The Internet can place a wealth of valuable information at a researcher’s fingertips. To research a legal topic such as telecommunications law on the Internet, a researcher should first focus on the types of information sought. Federal government information, in particular, is rapidly finding its way onto sites on the World-Wide-Web (“WWW” or the “Web”). Federal statutes and legislative history have a distinct place on the Internet, as do regulations and court opinions. Administrative orders and forms are found in yet another place, and one must look even further for news and articles. If a researcher is clear on which of these types of documents are sought, he or she need only access the appropriate pages directly, as will be explained in the rest of this essay.

If a researcher seeks to engage in a broader search for telecommunications law, or any legal topic, there are some particularly useful starting points, which will also be discussed in this essay.

STARTING POINTS FOR TOPICAL RESEARCH

One of the most helpful places to begin a search for WWW sites related to a legal subject is FindLaw. FindLaw’s home page serves as a menu from which a researcher may connect to on-line resources in several categories. When seeking information devoted to a specific topic, the “Legal Subject Index” should be selected. The Legal Subject Index page presents a number of topical menu choices, including telecommunications law. When the researcher selects a topic, links to several categories of web resources are provided, including WWW sites, primary materials, publications, and government agencies. Once an item from one of these categories is chosen, the researcher exits the FindLaw site and enters another site that provides content pertaining to the chosen topic. FindLaw serves as a finding tool for law resources on the Web, analogous to the way in which a library catalog functions as a finding tool for library materials. Thus, for the most part, FindLaw does not provide content, rather it provides links to content found elsewhere on the WWW.

A thorough search for topical legal information should involve a visit to FindLaw and several other sites known for collections of subject matter links related to law. Cornell Law School’s Legal Information Institute provides another useful starting point for topical research by offering a collection of links in the area of telecommunications law. Legal researchers should also visit Hieros Gamos, which is an enormous directory of Internet legal resources, with menus for over 200 legal topics including telecommunications law. Each category provides links to relevant legal Web pages from the United States government, state governments, foreign governments, supranational organizations, publications, discussion groups, and other Internet resources. The House of Representatives Internet Law Library also provides a listing of

* Ms. Botluk is Research Librarian at the Katherine J. DuFour Law Library, Columbus School of Law, Catholic University of America. Ms. Botluk is also a lecturer on use of the Internet for legal research.
2 FindLaw is not completely devoid of content, however. In fact, it provides the most complete free database of United States Supreme Court opinions on the Internet to date. Its collection dates back to 1893 (volume 150).
links to web sites containing federal, state, foreign, and secondary telecommunications law information.\(^6\)

**LEGISLATION**

The *United States Code* ("U.S.C.") can be searched on the Internet through a variety of hosts. Title 47 U.S.C., Telegraphs, Telephones and Radiotelegraphs, can be found at the Cornell Law School Web site,\(^7\) as well as the House of Representatives Internet Law Library.\(^8\) Both versions are over a year old, but may quickly be updated through the use of the Law Revision Counsel's *United States Code Classification Tables.\(^9\) A search through the Code at the Cornell or House of Representatives sites yields a relevant Code section. That section's number is checked against the Classification Tables. If the section has been amended since the on-line publication date of the U.S.C., a new public law number will be revealed. In order to update the section, consult the new public law and incorporate any changes into the Code text.

U.S. public laws can be found on the Internet in at least two places. One popular location is the Thomas site\(^10\) developed by the Library of Congress; the second is GPO Access\(^11\) which provides many federal government depository items online.

The Telecommunications Act of 1996\(^12\) (the "96 Act") is on-line in many different locations. One of the most useful locations for browsing purposes is the FCC Web site.\(^13\) Here, communications law researchers can locate the full text of many documents pertaining to the implementation of the 96 Act, including FCC reports, orders, and speeches, as well as the text of the Act. Additionally, researchers can download a WordPerfect version of the text of the Communications Act of 1934, as amended by the 96 Act. The same page provides researchers with their choice of text (viewable online) or WordPerfect (downloadable) versions of the FCC's proceedings to implement the Act.

Another place to find the 96 Act on-line is the Wisconsin Department of Public Instruction's web page which features links to the text of the Act and many related documents.\(^14\) Moreover, it includes links to Congressional committee reports, FCC materials, and summaries by telecommunications experts.\(^15\) Thus, an up-to-date version of certain statutes and legislative materials can be found through the comforts of a home computer, without a trip to either a library or through use of a more expensive on-line service.

**REGULATIONS**

GPO Access\(^16\) is a useful resource for locating federal regulations in both the *Code of Federal Regulations* ("C.F.R.") and the *Federal Register*. This site recently made great strides to update and expand its collection of on-line C.F.R. titles.\(^17\) To conduct a search under Title 47 (Communications) contains the text of the public laws from the 104th and 105th Congresses which can be searched by number or key word.


Legislative history research can be accomplished on the Internet through the Library of Congress' Thomas. See supra, note 10. This site provides the texts of bills, public laws, committee reports, the *Congressional Record*, and select committee hearing transcripts from recent years. It also features a summary and status page for each bill, notifying legislative researchers of where a particular bill stands in the legislative process.


One of the most important FCC documents for communications law researchers and practitioners is the FCC’s Daily Digest. This tool allows readers to follow new administrative action in the telecommunications field. Moreover, this publication may serve as the key to the FCC information door, as it provides summaries and lists of new FCC documents, including orders, reports, news releases and public notices. Although the FCC Daily Digest can be purchased in paper format, technology has become an important part of its distribution. A new issue is available at noon each day, and can be obtained in a variety of ways:

1. Fax: It can be faxed through a fax-on-demand service by calling (202) 418-2830 and following the instructions on the line. More instructions for this service can be found on the Internet at <http://www.fcc.gov/ftp/reference_tools/faxon-demand.txt>.

2. E-mail: The Daily Digest may be sent to an e-mail box each day by subscribing to the FCC’s list server. To subscribe, send an e-mail message to subscribe@info.fcc.gov. The subject line of the e-mail message should be left blank. The body of the message should read “subscribe digest Your mail message should be left blank. The body of the message must read “subscribe digest Your

At this time all titles of the U.S. Code do not exist on-line, however, Title 47 (Communications), is available.

Portable document format (“.pdf”) documents retain the original formatting of documents. They are often used with on-line government documents, and are especially useful with forms, where retention of original formatting is essential. Pdf documents must be viewed with the Adobe Acrobat Reader program, which can be downloaded free of charge from the Adobe web site at Adobe Systems Incorporated (visited Oct. 14, 1997) <http://www.adobe.com>.


FCC Bureaus and Offices:

- the Office of Engineering & Technology (visited Oct. 14, 1997) <http://www.fcc.gov/oet> manages the spectrum and provides leadership to create new opportunities for competitive technologies and services;
- the Office of Plans and Policy (visited Oct. 14, 1997) <http://www.fcc.gov/Bureaus/OPP/welcome.html> assists, advises and makes recommendations to the Commission with respect to the development and implementation of communications policies;
- The Office of General Counsel (visited Oct. 14, 1997) <http://www.fcc.gov/ogc> serves as the chief legal advisor to the FCC; and

The FCC's Bureaus and Offices have their own home pages, where one may locate pertinent documents. Additionally, some documents can be found under the heading of “Miscellaneous” which appears on the FCC home page.
Name", where the subscriber’s name is substituted for the words “Your Name.” More information about the FCC’s Daily Digest listserver can be found on the Internet at <http://www.fcc.gov/ftp/reference_tools/listserv.txt>.

3. FTP (File Transfer Protocol): The WWW can be used to access current issues of the Daily Digest. It usually appears at the FCC’s FTP site by noon each business day.

4. FCC Home Page: The link to the Daily Digest from the FCC home page is generally updated by 1:30 p.m. each business day. The Daily Digest web page also includes a calendar. Researchers need only click on a desired date to proceed directly to the Daily Digest for that date.

When the Daily Digest contains a reference to a document, the full text of the document can be found at the FCC Web site. The FCC publishes many types of documents. News releases contain brief, unofficial summaries of FCC orders or other actions. Orders are the official statements of FCC action. Full text copies of orders dating from mid-1994 are available on-line. However, it should be noted that on-line copies are not considered official, as only those copies printed by the FCC are the official version. Notices of Proposed Rule Making (“NPRMs”) can be found at this site, in addition to speeches by FCC officials. Fact sheets on controversial or technical topics are also available on-line. Those considering attending a meeting at the FCC will find this site’s current agenda of open meetings helpful. Moreover, FCC staff members can be located on-line with the FCC staff telephone directory. Finally, FCC forms, with their original page formatting intact, can be found at this site, in portable document format.

For a topical approach, there are many “hot topics” areas at the FCC Web site that allow researchers to locate information about certain communications related subjects in one convenient place. Some of these topics include digital television, children’s television, and bandwidth. Here, researchers can also locate the full text of many documents pertaining to the implementation of the 96 Act, such as the Act itself, related FCC reports, orders, and speeches.

For additional assistance in locating relevant and helpful information, the FCC Web site offers two different search tools. The first, the FCC Digital Index, allows a search through Daily Digest entries for FCC documents from March 1996 to present. The second, the FCC Word Search Tool, goes even further by allowing a search for keywords in FCC documents that appear in HTML or ASCII formats.

The FCC uses Internet technology to provide and collect information. It offers the Quick Start Comment Filing system, allowing individuals the choice of using the Internet to submit informal comments on selected FCC proceedings. Comments submitted using this system can also be researched on-line. More details can be found at the FCC Internet Comment Pages.

OTHER AGENCIES

Several other federal agencies deal with telecommunications and may provide valuable information for researchers on-line. Generally, speeches, press releases, policy statements, and other related information can be found at agency Web sites. For instance, the National Telecommunications Information Administration’s (“NTIA”) mission is to provide assistance to state and local entities in developing information infrastructures throughout the nation. It works toward accomplishing this mission by providing information through its web site. The Office of Spectrum Management is a division of NTIA. The Information Infrastructure Task Force, created by the White House, consists of representatives of several agencies. Its purpose is to develop comprehensive technology, telecommunication, and information policy. Information on telecommunications and technology standards are on-line at the Web sites of the National Institute of Standards and Technology, the American National

23 See supra note 18.
Standards Institute, and the International Organization for Standardization. Other technical information can be found at the Web site of the White House Office of Science and Technology Policy.

An international organization dealing with telecommunications, the International Telecommunications Union coordinates global telecommunications networks and services. Its Web site offers statistical data, frequency management software, press releases, publications catalogs, meeting schedules and a telecommunication terminology database called TERMITE. Moreover, the Intelsat agreement and other Intelsat information can be found on-line.

JUDICIAL OPINIONS

The Internet is not a recommended choice for comprehensive caselaw research about a particular subject. Judicial opinions do exist on the Web, but few collections date back very far. The Internet, however, may be a good place to look for a recently decided case, without incurring the costs of a more expensive on-line service. Cornell Law School's Legal Information Institute contains a Web page on communications law related resources that links to communications cases from the United States Supreme Court, the United States Courts of Appeals, and the New York Court of Appeals.

The Federal Communications Law Journal, published by the Indiana University School of Law-Bloomington and the Federal Communications Bar Association, offers the full text of its articles on-line. Its collection dates back to volume 46 (1993-1994). The articles can be browsed by volume/issue or can be searched using key words. These hypertext articles offer scholarly analysis of a wide variety of the latest communications law related issues. Another on-line law journal from the communications law field is COMM/ENT: Hastings Communications and Entertainment Law Journal. This site contains Tables of contents and abstracts of articles dating back to volume 17 (1994-1995) in addition to the full text of selected articles.


Law Journal Extra!, presented by the New York Law Publishing Company, is one of the WWW's leading daily legal news sites. Its practice areas section includes communications law and media law. Within each topic, interested readers can find headline news, columns, links to on-line cases and statutes, e-mail forums, memos by attorneys practicing in the field, and a list of hypertext links, all related to the topic of choice. Communications law practitioners and researchers should

ARTICLES

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Law Journal Extra!, presented by the New York Law Publishing Company, is one of the WWW's leading daily legal news sites. Its practice areas section includes communications law and media law. Within each topic, interested readers can find headline news, columns, links to on-line cases and statutes, e-mail forums, memos by attorneys practicing in the field, and a list of hypertext links, all related to the topic of choice. Communications law practitioners and researchers should


visit this site as part of a daily Internet routine to remain apprised of the latest developments in their field.

Many newsletters pertaining to the field of communications law can be found on the WWW. Bulletins from the Communications Media Center at New York Law School contain news alerts related to communications and media.\textsuperscript{43} Telecommunications Reports International, Inc.'s Netline,\textsuperscript{44} has telecommunications headline news and reports updated daily, and sometimes twice daily. This site also offers an on-line subscription to a variety of newsletters in the communications field.

Law firms also are utilizing the WWW to keep clients knowledgeable about communications matters. Information technology and communications law attorneys at the global law firm of Baker & McKenzie have placed client alerts on the world wide web in the form of the Baker & McKenzie Global Update.\textsuperscript{45} These articles report new developments in communications and information technology law, and other related fields. Pepper & Corazzini, L.L.P., a law firm specializing in telecommunications and Internet law, has placed memos on the Internet that relate to many aspects of telecommunications law.\textsuperscript{46} Similarly, Cole, Raywid & Braverman, L.L.P., a Washington, D.C., firm specializing in telecommunications law, publishes articles on-line about recent developments in communications law and related fields.\textsuperscript{47}

ASSOCIATIONS & ORGANIZATIONS

A number of professional associations and organizations provide useful information on-line. The Federal Communications Bar Association maintains a presence one the WWW.\textsuperscript{48} This site provides information regarding the organization and membership. The Forum on Communications Law of the American Bar Association can be found on the WWW.\textsuperscript{49} This site describes the Forum's purpose, permits direct e-mail contact with its leaders from the leadership directory page, and provides a calendar of educational programs. Moreover, two new features are expected to appear: on-line tables of contents from its newsletter, the Communications Lawyer, and a list of communications law related links.\textsuperscript{50}

The American Communication Association,\textsuperscript{51} a national professional organization in communication studies, provides on-line resources in the fields of communication studies and communication law, including First Amendment issues. Researchers can also find an on-line reference desk at this site, providing access to electronic reference resources.

OTHER SITES

The University of Michigan supplies the WWW with some of the highest quality on-line research resources available.\textsuperscript{52} The field of telecommunications law is no exception. University of Michigan Professor, Jeffrey MacKie-Mason, manages Telecom Resources, one of the Internet's most comprehensive lists of links to telecommunications related sites on the Internet.\textsuperscript{53} The links are organized into over two dozen major categories, www.abanet.org. The ABA site provides information about the organization as a whole, as well as all its various entities. Part of this site is LAWlink, a selected hypertext list of links to legal research starting points. LAWlink is found at LAWlink (TM) (visited Oct. 14, 1997) <http://www.abanet.org/lawlink/home.html>.\textsuperscript{51}

For example, the University of Michigan Documents Center has a Legislative Histories site called Legislative Histories in the U.S. Congress (visited Oct. 15, 1997) <http://www.lib.umich.edu/libhome/Documents.center/frames/legishis.html> which provides an excellent hypertext guide to compiling a legislative history using on-line resources. It also has a superb guide to Statistical Resources on the Web (visited Oct. 15, 1997) <http://www.lib.umich.edu/libhome/Documents.center/stats.html>.\textsuperscript{52}

such as Telecom Policy and Regulation, Telecom Operating Companies, and Telecom news and Headlines. A communications law researcher would be hard pressed to find a relevant Internet site that does not have a link from one of Professor MacKie-Mason's pages.

The Internet also contains information regarding telecommunications industry language. The *Glossary of Telecommunications Terms*, also known as Federal Standard 1037C, is available on the WWW. This on-line glossary presents an easy point and click version of its print cousin. The page is designed so that researchers may see a list of words in one frame, definitions in another frame, and a third frame holding a main menu for easy maneuverability. Also included is Appendix A, providing a hypertext list of relevant acronyms and abbreviations, allowing the capability to link directly to the definitions of those terms on the list that appear in the glossary. Appendix B furnishes a topical index which divides the defined words into major categories.

**FINDING THE NEEDLE IN THE HAYSTACK**

If none of the sites described above prove fruitful for a particular research project, a search engine may provide a means to helpful information. Generally, search engines are best suited to locating Web pages that use very specific terms like "radiodetermination-satellite service," rather than more general terms like "satellite" because a search engine will look through millions of Web pages to find every page that has mentioned a certain term. While it may seem difficult to conduct an effective search, there are certain methods of constructing more precise search statements for more precise results. One search engine devoted entirely to finding legal resources is Law Crawler, which might be useful when seeking very specific telecommunications law information.

The Internet has such a vast amount of information that it is impossible to describe, or even index, everything available for a particular topic. Sometimes the research well comes up dry, even after a thorough search of the major research sites. Electronic mail discussion groups, also known as listserv lists, can prove enormously helpful in locating sought information. If a document exists somewhere on the Internet, then someone must know about it. Chances are that someone will be a subscriber to the e-mail discussion group that most closely relates to the topic at hand. There are several e-mail discussion groups concerning communications law topics. The best place to find an e-mail discussion group about a legal topic of interest is *Law Lists* by University of Chicago's Lyonette Louis Jacques.

**CONCLUSION**

A wide variety of easily navigable Web sites can aid in locating relevant information. Increasing amounts of data and documents are becoming available on-line every day. Despite its popularity, the Internet is still in its infancy, and needs time
to grow as a repository of information. The Internet is thus not yet a replacement for a traditional library or well-established on-line service such as Westlaw or Lexis. While the Internet has its treasures, it also has its limitations. Many of its collections of materials lack any significant archive of documents prior to the mid-1990's. Those resources that do exist on-line can sometimes be difficult to search, view, or even access. For now, it appears researchers can use the Internet to its fullest potential by utilizing it as a supplement to traditional research sources, to keep informed of developments in particular fields of law, and to communicate with others who have the same research interests.