. It is not a summary. The introduction tells what has been done, what needs to be done, and how the present results relate to past work and present needs.

Main Body

Organize the main body under logical headings and subheadings. Do not number the headings. Main headings are centered on the page, subheadings begin at the left margin above the text, and sub-subheadings are set at the left margin on the first line of the paragraph. Use third person. Avoid jargon, slang and commercialism. Use acronyms and footnotes sparingly. Use simple English prose in paragraph form wherever possible.

Equations

Unless only a few are used, all equations should be numbered in the order introduced and referred to in the text by number. Equations and/or symbols may be presented in any suitable form; however, clarity for the printer is essential. Special symbols should be identified.

Placement of Figures and Tables

Figures and tables should be inserted in the Main Body. Each figure or table should be placed as soon after its reference in the text as is practical. If including them within the Main Body proves too difficult, grouping all Figures together and then all of the Tables together after the last section of the Main Body is acceptable. Note that Figures and Tables should all be within the Main Body or all after the Main Body.

Figures

Illustrations and graphics used in Figures must be clear and sharp. Converting to PDF files can sometimes affect the resolution of images: If you do the conversion to PDF, carefully review the conversion of all images. Lettering should be large enough to be legible, at least 1/16" high. If needed for clarity, selected figures can be double column width. Illustrations/figures showing plotted data should have axes labeled with appropriate names and units. Symbol keys should be

included to identify plotted lines and data when needed. Additional information or parameter values related to a figure should generally be placed in the figure caption rather than on the figure itself. Each figure must be numbered and have a caption.

Tables

The number of tables should be kept to a minimum. Each table must have a number and a caption and should be cited in numerical order in the text. Tables should be simple and arranged in the following format. Type a double line at the top and bottom of each table and a single line under the column headings. Table footnotes should be placed under the bottom double line and should be indicated by the letters a, b, c, d, etc. The following example is given for illustrative purposes only:

Table 1. Comparison of Vibration Data

	OH-58D	UH-1		CH-58B 1		
Flight Condition	2P	4P	2P	4P	6P	12P
Ground run	—	—	.3	.11	.46	.02
Hover	.12	.17	.16	.26	.55	.04
Climb	.13	.21	.27	.40	.40	.05
Transition	—	—	.34	.34	.80	.09
Level Flight ^a	.21	.35	.28	.35	.40	.03

^aVelocity of 120 kn

Conclusions

The most important results of the paper should be summarized as a concise list of numbered items. Conclusions should be supported by development in the main text and no new material should be introduced in this section. If the paper did not result in specific conclusions, then the section may be entitled Concluding Remarks or Concluding Recommendations, with brief summary comments as appropriate.

Appendices

Should be used for highly specialized data, derivations, etc. They should be lettered (A, B, C, ...) if more than one is used. Each appendix must be cited in the main text.

Acknowledgments

If used, this should be placed at the end of the paper, before the references.

References

All reference material should be grouped in the final section of the paper, numbered, and placed in the order cited in the text. Reference only that material which is readily available to the reader. Do not include classified material, internal company memoranda, or reports unavailable to the reader. Use the following style:

Book — Johnson, W., Helicopter Theory, Princeton University Press, New Jersey, 1980, pp. 808-813.

Periodical — Chopra, I., "Dynamic Stability of a Bearingless Circulation Control Rotor Blade in Hover," *Journal of the American Helicopter Society*, Vol. 30, (4), October 1985.

Report — Straub, F., "Study to Eliminate Ground Resonance Using Active Controls," NASA CR 166609, October 1984.

Meeting Paper — Esculier, J., and Bousman, W., "Calculated and Measured Blade Structural Response of a Full-Scale Rotor," American Helicopter Society 42nd Annual Forum, Washington, DC, June 1986.

D2. Guidelines for Electronic Projection at the AHS Aeromechanics Specialists' Conference

Before you present it, project it! ... Don't just view it.

Before you come to the conference, you should electronically project your presentation.

Your presentation may look great on your computer screen, but colors and font sizes may look unacceptably different when projected.

Introduction

The format for presentations at the conference will be electronic projection. Each session room will be equipped with an LCD projector connected to a computer running the Windows XP operating system.

File Formats

The only acceptable file formats for presentations are Microsoft PowerPoint 2000 or later and Adobe Acrobat PDF (for Reader 4.0 or later.) Presenters must bring the file(s) for their presentation to the conference on one of the following forms of removable electronic media.

- CD-ROM (must be turned in with either a protective sleeve or a case)
- USB Flash Drive

All CDs must be readable by Windows XP.

Before arriving at the conference, those who develop their presentation under an operating system other than Windows/Mac OS should transfer the file to a computer running Windows XP with Microsoft PowerPoint 2000 and/or Adobe Acrobat Reader 4.0 (or later) and test the conversion. If you have embedded movies, make sure they run on Windows XP.

You are required to provide your electronic presentation when you register, clearly labeled with the author name, session name, session chair, and date and title of your presentation. We will pre-load the presentations the evening before your session. If you arrive on the day of your session please present your electronic presentation when you register. All presenters should report to their session rooms at least thirty minutes early, where an audio-visual technician will make sure that their presentations are loaded onto the computer provided in the assigned room.

Every chart should:

- a. Carry the message in as concise, condensed, and technically correct manner as possible.
- b. Be legible from the back row. (Assume the distance to be 75 feet.)
- c. Standardize the typeface throughout and use bold face characters. In general,
 - All upper case is ONLY acceptable for the title
 - "Sentence case" is recommended for the body of the presentations (i.e., first letter of first word of a line is capitalized; everything else in lower case).

- "Title case" is also acceptable (i.e., first letter of all words [except short words like "a", "the", "and"] is capitalized; all other letters are lower case).

In general, a figure or plot that is clearly legible in a paper is not acceptably legible when projected. Some simplification and clarification of a printed figure is almost always required to ensure first-class legibility when projected.

- Two or more figures should not be incorporated in one image. (This could be acceptable only if lettering and line thickness are correspondingly increased).
- Use contrasting colors: Yellow letters on a blue or black background; orange letters on a blue or black background; or white letters on a black, green or blue background.
- A hard copy placed on the floor should be legible from a standing position. This assessment should be done by an individual other than the author.
- A chart should not be "filled." It is strongly recommended that you use a maximum of seven words per line and no more than seven lines per chart. The chart should only be a prompt for the speaker and not text for the speaker or audience to read.
- Letters and numerals should be large. The smallest lettering that can be read easily is 1:40 of the height of the frame (0.187" within a 10" × 7.5" frame). Under no circumstances should the lettering be less than 1:50 of the frame height (0.15").

Some additional recommendations for chart preparation are as follows:

- Avoid vertical legends (and Y-axis labeling).
- Multiple lines on a graph should be individually labeled, not cross-checked to a legend.
- Avoid charts with complex equations. Very few in the audience will follow without first understanding the background and notation, which requires more time than is available.
- Use a concise title at the top of each chart. The title can be a declarative statement which tells the audience what they should learn from the image.
- A "bumper sticker" is sometimes effective (i.e., a boxed statement at the bottom of a chart which is a very concise statement of the major point that you want the viewer / reader to remember after viewing the chart).

Session Rooms and Equipment

Each session room will be preset with the following:

Desktop PC computer running Microsoft XP/Office XP
 One XGA (1024x768) LCD Projector
 One appropriate size screen (as large as possible)
 One laser pointer
 One podium microphone and one Lavalier (for speaker)

Delivery

Presentations are planned on a 30-minute cycle (25 minutes for the presentation and five (5) minutes for questions). The 30-minute cycle must be observed in accordance with the published program to allow audience migration between sessions. A speaker who appears as if he /she may run over his/her time will be warned and, if necessary, stopped to preserve the schedule.

Be sure to

1. Deliver only selected parts of your written paper. Limit selection so that your oral presentation is compatible with allotted time.
2. Prior to the conference, conduct a dry run in front of your colleagues to rehearse timing, delivery and content. The presenter is also strongly encouraged to rehearse the presentation at least once using electronic projection.
3. Use the available lavalier (lapel) microphone. Attach the microphone along your "centerline." If you put the microphone on one side or the other, be sure it is the side to which you expect to most often turn your head (e.g., the side nearest the screen).
4. Stand at the podium and face your audience at all times.
5. Speak loudly and clearly enough to be heard in the back row.
6. Refer only to abbreviated notes of your presentation. It is helpful to create a prompter which includes reduced sized copies of your charts. Use your prompter as an outline to your presentation speech.
7. When introducing a plot or graph on an image, briefly describe the abscissa and ordinate axes, before you begin interpreting the results.
8. Avoid commercialism and sales nuances.
9. Use a pointer only when necessary to direct attention to specific points on your image. Be sure to turn off the pointer when not in use to avoid distraction. Use both hands if necessary to steady the pointer.
10. Finish in the allotted time or less, to leave time for questions and answers.

Do not

1. Turn your back to the audience and address your speech to the screen.
2. Read your speech or your charts verbatim. Avoid a monotonous, uninteresting delivery.