

Wallops Island Balloon Technology: Can't see the Repository for the Documents

**Andrea Japzon and Nikkia Anderson
Information International Associates, Inc.
NASA Goddard Space Flight Center**

Abstract

Since the Wallop's Balloon Technology documents repository began approximately 9 years ago, the Goddard Library has become increasingly involved in developing digital archiving capabilities. The Library developed the Digital Archiving System (DAS) which is a prototype infrastructure for creating a combined metadata repository that allows metadata for heterogeneous digital objects to be searched with a single search mechanism and presented in a single results page. With this, the opportunity has been presented to expand the usability of the print repository. The Balloon Technology documents relate only to the specific subject of construction of scientific balloons and at the current time number over 4,300. The documents exist primarily in paper format and are organized according to the accession number. The project is currently at a crossroads where decisions will have to be made regarding the reorganization of the database from many different perspectives. An assessment of the project was conducted to determine future direction. An assessment survey was created using the Knowledge Management Assessment Tool (KMAT) from the American Productivity & Quality Center and from the recommendations that The Scholarly Publishing & Academic Resources Coalition (SPARC) put forth in "The Case for Institutional Repositories: A SPARC Position Paper. Survey participants agreed to move forward with project by scanning the documents, mapping existing database records to the current metadata elements, seeking copyright permissions, and forming a joint committee of balloon scientists and librarians. All have agreed on the importance of digitizing this collection to the balloon science community. Further, it was agreed that once complete, the addition of the balloon documents to the DAS (an institutional repository) could serve as a model for other NASA and/or government projects trying to organize, collect and preserve specialized knowledge that manifests largely in grey literature.

History of the Library and the Database

The Balloon Technology Library and Database was created to provide a single repository for scientific ballooning literature and data. Grey and commercially published literatures comprise the collection of technical reports, working papers, proceedings, and journal articles. The primary impetus for creating the library and database was the fact that much of the literature relating to balloon technology is grey literature and therefore not easily found, let alone found in one place. The Balloon Technology documents, currently numbering over 4,300, relate specifically to the construction of scientific balloons. The subject matter covered includes balloon theory, balloon physics, design, operations, performance, facilities, testing, materials, fabrication, quality control, failure analysis and history [1].

The Balloon Technology collection project started in November of 1993 continues to exist today with the sustained involvement of Wallops Flight Facility (WFF) balloon scientists and Goddard Space Flight Center (GSFC) librarians. WFF is a part of GSFC but located three hours south of Greenbelt, Maryland in Wallops Island, Virginia. The WFF mission includes the performance of research in the areas of sub-orbital and small orbital payloads. Balloon science experiments are a significant part of this mission. From the beginning of the project, the intention of the Balloon Program Office (BPO) at WFF was to start a library that would become the World's Archival Center for Scientific Balloon Technology [2]. To that end, project participants set out to and accomplished the major goals of collecting to the greatest number possible of existing balloon technology documents and creating a searchable database. With these accomplishments in hand, now is the time to increase the availability of this work to balloon science researchers.

A great debt is owed to Jim Winker, balloon scientist and de facto librarian, for performing the yeoman's duty in reaching the goals set out by the BPO. In the field of librarianship, perhaps the greatest value placed on information is its authority. In the creation of this collection, Jim Winker's life experiences provide that authority. He possesses extensive historical and technical knowledge of scientific ballooning. His knowledge has developed through "a long continuous interest and participation in the field of scientific ballooning and interaction with the many present and past commercial and government organizations" [3]. The knowledge and experience of individuals within a specialized field is what sustains the use and value of grey literature within the field. Jim Winker's large-scale interaction with balloon literature clearly exemplifies this.

Mr. Winker visited over 60 sites in his effort to find and select documents for the library [4]. He started locally with his own collection, the Raven Industry library, private collections in Sioux Falls, South Dakota and the holdings of Wallops. His search expanded to include the information repositories of the National Technical Information Services (NTIS), Defense Documentation Center (DDC), Association of Balloon and Airship Constructors (ABAC), and American Institute of Aeronautics and Astronautics (AIAA).