

## The Michael H. Bruno Offset Lithography Archive

Gary G. Field

One of the most historically important sections of the RJPGAC is that devoted to the process of offset lithography. This should come as no surprise: our holdings include materials from the original 1925 research laboratories of the Lithographic Technical Foundation (LTF), then based at the University of Cincinnati. The relocation of this laboratory to Chicago in 1944 established an expanded foundation upon which groundbreaking research flowed. The lithographic process underwent the transition from a temperamental craft to a dominant industry. The research leader during the 20 years the research laboratories of LTF spent in Chicago was Michael H. Bruno, a Yale-educated chemist.

Mike's research management philosophy encouraged individual initiative, a style which attracted researchers who relished the opportunity to use their scientific training and creative instincts to understand the science of lithography. They also had practical understanding and were able to explain how to implement new insights into the practices of the lithographic industry. A solid scientific foundation had already been laid by Robert F. Reed at the University of Cincinnati, but it was the work at Chicago which expanded and cemented the industry's research-based practices.

The always-practical applications outcome sought by researchers naturally led the LTF staff to learn about the lithographic industry and its practices. This is why we now have such a rich collection of lithographic trade magazines in the RJPGAC.

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He was known around  
the world as "Mr. Lithography"

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Our holdings include the *US journals National Lithographer* (from the 1890s) and *Modern Lithography*, the *UK's Litho Printer, Litho Week* and *Offset Printer*, and *Australia's The Australian Lithographer*. The small offset or duplicator process was also covered: we have *Offset Duplicator Review*. These journals focused primarily upon the business and market aspects of the litho printing industry, but they also contained a rich collection of technical articles of considerable interest.

Naturally, the lithographic research of PATRA/Pira, FOGRA, UGRA and other research institutes around the world were of great interest to LTF. The diverse lithography-related papers presented at TAGA and IARIGAI conferences and printed in their proceedings, are all held within the RJPGAC.

Other materials from the LTF/GATF Wadewitz library that we acquired were the fundamental scientific texts upon which lithography was based. These disciplines included: surface chemistry, sensitometry, polymer science, azo and diazo chemistry, anodic oxide films, water-soluble gums and resins, adhesion, colloidal dispersions, metallurgy, dye and pigment dispersions, and even, as a possible research tool, radioactive tracer techniques.

The fundamental science texts from the LTF/GATF library were sometimes 40 or 50 years old and outdated. We did, however, place a selection of key scientific books in the offset lithography archive as a reminder of how it took the understanding of several fundamental sciences to crack the mysteries of offset lithography.

Initially, we called our trove of offset lithography materials the "LTF Offset Lithography Archive". We have renamed this portion of our collection the "Michael H. Bruno Offset Lithography Archive" to recognize Mike's importance. He was known around the world as "Mr. Lithography". ■





## From the Desk of Gary Field

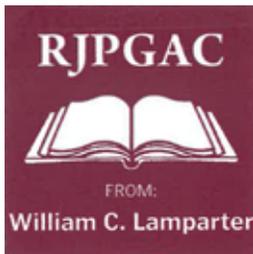
by Gary G. Field Emeritus Professor, Cal Poly Graphic Communication

### RJPGAC Bookplates

The first bookplates designed to identify books donated to the RJPCAC have been generated and are in the process of being affixed. The bookplate design is derived from the collection sign we have placed at the various RJPGAC locations throughout the Graphic Arts building.

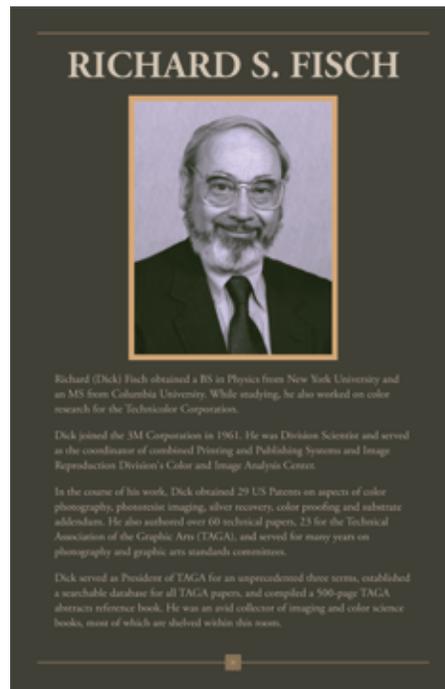
The initial batch included about ten names and were generated in quantities of either 15 or 60. These were produced on-demand printer on self-adhesive label material. In some cases, a longer run via the flexo process is planned. These are intended for the large donations: the LTF/GATF Library (Wadewitz Library), Frank Preucil, George and Susan Kinney, Richard Fisch, and Fred Billmeyer.

The bookplates identify a book as part of the RJPGAC holdings but, more importantly, serve as a permanent marker of the book's source. A book from the personal library of a donor serves, in some way, as a bond between the donor and future reader. Unlike most manufactured items, books often incorporate a personal touch. Side notes, in particular, offer interesting insights or reactions from the original owner. We delight in donations of this type as, to some degree, they convey the spirit of the owner.



our Resource Room, a heavily used room housing a key part of the RJPGAC. Mike Bruno spearheaded the research team which is usually credited in turning the offset litho process into today's dominant print manufacturing method.

In order to more fully honor Dick and Mike's contributions, and to inform present and future students of the people behind the names, we have produced small posters to be mounted in the locations of the books and journals associated with their names.



### The wording on each of the posters reads

Richard (Dick) Fisch obtained a BS in Physics from New York University and an MS from Columbia University. While studying, he also worked on color research for the Technicolor Corporation.

Dick joined the 3M Corporation in 1961. He was

Division Scientist and served as the coordinator of combined Printing and Publishing Systems and Image Reproduction Division's Color and Image Analysis Center.

In the course of his work, Dick obtained 29 US Patents on aspects of color photography, photoresist imaging, silver recovery, color proofing and substrate addendum. He also authored over 60 technical papers, 23 for the Technical Association of the Graphic Arts (TAGA), and served for many years on photography and graphic arts standards committees.

Dick served as President of TAGA for an unprecedented three terms, established a searchable database for all TAGA papers, and compiled a 500-page TAGA abstracts reference book. He was an avid collector of imaging and color science books, most of which are shelved within this room.



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*A Note From the Chair of the Graphic Communication Department*

A lot of progress has been made in the Raymond J. Prince Graphic Arts Collection. Many thanks to Gary Field for all of the work that he does to keep everything organized and accessible. He is a valuable asset to the department for whom we are eternally indebted. As you have gathered from his contribution to this newsletter, the collection remains alive and well. Many volumes of periodicals, books, and materials arrive continuously to add to the collection. Most recently, we received a wonderful donation of books and ephemera (beautiful prints of typographic, historical and print-oriented framed artwork) from Susan and George Kinney, former owners of Castle Press in Anaheim, California. Upon the receipt of the collection, there was a strategic initiative to acquire a railing system to place within the department where such pieces could be displayed and/or relocated. Fortunately, Mr. Prince and Ms. Kinney donated the funds to purchase the railing system. This is fantastic and has eliminated the quagmire of bureaucracy required to hang and display artwork on the walls of the academy. Now, we—as a department—can do what we wish. So, I have enclosed some pictures of the works as they are displayed in various classrooms and labs. The faculty, staff, and students have benefited greatly from the donation and we are forever grateful to have received such a wonderful and fulfilling gift that will inspire the future workforce of our industry. Anyone who finds themselves in SLO are always invited to drop by and look at the collection. Just let us know. We would love to have you here.



Cheers to all,

Ken Macro



## Searchable Database for Penrose Annual

The Penrose Annual was a London-based review of the graphic arts, printed nearly annually from 1895 to 1982. It was unique in that it searched the world for printers and print suppliers who were advancing the graphic arts. They asked for 1,000 copies to bind into the issues, plus all details.

Thus, the Penrose Annual became a time capsule that documented the advancement of print and related technology.

Penrose began as the Process Work Yearbook – Penrose’s Annual. It was edited by William Gamble from 1895 to 1933 and its final editor, Clive Goodacre edited Penrose until the publication closed down in 1982; the last volume is number 74.

Penrose Annuals remain the definitive record for the development of print media, advertising, photography, design, and typography throughout the 20th century. Although there was a listing of articles in one later issue, there has never been a searchable database.

Visiting professor Frank Romano intends to rectify that shortcoming. He has scanned the table of contents and illustration list from all but the first three issues. The first three are quite rare. Fortunately, the Kennedy Library has them and they allowed him to photograph the required content. All information is being input, and at some point, will be accessible to researchers. It is interesting that Professor Romano authored articles in the last few issues. ■



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“Penrose Annuals remain the definitive record for the development of print media, advertising, photography, design, and typography throughout the 20th century.”

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### *Bookplates, from page 2*

Michael (Mike) Bruno, who was known around the world as “Mr. Lithography”, graduated from Yale University in 1931 with a BS degree in Chemistry. His subsequent graphic arts research and development work included the collotype and lithographic processes at the Meriden Gravure Company, and as a Research Officer of the U.S. Army Map Printing Service during World War II.

In 1945 he joined the Lithographic Technical Foundation as Research Manager, where he led a team credited with turning the temperamental craft of offset lithography into today’s dominant industrial printing process. In 1948 he co-founded the Technical Association of the Graphic Arts, the industry’s leading professional association, and served as its first president. Mike joined the International Paper Company in 1967 as Manager of Graphic Arts Research and Development.

Mike’s research focused primarily upon metal surface treatments for litho platemaking. He published numerous research articles and sections of books on lithography, and also authored and edited the Pocket Pal book for International Paper. In retirement, he continued consulting work and published a highly regarded technology-assessment newsletter. Mike’s 1986 book, Principles of Color Proofing, was an important addition to the industry’s color reproduction literature. ■

### **Inquiries about potential donations**

Please contact the Graphic Communication department before shipping any material. Department staff will then work with you to determine the most appropriate disposition of the material.

We will need an inventory of books to be donated in order to determine if duplicates exist.

Contact for potential collection donations:

**805.756.1108**

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### **Transfer of ownership**

To transfer ownership of the archival materials to Special Collections and Archives, donors must sign a deed of gift. The deed of gift includes a brief description of the material donated and can be customized to address the individual donor’s needs. The donation becomes official once it is reviewed, approved, and counter-signed by the Director of Special Collections and Archives.

### **RJPGAC donations**

To contribute to the RJPGAC fund, please send checks payable to **Raymond J. Prince Graphic Arts Collection** to Dr. Ken Macro, Graphic Communication Department, One Grand Avenue, San Luis Obispo, CA 93407-0381.