Scouting Unit Web Design: A How To Manual

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Piedmont-Appalachian College of Commissioner Science
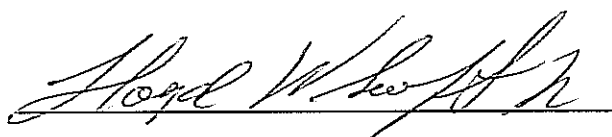
Lees-McCrae College

Banner Elk, North Carolina

Dr. Lloyd Swift, Advisor

To the Doctoral Candidate Review Board:

I am submitting herewith a Dissertation written by Anna L. Booher, entitled "Scouting Unit Web Designs: A How To Manual". I have examined the final copy of this report for format and content and recommend that it be accepted in partial fulfillment of the requirements for the Degree of Doctor of Commissioner Science.
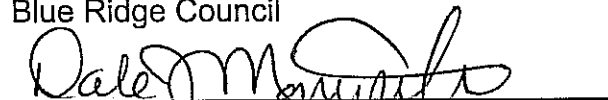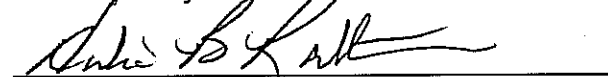
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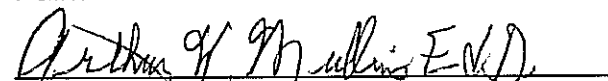And recommend its acceptance:

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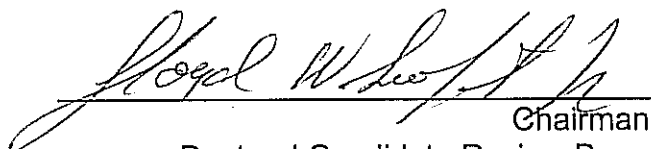
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Unit Website Design

by

Anna L. Booher

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I. Introduction

The Internet has placed at our fingertips the ability to communicate with others, disseminate information, and celebrate the search for knowledge. All of this can be accomplished with a few click on a mouse.

The Internet has placed an incredible amount of information throughout the world literally at our fingertips. Today, as a result, the Net is the portal to this storehouse of knowledge on the information superhighway. Information throughout the world is connected by groups of computers and computer systems. The World Wide Web is accessible to anyone with a computer, cable or phone modem, or a DSL line. As a result almost anyone can access the Web from the, home, school, office, public place or scout hall. What this translates to in the scouting community is that our leadership as well as the scouts we serve must have access to the most modern and up to date information.

The impact of information technology on today's society will have as great an influence as moveable type had on the Renaissance. Scouts enthusiastically embrace the multi-sensory capabilities of the Web. The real trick is to develop a way that allows individuals to express themselves creatively and at the same time to solve the problem of communication in a multimedia world. Scouting is a program that will develop highly marketable skills that will transfer into the workplace thus ensuring future success.

The benefits of a Web page are numerous. All rank advancements and merit badges can be tracked. All memos of upcoming events could be posted or emailed allowing all of the scouting family to stay informed. The accomplishments of both scouts and scouters can be highlighted and saved as tools for future scouts to reference. Scouter can have an email communication link which is separate from work and home. Lastly, Internet access provides a tremendous variety of resource for scouts as well as scouters because shared network access makes it possible to share files and other resources.

This document is an attempt to create a guide for web site development that units wishing to tap into the possibilities of information technology will find useful. It is practical in nature and informative to both the novice as well as the experienced scouts and scouters.

II.   Guidelines for Unit Websites

In a legal sense, every Scout unit is "owned" by a chartered organization, not the BSA or the local council, so our stance regarding unit websites is that they are privately owned rather than official venues of communication by the BSA.

--National BSA FAQ: Guidelines

The National BSA has, however, given us some guidance as to the content of websites:

Guidance for Unit Web Sites

The Boy Scouts of America provides the following advice for individuals who use privately owned Web sites and e-mail accounts to communicate information about Scouting.

Decorum
Scouters should exercise propriety and good taste online. Material that will be posted to a unit site or sent from a unit e-mail account should be reviewed by at least three adult members of the unit committee. Access (the ability to place material on the site or send messages from the account) should be controlled by an adult who is responsible to the committee.

Youth Protection
Names, images, and especially contact information pertaining to youth members should never be gathered or published over the Internet.

Copyright
Do not "borrow" (without permission) content for use in unit Web sites. Written permission should always be obtained,. Even when material is declared to be "free" or "public domain;" it might not be.

Councils may elect to provide links to unit website. If the council does provide this service, they have the "opportunity to provide guidance for them by requiring the sites to be appropriate to the values of the Scouting movement".

Unit websites are not "official" in the sense that the site represents or communicates to the public on behalf of the Boy Scouts of America or the local council. This concept should be included in your website Disclaimer.

III. So What Now? — Implementing the Guidance

Unit Webmasters should contact their local councils for policies and procedures pertaining to the use of the Internet for promoting and supporting Scouting units.

A. Decorum

All documents, illustrations, photographs and linked material must conform to the principles and traditions of the Boy Scouts of America. The best advice I have read on this subject is simply this: follow the Scout Law. Using a little common sense and the principles of scouting, it will be hard to put something up that is inappropriate.

Unit websites should avoid politics allowing the "official" sites to deal with those issues. In addition, keep the site factually oriented by avoiding opinions.

Generally avoid commercial advertisements. Unit websites often have sponsors, or use software that requires recognition. Do so in a manner that is appropriate and subdued. Remember that the purpose of the site is to communicate with Scouts, their families, unit leadership, sponsors, supporters, and the interested public.

Keep your site current, it is of little value to your user if it is out-of-date. Fix all problems that inevitably occur quickly. The website should put a good foot forward. A poorly maintained site reflects poorly upon you, your unit and scouting.

B. Youth Protection

Written permission is required to list the name of any adults and adult leaders. A formal release of liability is required to list any phone number, address or email address.

Unit web sites must consider the safety and privacy of their members and participants by obtaining the necessary permissions to release information about or images of any individual.

Technology committees should consider adopting a policy that youth names may not be used in conjunction with photographs or use first names or initials only (if John Doe" is pictured, they may use "John" or "John D" or "JD").

Linking to other sites is an integral part of the World Wide Web. Web masters should take care linking to other sites. You cannot control the content of those sites, so review each site before linking it to your site. The list of "official" BSA web sites can be found at: http://www.scouting.org/webmasters/sites.html. (Appendix A)

A list of links to unofficial scouting sites may also be useful. (Appendix B)

C. *Copyright*

It is important to understand that you do not have the right to use copyrighted materials until you receive written permission from the owner that grants the right to use the material. Also, if the owner sets any conditions or limitations, you must abide by them. Or permission might be granted only for a limited time, after which you could not use the material.

The Annual Charter Agreement states that the council agrees to provide year round training, service, and program resources to the organization and its unit(s). This paragraph grants the charter organization, and by extension the unit, permission to use emblems, insignia, logos of the BSA.

IV. Get organized

A. *Appoint a Technology Committee*

At least one of the members of the committee should be a registered Scouter of the unit. It would be better for all members to be registered but that is not always possible.

B. *You Need a Vision*

Why do you want to publish a website? Having a website can seem high tech and prestigious. Maybe you want to learn more about web design. These are all lofty and interesting excuses to have a website, but are not good reasons.

Identify your audience and the reason that you have targeted that group. Focus on your unit and what it needs from the site. Think about how scouts, parents and leaders will use the site.

Develop a Vision: In one or two clear written sentences describe what you want this site to become. This vision can change over time, but start small.

Develop a set of goals or milestones that would let you know you are on the right track. Do not attach dates to these goals until later.

C. *Who Is Going to Do All This Work?*

You need a design team

People who know nothing about technology or computer can and are often very important members of a design team. They bring no technology hang-up and can sometime bring a cold dose of reality to the issues. So do not be afraid to invite relatively computer illiterate people to join the design team.

Many people think a website is design and maintained by the designer, but the creative people may not be the type you need to help maintain the site. This is usually not the case.

You need a Web Administrator

Someone on the team needs to be the site administrator to handle technical issues and possibly do some of the initial design work. This person is the most likely individual that is not a registered Scouter and will have little or no input of content.

You need a Web Master

Web Master is the individual that maintains the site on a weekly basis. This individual must be focused on details and understand that if he does not do his job then people will not visit your site.

It is recommended that the Cub and Scout Masters should NEVER be the web master. Their job should be running the unit. A division of labor is important for success without burnout.

V. What Content Should Be Included?

A. Create a Site Outline

This is the most important step and is the one that is most often skipped. Start your web design with pencil and paper. During this process visit other unit websites and see what you like our dislike about the site. Take notes and share them with the committee when you discuss the design

Decide on which feature pages you will initially design this point can not be stress too much: Do NOT over promise or over commit. It is always a disappointment when you fail to meet expectations. Lots of excitement is generated around the new website without any real understanding of the initial time and effort required to publish a site. Start small! If you start small and work together you should be able to put together a good site in a weekend (6-8 hours).

Publish the site initially with only a few pages and then add to them. Announce the publishing of new page after they have been published, not when you hope to have it published.

B. The Basic Website

The most basic scouting web site should consist of four pages:
- The Home page
    o Unit Identification
    o Link to the Council
    o Link to Chartered Organization if they have one
    o Navigation links to other pages on the site
- Contacts
    o Names and email address of the members of the committee who are responsible for content or maintaining the site
    o Navigation links to other pages on the site
- Calendar
    o A simple list of dates, activities and any information the Scouters or parents might need.
    o Prominent date of when it was last update
    o Navigation links to other pages on the site
- Disclaimer
    o A statement that the site is not an official site of the BSA.
    o A statement that information may not be complete or accurate.
    o A statement that information provided on this site is sole the opinion of the individual author or authors.

o Navigation links to other pages on the site

It is important to sketch your site page by page.

C. The Simple DO's and Don'ts of Web Design

The Do's
1. Get ideas from other websites.
2. Plan your site and improvements with paper & pencil.
3. Keep it simple fun and user friendly
4. Content...Content...Content...
5. Design all of the pages in 800x600 pixel resolution
6. Keep your site fresh available, and updated.
7. Publish the things people want to see and read.
8. Get several people to feed you information
9. Pages should load in under 30 seconds
10. Always test your site

The Don'ts
1. Never overpopulate a page or make it too busy.
2. Don't use pop-up windows, moving or flashing text, or other annoying events on your site
3. NO big picture downloads without begin given a option of how to deal with them.
4. NO music without the option of turning it off.
5. Don't use fonts other than Arial or Times Roman.

D. Assign Responsibilities and Collect the information

Once you have your sketches then assign tasks. Do not stop and dump the rest of the project on the individual who is responsible for doing the layout. Someone should write the calendar in a word processor or text editor and submit it to the web master for posting. Some one else should collect the contact information and write the disclaimer and submit them to the webmaster for posting. Do NOT just hand the web master a paper copy of the calendar, handwritten notes on contacts and rough draft of the disclaimer! The web master has enough to focus on developing the "look and feel" of the website.

VI. Select and Acquire your Web Authoring Software

If the webmaster has not already done so, now is the time to select web software. There are literally dozens of software packages that might meet your needs as a unit web master. The problem is that if you are a novice you probably do not know what features you are going to need.

I suggest that you will need two pieces of software and some scouting clip art to get started. You will initially need only the Web Authoring Software and the clip art, but as you add pictures to the website you are going to need good photo editing software. Appendix E offers suggestions and evaluations of some of the most common authoring software. And Appendix F contains some of the most common photo editing software. Appendix C offers suggestions for useful HTML guides.

A. *Web Authoring Software*

You do not need a professional development package. The cost of these often exceeds $500-1000, but like my grandfather always said, "you get what you pay for." The old saying is true with website development packages.

What Features Do You Need?

- <u>WYSIWYG</u> (what you see is what you get) This editing tool is one of the most important features. It allows you to be able to place text and images on the page the same way you would with a word processor.
- <u>Table making functions</u> The creation of tables and layouts that make it easier to manage information and images on the screen. This feature is essential and any software that does not include this feature should not be considered.
- <u>Automatic Site Navigation Structure</u> Pages on the site that have associations will be updated automatically
- <u>Drag and Drop feature</u> The ability to move text and images is not essential, but if the authoring software did not contain this feature, I might struggle for a reason to use it.
- <u>HTML code editing</u> While this is not essential initially, as your skills increase, you will want to be able to edit HTML code directly.
- <u>Easy publishing to the web</u> This is a must! If you have to use another program to post your updates to the website, then you need different software.
- <u>Clip Art and Backgrounds</u> These are nice to have and to be able to use on your sites. However, they are not required. A wide variety of these are available on the internet at little or no cost.

- <u>Wizards</u> These are tools that simplify difficult tasks. They are a nice way to speed design work.
- <u>Style Sheets or Themes</u> This tool will allow you to apply a uniform "look and feel" to the website. It makes for quick changes to the "look and feel".
- <u>Templates</u> Pre-designed pages with specific functions are a way of making the set up faster. The more that you have the easier the design. Useful designs such as photo album or a calendar or a newsletter are a great way to begin. The more templates that you have the easier it is to setup.
- <u>Product Support</u> Manufacturer support is necessary when you first get your software. Free software will not have any support nor does paying more for software mean that you will get more support. Check what the manufacturer says about support on their website.
- <u>Product Support by others</u> This is one of the best sources of help. Manufacturers can not design this into software. Ask friends, other scouters and websites to provide assistance to common problems. They are invaluable.
- <u>Image Handling</u> Again this is nice to have, but not required since there is no possibility that the manufacturer of authoring software could include many of the advanced features that some of the less expense photo editing software contain.

B. Photo Editing Software Evaluation

In the Appendix there are tables that provide some basic information for decision-making. The comments are the opinion of the author and should be viewed as such. Personally, Microsoft FrontPage 2003 has the best combination of features and is one of the best options

Once you choose a product stay with it for a while before changing to a new package. This will result in less confusion. All software has a learning curve and unless you are a very quick study, changing software is difficult and can be painfully frustrating.

VII. Graphics and Photo Editing

Graphics play such a key role on internet pages that they are something that should not be taken lightly. When done correctly, graphics are certainly a wonderful addition to the appearance of a web site. When done incorrectly, users can become distracted and never see the written words that appear.

But for truly the best graphics, designers need to consider several functions to improve the display quality of the graphics. Among them:

- How many dots per inch (dpi) to use for the graphics?
- Which format to use?
- Should graphics be anti-aliased?
- Should the graphics be dithered?
- Should graphics be interlaced?
- Can I use transparent images?
- How should graphics be cropped?
- Are my graphics automatically optimized?

While it can seem to be a daunting task, once users begin working with graphics, it really is not that difficult. It takes some practice, but soon it becomes automatic.

A. Graphic Resolution

Photos enter the computer from either scanning or digital photos. No matter how many dots per inch (dpi)is used when they enter the system, they will all be 72 dpi when they hit the monitors. This is because all monitors allow them to be shown in that format.

Compare that to 2400 dpi used in magazines, and it seems as though photos would look terrible on a monitor. Not true, if done correctly.

Even though they will eventually only be 72 dpi, It is preferable to scan or adjust images to 300 dpi to start. The result will usually be a huge graphic (in display size and in storage size) that can be reduced in increments to maintain clarity and quality.

Final version of images for the internet should be no larger than 40K and preferably no more than 20-30K.

B. Graphic Formats

There are two common graphic formats used on the internet - .jpg and .gif. Another - .png - is becoming popular but has yet to dent the market enough to use unless there is, for some odd reason, no choice.

In most instances, photos should be saved in .jpg (it stands for Joint Photographic Experts Group) format. It provides greatest compression with the least quality loss.

The .gif (Graphical Image Format) format is more versatile, and is best suited for drawn (by hand or computer) graphics and type. It is also the format that best takes advantage of anti-aliasing (to eliminate the "jaggies"), transparency (where the background is eliminated), multi-graphic animations, and dithering (the mixing of dots to form colors other than cyan, magenta, yellow, and black that you would normally see).

.GIF format comes in two compression levels, 87a and 89a. Only in 89a can users get transparency and animations.

The afore-mentioned .png format was created when it looked as though people would have to pay royalties for using .gif images. That goal has apparently subsided and, after all, as the commercial says, "Shouldn't the internet be free for everyone?"

The short answer is "Yes." The longer answer is "Yes" if the graphic is in .gif format, but not if it is in .jpg format.

The reason for that is because the content of .jpgs is such that it doesn't produce the jaggies. It might seem that way if the subject of the photo has a bad complexion, but the photo itself will not.

Because drawings are made of pixels on the screen, even a straight line if angled will have a stair step look (that's the jaggies) and for best appearance needs to be anti-aliased.

That can be done within the graphic program used in most cases, and it will make the graphics appear smoother and more like a real picture.

C.   *When to Use Dithering*

Dithering occurs when other colors are used to blend those in a graphic and create a smoother transition of color. Dithered graphics will be larger because they do not compress as much as those not dithered.

Using .jpgs, the practice of dithering is essentially useless because there is no pixel by pixel control. In .gifs, however, it can improve the graphic's display.

Dithering is a valuable tool to use to create gradient colors and flat color areas.

D. *When to Use Interlaced Graphics*

This will help graphics appear more quickly on the page, but they won't look all that good at first. It involves the display to expose lines of the graphic as it loads.

This is intended mostly for gifs, because there is a progressive .jpg format that actually ends smaller than a normal .jpg.

Using interlaced .gifs means the designer is making a choice between faster load times or better first appearance. That is up to the individual designer.

E. *Transparent Images*

Transparent images are one of the fun things for a designer to use on the internet. Photos in .gif and .png format can be transparent, but .jpg images cannot.

Transparent .gifs are also great to use as animations. In that way, the user can have the animation appear on the background of choice.

There are several graphic programs that designers can use to make transparencies, and some HTML editors even have that ability as part of their features.

Using transparent images eliminates the square look that web sites often have, because even though the image is square or rectangle, the viewer only sees the image and not the box surrounding it.

F. *Cropping Photographs*

While trolling the web, it is easy to see that the greatest problem people have with graphics on web site is that they are not properly cropped.

Cropping is an old newspaper term meaning to select an area of a photo to focus on and delete the rest.

Frequently, internet travelers will see photos taken so far away that it is impossible to determine what is the subject. By eliminating the extraneous content, the photo can focus on the intended subject.

Head shots of people often contain far too much area of blank or background space, while the face itself is too far away to really determine what the person looks like. In that case, why bother having the photo there in the first place? Further, if the photo is too busy, it may be difficult for the viewer to fully understand at first what is the intended target of photo.

A general rule is that if it doesn't add to the photo, or if it detracts from the subject of the photo, get rid of it. Head shots (a.k.a. mug shots) you see in newspapers are usually the monitor equivalent of

72 pixels by 108 pixels, and often they are taken from much larger photos that show the person in action or in a group photo.

For the internet, not only does this help the viewer focus on what the designer wishes, but it also enables for higher quality while still diminishing the storage size of the graphic.

It seems like most HTML editors have a dialog box to use to place photos on a page. The advantage of that is that it more easily enables the designer to input information necessary to help the photo load more quickly.

Many users try to put a large graphic on the page and resize it to smaller, but it will still take the same amount of time for it load as the larger version. If you wish to have a smaller photo, resize before importing into the HTML page and then link to a larger version.

VIII. Acquiring Images and Clip Art

There are three basic sources of photographs to put on your website: Digital Camera, Scanners, and clip art.

A. Digital Cameras

There is a wide variety of camera equipment on the market today. Generally speaking, cameras fall into three broad groups: professional models, midrange models and subcompact shirt-pocket models. The price range varies form under $100 to over $2000 and the prices continue to decline.

Regardless of the special effects that a camera has there are still some things that you should consider when looking for a model to purchase. The features that should be considered (in no particular order) are: built in flash, zoom lens or the ability to add one, rechargeable batteries, USB 2.0 connectivity, eye level through the lens viewing, resolution, number of megapixels, memory storage, auto-focus, macro settings, exposure compensation, selectable ISO equivalencies, and automatic white balance.

The most important feature for generating high quality pictures is resolution, which is measured in megapixels. A pixel is a dot of light and a megapixel is a million pixels. The math of this is that the physical pixel size of a 2 megapixel image is around 1600 pixels wide by 1200 pixels tall. 1600 multiplied by 1200 equals 1,920,000 pixels (close to 2 million - the camera makers round this off when advertising cameras). When upgrading, you must do some math and look at the total number of pixels the camera's images produce, and NOT the "megapixel rating" of the camera at the store. Look at the highest image size (usually printed on the box) multiply them together and that will give you the number of millions of pixels that the image makes up. Jumping from a 2 to 4 megapixel camera will only give you a little more than 600 extra pixels across the width of an image. While prints will look better with the higher megapixel camera, they will not be doubled the resolution of the old camera.

A good 4-megapixel camera will give you very good 5x7 prints, and acceptable (to many) 8x10 prints. But if you really want very good enlargements of 8x10 and up, you will need to plunk down the dough for a 5 or more megapixel camera. Some will say they get great enlargements from their 2-3 megapixel cameras, as have some of my co-workers. That is, until I put a 5 megapixel print on the table next to theirs then they back down.

Buy as many megapixels as you can afford.

Professional models are by far the most expensive but they also offer the more advanced professional photographer versatility. They tend to be more rugged and tend to have the ability to be very creative in setting the right mood for the photograph.

Midrange models tend to be easier to handle then the subcompact models with a wider range of features. Some of these cameras have features found in the professional models. Features like the ability to save uncompressed RAW or TIFF photographs is helpful when you are going to tweak the image.

The subcompact models will serve the needs of most scouters. They tend to have the fewest features and are slower in performance. One disadvantage to these cameras is their small size which can make them difficult to find the correct buttons. Their advantage is these cameras are the go-any-where models. They take up a small amount of space in a pack and can capture the moment. The finished photograph can then be enhanced through one of the image management software packages.

An excellent resource for digital photography is the website www.shortcourses.com.

B. Scanners

Price vs. Quality

Flatbed scanners are more affordable than ever. Many models can be purchased for as little as $50. But buying cheap usually means reduced quality and functionality.

Resolution

This feature can be one of the most confusing, because of the way manufactures represent the value to the public.

Resolution usually refers to the number of dots that are used when scanning to represent an image and is represented as "DPI" (Dots Per Inch). The higher the DPI the more data that is available in the image. That is the simple part.

The two most common specifications that you will encounter are Optical resolution and Interpolated resolution:

- Optical refers to the actual number of dots that a scanner can capture and Interpolated refers to an enhancement that can be made to the image by the scanner's software.

- Interpolation allows the scanner to add dots to the image, which can potentially improve the image quality.

600 dpi is pretty standard on all entry level scanners, so don't settle for less. Unless you are attempting to produce professional quality images, paying for more than 600 dpi is generally not worth the difference. At the other end of the scale if you scan a photograph at 1200 x 2400with the full range of colors the file size can easily exceed 128Mb.This is likely to be more than the average computer can handle. Probably the only time you will need such high image quality would be when you are scanning a small, yet highly detailed image, and need to enlarge it.

Which One 24, 32 or 42 bits?

No, this does not refer to how many pieces you have to assemble. It refers to the range of colors the scanner can handle. These specifications can also be misleading. Don't assume that a 36-bitscanner will automatically give you better output than a 30-bit scanner, or even a 24-bit one. A higher-bit rate scanner is capable of recognizing more detail between colors, but you may not be able to tell the difference. A 30-bit color scanner, which provides several million colors and shades, is an excellent choice for the average user. Once you have installed your scanner you will need software to manipulate your images or convert a scanned piece of text into a document for further editing. All scanners come with software, often the 'LE' or stripped down version of a more expensive product but still more than adequate for most tasks.

C. Clip Art

For the purpose of scouting website development there are a wide range of clip art sites. Several of these locations are identified in the appendix. In addition, you can purchase graphics and some graphics are given away on the web, but be careful of copyright issues as discussed earlier.

Official BSA Clip Art

Official BSA Clip art is available http://www.scouting.org/identity/.

Other Scouting Art

There are a number of good websites that provide artwork for scouters to use on their website several of these are listed in Appendix B

IX. Get an Internet Name

Everyone has heard of 'dot com'. The name that is associated with the dot com suffix is called a domain name. A domain name is a series of letters, numbers or words that are associated with an electronic location called an IP(internet protocol) address. For the nonprofessional an IP address compares well to a phone number. Your phone number rings at your house no matter from where in the world someone is calling. An IP address is the same and by extension so is the Domain Name.

A domain name is shorter and more memorable way for visitors to find your site. A domain name may be up to 63 characters. You are limited to using alpha-numeric characters, and the hyphen can not be the first or last character of the domain. I do not recommend using a hyphen unless anyone using the site would naturally know to use the hyphen. It could make it difficult to find your site

There is no real difference in the technical standpoint. However, there is some difference in popularity. Originally,

- **.com** was commercial
- **.net** was internet network
- **.org** was non-profit.
- **.gov** was government
- **.mil** was military
- **.edu** was education institution

As a scout unit you are qualified for the first three, but the .org may require a few extra steps in the process. Other extensions are becoming popular like:

- **.aero** (aerospace)
- **.biz** (businesses)
- **.coop** (cooperatives)
- **.info** (general use)
- **.museum** (museums)
- **.name** (individuals)
- **.pro** (doctors, lawyers and accountants)
- **.tv** (television)

Country-specific domains, such as .us or the (USA), .ca (Canada) and .uk (United Kingdom), had also been available.

Typically you would want a .com site. Almost everyone checks that name plus .com first.

A.   Checking Domain Names

There are a number of places on the internet to find this information, but I suggest starting with Network Solutions at

http://www.networksolutions.com/en_US/whois/. Follow the directions and you can get a definitive answer of whether or not a name is available. Do NOT simply go to your browser and do a search. That can have a disappointing result.

B.   How Much is The Name?

Once you have a name you need to buy it. The rate varies from registrar to registrar. For .com, .net and .org domains, the rate usually varies from $10 - $35 per year. For international domains, the rate is anywhere from $25 to $250 dollars (US) per year. For .us domains, the cost varies from free to $80, and is determined by the local registrar.

You can register the domain yourself, and save yourself some fees; just visit any domain registrar's site. You will need to know several things, such as the primary and secondary DNS (Domain Name Server) name and IP address of the server you intend to host your domain on, and your host's NIC ID, if they are to be the technical or admin contacts for the domain. If you intend to be the admin, technical, billing and zone contact for your domain, all you will need to know is the DNS info. If you do not know this info, use a *whois* to look up your host's domain name, and use the DNS entries from that domain name. Most registrars also provide domain "parking" services in which you can use their own DNS servers for your domain, although some may charge a fee for this service.

This last step will now need to wait until you have selected your Web Host.

X. Find an Web Host

A. *So What Is a Web Host?*

A web host is the server that is connected to the internet that will have a copy of your web that will be visible to the entire internet. Selecting a web host can be a little tricky. You will want to minimize this reoccurring cost. There are people and organizations that may host your site at no cost. You must ask around the council and district to see if that is the case. If not you might have to buy an internet hosting plan. The costs of these plans have dropped dramatically. Some are only three to four dollars per month. Plus they will register your domain name for $10-25 extra per year.

B. *What Services Do We Need?*

The services you will need are as follows

- **Web Space**—usually expressed in megabytes (MB), 10-20 MB should be enough but more is always better.
- **Bandwidth**—expressed in gigabytes (GB)
- **MS FrontPage Support**—Microsoft FrontPage requires special software called 'extensions' to be applied to the website
- **FTP Access**—File Transfer Protocol access is for uploading files and pictures to your site when you initially set it up.
- **Guarantee**—Many sites offer a 30 day money back guarantee, that is sufficient to determine if they can deliver on their services.
- **Free Setup**—There should not be a charge for setting up your website.
- **Domain Registration**—The cost makes this a good deal. Make sure that you own the domain name and not the hosting service. This is usually true, but I have found several "too good to be true" deals and host owns the name. If you do not know, then ask the provider.

Other nice features that are often included are:

- **Pop3 email accounts**—are accounts that you use with your email software like MS Outlook.
- **Webmail Accounts**—are email accounts that may be accessed and managed from a webpage.
- **Tutorials**—on how to use the web host system are a must.

- **Software**—is sometimes included with purchasing a web site or signing contract, but be careful nothing is free and often the software is available on the web.

It usually takes 24-72 hours for your website and the registered domain name to begin working together. So anticipate the delay.

C. *Promoting Your Site*

Many web page developers seem to think that if you build a page, people will come. Unfortunately, life isn't quite so simple. With well over one billion pages on the internet, the odds of someone bumping into yours is rather remote, unless it is well promoted.

Web page promotion entails registering your URL with one or more search engines and portals.

There are literally hundreds of search engines in existence today. Although it is free to add your URL to some search engines, the registration effort does take time. Most major search engines now charge fees for registration. By registering with a firm such as *Overture*, however, your site will appear in the top U.S. search sites such as MSN, Yahoo, InfoSpace, Lycos, AltaVista, and Netscape.

Search engines can be national, international, of subject specific. A few very large search engines, however, are used by most internet users on a regular basis. You should certainly register your site with each of these.

Depending on your objectives, you may also want to register with some of the international, regional or subject based search engines. You can add your URL to each major search engines by clicking below:

- Add URL to AltaVista at http://addurl.altavista.com/addurl/new
- Add URL to Google at http://www.google.com/addurl.html
- Add URL to Yahoo at http://docs.yahoo.com/info/suggest/
- Add URL to HotBot at http://insite.lycos.com/

When a search engine becomes aware of the existence of your page, a "robot" or "crawler" will visit your site and create a set of database indexes based on words or phrases that it finds. Search engines use different algorithms, however, in general indexing occurs based on the number of times that specific words or combination of words are found in the title, section headings and body of the page. The title and first paragraph on your page are

important for indexing purposes. Your first paragraph on each page should therefore contain a concise overview of the page. Link popularity has also become extremely important.

XI. Maintaining Your Website

A. *Keep Your Website Current*

This is the single biggest reason most websites are not visited regularly. Keep your content fresh. If you are keeping a calendar, make sure it is current and gives enough information about the event including times and places. Add your photos of an event as soon as they are available, not six months after the event when the boys and their parents have long forgotten.

B. *Grow Your Content Slowly*

There are lots of good ideas that can make a website useful and fun. Your website can slowly grow by adding new pages for visitors to visit.

One of the best and most common is a picture album of events. Why not have some of the descriptions in your photo album written by the scouts? Scrapbooking is a fast growing hobby in many homes. An experienced scrapbooker is good source to help you lay out you album and to tell the story. Another idea is Unit History. Visit other sites and see what others are thinking. Let your creativity take over and have fun making these pages.

C. *How Much Should You Budget?*

Costs are always a problem for projects and the numbers listed below are theoretical. Many find that the cost is less than one hundred dollars per year.

Item	Cost	Reoccurring?
Domain Name	$10-25	Yes, annually
Web Hosting	$0-250	Yes, annually
Software	$65-200	No
Total Initial Cost	$75-475	
Total Annual Cost	$10-275	

XII. Website Developer Conclusions

Planning is the most import phase of website development. Make very sure you are publishing information that your readers will want to read and regularly visit your site.

Start small and grow your content slowly. Take time to learn your software. As you become proficient with the software most tasks will become much easier to accomplish.

XIII. Conclusions and Recommendations

This paper represents the only the beginning of what needs to be accomplished by our districts and councils. Listed below are recommendations for future implementation

A. *Survey of Scouter Software Use*

Survey scouting webmasters to determine what software they are using to prepare and maintain their websites, as well their problems and concerns. This project will allow for tailoring the training that unit webmasters might be interested in learning.

B. *Scouting Templates*

Develop basic Scouting Templates for common software to give novice webmasters a head start tool.

C. *Training Unit Web Masters*

Develop a training program for unit web masters.

D. *Develop Scouting Website Compliance Certificate and Awards*

Encourage the development of a Scouting Certification program for Unit websites as well as Awards that acknowledge the sites that serve the greater scouting community. Judging for such awards are best done by a third party.

E. *Web Master Recognition*

Develop a recognition award for unit web masters who are trained. These individual give hours to scouting each and every year.

Appendixes

Appendix A: Official Scouting Web Sites

Last Updated February 26, 2004

The following Web sites are operated by the National Council, Boy Scouts of America:

Boy Scouts of America, National Council (http://www.scouting.org)
Boys' Life (http://www.boyslife.org)
Scouting magazine (http://www.scoutingmagazine.org)
Give 2 BSA (http://www.give2bsa.org)
Supply Division, BSA (http://www.scoutstuff.org)
Direct Service BSA (http://www.directservicebsa.org)
Learning for Life (http://www.learning-for-life.org)
National Scouting Museum (http://www.bsamuseum.org)
Fieldbook companion site (http://www.bsafieldbook.org)
Finance Support Division (http://www.fsd.org)
Northern Tier High Adventure Base (http://www.ntier.org)
Florida Sea Base (http://www.bsaseabase.org)

Temporary Sites

Good Turn for America (http://www.goodturnforamerica.org)
Jamboree Web Site (http://www.bsajamboree.org)
Jamboree Catalog Site (http://www.jamboreestuff.org)

Appendix B. Unofficial Scouting Web Sites

- eScouting (http://www.eScouting.net)
- MacScouter Resources at (http://www.macscouter.com/)
- Animated Knots for Scouts at (http://www.mistral.co.uk)
- US Scouting Service Project (http://usscouts.org/)
- Merit Badge Research Center (http://www.macscouter.com/)
- Philmont Scout Ranch (http://www.philmont.com/)
- Scouter.com (http://scouter.com/)

Appendix C: Helpful Websites –HTML Guides

- A Handy Guide to HTML Editors http://www.ahandyguide.com/cat/h.htm Actually, there's more here than HTML Go take a look, you may be surprised!
- Bare Bones HTML http://werbach.com/barebones/ A guide that lists every tag in the official HTML 3.2 specification, plus the Netscape extensions, in a concise, organized format.
- Beginner's guide To HTML http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html This guide is used by many to start to understand the hypertext markup language (HTML) used on the World Wide Web. It is an introduction and does not pretend to offer instructions on every aspect of HTML.
- Digital Photograph Online http://www.digitalphotographyonline.com/ An important resource for digital cameras and equipment
- eTecc.com http://www.etecc.com/ Teaching HTML, JavaScript, and eCommerce. A great place to learn HTML, JavaScript, and graphic design. Plus, submit your site to search engines, and read ecommerce related articles.
- Form Tutor http://junior.apk.net/~jbarta/tutor/forms/index.html This is an easy to use guide for adding fill out forms to your web pages. Presented in HTML format, it will take you step by step through all the major form tags.
- How To Write HTML http://www.uwaterloo.ca/web-docs/Guidelines/howto.html Links to links.
- HTML Bad Style Page http://www.earth.com/bad-style/ A collection of dont's for HTML.
- HTML Help Online http://srsmith.tripod.com/ Everything HTML from the basics to advanced. Includes javascripts, frames, forms, style sheets, and more.
- HTML Quick Reference Guide http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLQuickRef.html From NCSA.
- HTML Tutorial http://www.cwru.edu/help/introHTML/toc.html This tutorial has a sequel titled Intermediate HTML, which covers forms, among other things.
- Learning HTML http://www.bev.net/computer/htmlhelp/index.html This page is dedicated to helping people learn HTML and write their own pages. Through it you can access most of the tools and tricks you need to get going.
- Putting Information on the Web http://www.w3.org/hypertext/WWW/Provider/Overview.html If you would like to create information and place it on the World Wide Web, you can approach this in several different ways. Find out some basics here.
- So, you want to make a Web Page! http://junior.apk.net/~jbarta/tutor/makapage/index.html Easy to use web

page authoring tutorial written especially for Newbies. It will guide you gently though all the basics of html and web page design.

- Style Guide for Online Hypertext http://www.w3.org/hypertext/WWW/Provider/Style/Overview.html This guide is designed to help you create a WWW hypertext database that effectively communicates your knowledge to the reader.
- Table Tutor http://junior.apk.net/~jbarta/tutor/tables/index.html Is an easy to use guide for making HTML tables for your web documents. Presented in HTML format, it will take you step by step through all the major table tags.
- Webhelp.org http://webhelp.org/ Is a good place to find out some tips, as well as a great frames section.

Appendix D: Helpful Websites

Web Tutorials and Books

- SiteBuilder.com
- FrontPage Tutorial
- Classroom FrontPage
- Florida Gulf Coast University On-line Tutorials

Helpful Websites—Additional Recourses

- DocB's WebDesign Clinic
  http://pages.prodigy.com/psych/wirdcli1.htm Is a Step-By-Step
  Guide to Effective WebSite Design. This ongoing series of brief
  articles will guide you from planning through execution of your
  site.
- Phrizbie Design- Creative Web Design http://phrizbie-
  design.com/ Graphic design, HTML, Java Script, DHTML, cgi-
  online forms, mailing list creation, animated banners, affiliate
  program integration, FLASH intros, logo design, dynamic
  navigation bars and sites free of cross-browser incompatibility
  issues.
- SiteKits®
  http://desktoppublishing.com/template/web/sitekits.html are
  FREE web site templates allow you to build a site in minutes.
- Wade's WWW Tutorials
  http://web.mit.edu/afs/athena/user/w/s/wsmart/WEB/HTMLtutor.
  html May be a bit dated, but contains explanations and
  examples of preliminaries, document structure, text handling,
  special characters, lists, images, links, mailto links, and
  imagemaps, and more
- Webmonkey Teaching Tool
  http://www.hotwired.com/webmonkey/teachingtool/ Is a set of
  reference tools to provide you with all the basics and more.
- Web Pages That Suck http://www.webpagesthatsuck.com The
  purpose of this site is to help people design effective and
  aesthetically pleasing web pages.

Appendix E: Web Editing Software
Software Evaluation Key

Category	Explanation
(ESC) eSouting Rating	My personal opinion of the overall usefulness of the software for scouting applications, where zero is the least useful and ten is the most useful
Skill Level	What level of user should consider this software? (N)ovice (I)ntermediate Skill users (A)dvance Skill users
Trial Version	Is there a trial version available to test? Yes or No plus most are available by download.
Difficulty	On a scale of 0 to 5 with five being most difficult and zero being easy to learn.
Title	Title of the software plus an internet link to the home page.
Description	I have searched for descriptions on the suppliers website to describe the software, plus I have included several observations from various sources pro & con.
Cost	The cost of the software per the website of the manufacturer. Lower costs may be found on the web. I suggest you do a though search before purchasing.

Software Feature Key

WYSIWYG	WYSIWYG
Tables	Table making functions
Navigation	Automatic Site Navigation
Drag & Drop	Drag & Drop
HTMLcode	HTML code editing
Publishing	Easy publishing
Art	Clip Art & Backgrounds
Wizards	Wizards
StyleSheets	Style Sheets or Themes
Templates	Templates
Support	Product Support
OtherSupport	Other Support
Images	Image Handling

Web Authoring Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
9	N-I-A	Yes (CD only)	2	FrontPage 2000/2002/2003	"FrontPage 2003 provides Web designers and developers with a set of tools to enable the creation of dynamic Web sites quickly and easily. FrontPage 2003 centralizes all of the design, coding, and publishing functions to provide a total Web creation and management solution with the flexibility to match your design and coding skills, as well as push them to new levels." —MS FrontPage 2003 Product Guide 2/25/04 **Pro's** • WYSIWYG editing • Lots of templates • Easier publishing • Drag and drop live content • New usage reports • Photo gallery • Many wizards to step you through the creation of your Web site **Con's** • code generated tends to be bloated • HTML view is poorly organized (2003 is much better)	$195 list $99 upgrade
7	N-I-A	Yes (45 day trial)	3	CoffeeCup HTML Editor	"The CoffeeCup HTML Editor is the fastest, easiest, most full featured HTML Editor available. It comes with over 125 Javascripts, a DHTML Menu Wizard, Thousands of Graphics and built-in Uploading too." —Coffeecup.com website 2/25/04 **Pro's** • WYSIWYG editing **Con's**	$49 list

Web Authoring Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description		Cost
8.5	N-I-A	Yes (30 day trial)	3	NetObjects Fusion	"NetObjects Fusion includes built-in e-commerce solutions... enhanced Photo Gallery options for importing and displaying digital images, and integrated Web services for effectively managing and promoting Web sites...and a sophisticated new version of the Style view for organizing and managing the SiteStyles library, we've enhanced the process of building and upgrading professional-quality Web sites quickly and easily." —NetObjects.com website 2/25/04	**Pro's** • WYSIWYG editing • Lots of templates • Easier publishing • Drag and drop live content • New usage reports • Photo gallery Many wizards to step you through the creation of your Web site **Con's** • Not a well supported by the internet community as Frontpage	$165 $87 upgrade
8	N-I-A	Yes (30 day trial)	2	Hotdog Pro	"The perfect authoring tool for both professional and budding Webmasters, HotDog Professional 7.03 provides a flexible, text based HTML authoring environment. It makes complex processes simple without getting in the way of specialized tasks that require undivided attention and scrutiny." — Sausage.com website 2/24/04	**Pro's** • WYSIWYG editing **Con's**	$129 list

Web Authoring Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
6	N-I	Yes (30 day trial)	1	HotDog PageWiz	"Designed for the novice user, HotDog PageWiz is an intuitive Web authoring tool designed to meet the needs of up-and-coming Webmasters, regardless of your experience level. HotDog PageWiz comes with 10 snazzy templates to get you started, and combines the best of WYSIWYG and text-based authoring to provide a totally scalable tool for you to not only learn, but master Web design." —Sausage.com website 2/24/04 **Pro's** WYSIWYG editing **Con's**	$70 list
5		Yes (30 day trial)	2	EHTML	EHTML is a powerful, fully featured web-authoring tool that will help you create, publish and update your web pages within a matter of hours. It includes an array of simple, intuitive wizards that will enable you to construct almost all web page components without all the usual headaches and hassle. In no time at all you will be achieving smart, professional results with ease." —Ehtm.com website 2/25/04 **Pro's** • WYSIWYG editing **Con's**	$45 list (discounts as low as $20)
2	A	Yes	5	Macromedia Dreamweaver	"Dreamweaver lets you create sites and applications the way you want to — by hand-coding, visual design, or a combination of the two, and with your choice of server technologies." —MarcoMedia.com website 2/25/04 **Pro's** • Advanced development features **Con's** • This package probably much more that the average webmaster will ever need.	$399 list (upgrade for $189)

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Web Authoring Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
5	N-I	Yes (30 day trial)	3	EasyWebEditor	EasyWebEditor is perfect for Web beginners, yet contains many high powered features. You can create fancy pages in minutes because you don't need to learn all available functions, nor all the dialogs, to start taking advantage of its power. Easy Web Editor grows as you grow. —EasyWebEditor.com website 2/26/04 **Pro's** • WYSIWYG editing **Con's**	$59
2	A	no	5	Microsoft Visual Interdev	This is a high end web application development tool. The package various scripting capabilities, database tools. **Pro's** • WYSIWYG editing **Con's** • Difficult to set up • This package probably much more that the average webmaster will ever need.	$665 list
2	N	Yes (30 day trial)	0	HotDog Junior	"HotDog Junior is an easy to use Web Page creation tool designed primarily for children aged 6yrs and up. 'Junior' (the friendly HotDog Junior character) will guide kids through a simple 4 step process whilst educating them about Web page creation, and ensuring they have fun along the way. It's so simple even Mom and Dad can use it!" —Sausage.com website 2/24/04 **Pro's** • WYSIWYG editing **Con's** • Very limited in scope	$40 list

Web Authoring Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
2	N	Yes (30 day trial)	3	Web Weaver EZ Web Weaver 2002	"Web Weaver EZ is a free WYSIWYG page editor for Windows. No need to fool around with HTML code to create professional looking Web pages. Web Weaver EZ allows you to create your Web pages without knowing a thing about HTML!" —mcwebsoftware.com website 2/25/04	$0 (upgrade is only $35)

Pro's	Con's
• WYSIWYG editing	Very few features, you may want to upgrade to the EZ Gold product for just a little money. Remember you get what you pay for!

Appendix F: Photo Editing Software Evaluation

Graphics Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
8	N-I-A	Free	2	GIMP	WinGIMP is a Windows-port of the GNU Image Manipulation Program. It is a freely distributed piece of software suitable for such tasks as photo retouching, image composition and image authoring. This site contains information about downloading, installing, using, and enhancing the Windows version of the GIMP. –WinGIMP website April 28th, 2004 **Pro's:** excellent editing features; Photo Organization system; touch-up wizards **Con's:**	$0
6	I-A	No	2	Adobe Photoshop 7.0	Description: For the ultimate in graphics power and flexibility, Photoshop can't be beat. Photoshop offers more non-destructive ways of working than any other photo editor, and Adobe is always adding enhancements to help get the job done faster and with less frustration **Pro's:** excellent editing features **Con's:** Clearly the industry standard, but it is much in the package for a novice	$650

Graphics Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description		
8	N-I	Yes (30 days)	4	SmartDraw Photo	SmartDraw makes it easy to draw diagrams, forms, maps, and flyers of all kinds that look like what an expert would produce. There are dozens of prebuilt templates organized by category -- block diagrams, engineering diagrams, floor plans, flow charts, flyers, forms, maps, networks, organization charts, trees, timelines, and more. The miscellaneous category even includes a crime-scene template.—PC Magazine Aug 23, 2000		
					Pro's		**Con's**
					• good editing features • Good Tutorials • Photo Organization system • touch-up wizards		• No layers
							Cost $69
6	N		5	Microsoft Picture IT 2002	"Picture It! Photo Premium 9.0's powerful photo-editing tools and built-in wizards make it easy for everyone to improve their photos. With Picture It! Photo Premium, it's easy to use advanced editing and creative tools to make your good pictures great pictures" —Microsoft website 3/1/04		
					Pro's		**Con's**
					• good editing features • touch-up wizards		• Limited color adjustment • no layers
							Cost $36

Graphics Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description	Cost
7	N-I	Yes (30 days)	2	Serif Photo Plus 9.0	**PhotoPlus 9** is more powerful, creative and easier to use than ever before. Incredible new effects to spice up your photos and creations include automatic dust and scratch removal, stained glass, half tone, glowing edges and new lighting effects." —Serif website 3/2/04 **Pro's** • PDF output **Con's**	$100
7	N-I	Yes (30 days)	2	Beatware e-Picture Pro 3.0	"Traditional web designers will appreciate e-Picture Pro's robust set of tools, filters, effects and animation capabilities. Banners, buttons and even Macromedia Flash movies are quick and easy to create and all the popular web formats are supported. You can even incorporate charts, graphs, dashboards and 3D models and text into your designs using the specialized built-in tools." —Beatware Website 3/2/04 **Pro's** • **Con's**	$169
8	N	Yes (30 days)	2	Jasc Paint Shop Pro	**Pro's** • good editing features • touch-up wizards **Con's**	$105

Graphics Software Evaluation

eScouting Rating	Skill Level	Trial version	Difficulty	Title	Description		Cost
8	N-I	?	3	Microsoft Digital Image 9	"Digital Image Suite including Digital Image Pro and Digital Image Library offers one integrated complete solution for all of your digital imaging needs. Digital Image Suite is packed with all of the tools you need to organize your photos, edit them using hundreds of easy-to-use tools, create hundreds of one-of-a-kind projects, print and share your work, and archive photos for safekeeping." —Microsoft website 3/1/04		$129
					Pro's • compatible with Photoshop plug-ins • Feature Rich	**Con's**	
7	I-A	Yes (30 day)	2	CorelDraw 12.0	"The first graphics suite to offer intelligent tools, it gives you fewer steps in the design process, less re-purposing time, faster reviews, better control over the placement of text and objects, and more accurate layouts. With industry-leading illustration, digital imaging and motion graphics software in one complete package" —Corel website 3/1/04		$399
					Pro's • Photo & Vector graphics • editing features	**Con's** Almost too much in the package for a novice	