Jim's Modified MLA Format

If you take a class in one of the Liberal Arts (English, History, etc.) then you will find a monster of a formatting scheme called the "MLA Format". You can get a free copy of Sierra College's interpretation of this format at the LRC (library).

While the full-blown MLA (Modern Language Association) format is required in these classes, I have modified the format to make it easy to write a "technical paper" that uses a much easier format. You have your choice with the paper required in this class ... the horrible full MLA or the easy Jim's Modified MLA. Your call.

On the succeeding pages you will find a paper that I wrote and published (and got paid) as an example. Where I want to show you something, the comments will be in **RED.**

PLEASE NOTE: This easy formatting is ONLY valid in Jim Weir's class. Do NOT attempt to use this modified format in another class without the permission of the instructor.

The sample paper assignment for this class is to write at least two pages in Jim's MLA format on any one of these subjects (other subjects with instructor approval):

- **Why Water Freezes At The Tops Of Ponds**
- **How To Get An Amateur Radio License**
- **The Story Of Apollo 13**

The sample paper must have at least two images, and at least two Works Cited in the footnotes.

This paper will NOT be graded, but it will be corrected and returned. The paper corrections should be noted for when you do the "actual" paper later in the semester.

If the paper is not turned in, there will be a penalty in your grade.

Please submit the paper in DIGITAL FORM ONLY as either a Word (.doc or .docx) file or as a pdf file. You may send it to my Sierra College email as an attachment jweir@sierracollege.edu or you can bring it to class on a thumb drive (flash drive, data stick, etc.) and I'll put it on my portable hard drive.

PLEASE, in anything you turn in to me digitally, give the SUBJECT in the email as follows

EMAIL SUBJECT: LASTNAME "What This Email Is For"

Example: SUBJECT: SMITH "Sample Paper on Water Freezing"

«««« 1 inch margins top, bottom, both sides »»»»»

(Entire document is double-spaced, 12 point serif font (Times New Roman is nice

Weir, Jim (Student/Author's name)

Professor Cyndi Cunningham

Mechatronics 01

31 January 2017

Stuff To Hang On the Prop

(capitals on all first letters except a, an, the)

This is the last in a series of things we proofed at Oshkosh '16. We've talked about timers. We've talked about tiedowns. Now it is time to talk about propellers. (Introduction ... what we are going to write about.)

No, not the prop itself. The prop simply provides a nice sturdy mount for some rather delicate items that finish out the "bling" of the display. This article will cover an aircraft band antenna, state and national flags, and a classy aircraft data sheet to tell the world about your airplane.

Double-double space between paragraphs

Let's start off with the antenna. Why an antenna? Because most of us have a handheld radio to listen in to aircraft comings and goings. If we are camping (or even moteling or dorming) then we need something better than that rubber resistor that masquerades as an aircraft band antenna. In some tests I ran a few years ago, the MINIMUM "goodness" of a rubber duckie was a reduction in range of 10:1 over a decent ground plane or dipole antenna[1] or (1). These are "footnotes" but MLA calls them "Works Cited". You will find them at the back of the paper. I prefer the [superscript] version but the (parenthetical) version is acceptable. That's a bunch when

you are trying to listen to Fisk from the North 40 campground. Or even the heavy iron over Warbird Island inbound for the afternoon airshow.

So, what's better than a rubber duckie? Pretty much two choices for simple antennas. Ground plane or dipole. Ground plane is fine, but collapsing it for travel is a pain in the labonza. Dipole is fine, but feeding it at the center is another pain in the nether regions.

So what to do? I chose dipole with some nifty thoughts for both feed and travel. The problem with feeding a dipole at the center is that the coax braid becomes part of the antenna and radiates part of the signal in a direction that you may not want. We can solve that problem too.

Figure 1. Airplane tied down at Oshkosh. (Personal Photo). Caption all images and number them sequentially. You may IMBED them like this one or have a separate FIGURES page at the end of the paper. You must give a citation to WHERE you got the image.

Here's the deal. We are going to make this antenna waterproof and fairly strong. It is going to take some real stiff winds to break it, and even if it breaks, it will fail at a joint

that is easily repairable. My best estimate is that it will withstand 60 to 80 knot straight line winds before it breaks.

So, here is the design. This column will be VERY short on words so that the drawings can tell the tale. They say a picture is worth a thousand words, so this will be a 9000 word column. A thousand words and eight pictures or drawings. See Figure 1.

The basic antenna structure is built on a wooden $^{3}/_{16}$" diameter wooden dowel. How long a dowel? Now it becomes time to do the calculations.

First, pick your center frequency. Just for grins, let's pick the Oshkosh Arrival ATIS frequency of 125.9 as our "center" frequency[2]. The antenna will work best at this center frequency, but as a function of how wide we make the antenna metal radiating elements, it will be a "good" (purely a subjective term) antenna the fatter we make the elements. You can use copper tape (available at most handyman stores) or #14 wire (strippable from house wiring "Romex") to make the elements.

Enough of Oshkosh. See you in a few months. Back to the electronics stuff. Stay tuned. This is the CONCLUSION. It is a summary of what you found out when you wrote the paper. This little gem earned me $500 and was about two hours work.

Works Cited

1. Weir, Jim. "Airshows in Style" *Kitplanes Magazine,* January 2013: pp 77-79, print.
2. (No author). "Burt Rutan Launches New Website" *EAA Web Page,* August 8 2012, web, 31 Jan 2013, http://www.eaa.org/news/2012/2012-08-08_burt-rutan-website.asp

For a book, a magazine article, or a newspaper article:

Footnote number, Authors last, first name. Title of article or chapter, *Name of publication in italics*, Date of publication (and location and revision of publication if available), pages cited, and what medium was used to publish the article (print, video, DVD, etc.)

For anything gotten from the internet or other digital location:

Footnote number, Author's last, first name. Title of article or chapter, *Name of web page in italics*, the date the article was written, what the source of the information is (web page, home page, catalog, etc.), the date YOU downloaded the information, and the URL of the page.

Figures

Figure 2. The education of a young engineer (Teledyne Ryan Aeronautical, Apollo History Manual, 1972, page 21)

Figure 3. Camping at Oshkosh in the Company Cessna (personal photo)