

## ABSTRACT

An electronic logbook has been developed for the Spallation Neutron Source (SNS) [1] at Oak Ridge National Lab. This logbook serves as a means of chronologically recording daily operations activities and experiences and communicating them to appropriate groups. The logbook is database driven and integrates into our existing database schema. The interface to the logbook is web based and works with most modern web browsers on the major platforms. Additionally, a Java package provides a simple mechanism to post entries from within our XAL [2] applications.

## Overview

The SNS Logbook is the official archive of SNS operations. The first version was deployed in the fall of 2002 and since then there have been over 149,000 entries.

## Main Features

- Edit and read entries from any modern web browser
- Familiar three pane layout
- Entries may include text, images and attachments
- All data is stored in our central database
- Threaded discussions
- Email notification
- Multi-criteria search
- Integrated online help

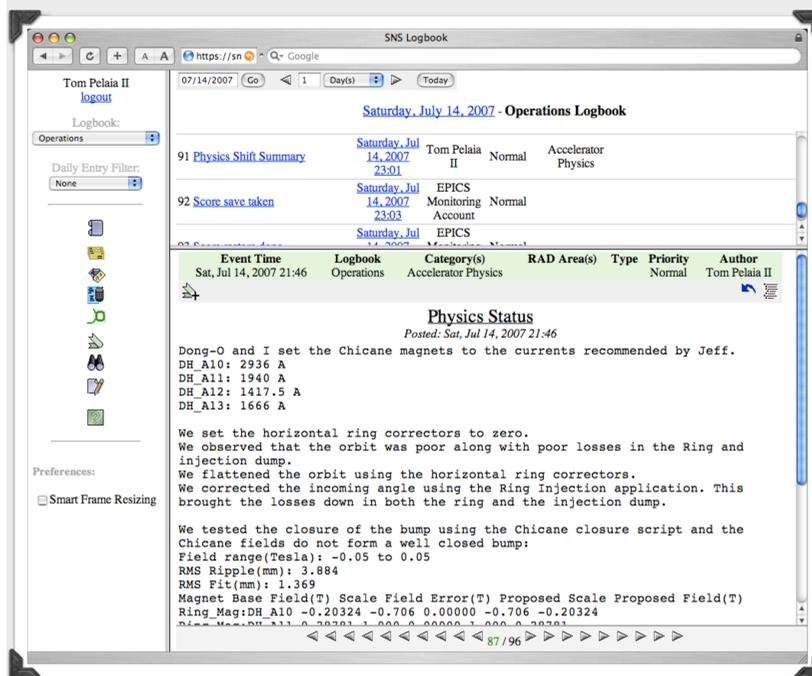
## Development and Deployment

<b>Development Platform</b>	Mac OS X
<b>Web Development</b>	Apple WebObjects 5.3.3
<b>Deployment Bundle</b>	J2EE servlet
<b>Deployment Platform</b>	Sun Solaris Server
<b>Database</b>	Oracle 10g
<b>Client Side Scripting</b>	JavaScript, AJAX

## User Experience

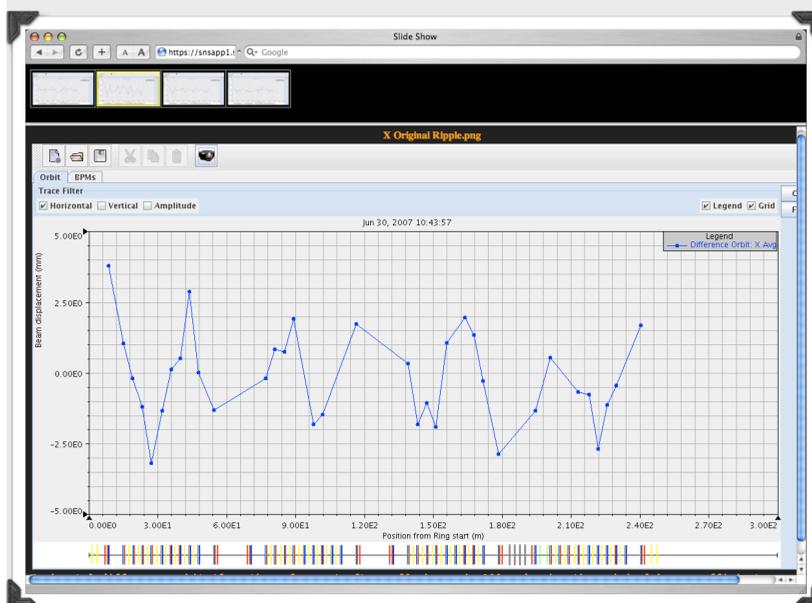
### Efficient and Intuitive Workflow

The user interface provides the user with an intuitive and efficient workflow. The familiar three pane layout has a left pane for specifying the mode of display (e.g. browsing, composing, searching), a top right pane with a list of entries and a bottom right pane for the display of the selected entry.



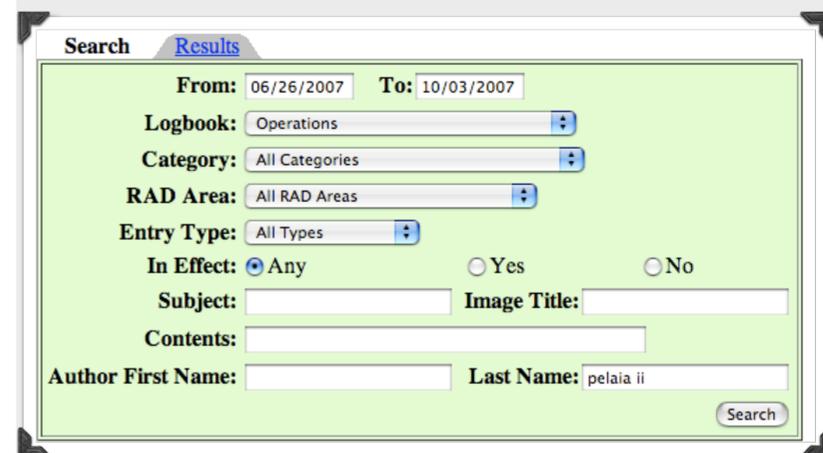
### Viewing Images

Images assigned to an entry are displayed in a slide show window with a thumbnail selection bar at the top.



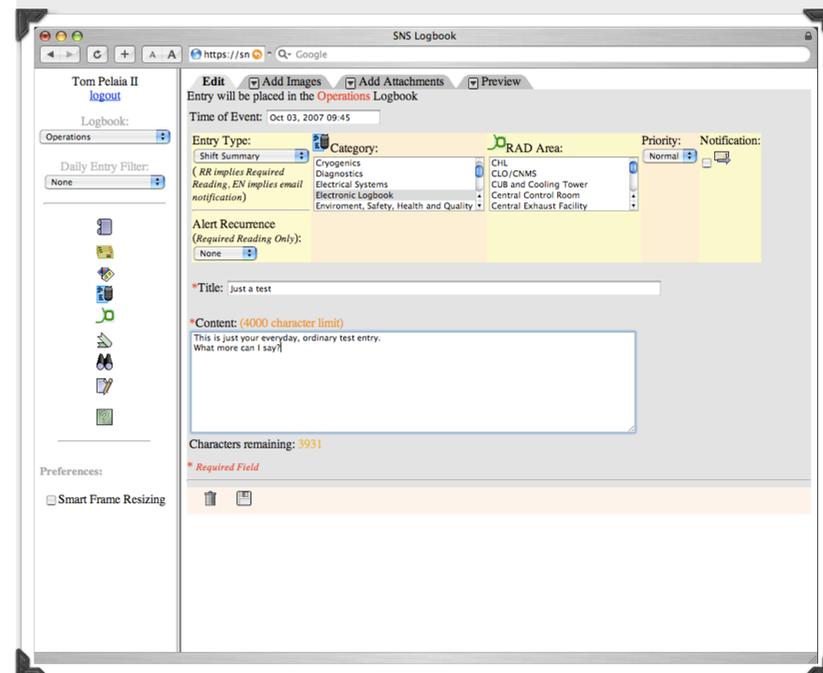
## Searching

A search panel allows the user to specify multiple criteria for a search.



## Composing

The compose view consists of a tab for entering the new entry's properties (e.g. title, type, categories, priority) and main text, a tab for uploading images, a tab for uploading attachments and a tab for previewing the entry.



## References

- [1] SNS, <http://neutrons.ornl.gov/>  
 [2] XAL, <http://neutrons.ornl.gov/APGroup/appProg/xal/xal.htm>