ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

REGULATION AND CERTIFICATION

1370.80

9/29/97

SUBJ: **GUIDELINES FOR IMPLEMENTING FAA INTERNET POLICY**

1. **PURPOSE.** This order establishes procedural and technical guidelines for implementing the Internet policy documented in Order 1370.79, Internet Policy. This order directs Regulation and Certification (AVR) Internet users/developers to use FAA's Internet resources only to directly support the FAA mission. This order applies to all organizations in the AVR line of business, including all employees and contractors in the AVR field, region, center, and Washington headquarters locations.

2. **DISTRIBUTION.** This order is distributed to the office level in Washington Headquarters, Regions, Centers, and to the division level in the Office of the Associate Administrator for Regulation and Certification, the Offices of Accident Investigation, Aviation Medicine, and Rulemaking, and to the Aircraft Certification and Flight Standards Services; to the division level in the Aircraft Certification, Flight Standards, and Aviation Medical Divisions in the regions; and to the Medical Staff in the Centers; and a standard distribution to all Aircraft Certification Field Offices and Flight Standards Field Offices.

3. **BACKGROUND.** The Regulation and Certification organization has established a procedure that is intended to provide organizations within the Regulation and Certification line of business (LOB) with the official on-line means to present and distribute Internet-based information from a central, reliable and secure government system. The primary AVR Internet web site is a virtual logical area physically residing on the primary official FAA web server in the Office of Information Technology (AIT) and logically linked to other official AVR web sites, such as the Civil Aeromedical Institute (CAMI).

   a. A web site provides a powerful tool to allow information sharing. In order to make the best use of this tool and maintain program flexibility, each organization within the Regulation and Certification LOB will ensure information within their organization's control is managed in accordance with agency information management policies and procedures. In support of this goal, the AVR Executive Staff, AVR-10, with assistance from the AVR Internet Team and the AVR IRM Council, developed this order which governs the production, maintenance and delivery of the web content from all AVR offices.

   b. The creation, maintenance, use, disposition, and release of information by FAA employees and FAA contractors continues to be governed by numerous agency directives and related guidance to ensure the FAA follows sound information management principles and the FAA complies with public law and other Federal mandates. (Refer to Appendix 1, Procedural and Technical Guidance.)

4. **DEFINITIONS.**

   a. **Content.** Content is any information intended to be placed on a FAA Web site and all content shall be for the benefit of the FAA mission. Content may include text, images, charts, documents,

reports, spreadsheets, sounds, movies, and embedded interactive components (applets). Content may be in raw form (the form in which it was originally created) or in Web-ready form (programmed and formatted for placement on a Web site).

b. Home Page. The top-level Web page for an organization or topic. It is commonly the first page seen by a user when connecting to a World Wide Web server, but it may also be used to refer to an introductory page for other sub-levels/sub-sets of information on any server. It often appears as a table of contents and is primarily used as a starting place for finding more information.

c. Internet. The world-wide collection of inter-connected networks that use the Transmission Control Protocol/Internet Protocol (TCP/IP) to communicate and that evolved from the Department of Defense ARPANET project of the late 1960's and early 1970's. It generally includes several other types of systems, such as private Intranets, on-line services, and electronic bulletin board services, although communication with these other systems may be restricted, limited, and/or monitored.

d. Organizations. All FAA divisions, offices, centers, and field facilities in the Regulation and Certification line of business, which includes Flight Standards Service (AFS), Aircraft Certification Service (AIR), Office of Aviation Medicine (AAM), Office of Accident Investigation (AAI), and Office of Rulemaking (ARM).

e. Posting/Web Development. The act of converting information into Web-ready format and making that information available by placing it on a publicly accessible server or service. Information that may be posted includes those items that would be provided to customers by other, more traditional, methods such as mailings, handouts, brochures, faxes, etc.

f. World Wide Web (WWW). The World Wide Web is a common set of services available on the Internet that allows for "point and click" access to information. It is a global, seamless environment in which information (text, images, audio, video, computational services) accessible from the Internet can be accessed in a consistent and simple way by using a standard set of naming and access conventions. It includes, but is not limited to, the set of hypertext servers which allow text, graphics, sound files, etc. to be mixed together (Web or HTTP servers) in Web pages that are displayed on client computers. The collection of server-based information with the same TCP/IP address domain represents the web site, and each web site is generally maintained by a Webmaster who oversees the posting procedures.

g. Webmaster. The Webmaster is responsible/accountable for the oversight of the organization's web site and interfacing with the public via Internet-based e-mail. Activity includes creating, updating, and maintaining the Web pages on the Internet site. The Webmaster creates Home Pages, converts documents to web-ready formats, and ensures the integrity of the content on the Web site. In addition to these duties, the Webmaster coordinates updates from the organizations, monitors the activities of all of the AVR Internet pages, and coordinates Webmaster e-mail replies back to the public.

h. Pagemaster. This person has aviation technical, computer, and Internet knowledge/skills and is editorially responsible for published content, accuracy, timeliness, and appropriateness of material.

5.   RESPONSIBILITIES. Each office and service within AVR is individually responsible for their specific area of information. The AVR Executive Staff, AVR-10, has overall responsibility to:

    a. Create, maintain, use, review, approve, and oversee the World Wide Web implementation procedures in the Regulation and Certification line of business organizations. This work is performed with input and coordination from each of the AVR WWW Internet Team Members and the AVR Information Resource Management (IRM) Council.

    b. Ensure each office and service that is a direct report to the Associate Administrator for Regulation and Certification (AVR-1) has the opportunity to select at least one point of contact to serve as the Webmaster for the office and service and to participate in an AVR Internet Team process where consensus of the membership determines approval of technical software issues and location of subject matter material postings. Each service and office may use an organizational team to formulate and maintain information presented to the AVR Internet Team for inclusion and linkage to/from the official AVR-wide Web site. Each office and service is individually responsible for gathering the information they wish to publish on the Internet. The AVR Internet Team shall work together to provide presentation of the information in an integrated and consistent manner.

    c. Provide leadership and guidance to the AVR Internet Team and ensure organizations are maintaining consistent and appropriate business content presentations on their home pages. Ensures appropriate linkages from AVR home pages to other official FAA home pages and non-FAA pages.

6.   OBJECTIVES. The intent of this Internet guidance is to ensure the AVR offices and services:

    a. Use the Internet as an official source for reliable, coordinated, appropriately secured, and accountable AVR information to the public and AVR users by presenting information in a clear, professional manner consistent with sound information management practices and Federal law.

    b. Provide AVR organizations with a procedure and guidelines to create, submit and maintain Web-ready content and/or raw content for timely and accurate placement on the AVR Web sites while maintaining flexibility and individual office and service priorities.

    c. Fulfill National Performance Review (NPR) initiatives.

7.   TECHNOLOGY. In consultation with AVR's Internet Team and based on technical recommendations from the FAA Webmaster who physically hosts the AVR headquarters web site, AIT will determine the hardware and software needed to maintain the FAA's primary Web site. Locations where other official AVR web sites exist may use technology guidelines provided by the AVR Internet Team. AVR-10 will evaluate and provide access to software, hardware and guidance to participating organizations wishing to prepare their own content for submission to the AVR Webmaster in AVR-10. Technology review, quality assurance, technology performance, and content implementation for publication on the AVR web sites is coordinated and performed by the AVR Webmaster through the AVR Internet Team activity.

8.   ENFORCING GUIDELINES. Enforcement of the implementation guidelines is no different than management's enforcement of any other AVR guidelines. It may also be appropriate to seek advice from the Office of the Chief Counsel when questions arise concerning appropriate content of electronic documents. AVR-10 is responsible for ensuring implementation of these guidelines.

9.   GUIDANCE. Appendices 1-3 reference directives, laws, and guidelines concerning the submission of content by organizations, and procedures for creating and maintaining Web pages by organizations desiring to establish a presence on the Regulation and Certification Web Site. The AVR Internet Team is responsible for interpreting and revising AVR's procedures and guidelines as necessary.

10. ESTABLISHING A WEB PRESENCE.

  a.   Approvals. Each AVR office and service director may decide to define an organizational Webmaster function which shall create and contribute complete Web-ready content, or may contribute content in raw form (unrefined, word-processed document files, photographs, etc.) to the AVR Webmaster. Each organization is responsible for ensuring submitted content complies with the directives, laws, and guidelines listed in appendix 1. Each organizational Webmaster (e.g., WebmasterAAM, WebmasterAFS, etc.) is accountable to ensure consensus by their management to publish the submitted content. The AVR Webmaster shall ensure coordination of all content changes.

  b.   Business Related Use. All content provided by organizations using FAA resources must be in support of the organization's officially assigned function.

  c.   Centralization of Information. All AVR information presented by organizations in AVR should reside only on the AVR Web server, or other official FAA Web sites, and must be submitted in accordance with the procedures in Appendix 2, Web Site Submissions Process. The AVR Webmaster, working with the submitting organization, may from time to time modify technical guidelines for a particular submission if the guidelines in Appendix 3, Web Site Style/Technical Guidelines, conflict with the guidelines provided by the hosting FAA Webmaster, or if the submitting AVR organization has a unique requirement for which an exception is appropriate.

11. POSTING FAA INFORMATION VIA THE INTERNET.

  a.   Releasing information over the Internet.

    (1)   Information Review and Clearance. Although use of the Internet promotes the ideal of "openness in Government," great care must be taken to ensure only properly reviewed and cleared information is placed on electronic systems accessible by the general public, including replies to messages received via electronic mail.

    (2)   Information Management Requirements. Certain provisions of the Freedom of Information Act (FOIA), Privacy Act, Computer Security Act, and FAA records management orders shall apply to information made available to the public via the Internet, whether by placement on a publicly accessible Web server, or by reply to an electronic mail message. Material protected by copyright shall not be posted without permission of the holder of the copyright. Information containing

classified material shall not be posted. Trade secrets or confidential business material submitted to the FAA shall not be posted without the permission of the author. If the AVR Webmaster requests counsel, then the Office of the Chief Counsel is available to provide additional guidance on whether material submitted to the AVR Webmaster is proper for posting on the Regulation and Certification Web server.

b. **Format for Developing/Posting Information.** Guidelines for developing/posting information via the Web, including linking to the FAA Web site pages, have been established by AVR-10 in coordination with the AVR Internet Team and in accordance with industry standards, i.e., HTML-2.0 specifications, TXT files and PDF files. Any changes to these guidelines will be coordinated by AVR-10 and the AVR Internet Team, which has representatives from all AVR Headquarters offices. Coordination with internal committees, working groups, field offices, and regional offices is the responsibility of each AVR Internet Team member because they represent those other offices at the AVR Internet Team meetings.

c. **Responsibility for Maintaining Information.**

(1) **Executive Staff (AVR-10).** AVR-10 is responsible for maintaining the FAA Regulation and Certification World Wide Web (WWW) site and for establishing links from the FAA Regulation and Certification home page to other official FAA WWW sites. AVR-10 will establish and publish procedures to process all customer requests including an expected response time for various Web requests. System administration tasks will be performed by AVR-10. The AVR-10 Webmaster will perform routine system administration and server management tasks for the Regulation and Certification Web site. For example, access to the site shall be monitored, summarized, and reported. This information will provide feedback identifying the most popular locations within the site, patterns of document and data access, frequency of document downloads, and other statistics. The information gathered and reported can help organizations to determine optimal choices for expanded site content. In addition, procedures will be established for back-up and recovery of Web site programs, documents maintained within the Web site, and document/data repositories directly linked to the site. Facilities and procedures will also be utilized in monitoring Web server and network performance. Factors to be tracked include processor utilization, disk storage availability, response time, internal I/O utilization, network interface throughput, etc. Bottlenecks, if any, will be reported to site sponsors along with recommendations for corrective action. The Webmaster will also be responsible for promoting the development of security procedures to secure the site from unauthorized or destructive activity.

(2) **Office of the Chief Counsel.** The Office of the Chief Counsel (AGC) is responsible for providing guidance to organizations regarding WWW information distribution statutory issues.

(3) **Contributing AVR Organizations.** Organizations shall:

(a) Be responsible for all information submitted for placement on the Regulation and Certification Web server.

(b) Designate a staff member as a point of contact with AVR-10 for all Web site-related processes, procedures, and communications as defined in appendix 2.

(c)   Participate in a process for review and approval of material submitted to AVR-10 for Web posting to ensure the content complies with information management requirements (appendix 1) and conforms to the guidelines as provided in appendix 3.

(d)   Establish a process within their office and service to ensure Web content is current, reliable, and submitting organizations are accountable, and also advise AVR-10 for removal of material that is no longer accurate or current in a timely fashion.

(e)   Coordinate with other organizations to determine which organization shall submit material, when that material is duplicative or similar with information submitted or posted by other organizations.

d. **Security.** Security guidelines for establishing firewalls, encryption, registration, access to agency systems, virus protection, telecommunications, and legal liabilities shall be administered in accordance with FAA security orders (appendix 1).

e. **Resources for Internet Development/Posting, Training, and Support.** AVR-10 will provide for AVR Webmaster technical support in Washington headquarters, the AVR Web site hardware/software required and integration activity as required with the FAA primary web site in the AIT organization. Future enhancements or additional requirements may be shared among the participating organizations. Funding and support for unique office and service resources required for Internet posting, training, and support will be the responsibility of the contributing organization.

f. **Technology.** AVR-10, in coordination with other AVR Webmasters (i.e., AVR WWW Internet Team), will evaluate and make available to AVR Washington headquarters staffs the software and hardware needed to develop Web-ready content.

12. **ADVANCED INTERNET/WEB TECHNOLOGIES.** There are a number of new and evolving technologies that may be used to support FAA business needs. These new technologies may include, but are not limited to, the establishment of Web-based collaborative work areas (e.g., discussion groups), the ability to access databases via a Web site, the development and distribution of applets (e.g., Java applets), and the transaction of FAA business via electronic forms/electronic commerce initiatives. Policies in these areas may be developed by AIT for national implementation, or by the Regulation and Certification organization for global implementation. Until policies addressing new technologies are developed, the AVR WWW Internet Team will follow current information management regulations.

13. **REQUESTS FOR INFORMATION.** Information concerning the FAA Regulation and Certification World Wide Web Site implementation policy may be obtained from the Executive Staff, AVR-10, Room 802, 800 Independence Ave. SW, Washington, DC 20591, or through the Regulation and Certification Web Site at http://www.faa.gov/avr/avrhome.htm.

Guy S. Gardner
Associate Administrator for Regulation and Certification

APPENDIX 1. PROCEDURAL AND TECHNICAL GUIDANCE

DIRECTIVE NUMBER	TITLE	CONTENTS	OPR
1200.8C	Public Information Activities and Programs	Release of public information activities including providing, without charge to the public, brochures, pamphlets, leaflets, films, copies of speeches, and other educational, advisory, and informational material.	APA
1200.23	Public Availability of Information	Disclosure of FAA Records (Freedom of Information Act, FOIA) (costs associated); release of information by FAA employees (e.g., news and information media; prepared speeches and papers; budget information; procurement and contract information; aircraft type certification and production certification data; airmen and medical certificate information; certificate actions, fines, penalties; airport data information; regulatory action information; violation report data; statistical or summary information; accident or incident information; and information about employees.).	AAD
1280.1A	Protecting Privacy of Information About Individuals	Release of information concerning individuals per the Privacy Act.	ABC
1320.1D	FAA Directives System	Establishment and documentation of official policy and procedures in the FAA.	ABC
1320.32B	DOT Directives - clearance and Implementation	Policy and procedures for coordinating and issuing DOT directives.	ABC
1320.46	FAA Advisory Circular System	Policy and procedures for creating and disseminating FAA Advisory Circulars.	ABC
1330.1A	Forms Management	Policy and procedures for establishing and disseminating FAA forms.	ABC
1340.1C	FAA Reports Management System	Policy and procedures for establishing and disseminating FAA reports.	ABC
1350.14A	Records Management	Policy and procedures for the creation, maintenance, use, and disposition of information in the FAA.	ABC
1350.15B	Records Organization, Transfer, and Destruction Standards	Disposition of information in the FAA.	ABC
1350.20B	Micrographics/Electronic Image Management Program	Policy and procedures for creation, maintenance, use, and dissemination of microforms and electronic image (optical disk, CD-ROM, etc.) information in the FAA.	ABC
DOT 1350.250	DOT Information Systems Security (ISS) Guide	Security of major applications and the associated host computer systems (e.g. mainframes, workstations).	DOT
DOT 1350.251	DOT Network Security Guide	Security for networks.	DOT
1360.16	FAA Correspondence Manual	Guidelines for the preparation of official correspondence by FAA organizations.	ABC
1370.52D	Information Resources Policy	IRM policy and procedures for FAA organizations.	AIT
1370.72	Transitioning to an Office Automation Technology and Services (OATS) Environment	Policy and procedures for establishing an OATS environment in an organization.	AIT
1370.75	Using the Office Automation Technology and Services Contract	Policy and procedures for establishing specific requirements and waiver procedures for acquiring office automation (OA) hardware, software, networks, and technical support from non-OATS sources.	AIT
1600.15D	Control and Protection of "For Official Use Only" Information	Policy and procedures for protection and release of "For Official Use Only " information.	ACP

APPENDIX 1. PROCEDURAL AND TECHNICAL GUIDANCE (cont'd.)

DIRECTIVE NUMBER	TITLE	CONTENTS	OPR
1600.54B	FAA Automated Information Systems Security Handbook	Policy and procedures for protecting computer information systems.	ACS
1600.66	Telecommunications and Information Systems Security Policy	Policy and procedures for telecommunications and information systems security.	ACS & AIT
1710.15	FAA Publications Management System	Policy and procedures for creating and obtaining publications in the FAA.	ABC
1720.17B	Publications Required by the Library of Congress	Policy and procedures for distributing publications to the Library of Congress.	ABC
1720.18B	FAA Distribution System	Policy and procedures for distributing information in the FAA.	ABC
1720.36	Procedures for Printing, Duplicating, and Copying	Policy and procedures for printing in the FAA.	ABC
1730.8	FAA Graphics Standards	Graphics standards for creating publications, brochures, newsletters, stationery items, forms, etc., in the FAA.	ABC
1750.13A	FAA Library Program	Policy and procedures for library services in the FAA.	AIT
1800.41B	Standardization of Aviation and other Management Information	Policy and procedures for standardizing aviation and other management information in the FAA.	ABC
5 USC 552	Freedom of Information Act	Statutory requirements governing the public availability of government records.	
5 USC 552a	Privacy Act	Statutory requirements governing systems of records concerning individuals.	
A-130	Security of Federal Automated Information Resources	Minimum set of controls to be included in Federal automated information security programs.	OMB
Pub.L. 100-235	Computer Security Act	Statutory requirements governing the procurement, maintenance, operation and utilization of data processing equipment by federal agencies.	

APPENDIX 2. WEB SITE SUBMISSIONS PROCESS

1. **INTRODUCTION.** This appendix outlines the process by which organizations may contribute information to the Regulation and Certification Web Site. Organizations may submit complete, Web-ready information, or they may elect to submit raw content, which AVR-10 will develop into Web-ready format.

All organizations desiring to post material on any Web site must:

- designate a point-of-contact for the purpose of establishing a consistent working relationship with the AVR-10 Webmaster on all Web site issues;
- be responsible for obtaining the appropriate content and legal reviews prior to submission of either raw content or Web-ready materials; and
- be responsible for updating/removing Web site materials so that their organization's materials are both accurate and current.

2. **WEB DEVELOPMENT TOOLS AND SUPPORT.** AVR-10 will provide technical support for a selected list of Hypertext Markup Language (HTML) and image editing tools which have been evaluated and chosen based on their utility and ease of use. The AVR-10 Webmaster office will answer general questions about creating HTML and working with images as they relate to these tools. Organizations may choose to use other tools, but the Webmaster may not be able to provide support in their use.

The suite of commonly used tools will change over time and currently contains:

- FrontPage or HotDog Pro -- (HTML editing)
- Netscape Navigator Gold -- (HTML page development)
- Microsoft Internet Assistant or HTML Transit -- (HTML conversion)
- Paint Shop Pro -- Jasc, Inc. (image editing)
- Adobe Products -- Distiller, etc.

3. **SUBMISSION PROCESS FOR WEB-READY MATERIALS.**

a. **Web-Ready File Submission.** The headquarters organizations' point-of-contact will send the Web-ready materials and notify the AVR-10 Webmaster via e-mail. Web-ready materials are assigned to a directory located on the Regulation and Certification network. The AVR-10 Webmaster will establish directory locations on the network for use as review areas and provide information and support regarding their use by organizations. The designated point-of-contact should keep the file structure as simple as possible while striving to duplicate the structure of the production server.

b. **Technical Review Process.** The AVR-10 Webmaster will review the files and verify the following:

- The HTML and graphic files are correct and usable (e.g., files are not corrupt, virus-laden).
- The HTML and graphic files conform to the Style Guide (appendix 3).

The Webmaster will review material according to the Technical and Style Guidelines outlined in appendix 3 and coordinate any changes with the organization's point of contact. Once approved by the Webmaster, the materials will be integrated into the Web site. Organizations should keep copies of any files they place in the review area directory, as these directories will be emptied when the files are moved to the live Web site.

    c. Routine Content or Data Changes. Once the AVR-10 Webmaster has reviewed and approved the format and content of the first submission, routine changes or updates to the text content or data may, at the discretion of AVR-10, be made without additional AVR-10 Webmaster approval.

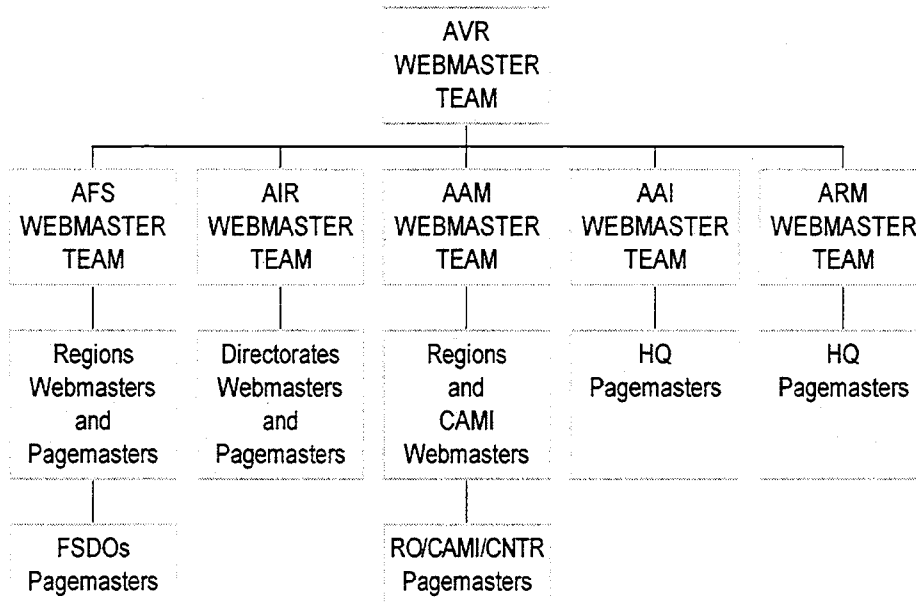## 4. ORGANIZATIONS CONTRIBUTING RAW FILES/CONTENT FOR DEVELOPMENT.

    a. Raw Content File Submission. An organization may submit raw files according to the guidelines outlined in appendix 3. The Webmaster will create, edit and verify HTML and graphic files based on the submitted material and according to the technical guidelines in appendix 3.

    b. Review Process. The completed HTML and graphic files will be moved by the Webmaster to a directory located on the Regulation and Certification Network. The organization will be notified that the files have been created and will be given an opportunity to make suggestions. Once any final edits are made, the materials will be integrated into the Web site. Generally, the files submitted by contributors will be moved into the public/production area within three business days.

5. GUIDELINES TO STRUCTURE TEAMS.

INTERNET TEAMS

STRUCTURE

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                        AVR
                     WEBMASTER
                        TEAM
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   |          |          |          |          |
  AFS        AIR        AAM        AAI        ARM
WEBMASTER  WEBMASTER  WEBMASTER  WEBMASTER  WEBMASTER
  TEAM       TEAM       TEAM       TEAM       TEAM
   |          |          |          |          |
Regions   Directorates Regions     HQ         HQ
Webmasters Webmasters   and     Pagemasters Pagemasters
  and        and       CAMI
Pagemasters Pagemasters Webmasters
   |                     |
 FSDOs              RO/CAMI/CNTR
Pagemasters         Pagemasters
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APPENDIX 3. WEB SITE STYLE/TECHNICAL GUIDELINES

1. **INTRODUCTION.** A Web site is a dynamic, highly visible, organizational presence. Like a television commercial or a full-page advertisement in a newspaper or magazine, it must be regarded by its contributors as a statement about the abilities and professionalism of the organizations and the people it represents. Content editors also need to ensure grammatical correctness that enhances the pages.

Consistent design and layout are essential to making the FAA Regulation and Certification Web site usable and easy to navigate. Because some organizations will develop their own material for this site, content must adhere to the following style guidelines and reference material to ensure consistency of presentation. Style and presentation guidelines will change over time and are not to be regarded as rigid rules. A foundation such as this can and should be built upon to take advantage of progress.

The technical administrators of the FAA Regulation and Certification Web site intend to make it a usable, strong information tool for all contributing organizations. The Webmasters do not make judgments about your choice of business material, however, non-business items, biographies, political statements, and pet photos are subject to editorial cuts. To make the site easy to navigate and to give it a consistent look, changes may be requested to certain elements of your pages.

Please use the following style guide as the basis of your Web page design.

> **Please Note:** The FAA Regulation and Certification Web site is optimized for Netscape and Microsoft Internet Explorer browsers. Therefore, all HTML and image files submitted for placement on the site must adhere to the HTML standards. See http://www.w3.org/pub/WWW/MarkUp/

Web pages should be designed to work well with the world's most popular browsers.

2. **SUBMITTING HTML, GRAPHICS AND DOWNLOADABLE FILES.** All submitted HTML. TXT, graphics and downloadable files must conform to the following:

    a. HTML-2.0 Specification. NCSA Mosaic supports the HTML-2.0 specification. Tags that are not part of the HTML-2.0 specification may not work, or worse, may produce unwanted results using NCSA Mosaic. However, simple adherence to the HTML-2.0 specification doesn't make a tag appropriate in all situations. It will be allowed only if it does not interfere with the site's consistent design. Modern Web development software generally does all this for you automatically.

    b. Titles. Every page shall have a title. The title will be as short as possible but fully informative and specific (e.g., "FY 1997 FAA Budget" is preferable to "Budget"). Although the title is often overlooked, it is important because it is frequently used to identify the document on hotlists/bookmarks, search result sets, and site indexes.

    c. Headers. The intent is to have clear headers on each page, be creative, and produce exciting presentations. Every "front" page could have a top-level <big letters> header near the top of the first screen, except that a <little letters> header may be used for

continuation pages when a chapter or section is subdivided. Ideally, the header should not exceed 1-2 lines of text. Lower-level headers may be used if appropriate to the document.

Documents which are divided into multiple pages will include the document title and publication date in italics above the top-level header. This helps identify the document to users who may arrive at the page without knowing its context. (This may happen as a result of a full-text search.)

   d. Standard Icons. Wherever an official FAA logo/image is used, such as the main Regulation and Certification home page, it shall be the standard logo sized appropriately for the display area and made available in the Web Author's Toolbox under the Regulation and Certification Resource Management page. Modern software tools virtually do the coding for you as shown in this text string/URL (Uniform Resource Locator) which could be used to display a logo (with a link):

```
<A HREF="http:///www.faa.gov">
<IMG SRC="http://www.faa.gov/gif/soreg.gif"
          ALT="[ Go to FAA Region Home Page ]"
WIDTH=XXX HEIGHT=XXX></A>
```

The intent is to provide for a common area of downloadable logos/graphics for all AVR Webmasters, Pagemasters, and developers. Use is encouraged, creativity is required, and sharing is requested. See the Web Author's Toolbox for additional general purpose icons, including navigational buttons and various bullets and horizontal rules. See http://www.pcmag.com/ for developer toolkit product reviews.

Organizations are encouraged to develop graphic elements and icons to help give a graphical identity and consistent look and feel to their pages, within the guidelines defined in this document for sensible and economical use of graphics.

   e. Background Color. The intent is to encourage adequate contrast between the background and the foreground and modern software can do this for you almost automatically. Eye pleasing creativity with white is quite acceptable. Each file must contain a tag such as:

```
<BODY BGCOLOR="#FFFFFF">
```

This tag sets the background color to white, the default standard. Background images are allowed.

   f. Images. The combined size of all images on a single page must not exceed 50K. For example, you may have one 25K image and five 5K images, per page. The image files must be provided in the GIF (Graphics Interchange Format) or JPG (Joint Photographic Experts Group) format.

Each image tag must include an alternate text description:

```
<IMG SRC="chief.gif" ALT="Image of Ms. Smith">
```

This is an aid to users who cannot view in-line images or who have images turned off in their browser settings.

g. Page Size. Keep each HTML file to a reasonable size. Files should generally be no larger than 60K, not counting images.

The viewable page length should be appropriate to the content. A major page with several important links should be viewed with minimal scrolling. A document chapter, on the other hand, may be a bit longer because your readers probably won't expect many links within the text. Having more text in one file also makes printing pages easier.

h. Standard Footer. The intent is to ensure that navigation is simple and users do not get locked into a page and unable to get back easily. Every beginning of a document will contain the following information, centered, in a standard footer, separated from the body of the page by a horizontal rule:

- A link to the FAA Regulation and Certification Web Site home page: http://www.faa.gov/avr/avrhome.htm. This link must reside at the bottom of the primary page, to the left of any other navigational links.

- A link to the organization's top-level (or home) page. This link will reside to the immediate right of the FAA Regulation and Certification Web Site link, and to the left of any navigational links.

- A link for feedback to the Webmaster is recommended. This link may reside at the bottom of each primary page, to the right of any other navigational links. A common FAA Regulation and Certification Web Site Feedback process has been developed that will allow visitors to e-mail direct comments and questions to individual Webmasters in each functional area on the AVR front page.

i. Large or Complex Documents. Large or complex documents, typically those larger than three printed pages, should be divided into multiple, smaller files. If possible, files should be divided along logical break points such as chapters or sections. For publications, a separate file should be created for title page information. The entry point for such documents should be a table of contents page which lists and includes links to the title page, each chapter/section file, and in some cases a downloadable file containing the entire document. To assist users in navigating multi-section documents, each page should include standard navigation buttons at the bottom with links to the table of contents and previous and next section. (These navigation buttons act like forward and back buttons. See example below.) The first and last sections of the document should omit the previous and next link, respectively.

The modern Web development software will ***automatically*** do this for you. Example:

ANE Home Page | Airway Facilities Page | Previous Chapter | Table of Contents | Next Chapter | Feedback

Automatically Generated HTML Source Example:

```
<A HREF="anehome.htm">ANE Home Page</A> | <A
HREF="airfac/index.htm"> Airway Facilities Page</A> | <A
HREF="chap2.htm"> Previous Chapter</A> | <A
HREF="toc.htm">Table of Contents</A> | <A
HREF="chap4.htm">Next Chapter</A> | <A
HREF="feedbk.htm">Feedback</A>
```

    j. Uniform Resource Locators (URLs). Relative URLs are to be used whenever possible, for both anchors and images, in order to make documents and collections portable. For example, a link from the file "index.html" to the file "chapter1.html", when both files reside on the WWW server "www.faa.gov" in the directory "/pubs/DocumentOne/", should be expressed as <A HREF="chapter1.html">, not as <A HREF="http://www.faa.gov/pubs/ DocumentOne /chapter1.html">.

    k. Filenames: *.htm *or* *.html? Name your files and links with the *.htm* extension, and always use all lowercase letters. Although the Windows NT on which a site resides requires some files to be named with a *.html* extension, the Webmaster will make the appropriate adjustments.

    l. Providing Downloadable Files. You are encouraged to provide downloadable documents where appropriate. These may be versions of documents already displayed on the site, or other documents, images, etc. Remember, the most common format is .txt all over the world.

    (1) Downloadable document files must be in a usable format. Links to such files must include descriptions of the files, the file sizes, and what is needed to view them. You may provide files in any format, but at least one choice for documents must be HTML or Word 6.0 format. The lowest common denominator which all computers that download files should be able to read is TXT files. Also note that one of the most popular modern format types is PDF, and it is supported by the AVR-10 Executive Staff.

    (2) Other media types, such as video and sounds may also be made available for download. Keep in mind the limitations of your viewer's platform. A standard may be developed soon to address this.

3. MATERIALS SUBMITTED AS RAW CONTENT. All materials submitted as raw content for the purpose of conversion to Web-ready format must conform to the following:

    a. Use Word 6.0 Format. Word 6.0 can be used as the file type for any text-based document: newsletters, reports, memos, etc. These documents may include embedded images, but it helps to include the original images as separate files as well (any format).

b. Always Use Styles (Consistently). When creating Word documents, always use appropriate styles to apply any formatting. This means, for example, a heading style should be applied to a heading, rather than changing the point size directly. Spaces should not be used in place of tabs, etc.

The Word 6.0 "Autoformat" feature can be turned on to assist in applying styles to new or existing documents. Some conversion products use styles to determine how the HTML should be presented; hence, minimizing the conversion process.

c. Non-Electronic Content. Printed material is also acceptable if you do not have an electronic version. However, the process of making this information Web ready is much more time consuming. Color or black-white brochures, newsletters, reports, articles, and any other printed document are usable, as well as photographs, slides, and transparencies.

d. Considerations for Low-Bandwidth and/or Text-Only Users. Pages will be designed so that there is a text equivalent for all information contained in graphics. For example, an image map must be accompanied by text links which provide access to the complete set of options for users who cannot use the image maps.

Whenever possible, pages will be tested using a character-only browser, or on a browser with images turned off. Ensure that the pages are navigable even without graphics.

Pages will be designed for efficient transfer over low-bandwidth connections, which are still prevalent in schools, homes, and libraries.

e. About Images. Images are appropriately used to help convey information or to create a consistent and recognizable look and feel. Limit biographical photo images to office and service director levels.

Images should be as small as possible. Large images or pages containing many images often have a direct impact on the perceived performance of the site. As a general rule, images should be no wider than 480 pixels, in order to display on the typical Web browser's 500 pixel wide viewing window on a 640 by 480 monitor. Images should rarely need to be so large, however. A small image placed alongside a heading or other text is more effective than a large one placed alone.

The proper balance of images can be difficult to achieve -- the following are some guidelines for working with images:

- *Use as few colors as possible.* Most visitors to the site will be viewing at no greater than 256 colors. Creating images with thousands or millions of colors is unnecessary. For example, a 3-color logo need not be saved in 256 colors. If you are using existing or scanned images and photographs, reduce the number of colors as much as possible without losing image quality.

- *Create images at 72 dpi.* This is the resolution of most monitors. Higher dpi settings are intended for printed images.
- *Create images at the intended size.* Try to create all images at the display size which you intend to use. This eliminates resizing which can cause the image quality to degrade. (Image size and resolution are related.) This does not apply to cropping, which simply cuts off unwanted edges of an image.
- *Crop images.* Crop images so that only the desired area remains. This reduces the file size.
- *Make it also function in non-graphic mode of browsers.* Allow for non-graphics and/or reduced number of graphics so functionality does not <u>depend</u> on graphics view by users.

4. PUBLISHING CYCLE TIME. Posting and integrating contributor's web-ready information files onto the AVR web site in Washington, DC, will generally be accomplished within three work days. Contributor's "raw" file submissions may require a day or two extra time to convert and adjust for appropriate web site presentations. For any questions about HTML, PDF, or Word 6.0 formats, the AVR-10 Webmaster will either answer questions immediately or defer to the appropriate technical expert in AVR.

This style guide will be amended periodically by AVR-10, in coordination with, the AVR organizations' staffs to address the needs of the site's visitors and contributors.