

# LINKS TO LAKES

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The Newsletter of the Arthur Lakes Library

<http://www.mines.edu/library/>

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Colorado School of Mines

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## **From the Director**

**By Joanne Lerud**

How many of you have found the Information Center for Ropeway Studies in the Library? This Center was established in 1991 with the donation of the working collection of Charles "Chuck" Dwyer, a retired ropeway engineer. This information center provides access to a comprehensive collection on information relative to the history, theory, design, and operation of ropeway systems. It is on the third floor of the Library.

The Ropeway Center has its own database. The ROPEWAY Database is a bibliographic database of journal articles, symposia, books, reports, handbooks, manufacturers' catalogs, and any other pertinent information. The database was developed here at the Library and is being kept current. Links to the database are available through the Library Webpage or <http://ropeway.coalliance.org>.

How might a ropeway pertain to you? If you ski, you have ridden on a ropeway. Ski lifts or ski tows are ropeways. If you have been to Palm Springs or Albuquerque and ridden the tramways, you have been on a ropeway. If you have been to Las Vegas or Manhattan and ridden on various people movers, these are also ropeways.

Early in the history of our country, ropeways were first used for transportation applications such as canals and materials handling in mining operations. If you hike in the mountains of Colorado, you may find evidence of ropeway towers or wire rope hoists – you may even trip over wire rope lying on the ground.

The Arthur Lakes Library has some unique specialized information centers of which the Ropeway Center is one. You can learn more about the Ropeway Center at <http://www.mines.edu/library/ropeway> (Examine the photos!) or visit the Center on the third floor of the Library. Other specialized information centers within the Library will appear in future issues of this newsletter.

## **Ropeway Studies at Arthur Lakes Library**

**By Laura Guy**

Many libraries have what are called "Special Collections" – unique sets of materials that are often housed in a separate area of the library and have their own catalogs. Arthur Lakes Library is no exception, having several special collections including the Information Center for Ropeway Studies.

### **What are ropeways?**

To be precise, "ropeways" is an all inclusive, general term, used for the various transport systems qualifying as a ropeway.

Transportation by rope is a very ancient concept. Rope was first reported in use in Asia for aerial transport of goods and personnel during the 1400's. At that time hemp rope was used and human or animal power supplied the propulsion. Steep mountain terrain in China, Japan and India provided the incentive to develop the technology, and human power supplied the propulsion.

Over the centuries, with the invention of wire rope and development of improved rope-making technology, there was an expansion of types and usage of ropeway systems. Largely employed for materials transport until the turn of the 20<sup>th</sup>

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century, remarkable progress followed in the recreational use.

A given ropeway is categorized to identify it from others included under the general term. The first division is to identify what the system is intended to transport: passengers or materials. Materials ropeways or tramways are seldom further classified other than monocable or bicable systems. In a monocable system, one rope serves to both support and control the carriers in transit. In a bicable system, separate ropes serve the two functions: a static support rope and a moving "haul rope." Passenger ropeways are more extensively classified depending upon operational characteristics and carriers. The following are most common: aerial tramways, gondolas, funiculars, detachable chairs, fixed grip chairs, surface lifts, and tows.

### **Information Center for Ropeway Studies**

The Information Center for Ropeway Studies was established in 1991 to develop a collection in the theory, design, operation, and history of ropeway systems at the Arthur Lakes Library. The Center is unique, as there are no other specialized information centers in this subject area in the United States.

A Center goal is to make available ropeway information at greater depth than provided by a general online catalog or table of contents database. As a consequence, the ROPEWAY Database, a bibliographic database for this specific subject area, was developed. This database contains detailed citations of information found not only at the Information Center for Ropeway Studies, but also found at other locations.

### **The ROPEWAY Database**

The ROPEWAY Database is a bibliographic database pertaining to the theory, design, history, and operation of ropeway systems, covering journal articles, symposia and conference proceedings, books, reports, handbooks, manufacturers' catalogs, reprints, photographs, video, and any other print or media information publicly available. (<http://ropeway.coalliance.org>)

The user interface for the ROPEWAY Database is very similar to the Library's main catalog, Catalyst, but unlike Catalyst, the database includes records for individual journal articles and conference papers. Item records provide access to detailed, expert-assigned abstracts and descriptors.

To begin a search the user goes to <http://ropeway.coalliance.org> and clicks on one of two search options to select Basic Search or Custom Search.

The *Basic Search* performs a normal search. In the dialog boxes, specify the search terms and the type of search (Keyword, Author, Title, Subject). A *Custom Search* finds records using keywords located in specific fields. Item records include hyperlinks that lead you to other similar records, or online resources (if available).

### **The Ropeway Website**

Most, if not all academic libraries have a presence on the World Wide Web. Such a presence often serves to disseminate information on library collections and services, and also functions as a portal to electronic resources. As part of the Arthur Lakes Library, it was determined that a separate-but-related Internet presence for the Information Center for Ropeway Studies was appropriate.

### **The Ropeway Website**

(<http://www.mines.edu/library/ropeway>) provides access to a variety of information, including the ROPEWAY Database, a database User Guide, annotated selected dissertations, recent news, and links to other resources.

### **Ropeway Engineering**

Numerous companies throughout the world design and build ropeway systems, including Doppelmayer, Leitner-Poma, Garavanta, CWA, and Lift-Engineering (YAN). Ropeway engineers design and build ropeways such as ski lifts or other transportation applications (people movers), work as employees and consultants at ski resorts and other sites, provide annual inspections, and do forensics for accidents. Mining operations and construction applications that use wire rope for lifting, hauling, or moving would also use a ropeway engineer. Organizations such as the Rocky Mountain Lift Association and the International Organization for Transport by Rope serve ropeway professionals and facilitate continued learning and communication through conferences, seminars, and publications.

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### **Book Review by Heather Whitehead**

***Envisioning Science: The Design and Craft of the Science Image.* Frankel, Felice. MIT Press, Cambridge, 2002. CSM Call Number TR692.F73 2002**

Certain images on the covers of scholarly journals such as *Science* and *Nature* will grab your eye and demand your attention. Felice Frankel, Research Scientist at MIT, is responsible for several of these arresting images. In her new book, ***Envisioning Science: The Design and Craft of the Science Image***, Frankel displays her work and explains the technical details of how the images were composed. She also discusses how images help to communicate scientific work to professional colleagues and to the general public. She discusses how her images "somehow include the marvel of whatever phenomena I intend to capture".

As an example, see her figure 4.35, a photo of a 3 cm drop of ferrofluid affected by magnetic fields. Its smooth dark surface is interrupted by three empty valleys and clusters of conical structures, and to my geological eye it looks like a pollen grain, or some oddly symmetrical echinoderm, or a triple junction rift system, or an alien flower. Now curious, I discover that ferrofluid is a suspension of magnetite in oil; that there are mathematical equations describing the cones; that ferrofluid is used in disk drives and expensive speakers; that the beautiful yellow background that sets off the image is a Post-It® note under a glass slide. One image, and it made me think about biology, palynology, geology, materials science, physics, mathematics, botany, and photography! This image appeared on the cover of *Physics Today*, May 2000

<<http://www.aip.org/pt/may00/current.htm>>

***Envisioning Science*** will lead you on many such journeys. It can be enjoyed strictly visually, without a care as to how the image was created and what it is. Or, play the "what IS this?" game before you look up the details (photos taken through microscopes are especially fun). Or, try the techniques and advice she gives to improve how you use visuals to communicate your research to others.

The Library also has an older book by the same author, *On the Surface of Things: Images of the Extraordinary in Science*. Frankel, Felice and George M. Whitesides. Chronicle Books, San

Francisco, 1997, CSM Call Number QC173.4.S94 F73 1997 Both are highly recommended.

Some images are reproduced at  
<http://web.mit.edu/felicef/>

**Book Review by Robert Sorgenfrei**  
***Over the Edge: Death In Grand Canyon.* By Michael P. Ghiglieri and Thomas M. Myers. Flagstaff, Arizona: Puma Press, 2001. 408pp. Library call number: F 788 .G46 2001**

There is something in human nature that finds fascination in reading about how some of us make mistakes that can turn out to be fatal. This is a book that chronicles all the ways that people have died at the Grand Canyon after in most cases making fatal mistakes. It may seem somewhat lurid, macabre, and even a little exploitative, to read about all the ways people have met their end while coming to the Grand Canyon, but few of these people died simply due to bad luck or an act of God. Indeed, most died because of a series of decisions they made or someone with them made that turned out to be wrong, and in the end, fatal. This book is an attempt to seek understanding as to why people have died at the Grand Canyon and to see what can be learned from their deaths.

There are eight chapters in the book, each devoted to a particular category of death: falls, environmental deaths (exposure, etc.), flash floods, death in the Colorado River, air crashes, freak errors and accidents, suicide, and murder. Many of the deaths were a result of poor judgment, such as not taking enough water on a hike from the rim of the Canyon to the River. After all, a hike to the bottom of the Canyon takes one from pine forest to a desert climate similar to Phoenix. Once at the bottom, there are those that decided that a quick dip in the Colorado River would be nice, only to be caught in the swift current and drown. The list goes on and on about the ways people can meet their end in a place like the Grand Canyon.

These deaths raise the question about what can and what should the National Park Service do to protect people that are too lackadaisical or naïve to take sensible precautions when visiting wilderness areas in National Parks? The answer is that after reasonable efforts are made to inform people of the dangers, very little can be done. All of us must take personal responsibility when visiting a place with an unforgiving environment like the Grand Canyon. Perhaps if we are forewarned enough by the mistakes others have

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made, there will be less of those fatalities each of us read about every year in wilderness areas, whether they be in the Grand Canyon or closer to home.

### **Staff Notes**

**Wendy Shortridge** joined the circulation staff last June; she comes to us from the University of Northern Colorado's Mitchener Library in Greeley. Wendy is a third generation Colorado native; her great grandfather was a miner in Idaho Springs.

**Lisa Dunn**, Head of Reference is the incoming president of the Geoscience Information Society.

**Chris Thiry**, Map Librarian, is the immediate past president of WAML: the Western Association of Map Libraries.

**Heather Whitehead**, Reference Librarian presented a poster session at the Special Libraries Association Meeting in Los Angeles last June.

**Lisa Nickum**, Government Publications Librarian presented "Federal Government Information in the 21<sup>st</sup> Century: Public Access Issues" at the Geological Society of America's annual meeting held October 2002 in Denver.

### **Archive Notes**

The Russell L. & Lyn Wood Mining History Archive recently received a gift from local resident Chip Parfet of 30 boxes of information including some early catalogs on mining machinery. The James Andrew McCormick papers on The Colorado Grand Cañon Mining and Improvement Company, 1891 have been digitized and are now available at <http://www.mines.edu/library/archives/MHA0003.html>

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### **Library Directory**

Director.....	x3690
Circulation.....	x3698
Information Delivery/ILL.....	x3699
Information Delivery/Photocopy.....	x3899
Reference.....	x3694
Government Publications.....	x3695
Maps.....	x3697
Acquisitions.....	x2075
Cataloging.....	x3691

### **Library Hours (Fall & Spring Semester)**

Monday-Thursday.....	7:30 AM to 12 Midnight
Friday.....	7:30 AM to 6:00 PM
Saturday.....	9:00 AM to 5:00 PM
Sunday.....	1:00 PM to 10:00PM