

Naval Research Laboratory Digital Library Becoming Navy Sci-Tech Information Hub

The Ruth H. Hooker Research Library has been delivering information to the desktops of researchers at the Naval Research Laboratory (including the main campus in Washington, D.C., detachments at Stennis Space Center in Mississippi and Monterey California, and our parent organization, the Office of Naval Research in Arlington, Virginia for over 10 years. End users at the Navy's primary corporate research facility currently enjoy 24x7 access to databases, reference tools, technical reports, and journals via the Web whether in the office, at home or on travel.

The NRL Library has used technology to enhance library services for many years. In the early 90's the library developed a telnet-based, menu-driven campus wide information system allowing end-users to access networked CD-ROMs, Internet sites and locally stored databases. In 1995, the Library began migrating services to the Web, with a single-point-of-access through its InfoWeb gateway to remote resources and to locally hosted journals and agency documents in TORPEDO *Ultra*. Several key products have been developed or introduced over the past several years to create the current digital library. These include a Web-based catalog (Sirsi WebCat), a Master Journal Database, the TORPEDO *Ultra* digital repository, and locally-hosted databases including, ISI Science Citation Index. All are in the process of being further developed to serve an expanded Navy-wide audience representing over 60,000 end users. .

Sirsi WebCat

Sirsi was the first major library catalog vendor to offer a web interface to its product and NRL was one of the first to implement it in a production environment. By taking advantage of the MARC 856 field, the NRL library had added hyperlinks from technical report bibliographic records directly to the corresponding full text report in TORPEDO *Ultra*. In addition, the library is adding hyperlinks from the journal record to the volume/issue level of the full text articles either in TORPEDO *Ultra* or at remote publisher's web sites. A large number of Navy libraries have Sirsi systems. As part of a Navy Sci-Tech Hub, these and other Z-39.50 compliant catalogs can be linked so that they can be searched simultaneously and hyperlinked documents can be retrieved by any authorized user

Locally Hosted Databases

One of the most frequently used InfoWeb databases is Science Citation Index Expanded, part of the Web of Science produced by the Institute for Scientific Information (ISI) and mounted at NRL for the use of all employees served by a consortium of Federal science libraries known as the National Research Library Alliance. Science Citation Index allows users to trace references within articles and citations to articles from over 5,000 journals, a capability that has been greatly enhanced through links to full text. Other

locally hosted databases include SilverPlatter editions of INSPEC and COMPENDEX. All three have already or soon will be linked to full-text content in TORPEDO *Ultra*. A number of Naval libraries are licensed to use all three of these databases, which are considered core components of the Navy Sci-Tech Information Hub.

Master Journal Database

The Master Journal Database has been developed to holds all information about journals that are available from the NRL Library in print or digital format – about 4,000 titles. It is used by both InfoWeb and TORPEDO *Ultra* to dynamically generate journal lists in response to user queries. The Master Journal Database is OpenURL compliant and will support the implementation of an SFX-type linking solution for NRL and its Naval clients. Data from a Navy Union List, currently on CD ROM is being imported to the Master Journal.

TORPEDO *Ultra*

TORPEDO *Ultra*, based upon Convera's RetrievalWare, has been developed by the NRL Library to provide users with a more intuitive, convenient way to search and browse journal and technical report content. TORPEDO *Ultra* features an innovative user interface that integrates browse and search capabilities. With a single search query, users can search across:

- Everything in the system
- Items that have been selected (marked) for searching
- Individual subject areas, journals, journal volumes, or issues.

The default search mode is set for Concept searching, which retrieves strongly related terms. A search for “heavy water” will therefore find documents containing the term “deuterium oxide.” Users have the option of changing the expansion level to broaden or narrow the search or of using a different search mode, such as a fuzzy-text Pattern search or a Boolean search. Search terms, including expansions, are highlighted in the full-text PDF display. This collection currently consists of 6,000 technical reports, 2,000 NRL press releases, 6,000 NRL-authored articles and conference papers, and over 970,000 articles from more over 500 journals.

Over 400 Elsevier journals are available to 12 participating Navy sites from TORPEDO *Ultra*. Other licensed Naval content, including journals from the Institute of Physics, IEEE, IEE, and Wiley will be loaded alter this year. Participating sites are: Naval Academy, Annapolis, MD; Naval Air Warfare Center - Aircraft Division, Patuxent, MD; Naval Air Warfare Center - Weapons Division, China Lake, CA; Naval Health Research Center, San Diego, CA; Naval Medical Center, San Diego, CA; Naval Operational Medicine Institute, Pensacola, FL; Naval Postgraduate School, Monterey, CA; Naval SPAWAR Systems Center, San Diego, CA; Naval Surface Warfare Center, Carderock, MD; Naval Surface Warfare Center, Dalgren, VA; Naval Surface Warfare Center, Indian Head, MD; Naval Underwater Warfare Center, Newport, RI.