



U.S. Coast Guard Auxiliary C-School

AUX-04

USCG Auxiliary Distance Education
Technology Training (BASIC)

Website Development and Management Guide



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December 2006, Version 1.0

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Course Abstract

Course abstract

The AUX-04 course provides introductory to intermediate training in electronic presentation and Web-based technologies. This course is neither designed nor appropriate for advanced or professional users. Students will learn about the application of Internet and multimedia technologies for Auxiliary activities, including communication services, member training, public education, and public affairs. The classroom-based training involves the use of computers and the development of two projects: one multimedia presentation and one Website. These will be used when the students return to their local units.

Multimedia Presentation Section

In this section, students will advance their skills in multimedia presentation from the level of beginner to that of advanced user. Using Microsoft PowerPoint software, students will create a presentation specific to their office with the intent to deliver this presentation at an Auxiliary activity following completion of the course. Students will learn how to organize a presentation, connect relevant hardware, incorporate graphics, link to relevant online resources, and save the presentation for transportation between computers and delivery to end users.

Website Development and Management Section

This section of the course will provide beginner and intermediate level training in Internet technologies, specifically World Wide Web publishing. Students will develop Auxiliary unit-level Webpages into a Website architecture developed from a purpose statement and content plan. Intended as a new Website or a redevelopment of an existing unit Website, the course will provide the foundation for further development following the course. Instruction will also be provided on Internet security, local computer upgrades, and involvement of other staff officers in the development of content for the unit Website.

In addition, students will learn how to apply appropriate media, tools, and applications for Coast Guard and USCG Auxiliary training, education, and maritime domain awareness. The application of the above technical tools is in direct support to the Coast Guard's role in homeland security. Attendees will learn to how to effectively lead discussion groups over the Internet.

Graduates of this course will be able to create powerful interactive courseware, design Websites, regularly update computer security features, and conduct PC-based audio and video conferences. Attendees are expected to deliver this training at their local unit level following completion of the course.



Welcome AUX-04 students

You have embarked on a four-day journey that will take you to exciting places most have never been—that is the world of Auxiliary distance education. Our service members are scattered about the country, from Maine to Guam, so using computer technology is a very important component, the glue, which holds us together. Before computer technology, we relied on letters, Rapidrafts (an antiquated form similar to a memo), and the telephone to correspond and to stay connected. Today we use emails, Websites, and online member training to accomplish most of our communications.

Now that you have arrived—what is the next step? Hopefully you have been given a class schedule that details all class sessions, breaks, and meal times, even ground transportation schedules. Study that schedule to determine your own personal schedule at the hotel, meeting the van and for visiting the CG Exchange. As you can see, you will be spending a great amount of hours at a keyboard developing your projects, so free time will be at a premium.

There are two objectives of this course. Using the information learned and skills developed:

1. You will build a PowerPoint presentation, which will be presented at either a flotilla or division meeting.
2. You will plan, develop and publish an Auxiliary Website. This Website could be used as a flotilla or division primary site, or it could be an ancillary site.

Today, you will attend the following instructional periods:

Before Lunch	<ul style="list-style-type: none">• A welcome brief from the AUX-04 course manager and the either the Information Department Chief or Deputy Chief.• A brief and discussion of computer security.
After Lunch	<p>The class will be divided into two parts (port and starboard sections)</p> <ul style="list-style-type: none">• The port section will move to the Web development training room and continue discussions on computer security specific to Website development.• The starboard section will remain in the PowerPoint training room and will start briefs on general issues relating to using PowerPoint.

Your instructor will give your further guidance as to the information being covered and if schedule modifications will are necessary.

Each day will include briefs (lectures) with ample lab time to take what you have just learned and put it into practice. Throughout each brief, student questions are encouraged. On day four, you will have various lab times to work on either project (Website development or your PowerPoint presentation).

So get ready for the best C-School in the Coast Guard Auxiliary.

Student Skills and Computer Requirements for this Course

Student skills and computer requirements for this course

AUX-04 students must be flotilla members, actively involved in Communication Services (CS), Member Training (MT), Public Education (PE), or Public Affairs (PA). Preference will be given to CS Officers due to the nature of their particular tasking. They should be novice to intermediate in the use of Website publishing applications and MS PowerPoint. More experienced users are encouraged to participate in a future advanced AUX-08 course currently being developed.

This course is also open to reservists, active duty, or civilian employees actively involved in distance education technologies and who desire to implement e-Coast Guard and e-Auxiliary initiatives. The office of U. S. Coast Guard Commandant (G-PCX) must approve all waivers for active duty, reservists or civilians.

Students MUST be computer literate (see the computer skills below), and have a home computer with regular Internet access. Students are required to load Microsoft FrontPage 2003, PowerPoint and access pre-class and post-class assignment Website at <http://aux04assignments.auxservices.org/>. For computer system requirements, see the page ix.

The student needs the following computer skills and knowledge to complete this course:

- Opening and closing a document
- Cutting and pasting text in a document
- Editing text and moving text around within a document
- Saving a document
- Copying and/or moving documents between folders
- Know how to send and receive electronic mail (email)
- Be familiar with the use of the Internet
- In addition, familiarity with Microsoft Office products is a plus

The student must bring:

- A recent flotilla newsletter
- Some member training material
- Any available pictures or artwork of command activities suitable for use in developing a flotilla Website
- A recent Auxiliary education course and exam or a
- A sample chapter of a member-training course to be presented at an Auxiliary district or national conference or workshop

Student Skills and Computer Requirements for this Course

Active duty, reservists, or civilian students must bring a sample lesson plan, draft course, or other suitable education product to work on during the course. These will be used to carry multimedia-based training back to student's command.

The system requirements for FrontPage 2003, as stated by Microsoft are:

A PC with an Intel Pentium 233-MHz or faster processor (Pentium III or higher recommended), 128 MB of RAM or greater, 180 MB of available hard-disk space; optional installation files cache (recommended) requires an additional 200 MB of available hard-disk space, a CD-ROM or DVD drive, a super VGA (800 × 600) or a higher-resolution monitor, Microsoft Windows 2000 with Service Pack 3 (SP3) or later, or Windows XP or later, and a Internet functionality. Please remember these recommendations are the bare minimum—hopefully your system will be a current generation Pentium running Windows XP or Vista with lots of RAM and a much better monitor. [12]

Websites that support AUX-04 and the Auxiliary

Visit the AUX-04 Student Support Website

<http://aux04.auxservices.org>



There you'll find information on:

- How to apply for the AUX-04 resident course
- Student travel information
- Web and PowerPoint training documents
- Access to the CS Guide, the How to Library, and Bits and Bytes
- and of course all the information a student needs about the AUX-04 C-School class

Use GoodSearch to support the Auxiliary Association



Add <http://www.goodsearch.com/> to your Website.

When you search the Internet:

- Use GoodSearch at the above address
- Then enter “Coast Guard Auxiliary Association–CG AuxA”
- And do your search
- The Auxiliary Association receives one cent (\$.01) per search






Introduction

Introduction

This guide was developed for students as a reference while attending the USCG Auxiliary AUX-04 class. AUX-04 is a very demanding course and requires a significant time commitment before, during, and after the class. Before this guide was developed, students were given study materials from various sources (excerpts from training manuals and the Internet) in hopes the material would give a firm enough base to grasp the technical nature of the information presented. It became clear that a dedicated guide was badly needed. We envision this guide will become a basic reference book, not only for the AUX-04 student, but also for anyone who takes on the job of an auxiliary communications services officer.

Icons used in this reference guide

Throughout this guide you will find icons placed in the left-hand margin, Here is what they mean:

	Tip Icon: This signifies information, possibly a shortcut or trick of the trade, which will make your life as a CS officer easier
	Caution Icon: When you see this, be careful. You might be doing something you'll regret later.
	Reread Icon: This information or process you'll probably be doing over and over again, so you might want to reread this section.
	Good Habit Icon: This is something that the CS officer should develop as a good habit to follow.
	Policy Icon: This information is mandated Web policy and must be adhered to for site approval.

Items used in this Guide

Items used in this guide

Key sequences and keyboard commands

Keyed sequences: To show the systematic keyed sequences, the “↓” symbol is used. For example, to open a file in FrontPage 2003, you can choose File↓Open... to open a file. The down arrow signifies a drop-down menu.

Hot keys: In the example above File↓Open... notice that the F in File and O in Open are underlined. Underlined letters in menus are considered *hot keys*. Pressing these hot keys along with the <Alt> key will make selections in dialog boxes. If you hold down the <Alt> key while hitting the F key, the File drop-down menu will appear, continue holding down the <Alt> key and press O, and the Open dialog box appear.

Keyboard commands: In addition to *hot key* commands, you can press a combination of keys. A keyboard command that all users should be aware of is <Ctrl>+S. This is the keyboard command to save your document. This will be one of many keyboard command sequences that you will learn about in this course.

Word and capitalization used in this guide

When referring to the ‘Web,’ do we capitalize?

In this guide, the word ‘**Web**’ will be capitalized when reference is made to the World Wide Web. Webs on private networks are to be referred to as ‘**Webs**,’ with a lowercase ‘w.’ For the word ‘Web’ or ‘Webs,’ this guide follows the same convention as stated above.

Is the word ‘Website’ one word or two?

In this guide, the word **Website** will be one word and capitalized. The present trend is toward Website as one word. When two words express a single concept, they tend to grow together, sometimes passing through a hyphenated phase. The transition from Website (from “World Wide Website”) to Website has been quite rapid.

The transition from *World Wide Website* to *Web site* to *Website* seems to have progressed as rapidly as the technology itself. The development of *Website* as a single uncapitalized word mirrors the development of other technological expressions, which have tended to evolve into unhyphenated forms as they become more familiar. Thus *email* has recently been gaining ground over the forms *E-mail* and *e-mail*, especially in texts that are more technologically oriented. Similarly, there

Items used in this Guide

has been an increasing preference for closed forms like *homepage*, *online*, and *printout*. [11]

Is it E-mail, e-mail or email?

Throughout this guide, the word '**email**' will be used in reference to electronic mail. See reference [11] above, as it describes when two words express a single concept transition to a single word.

Why is bold text used in this guide?

Bold text is used to highlight a word or words significant within the discussion. Bold text helps the student locate important discussion words.

Why is some text italicized?

The purpose of italicized text is only to emphasis certain words or phrases, so they stand out within the text.

Images used in this guide

Images used in this guide are from the Microsoft Office 2003 clip-art galley unless otherwise noted.

Hyperlinks used in this guide

From time to time hyperlinks are used in this guide; they are not an endorsement of any particular company or product. Links are added to assist the reader in understanding the text or to give the reader a resource for further investigation.

Keeping up with Technology

Keeping up with technology

Throughout this guide there is little discussion about a “preferred home computer system.” As volunteers, auxiliary members support the e-Auxiliary with various computer systems. Our home computers are a large personal investment and many members may not have the expendable income to purchase all the latest equipment and software. Fortunately, or unfortunately depending how you look at it, technologies advance and we must keep pace with the advances in equipment, operating systems (OS) and application software.

A check of past AUX-04 student questionnaires show that most students try to maintain an up-to-date computer and OS, but many still are using older computers and operating systems which are no longer vendor supported. This is where problems arise. If you are still using an older system, let’s say a 486 or one of the first generation Pentiums (Pentium I or II), and the older operating systems (Windows 98, 98 Millennium or 98 SE—Special Edition), it’s time to retire that old machine. Why? Because, (1) these systems are under powered and don’t meet today’s standards, (2) these operating systems are no longer supported by Microsoft, and (3) security updates for these old operating systems stopped years ago and without security updates, you’re system is open to any number of malicious software attacks (see Chapter 1). Older systems, due to their antiquated hardware/software, cannot run the newer software applications, such as FrontPage 2003, which is the standard Website development and management software for the Coast Guard and the Coast Guard Auxiliary at present.

We normally recommend purchasing the best computer system your budget will allow, so the system will give you the maximum length of service possible. Shop around in your area and on the Internet.

Two other recommendations we strongly make are (1) get the maximum Random Access Memory (RAM) and (2) get the best monitor you can afford.

(1) Random access memory (RAM)

The more RAM you have, the faster you system will operate. In using FrontPage 2003, the minimum amount of RAM is stated at 128 MB, but we recommend at least 512 MB. Please note that the software might work fine on the minimum hardware requirements but you will probably not be satisfied on how slow the system runs.

(2) The best monitor you can afford (screen size and type)

And as a Web developer or manager, you’ll be spending hours sitting in front of your monitor, so shop around, compare each and get clearest, largest monitor you can afford. With a larger screen, you easily have enough screen space to have multiple applications open and viewable. As people get older, increasing the font size of the characters is easier on the eyes. Think of

Keeping up with Technology

yourself at your next computer purchase. If you still have an older CRT (Cathode Ray Tube) type of monitor around the house, you might want to upgrade to a LCD (Liquid-crystal display) type. The LCD has been found to be much easier on the eyes than the CRT. A major component of the CRT is the vacuum tube in which a hot cathode emits a beam of electrons that pass through a high voltage anode and are focused or deflected before hitting a phosphorescent screen. This beam scans the tube, which can cause a perceived screen flicker. Viewing this flicker for long hours can be very tiring to the eyes. For specific computer system requirements for this course see page ix.

Keeping up with Technology

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Chapter 1. Basic Computer Security



Microsoft Office 2003 clip-art gallery

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Chapter 1 Basic Computer Security

In this Section, you will learn about

1. Basic Computer Security

1.1 Updating your system and application files

1.1.1 Microsoft Windows updates

1.1.2 Apple Mac OS X updates

1.2 Antivirus software

1.3 The need to install a firewall

1.4 Strong passwords

1.5 Malicious software and practices

1.6 SPAM filters

1.7 Surge protectors

1.8 Making your backups



Protect your data
and computer

Website resources found in this Section

Home Security: http://www.us-cert.gov/reading_room/HomeComputerSecurity/

Microsoft Windows updates:

<http://update.microsoft.com/microsoftupdate/v6/default.aspx>

Apple Mac OS X updates: <http://www.apple.com/support/downloads/>

AVG Anti-virus software (free): <http://www.grisoft.com/>

Zone Alarm Firewall software (free): <http://www.zonelabs.com>

Anti-Spyware/Adaware software (free):

- Spybot
(<http://www.spybot.info>)
- Adaware
(<http://www.lavasoftusa.com/>)



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1.1 Updating your system and application files



Vendors often provide free software patches on their Websites—these updates offer software updates and security patches. When you purchase programs, check how the vendor supplies these updates, and if they provide a way for the customer to ask questions. Just as appliance vendors often sell extended warranties for their products, some software vendors may also sell support for theirs.

Most Auxiliary members use Microsoft Operating Systems (OS) such as Windows 98 or Windows XP and other use a version of Apple Mac OS. These vendors offer an easy way to update their OS. It's recommended you check for OS update often or setup your computer for automatic updates.

Software patches: Software patches are small software updates to correct or modify code on your computer's operating system or software applications to improve security or correct problems.

1.1.1 Microsoft Windows updates



Good Habit

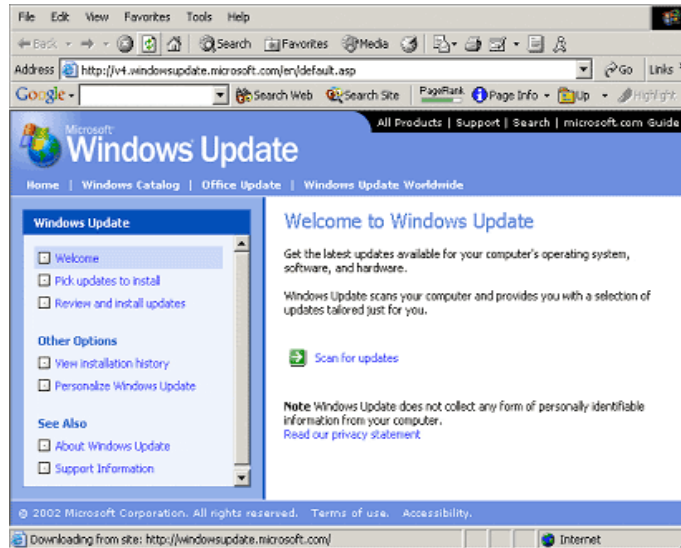
Updating your operating system is one of the most important things you can do. Here are ten reasons why we should update your Windows XP to Service Pack 2 (SP2) [14]:

1. Help protect your PC from harmful attachments.
2. Improve your privacy when you're on the Web.
3. Avoid potentially unsafe downloads.
4. Reduce annoying pop-ups.
5. Get firewall protection from startup to shutdown.
6. Take control of your security settings.
7. Get the latest updates easily.
8. Help protect your email address.
9. Take action against crashes caused by browser add-ons.
10. Go wireless without the hassle.

<http://update.microsoft.com/microsoftupdate/v6/default.aspx>

To update Microsoft Windows products use the Internet Explorer (IE) browser and click on the **'Tools' menu** and scroll down to **'Windows Update'**. Your desktop will look like Figure 1.1a. Follow the prompts on the Microsoft Website.

Figure 1.1a
Browser view showing Microsoft Windows Update



1.1.2 Apple Mac OS X updates

(<http://www.apple.com/support/downloads/>)



Good Habit

To get updates immediately:

1. From the **Apple** menu, choose **System Preferences**.
2. From the **View** menu, choose **Software Update**.
3. Click the Check Now button (or Update Now in earlier Mac OS X versions).
4. In the Software Update window, select the items you want to install, then click Install.
5. Enter an administrator account name and password.
6. After the update is complete, restart the computer if required.

Repeat these steps to see if more updates are now available. Because some software updates are prerequisites for others, you may need to repeat these steps several times to complete the software update sequence.



Tip

Tip: If you have Mac OS X 10.3 or later, there's a shortcut. Choose Software Update from the Apple menu instead, then skip to Step 4 above.

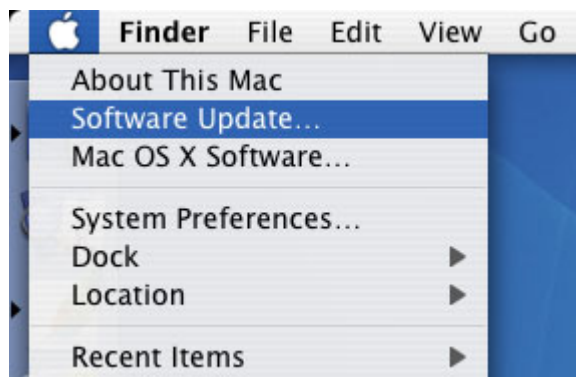
Scheduling an update with Mac OS X

The Software Update preference pane, see figure 1.2a) lets you schedule

automatic checks for updates. In fact, it's set to automatically check by default. You can change the check interval from weekly to daily or monthly, or you could turn off scheduled checks if you want.

Figure 1.2a

Mac software update



1.2 Anti-virus software



Good Habit

All computers systems should:

- Have anti-virus programs installed
- Be updated often (at least once each week)

Anti-virus programs look at the contents of each file, searching for specific patterns that match a profile—called a virus signature—of something known to be harmful. For each file that matches a signature, the anti-virus program typically provides several options on how to respond, such as removing the offending patterns or destroying the file.

Viruses can reach your computer in many ways: through floppy disks, CD-ROMs, email, Websites, and downloaded files. All need to be checked for viruses each time you use them. In other words, when you insert a floppy disk into the drive, check it for viruses. When you receive email, check it for viruses. When you download a file from the Internet, check it for viruses before using it. Your anti-virus program may let you specify all of these as places to check for viruses each time you operate on them. Your anti-virus program may also do this automatically. All you need to do is to open or run the file to cause it to be checked. It is recommended that you set up auto updates and system scanning.

There are many excellent anti-virus programs available. We find many Auxiliaries use the free anti-virus program from AVG. (<http://www.grisoft.com/>).

1.3 The need to install a firewall



Good Habit



The first level of defense in a modern computer system should be a firewall. The firewall acts much like a guard when it looks at network traffic destined for or received from another computer. The firewall determines what traffic should continue onto its destination. The firewall “guard” is important because it keeps the unwanted out and permits only appropriate traffic to enter and leave the computer.

Firewall: The Firewall is the primary method for keeping a computer secure from intruders. It allows or blocks traffic into and out of a private network or the user's computer. Firewalls are widely used to give users secure access to the Internet as well as to separate a company's public Web server from its internal network.

To do this job, the firewall has to look at every piece of information—every packet—that tries to enter or leave a computer. Each packet is labeled with where it came from and where it wants to go. Some packets are allowed to go anywhere (the employee with the ID badge) while others can only go to specific places (visitors for a specific person). If the firewall allows the packet to proceed (being acceptable according to the rules), it moves the packet on its way to the destination. In most cases, the firewall records where the packet came from, where it's going, and when it was seen.

For a free Firewall, most Auxiliary members download:

- ZoneAlarm <http://www.zonelabs.com>,
- Comodo <http://www.personalfirewall.comodo.com>, or
- Agnitum <http://www.agnitum.com/products/outpostfree/download.php>

Also built into Microsoft Windows XP service pack 2 is a free firewall. If you do a search of the Internet you might find additional firewall software.

1.4 Strong passwords

1.4.1 What makes a strong password?



Good Habit

A strong password is a random string of characters. To make a strong password, do the following:

- Make your password lengthy. Your strong password should be eight or more

characters.

- Combine numbers, letters and symbols in your strong password. The greater variety of these characters the harder it is to guess.
- Use phrases or words that are difficult to guess, but easy for you to remember. How do you remember? You write them down! Just make sure you give adequate protection to those written-down passwords.

1.4.2 Password strategies to avoid



Good Habit

- Don't use sequenced or repeated characters. (i.e. 12345678, abcdefgh, or 55555555)
- Don't use substitutions. (i.e. p@ssword)
- Don't use your login name, your birth date, and your Social Security number.
- Don't use common words that can be found in a dictionary.
- Avoid using the same password on different systems (i.e., using the same password for your ATM, and your online banking, and your home computer.)

1.5 Malicious software and practices

1.5.1 Viruses



How do intruders break into your computer? In some cases, they send you email with a virus. Reading email or opening an email attachment might activate a virus, creating an opening that intruders use to enter or access your computer. In other cases, they take advantage of a flaw or weakness in one of your computer's programs.

Virus: Software used to infect a computer. After the virus code is written, it is buried within an existing program. Once that program is executed, the virus code is activated and attaches copies of itself to other programs in the system. Infected programs copy the virus to other programs.

Once viruses are on your computer, they often install new programs that let them continue to use your computer even after you've plugged the holes they used to get onto your computer. These backdoors are usually cleverly disguised so that they blend in with the other programs running on your computer.

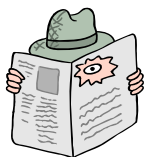
It is HIGHLY RECOMMENDED that all computer owners install and maintain anti-virus programs on their home computers.

1.5.2 Trojan horses



A Trojan horse is a destructive program that masquerades as a benign application. Unlike viruses, Trojan Horses do not replicate themselves, but they can be just as destructive. One of the most insidious types of Trojan Horse is a program that claims to rid your computer of viruses but instead introduces viruses onto your computer. Most anti-virus programs guard against Trojan horse programs.

1.5.3 Spyware



Spyware is any software that covertly gathers user information through the user's Internet connection without his or her knowledge, usually for advertising purposes. Spyware applications are typically bundled as a hidden component of freeware or shareware programs that can be downloaded from the Internet; however, it should be noted that the majority of shareware and freeware applications do not come with spyware. Once installed, the spyware monitors user activity on the Internet and transmits that information in the background to someone else. Spyware can also gather information about email addresses and even passwords and credit card numbers.

Spyware is similar to a Trojan horse in that users unwittingly install the product when they install something else. A common way to become a victim of spyware is to download certain peer-to-peer file swapping products that are available today.

If you notice your computer operating more slowly than normal, that might be a sign your computer has unexpectedly picked up one or more spyware programs. There are a number of free spyware remover programs available on the Internet. Check out the sites below or do an Internet search for other spyware remover software:

- Spybot (<http://www.spybot.info>)
- Adaware (<http://www.lavasoftusa.com/>)

Neither product is perfect, but together they do a good job in removing any spyware from your computer.

1.5.4 Phishing



Phishing is a fraudulent attempt, usually made through email, to steal your personal information. Often times phishing attempts appear to come from sites, services and companies with which you do not even have an account.

Phishing: Pronounced "fishing," it is a scam to steal valuable information such as credit card and Social Security numbers, user IDs and passwords. Also known as "brand spoofing," an official-looking email is sent to potential victims pretending to be from their ISP, bank or retail establishment. Emails can be sent to people on selected lists or on any list, expecting that some percentage of recipients will actually have an account with the real organization.

In order for Internet criminals to successfully "phish" your personal information, they must get you to go from an email to a Website. Phishing emails will almost always tell you to click a link that takes you to a site where your personal information is requested. Legitimate organizations would never request this information of you via email.

1.6 SPAM filters



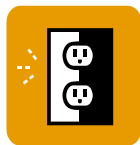
SPAM filter software takes the input of an email message and in its output might pass the message through unchanged for delivery to the user's mailbox. It might redirect the message for delivery elsewhere, or it might even throw the message away. Some email filters are able to edit messages during processing.

If you are missing emails from other auxiliary members or email broadcasts from National, then suspect SPAM Filtering at either at some email server along the way or at your Internet Service Provider (ISP). If you're having SPAM filtering problems, tell you're ISP and hopefully they can place Coast Guard Auxiliary email messages on a 'white list' or 'good guy' list.

1.7 Surge protectors



Good Habit



When you put together a computer system, one piece of standard equipment you should buy is a surge protector. Most designs serve one immediately obvious function—they let you plug multiple components into one power outlet. Don't confuse surge protectors or suppressors with standard power strips. Power strips do nothing

to protect your equipment. The function of a surge protector is to protect the electronics in your computer from surges in power.

All areas of the country are prone to surges in power outages. If you live in an area that experiences many lightening storms or brownouts, then it won't take you long to understand how important a surge protector can be. Is a surge protector 100% effective? No, but it will do a good job in most situations. Look first at its rating, which is the maximum voltage that the device will allow. A lower number is better, so one rated at 330v is fine. Also energy dissipation is very important—this is the amount of energy the device can absorb, and here the higher number is better. Don't settle for anything less than 800 joules.

When you're shopping, make sure the surge protector has connectors for a cable and phone line.

Uninterruptible Power Supplies (UPS): You may want to invest in an uninterruptible power supply (UPS) instead of just a surge protector. If you experience a power outage, the UPS will protect your equipment from power surges and maintain power to your computer for a limited time so you have the opportunity to save your work and power-down your compute.

A UPS contains a battery, so it is much heavier than a standard surge protector. If you do opt for a UPS, make sure it will supply enough power for all your equipment. To determine if the UPS has the correct rating to support your system, check its VA rating. The VA rating is the amps multiplied by the voltage (120v). The amp rating is listed on most equipment you buy or is listed on an equipment specifications sheet. To be safe, purchase a UPS with a VA rating 20 to 25% higher than the total rating of all your equipment.

1.8 Making backups



Good Habit



Backups are your computer's insurance policy. It is **HIGLY** recommended that backups are done on a regular basis.

What files should you backup? Backup those files that cannot be easily recreated. Usually backing up your My Documents folder will be all that is needed. If you store you data files in another folder, then make sure that folder is included in your backup.

How often should you make your backup? You should make backups when changes are made but with changes being made all the time, that many backups aren't practical. If you're on your computer daily, backups might be made every

Chapter 1 Basic Computer Security

few days. The question you must ask yourself is, “How much retyping am I willing to endure if my computer crashes?” If you have an important file, you may want to copy it on a CD-ROM or to a thumb drive until you make your folder backups.

On what type of media should you store your backups? The first answer is whatever media you have, but the frequency, size and number of files may require you to purchase a read-write CD-ROM, a second internal or second external hard drive.

Where should you store your backup media? The location of your backups could be very important. In the case of an unfortunate accident, fire, or flood, it is always best to store you backup offsite. If you can’t store it offsite, then a fireproof container in another location of your home will do. But remember, offsite storage is always the best choice.

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Chapter 2. Web Policy and Legal Requirements



Microsoft Office 2003 clip-art

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Chapter 2 Web Policy and Legal Requirements

In this section, you will learn about:

2. Web policy and legal requirements

2.1 Auxiliary Website policy requirements

2.1.1 The Auxiliary's communications services (CS) guide

2.1.1.1 General

2.1.1.2 Overall policies

2.1.1.3 Site approval and authorization

2.1.1.4 Site identification

2.1.1.5 Links and notice/disclaimer

2.1.1.6 Content

2.1.1.7 Privacy policy statement

2.1.1.8 Disagreements

2.1.1.9 Site design limitations

2.1.1.10 Website policy checklist

2.2 Accessibility standards for Auxiliary Websites

2.3 Obtaining space on the Auxiliary national Web server

2.4 Limitations in publishing to the Auxiliary national Web server

Referenced resources in this Section:

USCG Auxiliary Web policy is found in the:

- Communications Services (CS) Guide [1]: <http://csguide.auxservices.org/index.php>
- Policy Statement [2]: <http://csguide.auxservices.org/4.3.8.php>
- USCG Auxiliary Manual [3] COMDTINST M16790.1 (series)
- USCG Policy on Coast Guard Use of Internet/Worldwide Web [4] COMDTINST M5230.56

USCG Auxiliary images can be found in:

- USCG Auxiliary Image Library: <http://cgaux7.org/imagelibrary/>

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2.1 USCG Auxiliary Website policy requirements

2.1.1 Auxiliary Internet Website policy

The policies stated in this guide are included for a student's quick review of the subject. Policies do change from time to time and the student, CS Officer or Auxiliary Webmaster should consult the source document for currency.

Auxiliary Internet Website Policy can be found in a number of documents. The National Information Technologies Department has brought all the pertinent documented information (Web policy) into one guide, which is the Communications Services (CS) Guide. (<http://csguide.auxservices.org/index.php>)

The current stated USCG Auxiliary Web policy [2] is posted at the URL <http://csguide.auxservices.org/4.3.8.php>. For your convenience, this policy is also found below. Please take the time to read the following eight paragraphs.

URL: This is an acronym for Universal Resource Locator. In essence, a URL is the Website address. Most Auxiliarists are familiar with the URL <http://nws.cgaux.org>, which is the National Auxiliary Website. See Section 3.1.7. for detailed explanation of a universal resource locator.

Chapter 2 Web Policy and Legal Requirements

Date: 18 August 1997
FROM: NATIONAL COMMODORE
TO: NATIONAL BOARD
SUBJECT: **AUXILIARY INTERNET WEBSITES POLICY**

1. **GENERAL:** The many initiatives to establish Auxiliary Internet Websites at districts, divisions, and flotillas are to be applauded. The intent of this policy is to assure a coherent, professional Web presence for the Auxiliary while leaving considerable room for creativity and flexibility at individual sites.
2. **OVERALL POLICIES:** Auxiliary Websites must be developed and maintained in accordance with the public affairs and publication related sections of the Auxiliary Manual, and must also comply with relevant policies and procedures in the current Coast Guard Auxiliary Publication Guide. Knowledgeable CS, PA and PB officers should be actively involved in the development and maintenance of these sites.
3. **SITE APPROVAL AND AUTHORIZATION:** Auxiliary Websites must be formally approved by the unit(s) which they purport to represent. Thus the corresponding division board must formally approve a division Website, and the Flotilla Commander must formally approve a flotilla Website. Local units may apply requirements that are in addition to the National requirements. These requirements must be enforced by the issuing authority, and may not supersede National policies. Approval may be withdrawn at any time.

The Auxiliary Division Chief - Web Services (DVC-IW) must be notified of the existence and address (URL) of all Auxiliary sites. Auxiliary Websites meeting the requirements set forth by the National "I" Department shall be designated "Authorized Auxiliary Websites" by that Department. Only authorized sites may display the Auxiliary logo, identify themselves as Coast Guard Auxiliary Websites, and be listed on CGAUXWEB and the national Flotilla Finder. Authorization may be withdrawn at any time.

4. **SITE IDENTIFICATION:** Auxiliary Websites must clearly identify the sponsoring unit in the <TITLE> Section of the html code. The top of the main page must include either the Auxiliary banner from the national Webpage or the main heading "U.S. Coast Guard Auxiliary." Immediately below the banner or main heading there must be a subordinate heading that identifies the sponsoring unit. If the banner is used, then the statement "U.S. Coast Guard Auxiliary" must be included in the html code as a display in place of the banner for non-graphics users.

Chapter 2 Web Policy and Legal Requirements

5. LINKS: Links to Webpages outside the Coast Guard and the Coast Guard Auxiliary are authorized, provided they support legitimate business objectives. Reference the current edition of the Auxiliary Internet Link Policy for detailed information.

All Auxiliary Websites should, and Websites with external links must, include the following disclaimer. The text or a link to it should either appear on the opening page, or on the page that contains the sites links.

"NOTICE/DISCLAIMER Links to non-Coast Guard entities are not under the control of the United States Coast Guard or the United States Coast Guard Auxiliary and are provided for the convenience of our customers. They do not in any way constitute an endorsement of the linked pages or any commercial or private issues or products presented there. We cannot make any warranty or representation concerning the content of these sites, or secondary sites from the pages to which they link."

The Webmaster for each Auxiliary site is responsible for ensuring that, as far as possible, the site is accurately identified on other Websites that link to it and in directories and indexes of Internet Websites.

6. CONTENT: Content for Auxiliary Webpages must be developed and maintained at the most appropriate level. Websites at other levels must link to that material as described above, rather than duplicating it. Thus, information regarding national policies and information will be developed and maintained on the national Webpage to which other pages can link; District policies and information will be developed and maintained on District Websites; and so on.

Without obtaining further approval and with proper attribution, authorized Auxiliary Webpages may repeat verbatim official information that is intended for public distribution (that is, public information from Coast Guard headquarters or Auxiliary national officers, Coast Guard district offices and Auxiliary district officers, or Auxiliary directors).

Without obtaining further approval, authorized Auxiliary Webpages may include any logos or emblems approved by the Coast Guard or the Coast Guard Auxiliary at the national or district level with the exception of the official Auxiliary seal. All other information and graphics on Auxiliary Webpages requires prior approval as described in the Auxiliary Manual and the Publication Guide. Other content that is particularly appropriate for local

Chapter 2 Web Policy and Legal Requirements

Webpages includes PE class schedule(s), contacts for people who are interested in joining the Auxiliary or getting further information about the Auxiliary, and descriptions of local activities (patrols, CME stations, other events). Content that would clearly be inappropriate includes specific advice, endorsement or approval of particular commercial products or services, advertising or sponsorship information, or content that infringes on rights of privacy or copyrights.

In all cases the original source for all information posted on Auxiliary Websites must be clearly indicated.

- 7. PRIVACY POLICY STATEMENT: All Auxiliary Websites must have a defined, clearly posted Privacy Policy. The statement, or a link to the statement, should be included on the main entry page of all Auxiliary sites. The policy statement should inform the user if any personal data is being collected. This would include, but not be limited to the email or IP address of a user, tracking of sites previously visited, history of access to the tracking site, or browser information. If data is being collected, what that data is, who has access to the data, and how it will be used must be disclosed to the user.**

Auxiliary policy requires that there must be a compelling reason to collect user data. The collection of user information for site access control, or viewing history to configure list formats are examples of acceptable reasons. If collected data is saved on the Website server, every effort must be made to prevent unauthorized access to the database. If the parameters are saved on the user's computer by way of cookies, the user must be so informed.

Online forms such as surveys, questionnaires, or registration forms also fall under the Privacy Policy. Distribution and use information may be summarized for all forms, as a general statement within the policy, or individually described within the body of the page containing the form. Access to, and use of the collected data must be limited to the purpose for which the form was intended.

- 8. DISAGREEMENTS:** The National Chief of Staff, NAVCO-COS, in consultation with the Chief - Department of Information and Communication Services, DC-I, will resolve any disputes concerning links or content in Auxiliary Webpages.
- 9. CONCURRENCE:** The Chief Director has concurred for the Coast Guard with this policy.

Chapter 2 Web Policy and Legal Requirements

Now that you've read the Auxiliary Web Policy, let's look at each Section:

2.1.1.1 General

The intent of the policy is very clear: to assure a coherent, professional Web presence while leaving considerable room for creativity and flexibility. It is not intended that each auxiliary Website look like the next. Allowing creativity within the bounds of the policy is the objective.

2.1.1.2 Overall policies

This section of the policy states that the CS officer or Webmaster must work in the bounds of the Auxiliary Manual and receive concurrence by the PA and PB officers. Because a Website is seen by the public and is reflective of the Auxiliary and the Coast Guard, the Web developer must review the PA Section in the Auxiliary Manual.

2.1.1.3 Site approval and authorization



Policy



The decision to have a unit Website starts within the unit's organization. No one is to develop and post an Auxiliary Website without prior approval from a District/Division board, if a District/Division Website, or from the Flotilla Commander, if a Flotilla Website. The unit board or Flotilla Commander can make additional requirements of the Website, but these requirements cannot supersede National policies. Website authorization can be withdrawn at anytime.

Only Websites that are authorized can:

- Display the Auxiliary logo identifying them as a Coast Guard Auxiliary Website.
- Be listed on the National Flotilla Finder

When an auxiliary Website is posted, notification and the Universal Resource Locator (URL) must be given to the National Division Chief – Web Services (DVC-IW).

How does this notification take place?

- The CS officer/Webmaster first notifies the District Staff Officer for Communications Services (DSO-CS). This notification is normally by email.
- Then the DSO-CS might require the unit CS officer to complete a form (online) or supply additional information needed by the DSO-CS.
- The DSO-CS then reviews the Website and, if the Website is ready for National review, consults with the CS officer about needed changes. When the Website is ready for review, the DSO-CS completes the required National form. This is the notification to DVC-IW. The DVC-IW or his/her staff will inspect the Website to determine if all provisions, such as identification, image use, branding and other items meet current Auxiliary Web policy.
- If the Website meets current Web policy, then the URL is placed on a list of approved Websites and an email notification is sent back to the unit CS officer, via the DSO-CS. If the Website does not meet current Web policy, an email is returned to the unit CS officer via the DSO-CS giving items to correct.



Policy

2.1.1.4 Site identification

All Auxiliary Websites must be clearly identified as a USCG Auxiliary Website. The following are requirements for identification:

- **TITLE.** The common name of the sponsoring unit must be in the <TITLE> Section of the html code. The sponsoring unit name should include district, division, flotilla and geographical (city/state) information. The <TITLE> information, found in the HTML code, will also be displayed in the blue upper bar on most Internet browsers.
- **Auxiliary Banner.** Either the Auxiliary banner or the words “U.S. Coast Guard Auxiliary” must be displayed on the top of the main page (index.htm). If the banner is used, an alternative text must state “U.S. Coast Guard Auxiliary,” which will assist non-graphic users.
- **Subordinate Heading.** Below the Auxiliary banner or text, “U.S. Coast Guard Auxiliary,” there must be text identifying the sponsoring unit.

2.1.1.5 Links and notice/disclaimer statements



Links to Webpages outside the Coast Guard and the Coast Guard Auxiliary are authorized, provided they support legitimate business objectives. This is a very clear statement. Common sense will tell most auxiliary CS officers or Webmasters what is a legitimate link and what is not. If there is a question as to the legitimacy of a link, then unit leadership should be consulted.



Policy

All Auxiliary Websites should, and Websites with external links must, include the following disclaimer.

“NOTICE/DISCLAIMER Links to non-Coast Guard entities are not under the control of the United States Coast Guard or the United States Coast Guard Auxiliary, and are provided for the convenience of our customers. They do not, in any way, constitute an endorsement of the linked pages or any commercial or private issues or products presented there. We cannot make any warranty or representation concerning the content of these sites, or secondary sites from the pages to which they link.”

During the course of reviewing other auxiliary and non-auxiliary Website, the

Chapter 2 Web Policy and Legal Requirements

Webmaster is responsible for ensuring that the link to his/her Website is identified accurately.

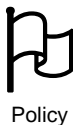
2.1.1.6 Content

Each CS officer or webmaster is responsible to assure that content is appropriate to their level of unit. A Flotilla Website should only develop content for the Flotilla, but provide links to Division, District and National level information. If it is necessary to repeat auxiliary information found on other auxiliary source Website, then that information must be verbatim, but this should be done on a limited basis. Any information copied can quickly become obsolete. If official policy is to be cited, it should be via a hyperlink to the information source, which is normally a National Website. The intent of copying verbatim is not to fill up a Webpage with text. Content that would clearly be inappropriate includes specific advice, endorsement or approval of particular commercial products or services, advertising or sponsorship information, or content that infringes on rights of privacy or copyrights.

2.1.1.7 Logos and images

An authorized unit Website has may include auxiliary logos and emblems which are approved by the Coast Guard or Coast Guard Auxiliary, except the official Auxiliary seal. For a source of auxiliary graphics refer to the Auxiliary Image Library Website at <http://cgaux7.org/imagelibrary/>. The images in this library have been reviewed and approved for Auxiliary use in publications, newsletters, Webpages and should be used by the student.

2.1.1.8 Privacy policy statement



All Auxiliary Websites must have a defined, clearly posted privacy policy. The statement, or a link to the privacy policy statement, must be included on the main entry page (index.htm) of all Auxiliary sites.

This privacy policy statement should inform the site visitor if any personal data is being collected. This would include, but not be limited to:

- The email or IP address of a user
- Tracking of sites previously visited
- History of access to the tracking site

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- Browser information

If data is being collected, what that data is, who has access to the data, and how it will be used must be disclosed to the user.

If your site collects data, then you must have a compelling reason. Online forms such as surveys, questionnaires, or registration forms, fall under the privacy policy.

2.1.1.9 Disagreements

The National Chief of Staff, NAVCO-COS, in consultation with the Chief - Department of Information Technology, DC-I, will resolve any disputes concerning links or content in Auxiliary Webpages.

2.1.1.10 Site design limitations

In the past, Webmasters have actually copied most of the elements of another Website because they liked the site's design or its ease of use. In 2005, a few auxiliary Webmasters did in fact copy the design and images of the National Website for their own unit's Website. It was determined that visitors, especially the public, might easily confuse the local unit site with the National Website. This becomes problematic for a number of reasons. These unit Websites were quickly changed. The National Site Design Statement policy can be found at http://nws.cgaux.org/statements/site_design.html.

The National Website Design Statement says,

You may not adapt, alter or create a derivative work from any of the specific graphics, headers, color combinations and/or page layouts contained in this site that could cause confusion by creating visual similarities between a local site and this Website (<http://nws.cgaux.org>). You may not "reverse engineer" any pages of this site in order to create a local Auxiliary site. Webmasters should contact their DSO-CS (District Staff Officer - Communications Services) for additional guidance regarding the use of similar design elements.

Textual material may be copied, reproduced, republished, downloaded, posted, broadcast or transmitted only for official Auxiliary use. Any use other than Auxiliary use requires the

Chapter 2 Web Policy and Legal Requirements

prior written permission of the Auxiliary. In case permission is granted, the source of the information used should always be mentioned.

For the avoidance of doubt, any other use of any of the materials on this Website including reproduction (for any purposes other than those authorized herein), modification, distribution or republication without the prior written permission of the Auxiliary Department Chief of Information Technology (DC-I) is strictly prohibited. [15]

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2.1.1.11 Website policy checklist

Check-off

USCG Auxiliary Web Policy Requirements

<input type="checkbox"/>	1. Your Website has been authorized by the governing board of your unit.
<input type="checkbox"/>	2. The DSO-CS has been notified of your site's existence.
<input type="checkbox"/>	3. Your unit is clearly identified in the site's HTML code.
<input type="checkbox"/>	4. Either you have included a graphic Auxiliary banner from the National Website or the text heading "U.S. Coast Guard Auxiliary" at the top of the homepage (index.htm).
<input type="checkbox"/>	5. Directly below the item mentioned in #4, you have included a subordinate heading identifying your unit.
<input type="checkbox"/>	6. When using a graphic image for site identification, you have included alternate text identification in the HTML code for that image.
<input type="checkbox"/>	7. You have included alternative text labels for all graphic images and links.
<input type="checkbox"/>	8. You have made sure that links to sites outside the Coast Guard and CG Auxiliary have a legitimate business objective, are not endorsing any private issue or commercial product, and are in good taste.
<input type="checkbox"/>	9. If you provided external links, the standard Website Notice/Disclaimer is included on a page in your Website with a link on your homepage.
<input type="checkbox"/>	10. All known links on your site have been verified to ensure that they accurately depict your Website's purpose and intent.
<input type="checkbox"/>	11. The context on your Website is appropriate for your unit level.
<input type="checkbox"/>	12. You have included links to sites at different levels to avoid duplication of posted materials.
<input type="checkbox"/>	13. You have clearly indicated the original source of all material posted on your site.
<input type="checkbox"/>	14. You may only post the following unapproved items: verbatim reproductions of official information intended for public distribution, and any logo or emblem approved by the Coast Guard or Coast Guard Auxiliary National or District level.
<input type="checkbox"/>	15. You have received approval for information not described in #14, as described in the current AUXMAN and Publication Guide [3].
<input type="checkbox"/>	16. You have no inappropriate material or information that might infringe the rights of an individual or copyright violation on your Website.
<input type="checkbox"/>	17. You have NOT reproduced or posted the official Auxiliary Seal on any page. Reference AUXMAN, Ch. 5, Sec. I.5.b [3]
<input type="checkbox"/>	18. Your Website has a posted Privacy Policy Statement.
<input type="checkbox"/>	19. Your checklist is complete.

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2.1.1.12 Violations of policy

The Auxiliary Manual (Section G) [3] discusses informal disciplinary action, which can be taken against an auxiliariist for a violation of Web policy. Sanctions for minor policy infractions could include counseling sessions, denial of Web privileges or even a letter of caution. Refer to this section for additional information.

2.2 Three items most commonly missed on an Auxiliary Website

The three most missed items are:

1. Alternative text on all graphics. It is policy, and just good sense to add alternative text to every image within your Website. Not all visitors to your site will have graphics turned on, and sight-challenged visitors who use text readers need alternative text to know information about your images. So get into the habit of including alternative text when you insert an image.
2. HTML title is usually poorly written. Make sure the title of your Website includes the unit's full text identifier, i.e., District, Division and Flotilla number. Include a geographical location with the city or area the unit serves. A good example of a site's title would be *U. S. Coasts Guard Auxiliary, District 13, Division 5, Flotilla 9 serving the Grants Pass Oregon area*.
3. Disclaimer and Privacy Statement missing or inadequate.
 - a. The Disclaimer Statement is found in Section 2.1.2.5. The policy states: "All Auxiliary Websites should, and Websites with external links *must*, include the following disclaimer." So if you have even one external link, and most do, then the disclaimer statement must be included, verbatim. Most Web designers place both the disclaimer and privacy statements on one or two separate pages and include links on the homepage.
 - b. The Privacy Statement is found in Section 2.1.1.7. That Section gives details about what is required, but remember your privacy statement should be unique to your Website. If you collect data within Web forms or collect email addresses as a way to contact the public, include

Chapter 2 Web Policy and Legal Requirements

that information in your privacy statement.

2.3 Accessibility standards for Auxiliary Websites

Accessibility standards for Auxiliary Websites are detailed in the following message.

R 031929Z MAR 00
FM COMDT COGARD WASHINGTON DC//G-SI//
TO ALCOAST
BT
UNCLAS //N05230//
ALCOAST 090/00
COMDTNOTE 5230
SUBJ: **Website Accessibility Standards**



1. As we become increasingly aware of the needs and rights of persons with disabilities, we are also becoming more dependent on computers and other electronic information technologies for providing information we need.
2. The Workforce Investment Act dated August 7, 1998, includes a revised version of Section 508 of the Rehabilitation Act of 1973. This newly revised Section 508 imposed strict requirements for any electronic and information technology developed, maintained, procured, or used by Federal Agencies. Federal Agencies must take steps immediately to insure that persons with disabilities can use these technologies.
3. In August 2000, Agencies will be held liable for violation of Section 508.
4. Final guidelines for Federal Websites are not yet available, but the following resources are available to assist Coast Guard Website primary content approval officials and Webmasters to provide accessible Internet and intranet Websites.

The Department of Justice provides a Webpage accessibility checklist at <http://www.usdoj.gov/crt/508/>.

- a. The Center for Applied Special Technology (CAST) provides an Online Webpage evaluator, called “BOBBY”, at <http://www.cast.org/bobby/index.html>. “BOBBY” does a thorough online Webpage evaluation and makes remedial recommendations.
- b. The Lynx text-based browser found at <http://lynx.browser.org>

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(Headquarters users have access to Lynx through the HSC Technology Center.) can be used to determine if Webpage content can be read and translated by a text reader.

c. The World Wide Web Consortium (W3C) Web accessibility initiative at <http://www.w3.org/wai/> provides many accessibility resources.

d. International Business Machines provides comprehensive Website accessibility guidelines at <http://www.rs6000.ibm.com/sns/accessWeb.html>.

5. The substance of this ALCOAST and final Website requirements will be incorporated into the 2000 update to “Policy on Coast Guard Use of Internet/Worldwide Web, COMDTINST 5230.56”. Direct all questions to Ann Sulkovsky (G-SIA) AT (202) 267-0930.

6. Internet release authorized.

7. Daniel F. Sheehan, Director of Information and Technology, sends.

2.4 Information about the Auxiliary National Web Server

The Auxiliary National Web Server supports over 700 auxiliary unit Websites. This server is a dual processor, 2.66 Zeon, 1.5 GB RAM with three 33 GB hard drives. Its operating system is Redhat LINUX Enterprise Edition running Apache 1.3.36 and FrontPage 5.0.2.2635.

LINUX: Linux is an open source operating system within the Unix family. Because of its robustness and availability, Linux has won popularity in the open source community and among commercial application developers.

The National Web server will not process:

- .ASP files or Active Server Pages
- SQL or MySQL

Definitions:

1. **ASP (active server pages)**, are in a specific scripting environment which works with Microsoft IIS (Internet Information Server) software in which you can combine HTML, scripts and reusable ActiveX server components to create

Chapter 2 Web Policy and Legal Requirements

dynamic Web pages.

2. **SQL and MySQL** are standard server-side relational database used to query Web servers for information.

2.5 Obtaining space on the Auxiliary National Web Server

The policy for an auxiliary Webmaster to obtain server space on the National server changed at NTRAIN 2005. From that point, all requests for national server space would be through each district staff officer of communications services (DSO-CS).

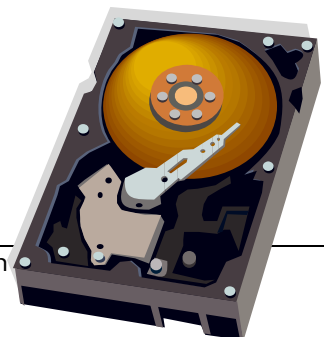
Definition: NTRAIN is a partial acronym of the Auxiliary's National Training Conference. This national training conference is held annually near the end of January in St. Louis, Missouri.

The process for requesting server space is as follows:

- The unit's CS officer or webmaster, after receiving unit authorization, contacts the District DSO-CS requesting space on the national server.
 - This request could be by any means the DSO-CS dictates, but most just request an email with some basic information. Some DSO-CSes have developed online forms for this function, so check with your DSO-CS.
- The DSO-CS takes the unit's request information and completes a national form requesting National Web server space.
- Staff from the National Information Technologies Department (I-Dept) take that information and build space on the server.
- Then National staff sends an email back to the requesting DSO-CS with access information. The DSO-CS, in turn, forwards an email back to the unit's CS officer.
- The unit CS Officer or Webmaster uploads the new Website files to the National Web server and informs his/her unit leadership, the SO-CS and DSO-CS.

The current space allocation for auxiliary units on the National Web server is:

Level of unit	Server Space (in MB)
Flotilla	15
Division	20



2.6 Publishing to the Auxiliary National Web Server

The follow are instructions to the publishing process for the National Web Server.

AUXILIARY LINUX11785 SERVER

VIRTUAL SERVER CONFIGURATION

Each user account is configured based upon the Auxiliary unit type. Flotilla sites are allocated 15MB of user-accessible disk space. Divisions receive 20MB and Districts receive 25MB. This disk allocation is used only for Website storage, but may be shared by additional features as they become available. A unit is responsible for the determination of how their disk space will be used. New features such as POP/SMTP mail accounts, mail redirects, list servers, and Website usage statistics.

USER INSTRUCTIONS

1. FTP administrative access to your site is made using the following parameters. The entry field terminology may vary depending on the FTP client being used.
 - a. Server Address - <ftp://username.uscgaux.info>
 - b. Username - username provided
 - c. Password - password provided
 - d. Account - Leave blank
 - e. Server Type - FTP
 - f. Host Type - Automatic detect in passive data mode.
 - g. Posting - The root directory of your site will be displayed after the site is opened. One of the subdirectories shown will be called public_html. You must post all Web files to this directory.

2. FrontPage (FP) administrative access is made using the following parameters.
 - a. Site Name - <http://username.uscgaux.info>
 - b. Username - The username provided.
 - c. Password - The password provided.
 - d. Posting - After FP is opened, the folder list will display the

Chapter 2 Web Policy and Legal Requirements

Website directory. All postings will be made within this directory.

3. Caution! – Do not do not erase any of the files or directories that were included when the site was provided. The loss of these system files may make your site unusable.

FTP: FTP or File Transfer Protocol is a program that can transfer a file or entire file directories from one computer to another, intact for viewing or other purposes. Many webmasters use a FTP program to transfer their local files on their Website to the remote Web server so these files can be available to the World Wide Web.

List server: A list server is a device that operates mailing lists and distributes new messages, newsletters, or other postings from list members to the entire list of subscribers.

Chapter 3. What is the Internet?

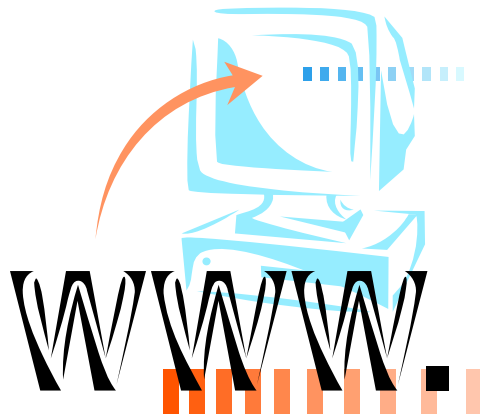


Image from the Microsoft Office 2003 clip-art gallery

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Chapter 3 What is the Internet?

In this Section, you will learn about:

3.1 Web terminology you will use in this course.

3.1.1 What is the Internet?

3.1.2 What is the Intranet?

3.1.3 What is the World Wide Web?

3.1.4 What is a Webpage?

3.1.5 What is a browser?

3.1.6 What is HTML?

3.1.7 What is a URL?

3.1.8 What is a Web server?

3.2 The AIR program

Website resources in this Section:

The Auxiliary Internet Resource Site: <http://airs.uscgaux.info/>

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3.1 Web terminology you will use in this course.

This section only gives the basic terminology you will learn during this course and will get you started with Website design. For a more inclusive list of terms go the Glossary in the back of this guide.

3.1.1 What is the Internet?

The *Internet* is a worldwide network of computers. Since, it was first rolled out as ARPANET in 1969, the Internet has moved from a military network to an academic research network to the current commercial network system. It commonly supports services such as email, the World Wide Web, file transfer and Internet Relay Chat.

3.1.2 What is the Intranet?

An *Intranet* is a private network contained within a company or organization. It may consist of many linked Local Area Networks (LANs) and also use leased lines in the Wide Area Network (WAN). Typically, an intranet includes connections through one or more computers to the outside Internet. The main purpose of an intranet is to share organizational information and computing resources among employees and organizations. Intranets use the same technology as the Internet but limit access to specific users and provide a high level of security for sensitive organizational data.

3.1.3 What is the World Wide Web?

The *World Wide Web* (WWW) is a system of Internet servers that support specially formatted documents. In the simplest of form, the documents are formatted in a language called HTML (Hypertext Markup Language) that supports links to other documents, as well as graphics, audio, and video files. This means you can jump from one document to another simply by clicking on links. Not all Internet servers are part of the World Wide Web. For example, there are Internet servers dedicated to email, chat, file transfer, and news groups.

3.1.4 What is a Webpage?

A **Webpage** is created using one of many Web programming languages and is a single document that is available via the Internet or intranet. These Webpages generally resided on a Web server. Users request a Webpage from a Web server through their Web browser by either clicking on a hyperlink or by typing in a particular Web address. A Webpage can contain text, images, sound files, video files, and hypertext links to other Internet pages.

What is the purpose of a Webpage? To pass information, history, give lists or definitions, assist in member education, etc.

What is a good and bad Webpage design? This will be covered in Chapter 4.

3.1.5 What is a browser?

A **Browser**, also referred as a **Web Client**, is a software program that acts as an interface between the user and the technology used in the World Wide Web. The browser contacts a Web server and sends a request for information. Once the information is received, it interprets the Webpage code and then displays it on the user's computer. Popular Web browsers include Microsoft Internet Explorer, Mozilla Fire Fox, Netscape Navigator, and others.

3.1.6 What is HTML?

HTML stands for *Hypertext Markup Language*. It consists of standardized codes or “tags” that are used to define the structure of information on a Webpage. HTML defines several aspects of a Webpage including heading levels, font formatting, images, paragraph breaks and hyperlinks to other resources. HTML files can be written in any text-editing program, for example, Notepad and Microsoft Word. HTML files can also be written using a HTML editor, such as Microsoft FrontPage and Macromedia DreamWeaver. Note that all the HTML tags are enclosed in angle brackets ‘< >’.

HTML is considered a base level code and is actually quite easy to learn. You will often see other Webpages designed by much more complex code. Often these codes are included in the base level HTML code. Examples would be ASP, JAVA, PHP, CGI, XHTML, XML, and Visual Basic, just to name a few. See HTML code examples, next page.

Figure 3.1a

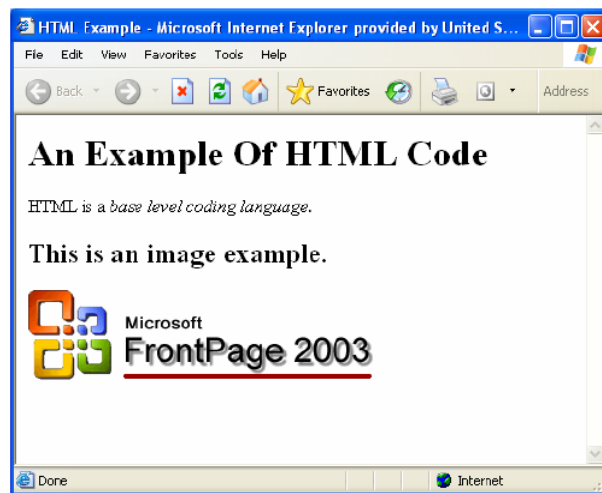
HTML code of a simple Webpage.

```
<HTML>
<HEAD>
<TITLE>HTML Example </TITLE>
</HEAD>
<BODY>
<H1>An Example Of HTML Code</H1>
<P>HTML is a <I>base level coding language.</I>
<H2>This is an image example.</H2>

</HTML>
```

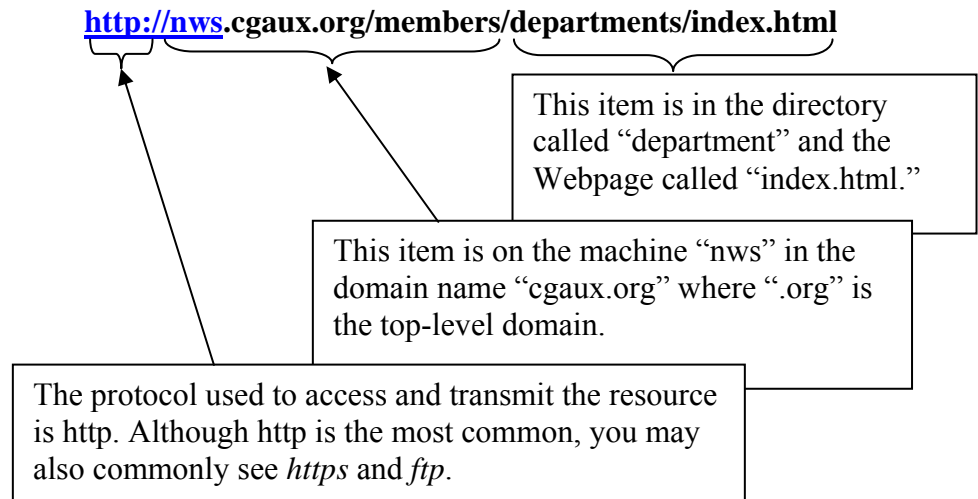
Figure 3.1b

Browser view of the HTML code in Figure 3.1a.



3.1.7 What is a URL?

URL stands for *Uniform Resource Locator* [13]. It identifies a particular Internet resource, e.g., a Webpage, an FTP server, an image, a text file, etc. It is a standardized addressing format for Internet or Intranet resources and helps users locate these resources by indicating exactly where they are. Every resource available via the WWW has a unique URL. Think of it as the address for your house. No two addresses in the world are the same. URLs will never have spaces in them and, on some network systems, are case sensitive. (Coast Guard and Coast Guard Auxiliary servers are not case sensitive.) The basic structure of a URL is hierarchical, and the hierarchy moves from left to right.



Built using Microsoft Word Art 2003

Once upon a time, there were only a handful of different domain name extensions. You could choose between '.com' for commercial organizations, '.net' for network services and '.org' for non-profit organizations. In addition, many countries offered domains based on the two-character ISO country codes, such as '.fr' for France, '.jp' for Japan, '.ca' for Canada, and so on.

In recent years, the picture has become more complicated, with more and more domain names and alternatives springing up. The Internet Corporation for Assigned Names and Numbers (ICANN) controls which domain names are available and is constantly adding new ones. A quick search on the Internet shows that about 273 top-level domains are available. To understand how complex this becomes, just take a look at the new ones that have been recently added.

- *.aero* for air-transport industry

Chapter 3 What is the Internet?

- *.biz* for businesses
- *.coop* for cooperatives
- *.edu* for education
- *.gov* for government
- *.info* for unrestricted use
- *.museum* for museums
- *.name* for individuals (you can now have www.johhsmith.name)
- *.pro* for accountants, lawyers, and physicians

Case sensitive: Some computer programs have the ability to distinguish between uppercase (capitals) and lowercase (small) letters. A case-sensitive program that expects commands or URLs in lowercase will not respond correctly if you enter one or more characters in uppercase. This is known as being case-sensitivity. It is best to type all URLs in lowercase because the USCG National Web server is case-sensitive.



Tip

A word on Website file names: When building your Website it is very important to retain a consistent file naming strategy. We have found that naming all files in lowercase with continuous characters, without spaces, alleviates problems with file names when publishing your Website. If you must have spaces in your file name, replace the space with an under-score ‘_’.

3.1.8 What is a Web server?

Server is a term often used to describe a computer that *hosts* a Website. In fact the term refers to software running on that computer allowing Webpages to be requested and then sent to a user's Web browser (*the client*).

3.2 The AIRS program



The “Auxiliary Internet Resources Site” or “AIRS” program was established to provide necessary resources for the Auxiliary National Website and to aid local Auxiliary units by hosting their Webpages. Units using this service are provided with free use of an Auxiliary Web server, sufficient disk storage space for an average size site, and a unique Internet Website address. All sites hosted by AIRS, like all Auxiliary Websites, must meet the standards established by the Auxiliary Internet Web Policy as well as additional requirements established by the Auxiliary Web Services Division Chief (DVC-IW). Online the AIRS site can be accessed at <http://airs.uscgaux.info/>.

The Auxiliary National Web server supports the Auxiliary by hosting over 700 auxiliary unit Websites. It was established in 1997 with leased space on a commercial Internet Service Provider's (ISP) facility. Today, AIRS has multiple servers; one is the Local Unit Server that hosts our local sites, a National Web server that hosts the National Website (NWS) and departmental sites and a server dedicated to the Auxiliary Association.

The AIRS National servers provide all the interactive information for Auxiliary Webmaster's individual site status updates including:

- DSO-CS AIRS Site and Flotilla Finder update forms
- Links to approved Auxiliary Websites and information on the status of Auxiliary Websites approvals
- Best-of-Web program information and forms

If your Flotilla or Division has a Website but it is not yet linked from <http://unitlink.uscgaux.info/auxsites.html>, your Webmaster should contact your DSO-CS who is responsible for the following AIRS Website related issues:

- Requests for local unit AIRS Website service
- Requests for access code changes
- Reissuing existing access codes that have been lost
- Notification of a change of official unit
- Notification of a change of Webmaster's email address

Chapter 3 What is the Internet?

Local unit requests for new Website services or access codes will not be accepted by the National Division Chief of Web Services (DVC-IW).

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Chapter 4. Planning and Designing a Webpage



Microsoft Office 2003 clip-art

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Chapter 4 Planning and Designing a Webpage

In this Section, you will learn about:

- 4.1 Planning effective Webpages
- 4.2 Screen resolution and page design
- 4.3 Webpage design (the good, the bad and the ugly)

Website resources in this Section:

The Auxiliary Internet Resource Site

V. Flanders, “Websites that suck: <http://www.Websitesthatsuck.com>

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4.1 Planning effective Webpages

A Webpage is a place people visit to obtain information. When you design a Webpage, think about such things as purpose, organization and style. Below are several guidelines to help you.

4.1.1 Simplicity

Keep your Webpages simple and uncluttered. Your information should be clear, concise, and to the point, while being pleasant and interesting. Avoid presenting unnecessary information. Resist the temptation to clutter up your screens with too much information. It is better to have two uncluttered pages than one crowded page.

4.1.2 Consistency and predictability

Visitors feel more comfortable if you maintain a consistent look and feel throughout your site. It also lets visitors know they are still at your site. Use a consistent style for text and graphics and maintain it throughout. Repeat certain visual or design elements on every page in your Website. You might repeat colors, graphics, layouts, navigation bars, etc.

Similar functions should appear in the same relative location on all screens. The navigation buttons on your homepage are often set up in a way you can't repeat on other pages, perhaps because the homepage is the "cover" of the Website and usually has a different visual arrangement than the content pages. But once you get to content pages, the visitor should find the navigation in the same place, in the same order, with the same graphics. This makes it easy for visitors to find their way around in your site.

4.1.3 Clarity

Visitors come to your Website for information, so clear and consistent navigation is required. Poorly designed pages cause users to get lost, many times unable to find the information they are looking for. Remember, clarity begins with proper

planning.

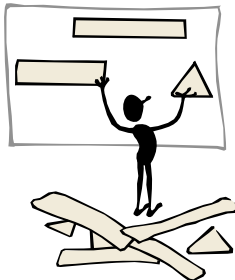
- The *Organization* of your site should be clear to visitors.
- The *Purpose* of the Webpages elements should be clear at a glance.
- The *Navigational system* should be clear and easy to use.
- Put a *Title* (sometimes called a *Header*) on each page. It doesn't need to be large and bold, as long as it's recognizable as a title, separate from the rest of the page content.

4.2 Readability



The most difficult place to read text is on a computer monitor. To make your Webpages as easy to read as possible, make the following adjustments to text on Webpages.

4.2.1 Layout



Optimize your text for the way users read on the Web. Most people do not read Webpages word by word. Instead, they scan the page, picking out individual words, sentences and hypertext links. They skip over text they deem to be fluff (welcome messages, intro paragraphs, etc). One study found that 79% of users only scanned new Webpages; only 16% read word-by-word [16]. To optimize your text for Web-reading, make your text “scannable” by:

- Highlighting keywords by using variations in font type, color and size.
- Creating meaningful sub-headings.
- Using bulleted lists when appropriate.
- Keeping to one idea per paragraph (Users will skip over any additional ideas if they are not caught by the first few words in the paragraph.)
- Using less text. Try to use half the word count (or less) than conventional writing. Be very concise!
- Create an outline-like presentation.

4.2.2 Ease of reading

Text

Text must have good contrast with the background in order to be easily read.

- Black or dark text on a white or off-white background is the easiest text to

read

Typestyle

For headings and titles

- Sans-serif typestyle such as Arial or Helvetica is best.

For body text:

- Serif type style, such as Times New Roman, is the easiest type style to read.

Avoid using blinking or flashing text. People notice motion more readily than color or size. Blinking text on a page will draw a reader's eye away from all other text or image content. And in case you are not aware of this already, blinking, flashing, spinning, scrolling text is also annoying!

4.2.3 Backgrounds

When choosing a background, whether plain or textured, make sure your text is readable. Many Websites have backgrounds that are very distracting. This can prevent visitors from reading your pages. Also, avoid bright or fluorescent colors—both text and backgrounds.

4.2.4 Text style

Avoid putting phrases, whole sentences, and paragraphs in ALL CAPITAL LETTERS. Why? Because text in ALL CAPS is much harder to read than text that is upper and lower case. It has been proven that we tend to read the actual shape of the word itself and all caps make it difficult to see the shape of a word. [17] Overall, it makes reading text on a Webpage very UNFRIENDLY to your visitors. It's okay to make one or two words in all caps (preferably, small words). All caps are also equated to verbally shouting [18], which instantly annoys some readers. Most importantly, you lose the effect of emphasizing the important point if everything is capitalized. Readers will have a very difficult time determining which key words are important if everything looks the same. If you wish to emphasize something use:

- **bold lettering**
- "Quote marks"
- A larger text size
- A different color



- **Combinations** of the above

4.2.5 Avoid or minimize use of animations

They may be cute, but animations are worthless on your site. They contribute little or no value as they can ruin your Webpages by potentially annoying your visitors.

Minds treat motion as a high-priority visual stimulus; thus animations distract from our ability to read text. They quickly become annoying, especially if overused, because they draw attention to themselves. Focusing on a site's content can be very difficult when images are blinking, flashing, spinning, bouncing and rolling around, essentially screaming "LOOK AT ME!" Use animations sparingly—if at all. They are usually best to avoid, especially on pages with several paragraphs of text.



Caution: Avoid or be careful of using underlined text for emphasis since it can be easily confused with a hyperlink. You always want to avoid underlined words if the text color is blue. This is the default color for hyperlinks in most browsers

4.2.6 Ease of use

All of the previous design concepts combine to will produce a site that is user friendly. On every page of your site, answer two basic questions your visitors will ask themselves:

“Where am I?”

“Where do I go from here?”

Every page on your site should have Website and page identification—a name or logo that announces, “You are here,” plus a link to your homepage. Often, users will find your site from a Google search or through a link on another auxiliary Website (rather than coming straight to your homepage), so these identifying features will be very helpful. If you do not have Website and Webpage identification, users can quickly become lost and frustrated.

If possible, try to have multiple ways of easy navigation. If your pages are consistently longer than 1 ½ screens, consider adding navigational links throughout to help readers jump to other topics or pages, without forcing them to scroll up to the top of your page. Also consider repeating navigation links at *both* the top and the bottom of your pages. If you think that repeating navigational

links look awkward, try a simplified version that offers only essential destinations.

4.2.7 Navigation

Your buttons and navigational links should be clearly marked. If a graphic image is a button, it should be look like it is a button. The interaction technique (clicking) is easy, but it is not easy to know what to click on or where. Webpages are often very poor at describing the options to the visitor and making it clear where they should go to achieve the desired result is necessary.



4.2.8 Speed

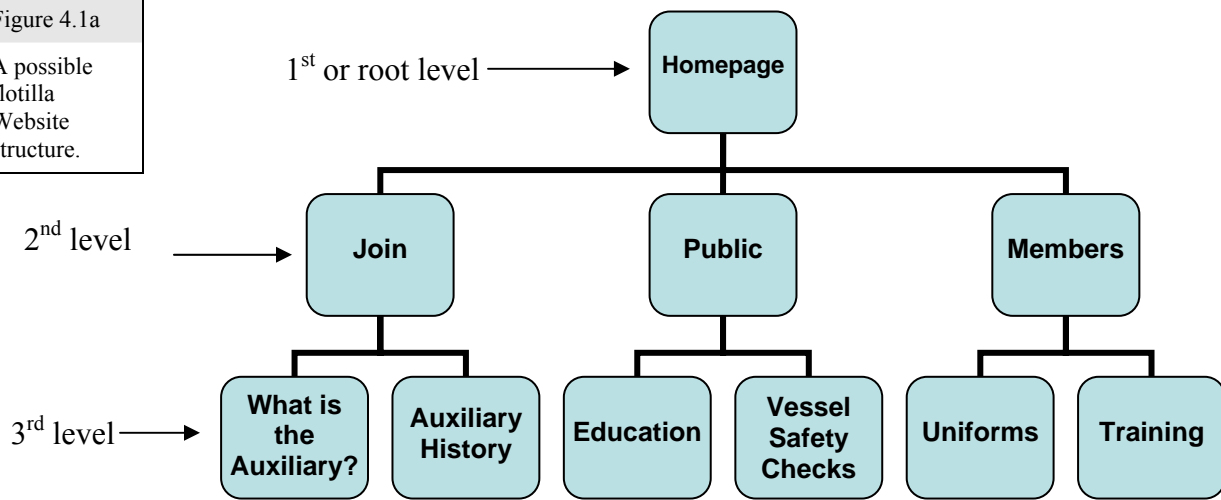
Most people do not like waiting for pages to download. Designing a Webpage that will load quickly is one of your main goals. This can be done by using graphics sparingly, optimizing your graphics for Web use and keeping pages short. In Section 4.3, we will discuss problems with Webpages that are too long and require considerable scrolling. Long pages increase download times and when your Webpage loads slowly, visitors tend to click the <Back> button and browse elsewhere.

4.2.9 Site structure

Create an outline, a flowchart, and base your site structure upon it. Consider using Microsoft Visio if you have this software. When trying to visualize Website structure, many find it helpful to draw out the site's preliminary structure on a piece of paper. The diagram below could be a simple flotilla Website structure.

Figure 4.1a

A possible
flotilla
Website
structure.



Designed by author using Microsoft Word 2003 Organizational Chart

4.3 Designing with screen resolution in mind

Flotilla members might have their monitors set to 800 x 600 pixels, while yours is set to 1024 x 768 pixels. You have more pixels, right? So why does everything looks smaller on your screen? It's because the pixels on your screen are smaller, so more of them fit into the same space. While this concept sounds like a great idea, it can affect the overall usability and accessibility of your Website.

The term **Screen Resolution** refers to the number of individual pixels that fit within a given space. When we are discussing 800 x 600 resolution, the number 800 refers to the number of pixels that the monitor can display horizontally, while the number 600 refers to the vertical limit.

Monitor size and optimal screen resolution are closely linked. As you increase the resolution, the screen elements appear smaller. In fact, the information contained on a 15-inch screen set to 1024 x 768 may be so small that it is virtually unreadable. But the same information displayed at that resolution on a 17- or 21-inch monitor would look fine.

Ideally, your site should be completely device and browser-independent, but that's an almost impossible standard. The next best strategy is to design a site that looks good and performs well for the vast majority of your visitors.

Avoid informing visitors that your site is "best viewed at" a certain resolution or with a certain browsers. To seasoned Web users, this less-than-helpful hint screams that the site is poorly planned and designed. Fortunately, it isn't hard to design and test a good-looking site. You just have to take the time to do so. Many Web designers in the public sector use large monitors and run them at the

highest resolution possible. A 2004 survey reflected that about 24% of people use 800 x 600 as a screen resolution while 72% use 1024 x 768 or higher. [19]

As a general rule, you should design all of your pages to be optimally viewed on computers set to 800 x 600. Remember, however, that someone viewing the page at a higher resolution may see a lot of empty space (depending on how it is designed).

What happens when a designer considers how the page will look to all visitors? The usability level of the site increases, as does visitor satisfaction—and hopefully repeat visitors. You don't have to design an ugly site geared towards the lowest common denominator. Just put some thought into how the site looks in configurations other than your own.

4.4 Webpage Design (the good, the bad, and the ugly)

4.4.1 “The good”

A good-looking Website starts with a good design. It has eye-appeal with complementary colors, and contrast between text colors and backgrounds. It uses consistent and convenient site navigation on each page. Its pages are no more than two pages high, so there is little need for vertical scrolling. Page width is within the standard screen resolution, so there is no horizontal scrolling. Images complement text and all have appropriate alternative text descriptions.

The description could go on and on, but you should be getting the idea. If you've done any Web surfing, you know when you've arrived at a good Website. Make sure the site you build includes most or all of the features of a good site.

4.4.2 “The bad”

Let's all play the “Find the text” game.

That is right, guess where I have placed the text. Have you ever seen a disorganized Webpage? Sure you have, we all have. What's the first thing you want to do? I hit the back button and go elsewhere.

Or here's a variant of the game. The Web designer has placed blue text on a background that's only two shades of blue different from the text—bad idea!

And just so we catch all the variations of the game—how about placing green text

Chapter 4 Planning and Designing a Webpage

on a red background? This is not a good idea because many people have color perception problem with red and green, as well as other colors. Bottom line: think of the viewer while you're designing your page.

4.4.3 “The ugly”

We're looking at a Webpage on which all text and images are centered—yes the complete page! This technique, though balanced, makes it almost impossible to read. It is unbelievable, but some Web designers think these horrible design ideas look great. An adaptation of the centered text and images is the page that never stops scrolling. It scrolls and scrolls some more—it never seems to stop. This design is no design at all. If your Web page is more than a page and a half to two pages, please break it up into individual pages. Have mercy on your visitors.

4.4.4 Examples of Websites that scream for help

For more information on how to keep the public and your fellow auxiliaries happy, please visit <http://www.Websitesthatsuck.com> [10] and take away some design tips. Vincent Flanders [10] has been helping Web designers for years by canvassing the Internet for sites and pages that really need help. May sure your Website doesn't show up on his list.

4.5 The Best-of-the-Web



The National Best-of-the-Web competition (BOW) highlights the "Best of the Best" Auxiliary online presence, recognizing good performance of unit webmasters. All Flotilla, Division, and District sites are encouraged to participate. Winners receive a distinctive 5-Star logo for their Website and a beautiful trophy, which will be presented at the annual National Conference (NACON). Runners-up will also receive a logo for their Websites. [Click here to view the logos and trophy](#). Several districts also have similar annual Website completions.

The following is a list of subjects Communication Services Staff Officers should be aware of about the Best-of-the-Web competition:

- Nomination procedure
- Advance notice

Chapter 4 Planning and Designing a Webpage

- Judging
- Evaluation criteria
- Selection Procedure
- Feedback
- Website Changes
- Schedule of Events
- Time Limit On Award

Click on the hyperlinks to access the Best-of-the-Web Award Procedures and Schedule:

4.5.1 Nomination procedure

1. A self-nomination procedure is used for the Best-of-the-Web program. Any flotilla or division that wishes to enter the competition should notify their SO-CS or DSO-CS well in advance of the deadline (choice and nomination deadline is up to the DSO).
2. The DSO-CS may elect to enter the district website into the competition.
3. The SO-CS or DSO-CS will screen candidates for compliance with the following Auxiliary Web Site Policies:
 - a. [Auxiliary Internet Web Sites Policy](#)
 - b. [Auxiliary Internet Site Checklist](#)
 - c. [Auxiliary Website Link Criteria](#)

Websites not in compliance should be promptly notified. The screening process should be initiated early enough so that those sites not in compliance can be brought into compliance and resubmitted before the deadline.

4. The DSO-CS (perhaps with the assistance of SOs) will then evaluate all submitted sites on the three criteria below and identify the best websites at the flotilla and division levels. Though we prefer that only two flotilla websites be submitted for the national competition, up to five will be accepted; only two division websites may be submitted for the national competition; the district website may also be submitted if desired.
5. DSO-CS officers (or their designee), should use the Best-of-the-Web submission form available on the AIRS site to submit a list of their candidate web sites. See <http://airs.uscgaux.info/bowform05.html>.

4.5.2 Advance notice

1. Changes to the procedures and criteria for judging (as contained in this document) shall be announced by 01 February, for that year's competition.

Chapter 4 Planning and Designing a Webpage

2. DSO-CS officers should immediately begin their local selection process following the BOW announcement by national. This will provide time for local webmasters to bring their websites into compliance with Auxiliary web policies, and also to improve their websites in light of the judging criteria.
3. The panel of judges shall be selected and instructed on the selection process at least seventy-five (75) days prior to the first day of the Fall Meeting of the National Board (NACON).

DSO-CS officers must submit their list of candidate sites to the Division Chief, Web (DVC-IW), during a sixty-day (60) window, ending seventy-five (75) days prior to the first day of the Fall Meeting of the National Board (NACON).

4.5.3 Judging

Four members of the "I" Department staff and two DSO-CS' will form the panel of judges. Each will be selected under the supervision of the DC-I.

4.5.4 Evaluation criteria

4.5.4.1 Technical

1. Web sites must be written in a manner that provides access to viewers using all currently distributed browsers. The need for proprietary software or specialized browser "plug-ins" is discouraged.
2. Web pages should be easily viewable on all screen resolutions. Although screen formats are transitioning to higher resolutions, users with lower resolution displays must have full accessibility. For example, if page elements do not fit on a 680x480 format, unseen elements should be made accessible through the use of scroll bars.
3. The use of new technologies and innovative features is highly encouraged. Such features should be used to enhance site operation, and not as a substitute for the basic elements of a site.
4. A means to easily navigate the Web site should be provided. Generally stated, the viewer should be able to easily navigate throughout the site, and return to the entry point, without becoming lost. The use of navigation buttons, frames, or standardized borders can provide the necessary tools.

Webmasters are encouraged to adopt the W3C standards for Web site authoring standards. Additional information may be found at the W3C site.

4.5.4.2 Content

1. Proper Auxiliary and sponsoring unit identification must be visually provided on all sites. The name of the sponsoring unit must also appear in the <TITLE> section of the page header.
2. All posted information should further the objectives of the Auxiliary, and should be relevant to the interests of Auxiliary members and/or the boating public. In addition, information should be accurate, current, concisely stated, and understandable.
3. Content for Auxiliary Web pages must be developed and maintained at the appropriate level. Web sites at other levels must link to that material rather than duplicating it. Thus, information regarding national policies and information will be developed and maintained on the national Web page to which other pages can link; district policies and information will be developed and maintained on district Web sites; and so on.
4. [All links should be functional](#). Links to sites outside of the CG and CGAUX must provide a "value added" source of information or service directly related to Auxiliary activities.
5. Links should be provided to the national Web site, and other relevant district, division, and flotilla sites.
6. All sites should display the [standard Link Disclaimer](#) as listed in the [Auxiliary Internet Web Policy](#).
7. Web pages should be designed to load quickly. Unnecessary gimmicks, large high-resolution pictures, overuse of action icons, and background music should be avoided.
8. All sites must display a Privacy Statement that specifically describes the site's collection and use of personal information.
9. All sites must post an email contact address or MAILTO: link in a prominent location. The contact person must be someone who will respond to inquiries in a timely manner.
10. Auxiliary sites should make every effort to accommodate viewers with disabilities. It is recommended that sites conform to the [CAST Bobby Level 1](#) requirements.

4.5.4.3 Appearance

1. The Web site opening page should be designed to catch the interest of the viewer.
2. Web page layout should provide a visually appealing framework to display the materials being presented. Effective use of graphics, images, backgrounds, frames, and borders can enhance the effectiveness of the site.

3. The overall appearance of a Web site should present a consistent look and feel. It is important to maintain this uniformity through:
 - a. Visual continuity throughout all site pages.
 - b. Consistent page format, color schemes, and identification headers.
 - c. Consistent applications of text size and style.
 - d. Standardized navigation procedures between site pages.

4.5.4.4 Selection Procedure

1. Judges will independently assign each website a rating for each of the three categories of criteria above. In reaching a rating, they will consider the specific criteria listed within each category.
2. The average (mean) rating of all judges will be determined for each website on each of the three criteria. Judges are not permitted to vote on a site within their own District; the average of the other judges' ratings will be used to replace any missing ratings due to a website being within a judge's own district. A total rating for each website will be determined by adding the average ratings in each of the three categories.
3. Judging for this award shall be done and the winner determined at least forty-five (45) days prior to the first day of the Fall Meeting of the National Board.
4. The finalists and runners-up will be reviewed by the "I" Department Chief (DC-I) and Deputy Chief (DC-Id) to confirm that the award winners are indeed outstanding websites and deserving of the awards.

4.5.4.5 Feedback

No detailed feedback will be provided regarding the winners. By definition, the judges determined that relative to the other candidates the winning websites best met the published criteria.

4.5.4.6 Website Changes

In order to avoid the problem of significant changes to a website between the time of judging and the time of the award announcement, a copy of each winning and runner-up website will be stored online at the time of the judging. These site copies will be made available for viewing after the winners are announced. In addition, one or more screen shots of the winning and runner-up websites will be made and included with the certificate at the time the awards are made.

4.5.5 Best-of-the-Web annual schedule

This section will be updated annually before the next Best-of-the-Web judging.

- Changes to the procedures and criteria for judging will be announced by 01 Feb 07
- DSO-CS Officers immediately begin their local selection process upon announcement of procedures and criteria for judging.
- Panel of judges shall be selected & instructed on the selection process. 15 June 07
- DSO-CS officers must submit their list of candidate sites to the Division Chief, Web (DVC-IW), during the period 16 April to 15 June 2007.
- Judging will be done and winner determined by 15 July 2007.

4.5.6 Time Limit on Award

Since the award logo carries a date, there is no time limit on how long it may be displayed on a website.

Appendixes

In this Section, you will learn about:

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- Appendix 2 Bibliography

Appendix

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Appendix 1. The e-Auxiliary

Universal passwords

Online shopping

e-Directory

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Online training and testing

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AUXImage

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Speed tests

Windows Updates

Spyware

Ad-Aware

Testing your security

Surge protectors

SPAM Filters

Free antivirus software

Memory upgrades

Computer clean-up

Defrag

Laptop verses desktop

USB 1.1, USB 2.0 and firewire

Ports (parallel and serial)

CD/DVD type R+ or R- capabilities

Software maintenance

Driver updates

Registry (be very careful)

Make backups before software updates

Thumb drives or USB drives

eTips for Dummies

Microsoft viewers

Appendix 2. Glossary of Terms

Appendix 2. Glossary of terms

The following are terms used in this guide and on the Internet. This is not an exhaustive list. If you find a term that should be on this list, let your instructor know.

B	
Back & Forward	<p>Buttons in most browsers' Tool Button Bar, upper left. BACK returns you to the document previously viewed. FORWARD goes to the next document, after you go BACK.</p> <p>If it seems like the BACK button does not work, check if you are in a new browser window; some Web pages are programmed to open a new window when you click on some links. Each window has its own short-term search HISTORY. If this does not work, right click on the BACK button to select the page you want (some Web pages are programmed to disable BACK).</p>
BLOG or Web Log	<p>A blog (short for "web log") is a type of webpage that serves as a publicly accessible personal journal (or log) for an individual. Typically updated daily, Blogs often reflect the personality of the author. Blog software usually has an archive of old blog postings. Many Blogs can be searched for terms in the archive. Blogs have become a vibrant, fast-growing medium for communication in professional, political, news, trendy, and other specialized web communities. Many Blogs provide RSS feeds, to which one can subscribe and receive alerts to new postings in selected Blogs.</p>
Bookmark or Favorites	<p>A way in browsers to store direct links to sites you wish to return to. Netscape, Mozilla, and Firefox use the term Bookmarks. The equivalent in Internet Explorer (IE) is called a "Favorite." To create a bookmark, click on BOOKMARKS or FAVORITES, then ADD. Or left-click on and drag the little bookmark icon to the place you want a new bookmark filed. To visit a bookmarked site, click on BOOKMARKS and select the site from the list.</p> <p>You can download a bookmark file to diskette and install it on another computer. In most browsers now, you can do this with an Import... and Export... set of commands which can be found under FILE or in the Manage Bookmarks window's FILE.</p>
Boolean Logic	<p>Way to combine terms using "operators" such as "AND," "OR," "AND NOT" and sometimes "NEAR." AND requires all terms appear in a record. OR retrieves records with either term. AND NOT excludes terms. Parentheses may be used to sequence operations and group words. Always enclose terms joined by OR with parentheses.</p>
Browsers	<p>Browsers are software programs which enable you to view WWW documents. They translate HTML-encoded files into the text, images, sounds, and other features you see. Microsoft Internet Explorer (called simply IE), Mozilla, Firefox, Safari, and Opera are examples of "graphical" browsers that enable you to view text and images and many other WWW features.</p>

C	
Cache	<p>In browsers, cache is used to identify a space where Web pages you have visited are stored in your computer. A copy of documents you retrieve is stored in cache. When you use GO, BACK, or any other means to revisit a document, the browser first checks to see if it is in cache and will retrieve it from there because it is much faster than retrieving it from the server.</p>

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Cached Link	In search results from Google, Yahoo! Search, Good Search, and some other search engines, there is usually a Cached Link which allows you to view the version of a page that the search engine has stored in its database. The live page on the web might differ from this cached copy, because the cached copy dates from whenever the search engine's spider last visited the page and detected modified content. Use the cached link to see when a page was last crawled and, in Google, where your terms are and why you got a page when all of your search terms are not in it.
Case Sensitive	Capital letters (upper case) retrieve only upper case. Most search tools are not case sensitive or only respond to initial capitals, as in proper names. It is always safe to key all lower case (no capitals), because lower case will always retrieve upper case.
CGI	"Common Gateway Interface," the most common way Web programs interact dynamically with users. Many search boxes and other applications that result in a page with content tailored to the user's search terms rely on CGI to process the data once it's submitted, to pass it to a background program in JAVA, JAVASCRIPT, or another programming language, and then to integrate the response into a display using HTML.
Cookie	A message from a web server sent to and stored by your browser on your computer. When your computer consults the originating server computer, the cookie is sent back to the server, allowing it to respond to you according to the cookie's contents. The main use for cookies is to provide customized Web pages according to a profile of your interests. When you log onto a "customize" type of invitation on a Webpage and fill in your name and other information, this may result in a cookie on your computer which that Webpage will access to appear to "know" you and provide what you want. If you fill out these forms, you may also receive e-mail and other solicitation independent of cookies.
Crawler or WebCrawler	Same as Spider.

D

Domain, Top Level Domain (TLD)	Hierarchical scheme for indicating logical and sometimes geographical venue of a Webpage from the network. In the US, common domains are .edu (education), .gov (government agency), .net (network related), .com (commercial), .org (nonprofit and research organizations). Outside the US, domains indicate country: ca (Canada), uk (United Kingdom), au (Australia), jp (Japan), fr (France), etc. Neither of these lists is exhaustive. See also DNS entry.
Domain Name, Domain Name Server (DNS) entry	<p>Any of these terms refers to the initial part of a URL, down to the first /, where the domain and name of the host or SERVER computer are listed (most often in reversed order, name first, then domain). The domain name gives you who "published" a page, made it public by putting it on the Web.</p> <p>A domain name is translated in huge tables standardized across the Internet into a numeric IP address unique the host computer sought. These tables are maintained on computers called "Domain Name Servers." Whenever you ask the browser to find a URL, the browser must consult the table on the domain name server that particular computer is networked to consult.</p> <p>"Domain Name Server entry" frequently appears a browser error message when you try to enter a URL. If this lookup fails for any reason, the "lacks DNS entry" error occurs. The most common remedy is simply to try the URL again, when the domain name server is less busy, and it will find</p>

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	the entry (the corresponding numeric IP address).
Download	To copy something from a primary source to a more peripheral one, as in saving something found on the Web (currently located on its server) to diskette or to a file on your local hard drive.
DSL	Digital Subscriber Line turns the average telephone line into a high-speed Internet connection. Typically the computer modem limits data speeds over the voice channel of a phone line to 56 kbps. The DSL modem can achieve speeds of 1.5 Mbps or approximately 30 times faster throughput of the data. The phone company servicing your phone line must first install equipment at the local phone bridge that will enable the phone line to carry data and voice on separate frequencies or "channels." Once this is completed, the subscriber uses a modem supplied by the DSL provider to connect to their equipment over the data channel on the phone line.

E

Extension or File Extension	In Windows, DOS and some other operating systems, one or several letters at the end of a filename. Filename extensions usually follow a period (dot) and indicate the type of file. For example, <i>this.txt</i> denotes a plain text file, <i>that.htm</i> or <i>that.html</i> denotes an HTML file. Some common image extensions are <i>picture.jpg</i> or <i>picture.jpeg</i> or <i>picture.bmp</i> or <i>picture.gif</i>
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F

Favorites	In the Internet Explorer browser, a means to get back to a URL you like, similar to Bookmarks.
Feed Reader	A software package that enables you to easily read the XML code in which a RSS feed is written. Bloglines is currently the most popular feed reader but there are many competitors.
Field Searching	Ability to limit a search by requiring word or phrase to appear in a specific field of documents (e.g., title, URL, link).
Find	A tool in most browsers used to search for word(s) keyed in the document. Useful to locate a term in a long document. Can be invoked by the keyboard command, Ctrl+F.
FRESHNESS	How up-to-date a search engine database is, based primarily on how often its spiders recirculate around the Web and update their copies of the Web pages they hold, and discover new ones. Also determined by how quickly they integrate new sites that web authors send to them. Two weeks is about as good as most search engines do, but some update certain selected web sites more frequently, even daily.
Frames	A format for web documents that divides the screen into segments, each with a scroll bar as if it were as "window" within the window. Usually, selecting a category of documents in one frame shows the contents of the category in another frame. To go BACK in a frame, position the cursor in the frame and press the right mouse button, and select "Back in frame" (or Forward). You can adjust frame dimensions by positioning the cursor over the border between frames and dragging the border up/down or right/left holding the mouse button down over the border.
FrontPage	FrontPage is a web-authoring program for the beginning web site designer.
FTP	File Transfer Protocol. Ability to transfer rapidly entire files from one computer to another, intact for viewing or other purposes.
Fuzzy AND	In ranking of results, documents with all terms (Boolean AND) are ranked first, followed by documents containing any terms (Boolean OR) are retrieved. The farther down, the fewer the terms, although at least one should always be present.

G

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GIF	<p>A GIF (Graphic Interchange Format) is a compressed cross-platform image format which is 8-bit with 256 colors. It was created by CompuServe, Gif 87a was the first GIF version, Gif 89a is the newer version and supports comments and transparency.</p> <p>The advantage of this image format are:</p> <ol style="list-style-type: none"> (1) Its file compression is best suited for areas of flat, solid color images like logos and line art. (2) It supports transparent color (so backgrounds on a webpage can show through), supports animation and allows for interlaced images, so images appear to download faster. <p>The disadvantages of this image format are:</p> <ol style="list-style-type: none"> (1) It is a poor choice for most non-online uses because GIF files are limited to 256 colors so details and color quality can suffer. (2) Converting a photo from a format that supports millions of colors (such as JPEG) can permanently lose those extra colors since they are all converted to the closest GIF equivalent.
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H

Head or Header (of an HTML document)	The top portion of the HTML source code behind Web pages, beginning with <HEAD> and ending with </HEAD>. It contains the Title, Description, Keywords fields and others that webpage authors may use to describe the page. The title appears in the title bar of most browsers, but the other fields cannot be seen as part of the body of the page. To view the <HEAD> portion of Web pages in your browser, click VIEW, Page Source. In Internet Explorer, click VIEW, Source. Some search engines will retrieve based on text in these fields.
History or Search History	Available by using the combined keystrokes CTRL+H, a more permanent record of sites you have visited/retrieved than GO. You can set how many days your browser retains history in Edit Preferences, or in Tools Options
Host	Computer that provides web-documents to clients or users. See also server.
HTML	<p>Hypertext Markup Language. A standardized language of computer code, imbedded in "source" documents behind all Web documents, containing the textual content, images, links to other documents (and possibly other applications such as sound or motion), and formatting instructions for display on the screen. When you view a Webpage, you are looking at the product of this code working behind the scenes in conjunction with your browser. Browsers are programmed to interpret HTML for display.</p> <p>HTML often imbeds within it other programming languages and applications such as SGML, XML, JavaScript, CGI-script and more. It is possible to deliver or access and execute virtually any program via the WWW.</p> <p>You can see HTML by selecting the View pop-down menu tab, then "Document Source."</p>

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Hypertext	On the World Wide Web, the feature, built into HTML, which allows a text area, image, or other object to become a "link" (as if in a chain), that retrieves another computer file (another Webpage, image, sound file, or other document) on the Internet. The range of possibilities is limited by the ability of the computer retrieving the outside file to view, play, or otherwise open the incoming file. It needs to have software that can interact with the imported file. Many software capabilities of this type are built into browsers or can be added as "plug-ins."
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I	
Internet (Upper case I)	The vast collection of interconnected networks that all use the TCP/IP protocols and that evolved from the ARPANET of the late 60's and early 70's. An "internet" (lower case i) is any computers connected to each other (a network), and are not part of the Internet unless the use TCP/IP protocols. An "intranet" is a private network inside a company or organization that uses the same kinds of software that you would find on the public Internet, but that is only for internal use. An intranet may be on the Internet or may simply be a network.
IP Address or IP Number	(Internet Protocol number or address). A unique number consisting of 4 parts separated by dots, e.g. 165.113.245.2 Every machine that is on the Internet has a unique IP address. If a machine does not have an IP number, it is not really on the Internet. Most machines also have one or more Domain Names that are easier for people to remember.
ISP or Internet Service Provider	A company that sells Internet connections via modem (examples: AOL, or MindSpring. There are thousands of ISPs to choose from). Faster, more expensive Internet connectivity is available via cable, DSL, ISDN, or Web-TV. Often these companies also provide Webpage hosting service (free or relatively inexpensive Web pages—the origin of many personal pages).

J	
JAVA	A network-oriented programming language invented by Sun Microsystems that is specifically designed for writing programs that can be safely downloaded to your computer through the Internet and immediately run without fear of viruses or other harm to our computer or files. Using small Java programs (called "Applets"); Web pages can include functions such as animations, calculators, and other fancy tricks. We can expect to see a huge variety of features added to the Web using Java, since you can write a Java program to do almost anything a regular computer program can do, and then include that Java program in a Webpage.
JAVASCRIPT	A simple programming language developed by Netscape to enable greater interactivity in Web pages. It shares some characteristics with JAVA but is independent. It interacts with HTML, enabling dynamic content and motion.
JPEG OR JPG	A JPEG or JPG (Joint Photographic Experts Group) is an image file compression format for cross-platform, 24 bit which renders millions of colors and is best photos. It uses a compression scheme that throws away data to save space—called a "lossy" scheme. The advantages of this file compression format are:

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	<p>(1) It gives users the flexibility in choosing between file size and image quality. At lesser levels of compression, picture quality remains accurate.</p> <p>(2) Usually better compression for photographs than GIF and it supports millions of colors</p> <p>The disadvantage of this file compression format are:</p> <p>(1) A noticeable image degradation if you opt for too high a level of compression.</p> <p>(2) Repeated image saving in this format will result in a loss of image quality. Save in another format first and convert to JPEG only when you are finished editing the image.</p>
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K

Keyword(S)	A word searched for in a search command. Keywords are searched in any order. Use spaces to separate keywords in simple keyword searching. To search keywords exactly as keyed (in the same order), see Phrase.
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L

LIMITING TO A FIELD	Requiring that a keyword or phrase appear in a specific field of documents retrieved. Most often used to limit to the "Title" field in order to find documents primarily about one or more keywords. (Can be used for other fields).
LINK	The URL imbedded in another document, so that if you click on the highlighted text or button referring to the link, you retrieve the outside URL. If you search the field "link:" you retrieve on text in these imbedded URLs which you do not see in the documents.
LINK "ROT"	Term used to describe the frustrating and frequent problem caused by the constant changing in URLs. A Webpage or search tool offers a link and when you click on it, you get an error message (e.g., "not available") or a page saying the site has moved to a new URL. Search engine spiders cannot keep up with the changes. URLs change frequently because the documents are moved to new computers, the file structure on the computer is reorganized, or sites are discontinued. If there is no referring link to the new URL, there is little you can do but try to search for the same or an equivalent site from scratch.
LISTSERVE RS	A discussion group mechanism that permits you to subscribe and receive and participate in discussions via e-mail. Blogs and RSS feeds provide some of the communication functionality of Listservers.

M

META-Search Engine	Search engines that automatically submit your keyword search to several other search tools, and retrieve results from all their databases. Convenient time-savers for relatively simple keyword searches (one or two keywords or phrases in " ").
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N	
Nesting	A term used in Boolean searching to indicate the sequence in which operations are to be performed. Enclosing words in parentheses identifies a group or "nest." Groups can be within other groups. The operations will be performed from the innermost nest to the outmost, and then from left to right.
Newsgroups	A discussion group operated through the Internet. This is not to be confused with Listservers which operate through email.

P	
Personal Page	A webpage created by an individual (as opposed to someone creating a page for an institution, business, organization, or other entity). Often personal pages contain valid and useful opinions, links to important resources, and significant facts. One of the greatest benefits of the Web is the freedom it has given almost anyone to put his or her ideas "out there." But frequently personal pages offer highly biased personal perspectives or ironical/satirical spoofs, which must be evaluated carefully. The presence in the page's URL of a personal name (such as "tmiller") and a ~ or % or the word "users" or "people" or "members" very frequently indicate a site offering personal pages.
Packet, Packet Jam	When you retrieve a document via the WWW, the document is sent in "packets" which fit in between other messages on the telecommunications lines, and then are reassembled when they arrive at your end. This occurs using TCP/IP protocol. The packets may be sent via different paths on the networks which carry the Internet. If any of these packets gets delayed, your document cannot be reassembled and displayed. This is called a "packet jam." You can often resolve packet jams by pressing STOP then RELOAD. RELOAD requests a fresh copy of the document, and it is likely to be sent without jamming.
PDF or .pdf or pdf file	Abbreviation for Portable Document Format, a file format developed by Adobe Systems, which is used to capture almost any kind of document with the formatting in the original. Viewing a PDF file requires Acrobat Reader, which is built into most browsers and can be downloaded free from Adobe.
Phrase	More than one KEYWORD, searched exactly as keyed (all terms required to be in documents, in the order keyed). Enclosing keywords in quotations " " forms a phrase in AltaVista, and some other search tools. Some times a phrase is called a "character string."
Plug-in	An application built into a browser or added to a browser to enable it to interact with a special file type (such as a movie, sound file, Word document, etc.).
PNG	<p>The image format PNG (Portable Network Graphics) is a file compression scheme than GIF and will eventually replace GIF files and images. PNG provides better compression and files sizes. PNG also provides and alpha channel for transparencies, gamma correction for cross platform compatibility, and two-dimensional interlacing for progressive downloading and display of images which speeds image delivery.</p> <p>The advantage to this image format are:</p>

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	<p>(1) A better compression and more layers than GIF and the patent is not in question since it was developed as an open standard. It is beginning to grow in popularity after 5 years of availability.</p> <p>(2) That most image software will create or convert to PNG files and all of the latest versions of browsers will display PNG files natively without plug-ins.</p> <p>The disadvantages of this image format are:</p> <p>(1) GIFs will allow layering of multiple images to create an animated GIF, but PNGs are only a single image format.</p> <p>(2) A Multiple-Image Network Graphics (MNG) format has been created to provide PNG quality animated images, but implementation has been slow</p>
Popularity Ranking of search results	Some search engines rank the order in which search results appear primarily by how many other sites link to each page (a kind of popularity vote based on the assumption that other pages would create a link to the "best" pages). Google is the best example of this. See also Subject-Based Ranking.

R	
+Require or - Reject a Term or Phrase	<p>Insert + immediately before a term (no space) to limit search to documents containing a term. Insert - immediately before a term (no space) to exclude documents containing a term. Can be used immediately (no space) before the " " delimiting a phrase.</p> <p>Functions partially like basic BOOLEAN LOGIC. If + precedes more than one term, they are required as with Boolean AND. If - is used, terms are excluded as with Boolean AND NOT. If neither + nor - is used, the default is Boolean OR. However, full Boolean logic allows parentheses to group and sequence logical operations, and +/- do not.</p>
Relevancy Ranking of search results	The most common method for determining the order in which search results are displayed. Each search tool uses its own unique algorithm. Most use "fuzzy and" combined with factors such as how often your terms occur in documents, whether they occur together as a phrase, and whether they are in title or how near the top of the text. Popularity is another ranking system.
RSS or RSS feeds	Short for "Really Simple Syndication" (a.k.a. Rich Site Summary or RDF Site Summary), refers to a group of XML based web-content distribution and republication (Web syndication) formats primarily used by news sites and Web logs (Blogs). Any website can issue an RSS feed. By subscribing to an RSS feed, you are alerted to new additions to the feed since you last read it. In order to read RSS feeds, you must use a "feed reader," which formats the XML code into an easily readable format (feed readers are to XML and RSS feeds as web browsers are to HTML and Web pages).

S	
Script	A script is a type of programming language that can be used to fetch and display Web pages. There are many kinds and uses of scripts on the Web. They can be used to create all or part of a page, and communicate with searchable databases. Forms (boxes) and many interactive links, which respond differently depending on what you enter, all require some kind of script language.

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	When you find a question mark (?) in the URL of a page, some kind of script command was used in generating and/or delivering that page. Most search engine spiders are instructed not to crawl pages from scripts, although it is usually technically possible for them to do so.
Server, Web Server	A computer running that software, assigned an IP address, and connected to the Internet so that it can provide documents via the World Wide Web. Also called HOST computer. Web servers are the closest equivalent to what in the print world is called the "publisher" of a print document. An important difference is that most print publishers carefully edit the content and quality of their publications in an effort to market them and future publications. This convention is not required in the Web world, where anyone can be a publisher; careful evaluation of Web pages is therefore mandatory. Also called a "Host."
Server Side	Something that operates on the "server" computer (providing the Webpage), as opposed to the "client" computer (which is you or someone else viewing the Webpage). Usually it is a program or command or procedure or other application causes dynamic pages or animation or other interaction.
SHTML , usually seen as .shtml	A file name extension that identifies Web pages containing SSI commands.
Site or Website	This term is often used to mean "webpage," but there is supposed to be a difference. A webpage is a single entity, one URL, one file that you might find on the Web. A "site," properly speaking, is a location or gathering or center for a bunch of related pages linked to from that site. For example, the site for the present tutorial is the top-level page "Internet Resources." All of the pages associated with it branch out from there—the web searching tutorial and all its pages, and more. Together they make up a "site." When we estimate there are 5 billion Web pages on the Web, we do not mean "sites." There would be far fewer sites.
Spiders	Computer robot programs, referred to sometimes as "crawlers" or "knowledge-bots" or "knowbots" that are used by search engines to roam the World Wide Web via the Internet, visit sites and databases, and keep the search engine database of Web pages up to date. They obtain new pages, update known pages, and delete obsolete ones. Their findings are then integrated into the "home" database. Most large search engines operate several robots all the time. Even so, the Web is so enormous that it can take six months for spiders to cover it, resulting in a certain degree of "out-of-datedness" (link rot) in all the search engines.
Sponsor (of a Webpage or site)	Many Webpages have organizations, businesses, institutions like universities or nonprofit foundations, or other interests which "sponsor" the page. Frequently you can find a link titled "Sponsors" or an "About us" link explaining who or what (if anyone) is sponsoring the page. Sometimes the advertisers on the page (banner ads, links, buttons to sites that sell or promote something) are "sponsors." <i>WHY is this important?</i> Sponsors and the funding they provide may, or may not, influence what can be said on the page or site—can bias what you find, by excluding some opposing viewpoint or causing some other imbalanced information. The site is not bad because of sponsors, but you they should alert you to the need to evaluate a page or site very carefully.
SSI commands	SSI stands for "server-side include," a type of HTML instruction telling a computer that serves Webpages to dynamically generate data, usually by inserting certain variable contents into a fixed

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	template or boilerplate Webpage. Used especially in database searches.
Stemming	In keyword searching, word endings are automatically removed (<i>lines</i> becomes <i>line</i>); searches are performed on the stem + common endings (<i>line</i> or <i>lines</i> retrieves <i>line, lines, line's, lines', lining, lined</i>). This is not very common as a practice, and not always disclosed. Can usually be avoided by placing quote marks “ “ around the term.
Stop Words	In database searching, “stop words” are small and frequently occurring words like <i>and, or, in, of</i> that are often ignored when keyed as search terms. Sometimes putting them in quotes “ “ will allow you to search them. Sometimes + immediately before them makes them searchable.
Subject Based Popularity Ranking of search results	A variation on popularity ranking in which the links in pages on the same subject are used to in ranking search results.
Subject Directory	An approach to Web documents by a lexicon of subject terms hierarchically grouped. May be browsed or searched by keywords. Subject directories are smaller than other searchable databases, because of the human involvement required to classify documents by subject.
Sub-Searching	Ability to search only within the results of a previous search. Enables you to refine search results, in effect making the computer "read" the search results for you selecting documents with terms you sub-search on. Can function much like Results Ranking.

T

TCP/IP	Transmission Control Protocol/Internet Protocol—This is the suite of protocols that defines the Internet. Originally designed for the UNIX operating system, TCP/IP software is now available for every major kind of computer operating system. To be truly on the Internet, your computer must have TCP/IP software. See also IP Address.
TELNET	Internet service allowing one computer to log onto another, connecting as if not remote.
Thesaurus	In some search tools, the terms you choose to search on can lead you to other terms you may not have thought of. Different search tools have different ways of presenting this information, sometimes with suggested words you may choose among and sometimes automatically. The terms are based on the terms in the results of your search, not on some dictionary-like thesaurus.
Title (of a document)	The official title of a document from the "meta" field called title. The text of this meta title field may or may not also occur in the visible body of the document. It is what appears in the top bar of the window when you display the document and it is the title that appears in search engine results. The "meta" field called title is not mandatory in HTML coding. Sometimes you retrieve a document with "No Title" as its supposed title; this is caused when the meta-title field is left blank. <i>In an Auxiliary Website, the title must include the full unit identifier, (i.e. district number, division number, and flotilla number AND a geographic description, i.e. city, area, and state).</i>
Truncation	In a search, the ability to enter the first part of a keyword, insert a symbol (usually *), and accept any variant spellings or word endings, from the occurrence of the symbol forward. (E.g., <i>femini*</i> retrieves <i>feminine, feminism, feminism, etc.</i>)

Appendix 1. The e-Auxiliary

U			
URL	Uniform Resource Locator. The unique address of any Web document. May be keyed in a browser's Open or Location/Go To box to retrieve a document. Below is the logical layout of a URL. See Section 3.1.7.		
<i>Anatomy of a URL:</i>			
Type of file (could say ftp:// or telnet://)	Domain name (computer file is on and its location on the Internet)	Path or directory on the computer to this file	Name of file, and its file extension (usually ending in .html or .htm)
http://	http://nws.cgaux.org/	members/departments/	Index.htm
USENET	Bulletinboard-like network featuring thousands of "newsgroups." Google incorporates the historic file of Usenet Newsgroups (back to 1981) into its Google Groups. Yahoo Groups offers a similar service, but does not include the old "Usenet Newsgroups." Blogs are replacing some of the need for this type of community sharing and information exchange.		

W	
Word Variants	Different word endings (such as <i>-ing, -s, es, -ism, -ist,</i> etc.) will be retrieved only if you allow for them in your search terms. One way to do this TRUNCATION, but few systems accept truncation. Another way is to enter the variants either separated by BOOLEAN OR (and grouped in parentheses). In +REQUIRE/-REJECT non-Boolean systems, enter the variant terms preceded with neither + nor -, because this will allow documents containing any of them to be retrieved.
XHTML	This is a variant of HTML. XHTML stands for Extensible Hypertext Markup Language is a hybrid between HTML and XML that is more universally acceptable in Web pages and search engines than XML.
XML	Extensible Markup Language is a dilution for Webpage use of SGML (Standard General Markup Language), which is not readily viewable in ordinary browsers and is difficult to apply to Web pages. XML is very useful (among other things) for pages emerging from databases and other applications where parts of the page are standardized and must reappear many times. See XHTML.

Appendix 3. Bibliography

Appendix 3. Bibliography

- [1] U.S. Coast Guard, “USCG Auxiliary Communications Services (CS) Guide”, [Online document], [accessed 2006 Oct 15], available HTTP: <http://csguide.auxservices.org/index.php>.
- [2] U.S. Coast Guard, “USCG Auxiliary Communications Services (CS) Guide, Web Policy Statement”, [Online document], [accessed 2006 Oct 15], available HTTP: <http://csguide.auxservices.org/4.3.8.php>.
- [3] U. S. Coast Guard, Auxiliary Manual, COMDTINST M16790.1 (series), Washington D.C.: G-OCX, 2004.
- [4] U. S. Coast Guard, Policy on Coast Guard Use of Internet/Worldwide Web (COMDTINST M5230.56), Washington D.C.: G-SI, 2000.
- [5] J. Mantaro, FrontPage 2003: The Missing Manual, Sebastopol, CA: O’ Reilly Media, 2005, pp. xv-xvii.
- [6] P. Weverka, Microsoft Office 2003 All-In-One Desk Reference for Dummies, Indianapolis: Wiley, 2003, pp. 363-364.
- [7] U. S. Coast Guard, Microsoft FrontPage 2003 Website Design and Development—Vol. 1, Seattle: Pacific Area Training Team, 2005.
- [8] J. Buyens, “Code with XHTML in FrontPage 2003 Microsoft Office,” [Online document], [accessed 2006 Oct 10], available HTTP: <http://office.microsoft.com/en-us/HA011176911033.aspx>.
- [9] J. Buyens, “Planning page layout,” [Online document], [accessed 2006 Oct 10], available HTTP: <http://office.microsoft.com/en-us/assistance/HA011872491033.aspx>.
- [10] V. Flanders, “Websites that suck,” [Online document], [accessed 2006 Oct 10], available HTTP: <http://www.Websitesthatsuck.com>.
- [11] Website, “The American Heritage Dictionary of the English Language” [Online document], [accessed 2006 Oct 24], available HTTP: <http://www.bartleby.com/61/57/W0075725.html>.
Refers to the usage note—which describes the transition of the terms of World Wide Web, to Web site, and finally to Website.
- [12] Website, “FrontPage System Requirements” [Online document], [accessed 2006 Oct 27], available HTTP: <http://www.microsoft.com/office/frontpage/prodinfo/sysreq.mspx>.
- [13] Website, “Universal Resource Indicator: Generic Syntax” [Online document], [accessed 2006 Oct 28], available HTTP: <http://gbiv.com/protocols/uri/rfc/rfc3986.html>.
- [14] Website, “Top 10 reasons to install Windows XP Service Pack 2 (SP2)”, [accessed 2006 Nov 12], available HTTP: <http://www.microsoft.com/windowsxp/sp2/topten.mspx?pf=true>.
- [15] Website, “National Website Design” [Online document], [accessed 2006 Nov 12], available HTTP: http://nws.cgaux.org/statements/site_design.html.
- [16] Website, “New Thinking: How you can design for the scan reader” [Online document], [accessed 2006 Nov 27], available HTTP: http://www.gerrymcgovern.com/nt/2002/nt_2002_04_29_scan.htm.

Appendix 3. Bibliography

- [17] Website, “The Science of Word Recognition” [Online document], [accessed 2006 Nov 27], available HTTP: <http://www.microsoft.com/typography/ctfonts/WordRecognition.aspx>.
- [18] Website, “Lesson 11: Netiquette” [Online document], [accessed 2006 Nov 27], available HTTP: <http://www.sc.edu/bck2skol/fall/lesson11.html>.
- [19] Website, “A survey of browser text size settings” [Online document], [accessed 2006 Nov 27], available HTTP: <http://www.clickdensity.com/Text-Sizes-Study.aspx>.

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