

Lawrence, Mass. large format printer Graphic Litho thrives with specialty services

By Nancy A. Hitchcock

No one realized it at the time, but when the U.S. government needed large field maps during World War II, a new niche was developing for Graphic Litho, a family-run business that has been operating for nearly 100 years.

From maps for military troops to a recent job of producing the world's largest comic book — as recognized by the Guinness Book of World Records — to launch a promotion for the band KISS, Graphic Litho has been able to serve a broad client base and thrive while doing so.

 **PINE Member Since 1984**

"We have the largest sheetfed presses in the area," says president Ralph E. Wilbur, grandson of the original owner, Ralph H. Wilbur. "Our niche is over 40 inches, which gives us the ability to do things out of the ordinary."

Located in Lawrence, Mass., Graphic Litho offers versatility in its printing. It produces both long and short runs of large products including retail signs, point of purchase (POP) displays, large maps, oversize box wraps, backlit displays and giant posters. A variety of substrates are



Graphic Litho President Ralph E. Wilbur holds the largest comic book in the world according to the Guinness Book of World Records. The comic book is 20 by 30½ inches with 36 pages plus cover. It was produced at the Lawrence, Mass. company in eight-page signatures.

utilized, including synthetic sheets and tear-resistant papers. Graphic Litho also offers conventional commercial print jobs such as books, catalogs, brochures, greeting cards and fine art reproductions, as well as folding, binding, laminating, mounting, kitting, and fulfillment.

"We're proud that we're still in business after almost 100 years; that's rather unique," enthuses Wilbur. "We have the ability to provide unusual products and meet challenges that people seek us out to do."

Ordinary & extraordinary products

Graphic Litho has received awards and recognition for its printing of complex, quality products. The company produced the world's largest comic book, called KISS 4K #1 Destroyer Edition, published by

Platinum Studio Comics. It promoted the band KISS, and was produced on 80 lb. matte, with 10 pt cover. Featuring "avant garde art," says Wilbur, who was an avid comic book reader as a kid, the comic book received a 2008 Print Excellence and Knowledge (PEAK) Award of Excellence sponsored by Print Solutions Magazine.

The client wanted to efficiently produce the 19⁷/₈ by 30⁵/₈-inch book, which, as a two-page spread would be about 30⁵/₈ by 40 inches. Graphic Litho was able to deliver a solution by printing approximately 5,000 limited edition books on its 54 by 77-inch Harris press, then folding eight-page signatures on a 44-inch Baum folder. The 36-page book was then saddlebound on an in-house modified Bostitch stitcher.

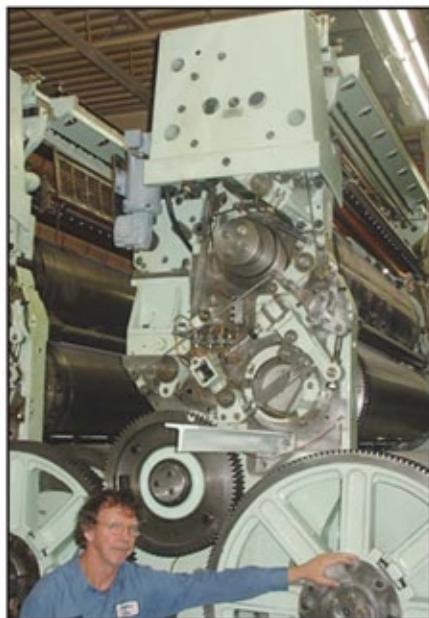
COMPANY OVERVIEW: Graphic Litho

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Another award-winning project is the 2008 IDG Media Kit that includes unique brochures to demonstrate the breadth of the publishing company's media products. One 8-panel 11 by 64½-inch publications brochure, for instance, showcases hundreds of publications the company produces, and then is barrel-folded to 8¼ by 11 inches so as to fit into the media kit's pocket folder. For the creative kit with its crisp, polished materials and luxurious look, Graphic Litho received a Pinnacle Award of Excellence from Printing Industries of New England. Graphic Litho printed about 4,000 IDG media kits in 2008, and printed the 2007 IDG media kit as well.

From pocket maps to wall maps

About 20 percent of the company's jobs include printing maps — a niche created many years ago. During World War II, the company contracted with the US Army Map Service to provide field maps for U.S. troops in France, Italy, Belgium, Holland, and Germany. During the Korean War, the company again contracted with the Army



The size of a single printing unit on Graphic Litho's new 54 by 77-inch six-color Harris Press installation becomes apparent alongside Plant Superintendent Richard Carter.



Press Foreman Mike Lawson checks registration on a large retail poster before starting the run.

Map Service to produce field maps of the Korean peninsula.

"We've done emergency evacuation maps for nuclear power plants," adds Wilbur. "The maps are quite complex. There's a lot of cartography needed to develop the map imagery. We have also done damage control diagrams for U.S. Navy vessels."

"All maps are a challenge because of the accuracy, registration and folding," says Wilbur. "When folded they can end up pretty thick. Our folding machine is capable of 12 accordion or barrel-folds."

Graphic Litho produces about 70 percent of its jobs for local clients, but also completes jobs for clients in California, New Zealand, and recently printed a native language map for the University of Alaska.

"We don't have salesmen; most of our work is done for other printers and brokers. We are a printer's printer," says Wilbur. "We encourage other printers not to turn down oversized work. Why encourage your customers to shop for another printer if you can offer them one-stop service for a wider range of products? We enjoy working with printers because we talk the same language. We do the work, and they

can make a good profit. Nothing wrong with that."

Another interesting application the company provides is heat sublimation printing for products including snowboard designs. The process involves printing images in reverse. The heat sublimation transfer process flops the image to right reading. "It's tricky," says Wilbur, "because the inks you use to print don't look anything like the final result." "While running, you have to take a small heat transfer machine and process a section of the image to see what you're printing. We largely depend on densitometer readings and make sure the numbers stay constant throughout the run. The customer usually okays on press. When you're running sublimation jobs, you can't see what colors you're printing. It's like printing with invisible ink."

From letterpress to offset printing

Before the company evolved into Graphic Litho, it was a letterpress facility named Tudor Press, located on Causeway Street in Boston. Founder Ralph Harland Wilbur, who was born in 1875, gained printing experience at the Melrose Journal, which also operated a book and job printing business. Around 1910,

Wilbur became owner and president of Tudor Press.

During the 1920's, Ralph's sons Harland, Alvra, and Wesley began working at the company. As the offset process came of age, the company acquired both a single-color offset press and a two-color offset press. One trendy item during the Depression years was printing weekly jigsaw puzzles — a popular form of inexpensive entertainment for families. The "jig of the week" would be purchased at newsstands on Fridays for weekend enjoyment, Wilbur said.

In 1940, Tudor Press brought the first four-color offset press — a Harris 42 by 58-inch press — into the Boston area. In 1941, Harland Wilbur became president and Tudor Press grew. At that time, the volume of business was evenly split between offset and letterpress. One of the larger letterpress contracts was the monthly New England Journal of Medicine.

After the war, the Bureau of Printing and Engraving turned to Tudor Press to provide military currency for the U.S. occupation forces and regular currency for occupied Ger-

many. At an isolated, secure facility set up near Logan Airport in East Boston, the company installed another four-color Harris press used to print the sheets of money. A No. 8 Meihle letterpress and an 86-inch Seybold cutter were installed to number and cut them into certificates. Treasury agents from Washington D.C. provided round the clock security. All bills, including waste, had to be accounted for.

A move and name change

Current owner Ralph E. Wilbur (grandson of Ralph and son of Harland) graduated from Massachusetts Institute of Technology in 1957 and became president of the company around 1968. He moved the company to its current location in Lawrence in 1967, and renamed the company Graphic Litho to reflect its shift to all offset printing.

Operating out of a 28,000-square-foot building in the Lawrence Industrial Park, the company houses a 52 by 76-inch Harris four-color press, and a 54 by 77-inch Harris five-color press that was added in 1981. Currently, Graphic Litho is installing a second 54 by 77-



Assistant Pressman Butch Bakeman adjusts settings on the five-color Harris press.

inch Harris six-color press that will provide aqueous coating. "It's an exact duplicate in style and model and that allows us to switch personnel back and forth without special training," Wilbur said.

To install the refurbished press which weighs 200,000 pounds, the company had to rip up 600 square feet of floor and install an 18-inch-thick foundation of rebar-reinforced concrete. Furthermore, Wilbur says the company plans to add 7,200 square feet to the building to handle the additional finishing work the press will generate.

"We're very pleased with Harris presses; they're rugged and reliable," says Wilbur. "We're looking forward to being able to produce great work on that press, which has been refurbished to factory standards. It will be one of the largest presses in the area. It's mainly an upgrade of our equipment capabilities. It will have aqueous coating, and will be able to do the same jobs faster and with superb quality. We're also looking down the road to doing off-line UV coating."

Operating presses of this size provides a competitive advantage for certain quantities. "Doing a booklet, pamphlet or greeting card, we might be able to put five, 10, 20, or even 50 of some item up on a sheet allowing us to be competitive in



A blanket cylinder is being lowered into position during the installation of the new 54 by 77-inch six-color Harris press.



Mike Lawson has a good look at a mounted plate on the five-color Harris press.

larger quantities," explains Wilbur. "When printing $\frac{5}{8}$ by 60-inch tape measures on Tyvek, we impose as many as 66 on a sheet."

Computer to Plate upgrade

One of the biggest technological changes that Wilbur has experienced was converting their prepress workflow to computer-to-plate. The company installed an Agfa Xcalibur VLF Platesetter and, for proofing, an Agfa Sherpa 64-inch large-format printer. "When I got into the business it took two hours to make a plate and now it takes six minutes," he says. "In the old days, used plates were recycled on a graining machine that consisted of a large, flat, shallow tank in which one or two plates were tightly clamped. Glass marbles and a slurry mixture of sand and water were added. Then a motor shook the table back and forth, erasing the image and leaving a fresh, finely grained surface to accept a new image."

Wilbur also remembers when paper for offset printing had to be moisture-conditioned prior to printing by hanging it in pinch-grip racks while mist from a humidifier was circulated in the paper storage area.

Over the years, Wilbur's wife and three daughters have worked in various positions within the 17-employee company. Currently, daughter Randi Collins is controller and son-in-law Mike Devine is plant

manager. In addition to the family making company decisions, other employees including Plant Superintendent Richard Carter, and Press Superintendent Michael Lawson, contribute to the company's direction.

Just as PINE was an important association for founder Ralph H. Wilbur — he was president from 1927 to 1929 — Graphic Litho has been turning to PINE for information since 1984. "PINE, now as before, still provides valuable services to the New England printing industry," says Wilbur. "We get up-to-date information on what's going on in the industry, and we participate in their trade shows."

By teaming up with other printers, Graphic Litho is able to focus on its core strength of large-format offset printing and help print providers offer one-stop solutions to

their customers. "Customers trend more toward one-stop shopping now," says Wilbur. "In the old days, a publisher might go to a printer for printing and a binding house to get the book bound and handle that interaction themselves.

Whereas today they want the printer to handle the whole thing. It doesn't necessarily mean the printer has to do the binding, but they have to have a reliable source where they can get it done."

The family-run company continues to strengthen its niche and its growth path. For the last 10 years, the company has experienced a 6 percent growth rate. And for a company that managed to survive many technological changes and the Depression, Graphic Litho expects to continue thriving just as it has for the past 100 years.

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Two Graphic Litho customers stand inside the company's 5000 Kelvin viewing booth. The booth is needed to inspect the company's large format work.