

THE NOAA RESEARCH HOT ITEMS WEB SITE: UP-TO-DATE COMMUNICATIONS WITHIN THE NOAA RESEARCH FACILITIES

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1. OVERVIEW

There is a huge volume of fascinating work being done throughout the NOAA Ocean-Atmosphere Research facilities. It is clear that sharing experiences and knowledge stimulates our creativity and improves scientific productivity. The Hot Items web site has been designed and developed to provide a quick and easy way to stay aware of the latest happenings throughout NOAA Research laboratories, program offices, University Joint Institutes and headquarters.

The concept is simple. Each organization within NOAA Research enters their own information for publication on the NOAA Research Hot Items! web site, using a convenient web entry form. The information is immediately pushed onto the NOAA Research Hot Items! Web site. New entries are posted continuously, and two-week-old items are automatically moved to an Archive that is searchable by keyword, date, and organization. Since the Hot Items is web based, users of Netscape Mail can install the Hot Items page into their Netscape Mail Browser Window, ensuring that it is immediately available when an employee logs in each morning. Local Hot Items intranet web pages are available for use within each NOAA Research operating unit and local "news" can be pushed forward to the NOAA Research level Hot Items.

Hot Items has been a big success for NOAA Research, with the NOAA Research Assistant Administrator and the NOAA Administrator looking at the web site frequently, and all the laboratories and program offices within NOAA Research making entries on the page on a regular basis. Enhanced communication within an organization fosters and facilitates collaboration among the different components of the organization. Hot Items is an intranet site based on advanced backend Open Source Technologies, which are described in a separate paper (Burger and Soreide, 2002). All Hot Items web pages and databases are hosted on a Seattle Campus Web Server.

2. NOAA RESEARCH HOT ITEMS

NOAA Research has developed the "NOAA Research Hot Items" intranet web site to enhance and facilitate communications within the various operating units of NOAA Research located throughout the US (Fig. 1).

Each organization within NOAA Research enters their own information for publication on the NOAA Research Hot Items! web site, using convenient web entry forms. There is a general, free form entry, and customized web entry forms for publications, participation in professional society meetings, conferences or workshops, and media contacts. A story can be published immediately or a publication date can be set. Once published, the information is immediately pushed onto the NOAA Research Hot Items! Web site. New entries are posted immediately, and when an entry is two weeks old, it is automatically moved to an Archive that is searchable by keyword, date, and organization.

Since NOAA Research Hot Items is an intranet website, the NOAA Research Hot Items stories are freely available to all within NOAA Research. However, an administrative login is required in order to use administrative functions, such as entering a story, editing a story, publishing a story, adding or removing users, or changing login passwords. Each NOAA Research laboratory or program office identifies those who have administrative privileges, and administers these functions for their users. For security reasons, the administrative login includes user authentication, user information encrypted in a database, session tracking for authentication of administrative user functions, and use of Secure Socket Layers (SSL) to safeguard network login and password.

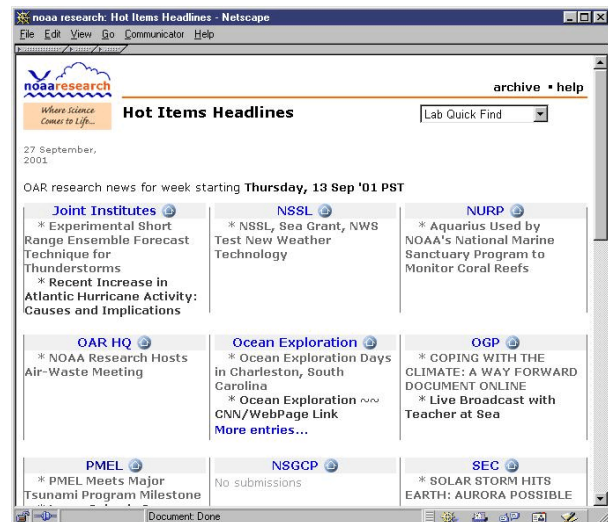


Fig. 1. NOAA Research Hot Items home page, showing a panel for each operating unit within NOAA Research. Headlines are clickable to the full story. The full story includes contact information and an optional URL.

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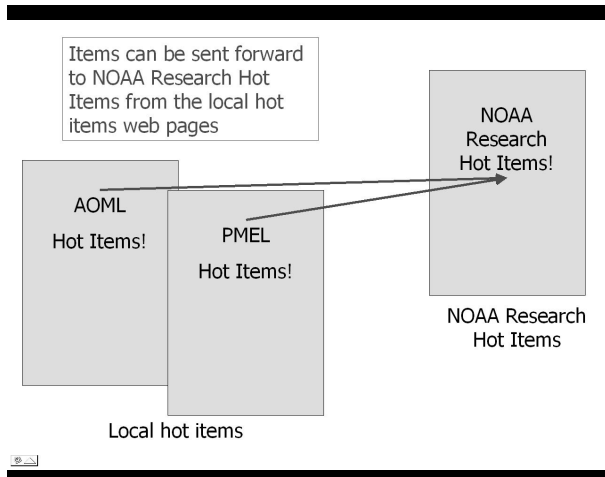


Fig. 2. Relationship between local hot items and the NOAA Research Hot Items. Local management, within a NOAA Research operating unit, can “push” items forward from their local hot items to the NOAA Research Hot Items.

3. LOCAL HOT ITEMS

With the introduction of Hot Items Version2 software, the functionality was expanded by providing internal, local laboratory- and program office-level hot items capability for all the NOAA Research operating units, with a built-in connection to the NOAA Research-level Hot Items web site (Fig. 2). The local hot items pages have a feature that allows local management (e.g., a laboratory director) to select an item from the local hot items page to be automatically pushed forward or posted on the NOAA Research Hot Items page (Figs. 2 and 3). The Web based forms for entering headlines and stories are the same as those available on the NOAA Research Hot Items page. The local pages are hosted on the NOAA Seattle campus, but are fully controlled by the local operating unit office to which they belong.

Access to local hot items is by IP address, and decisions about access privileges are made by management at the local operating unit who owns the web page. There are three levels of administrative users at the local hot items website: a) User privileges allow the user permission to enter, edit, publish, or delete their own stories, and change their own password, b) Administrator privileges allow the user to add a story, to edit, publish or delete any stories in the local system, change passwords, establish and remove users, and edit laboratory or program office information and contacts, and c) Director privileges allow the user all the Administrator privileges, plus the ability to push a story forward to the NOAA Research Hot Items. Logins for all administrative functions include security features such as user authentication, user information encrypted in a database, session tracking for authentication of administrative user functions, and use of Secure Socket Layers (SSL) to safeguard network login

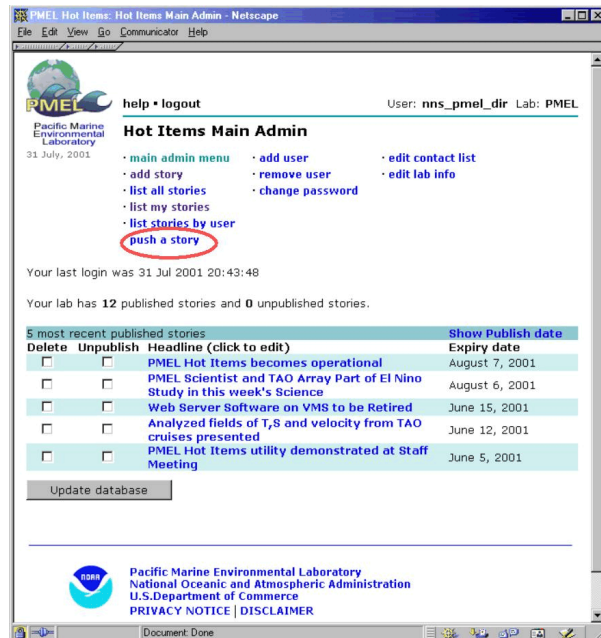


Fig. 3. Screen snapshot showing local hot items administrative function to push a story forward to the NOAA Research Hot Items.

and password. The site features page-by-page checking on the secure portions of the website (e.g., story entry, edit, push, etc.).

4. SUMMARY

Operational since February 2001, the NOAA Research Hot Items web site is proving highly successful by providing NOAA Research personnel throughout the laboratories, program offices, and Joint Institutes to share information about their work. NOAA Research management is using the information from NOAA Research Hot Items to brief NOAA management on key research issues, and the information is also used for press releases, annual reports, and other reporting vehicles.

5. REFERENCES

Burger, E.F. and N.N. Soreide, 2002: A web based news distribution system using PHP and MYSQL. 18th International Conference on Interactive Information and Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology AMS, 13–17 January 2002, Orlando, FL (submitted).