

THE INK RAG

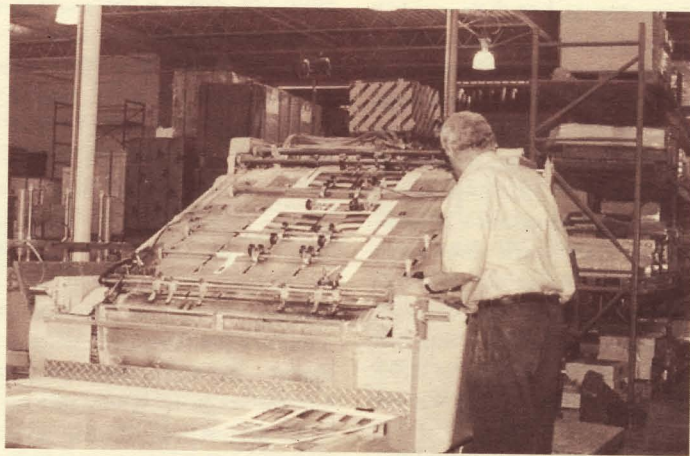
*A Newsletter by the Graphic Communications &
Production Technology Department of Vancouver Community College*

Hemlock Open House

by C.B.

On a cold and snowy evening, we gathered for an Open House in Burnaby hosted by Hemlock Printers Ltd. Several hardy souls were brave enough to come for this event as part of this department's campaign to showcase the many different and exciting career opportunities within the printing industry. In the hopes of attracting high school students to our program here at VCC, Hemlock provided a wonderful opportunity for touring their facility. The guests comprised of some high school students, K-12 teachers, high school councillors and a dean, along with several first and second year students from our program, with other interested parties rounding out the group. Jeff Taylor, the Vice President of Manufacturing for Hemlock and also our host for this evening, paved the way to introducing the tour.

Among the attractions viewed by those attending the Open House, Hemlock had on display one of their finished pieces of work that being a limited edition produced for the Birdlife International Society. Only 950 copies had been produced and were priced at \$4,000 each. Containing 350 beautiful photographs selected from the more than 10,000 taken in the Antarctica region; this edition is only available as part of the fundraising effort being put on by the society. Hemlock produced this item on their sheet-fed presses with a stocastic screening on a glossy stock with a satin aqueous coating all done in-line. The result was a beautifully produced hard cover, cloth bound book accompanied by its own case; and only available as part of the fundraising efforts. Not cheap, but wonderfully done!



Diecutter Press in operation

For the tour, we were split into two groups led by Jeff Taylor and Peter Oostlander, with one group working backwards from the bindery to the prepress and the other moving from the prepress to the bindery section which also included a side trip to an outside facility with a smaller prepress and press shop area. Their equipment included Speedmaster presses; die cutter presses; paper cutters with automated jogging, loading and off-loading capacities; and also high speed folders and saddle stitchers in the bindery section. In their prepress area, Hemlock makes use of laser drum scanners; ink jet and laminate proofing systems; as well as computer to plate technology. Two amazing items that attracted some of the visitors' attention were the replication of watercolours on canvas paper using their ink jet systems; and the automatic calibration system that scanned the colour keys impressed on the sheet printed on their presses.

The grand finale for the Open House was the introduction of the guest speakers who were on hand to share their personal experiences, namely Peter Oostlander, Director

of Customer Service for Hemlock; Ernst Vegt, Vice President of Total Graphics Inc; and GC&PT Acting Department Head, Lisa O'Neill. As well, Marilyn Knoch from the BC Printing and Imaging Association was on hand to introduce the more than 12 areas of employment opportunities available to those interested in the printing industry and also provided information for funding opportunities for high school graduates. Key words that fell from their lips were: "attitude", "flexibility", "willingness to learn", "skills" and the ultimate word, "employment."

So there you have it, everything from the tour crammed into the space of this page. There is so much more one could write; but the best thing to do is to experience for yourself the many fascinating aspects of a printing facility by attending a tour as the opportunity presents itself; it will sharpen your focus towards a career in the printing industry.

O.S.

E.P.P. 1 G.C.P.T. - Y1 @ V.C.C

"How was your day honey?," she said with her soft inviting voice and a smile on her lips. "Do you really want to know?" I replied, and with her approving nod I continued. "O.K.," I said, "This is what happened. My H.S.V. was high, I was feeling good with plenty of work. The U.S.B. hub was lit up like a Christmas tree but there was plenty of R.A.M. in my G4, or M.B.'s if you like, must have been at least 716,000K. So I plugged the HELL Sapphire into the I.E.E.E. to do some anamorphic scanning and O.C.R. work. I was planning to go to FM today and I was excited. C.T.F. for AM was O.K. but this was new and I couldn't wait to see the results of the C.T.P. Things went well most of the day until I had just about finished all the long hard hours of I.C.C. profiling, L.A.B. or R.G.B. correction and C.M.Y.K. conversions of the CT's. Little did I know that about a half hour before the customer would arrive from CA to have a look at the work, my day would indeed be a Sapphire of its own. I was just about ready to R.I.P. and maybe surf some URL's when it started.

Since I was in such high spirits and was right into the process I had forgotten one of the golden rules, Command S. So I figured I should Stuffit and shove it into a H.F.S. for safe keeping, then Toast it on CD just in case. Just then the company C.E.O. walked in and asked how it was going, I said great, just about ready for the R.I.P. Anxious for results we sent it through. The minutes ticked by as we waited for the files to finish the process. When we looked at the results it was around 2:30 pm, CA would be here at about 3:00 pm. My C.E.O. looked first as I stood back with a smile, confident that it was the best work I had done. His smile turned to a frown as mine faded and his frown turned to a

scowl. Starting to notice things weren't quite right myself, I bolted back to my G4 and cursed at the once wonderful machine. Searching through the P.D.F.'s, T.I.F.F.'s and back into the P.S.D.'s for an answer. My desktop was a mess by this point, I was starting to sweat and my H.S.B. was fading fast. My gamut was flexible but I cursed, what the H! The C.S.R. came storming in followed by the C.E.O. demanding explanations as I explored frantically through the ever increasing folders. My B.P.S. were increasing as I discovered that the T.I.F.F.'s had somehow become G.I.F.'s, PICT's, and J.P.E.G.'s. What the F!? I dove in deeper, frantically inspecting the files feeling more and more like the V.O.C.'s that used to be in the inks. My F.P.O.'s had not been replaced so the A.P.R. and the O.P.I. were screwed. The C.S.R. was on the phone with CA while the C.E.O. was asking if I had checked the L.P.I., D.P.I., and S.P.I., he was ultimately P.O.'d, then enraged as my ATM went on the fritz and crashed. Before I could answer he was on the phone to the ISO, ANSI, and the CGATS while flipping through appendix 1 of SWOP to see if there was anything we could do, not waiting or really wanting an answer from myself. I felt like a P.O.W., the C.E.O. was furious, the C.S.R. was frantic, my G4 was on the verge of K.O., and my E.T.A. for CA's arrival was slipping away. It felt like being simultaneously visited by the I.R.A. and the I.R.S. or the inquisition, I wasn't sure but I knew that I was most certainly S.O.L. The T.A. was apparently on his way at that point when the O.S. crashed and I saw a spark from the ADB ports. O.S. NO! I mean O. S.! A couple of seconds later the CPU was pouring smoke all over the place and the AAUI port caught fire. My PS fonts where conflicting with T.T.F.'s that weren't there before as the screen started flickering violently and CA was just down the street. Cursing at the G.U.I. while looking around through the chaos I decided, F.I.! Throwing the ZIP drive in the air, I split at about 5000MHz and cut the LAN as well

as the power to the C.E.P.S. on the way out, while chalking it up to B.S.

All I really wanted to do was R.I.P. under a UV with some frequency modulation but apparently I was D.O.A. or at least doomed from the start and now M.I.A. CA probably called the F.B.I. after they saw what happened to their job and I'll likely have to visit an M.D. or the H.R.D.C. for some recommendations on therapy, but for the time being I was free, debating on catching the first flight to the U.K. On the way home while listening to some R.E.M., O.M.D., or F.S.O.L., I'm not sure which one it was, maybe it was B.B. King, I decided to become a stripper who only has to deal with P.M.S. occasionally."

I cannot explain the expression that was on her face at that moment. I blinked and found myself staring at the ceiling. After the initial shock and a few minutes of recovery, realizing the cold sweat, I turned over to see my bedside table with the CD of all the files I had saved the day before. Hmm... must have been all the T.L.A.'s in EPP 1 - GCPT at V.C.C. as a flashback I thought to myself and smiled while looking over to my peacefully sleeping girlfriend. "Baby if only you knew", I whispered, rolling over to go back to sleep abruptly realizing that it was Saturday and I had to take my S.U.V. in for an overhaul, then off to the B.Y.O.B. - B.B.Q with the C.S.R. and the C.E.O., ...O....S.!

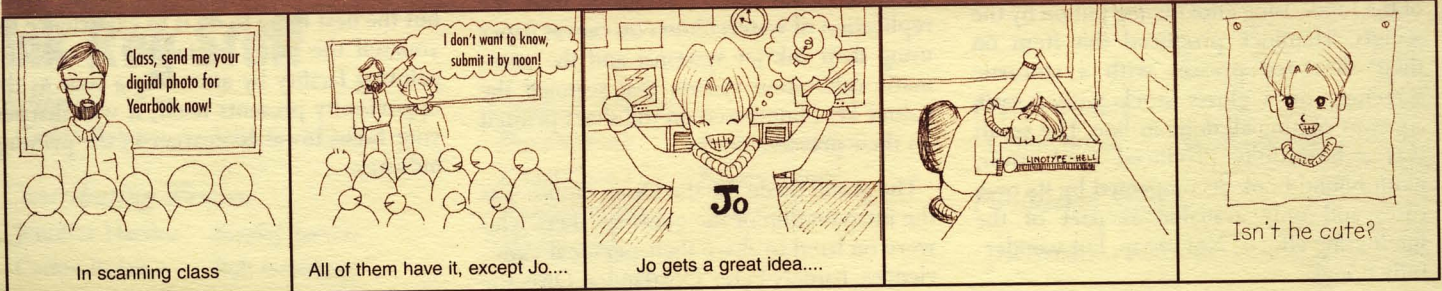
Cheers,
K.W.A.J.
(EPP 1 GCTP @ VCC -Y1 (LOL))
P.S. Just kidding, The End.

References:

Graphic Communications
(The Printed Image) Textbook
Pocket Pal Textbook
The Little Mac Book

INSTANT SCANNING

Illustration by Meiliani Ng



Upcoming Events

PRINT FAIR

(HOSTED BY) FRASER VALLEY CLUB
OF PRINTING HOUSE CRAFTSMEN
TUESDAY, FEBRUARY 26, 2002

6:00 - 8:00 PM

RAMADA INN - 10410-158TH AVE,
SURREY BC

This fair is open to the students of the GC&PT program and offers a view of current employment opportunities within the industry. There will be prizes available, and students are encouraged to attend. Please see Beth Callahan if you have any questions.

SPRING BREAK

Mark your calendar! The annual Spring Break is happening starting March 18th to March 22nd inclusive.

GC&PT INFORMATION NIGHT
WEDNESDAY, MARCH 20, 2002
6:30 - 7:30 PM, RM. 120

This session is for anyone interested in finding out more about the GC&PT program here at VCC. There will be an opportunity to meet with the instructors, tour the facility, and get answers to your questions. If you know of anyone who may be interested in attending, feel free to share this information with them.



Winner of the Cinnamon Heart draw was Kerry Anderson, with a guess of 2748. The actual amount was 2760.



From the Editors:

Greetings! This is our very own Special Edition of The Ink Rag newsletter that we have printed on the press as part of the department's Open House. We hope that you will have enjoyed the activities during the Open House as much as we have enjoyed participating in it. Many of us are excited to show our family and friends what it is that we are learning here at VCC. As a way of expressing what the final outcome of this phase of our development towards obtaining a career in the printing industry, we present this humble paper to our readers. Enjoy!

HALFTONES

PART TWO

by Jennifer Harder

In the last issue I wrote about how halftones came into existence, their use in full colour printing, and their rise in popularity. This article will focus on how we use and view halftones in the present.

After the Woodbury type invention, many other inventors tried to perfect and make the process more effective and less expensive. In 1884 along with improvements in chemical etching, gelatin coated dry plates and films were being used to reproduce photos. Years later, Kodak also began experimenting with this research and in 1935 the first practical color film that could be used by amateurs and professionals was invented. In the past the cameras that were used were bulky and were hard to transport. Now that it was easier to take photos, use of colour illustrations began to increase in publications.

In 1947 Electromechanical plate making was introduced. The process involved a picture that was optically scanned, which would then be reproduced as a relief on a plastic plate. As the laser was improved upon, it was used to etch metal and this new invention was used in the 1950's on photosensitive nylons plates and other resins. Along with this discovery, Europe and the US were testing out lasers on a full colour transparency and imaging it onto a corrected film negative that could be used later to image a printing plate. The scanner was connected to a type of computer that split light into red, green and blue. Then the computer had to change these additive colours into the subtractive cyan, magenta, yellow and black. Transmitting images began to become extremely important in the printing industry, however, even with these laser computers it was difficult to see what was happening to the images before they were developed.

In 1935 a company named Bell Labs invented a machine for "wiring photos"; in effect it was a cross between a television and a halftone. One machine would read the dots on a halftone, row by row, and send the information by electrical impulses, while a machine on the other end turned the information back into rows and dots. In 1939 Bell Labs took this idea and used it to make the first computing device that could be used to transmit the images over telephone lines. Breaking up an image into coloured dots is

similar in some ways to how a computer breaks up an image into ones and zeros. This is possibly why the computer came to be incorporated with the scanner. Instead of the image going straight to film, a photograph can be changed and manipulated in a computer.

Halftone dots have greatly improved the ability of printing full colour pictures. Unfortunately there are several drawbacks, three of which I will briefly mention. First, CMY inks are not pure subtractive colours and therefore cannot be accurately reproduced, even with the addition of black ink. The second most serious problem with halftone dots is if they are not imaged at a set angle, a moiré or funny checkerboard pattern is produced. With the invention of the previously mentioned scanner, new and improved angles were discovered. Also, in 1942 Frank E. Smith experimented with various coarse rulings, which helped to eliminate the moiré pattern. In 1993 improvements of stochastic or FM screening was made by Agfa CristalRaster and later in the Staccato technology produced by Creo. Frequency Modulation (FM) Screening uses dots that are similar in size and closely grouped, rather than dots of varying sizes as with Amplitude Modulation (AM) Screening. As a result, the dots are more random and thus eliminate the need for angles resulting in the moiré pattern. In addition to this dot gain has also been a common problem in that when film is processed under the imaging light along with other factors, the halftone dots grow in size. New advancements with image setters; computer to plate; and computer to press technology have virtually eliminated dot gain on the press. Over the years halftone dots have changed in shape and have improved with new equipment. Today they have become so common that most people don't even think about them when they're looking through a magazine, but without halftones these advertisements would be impossible to reproduce.

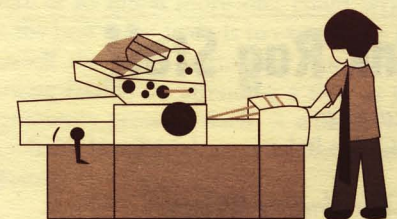


Illustration by Amy Goko

In The Loupe

by Bob Grahame

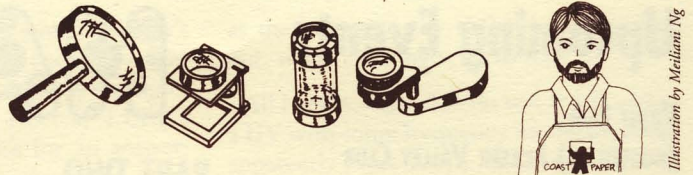


Illustration by Meiliani Ng

AN OCCASIONAL COLUMN WITH A TECHNICAL FOCUS

GRIMY MICE & COMPUTER GEAR (PART TWO)

Your mousepad is part of the problem, as any grime the mouse ball encounters moving on the pad may be taken up into the mouse, thus requiring mouse cleaning. Keeping your mouse pad clean (using Windex and a KimWipe) reduces the need to clean your mouse. Perhaps you've noticed grimy bumps on a mouse pad, and asked yourself: where does all this grime come from? Well, the human body makes oils which rub off onto surfaces. It also requires food and drink and urges the human mind to desire their consumption while working. Since common sense tells us that crumbs and liquids are the computer's enemies, as they lead to grime – and possibly

worse outcomes – our rule is that food and drink must remain on the centre tables in the computer labs. Keeping them out of the computer labs entirely is even better.

OH SAY CAN YOU SEE?

But the grime doesn't stop there. Fingers dancing on the keyboard can transfer grime, and crumbs and other dirt dropping into the keyboard can gum up the keys. We don't have a regular keyboard cleaning procedure at this time, so your care and attention is important.

Let's return to the screen of the grime. Bryn (our Mac techie) recently mentioned to me how dirty and poorly adjusted the

monitor screens are. NEVER USE WINDEX OR ANY OTHER CLEANING SOLUTION ON THE MONITORS. Each lab should have a spray bottle of water. If your screen is dirty, spray a little water on a KimWipe and gently wipe the monitor. Never spray directly on the screen, as water may drip down inside the monitor.

If you're not sure how to adjust the image on the monitor screen, it's time you explored the four buttons at the bottom centre of the monitor... but ask for assistance with this. The image may be moved up or down, stretched horizontally or vertically and the three RGB guns can be aligned so that the colours are in register. Yes, even monitors need to be in register.

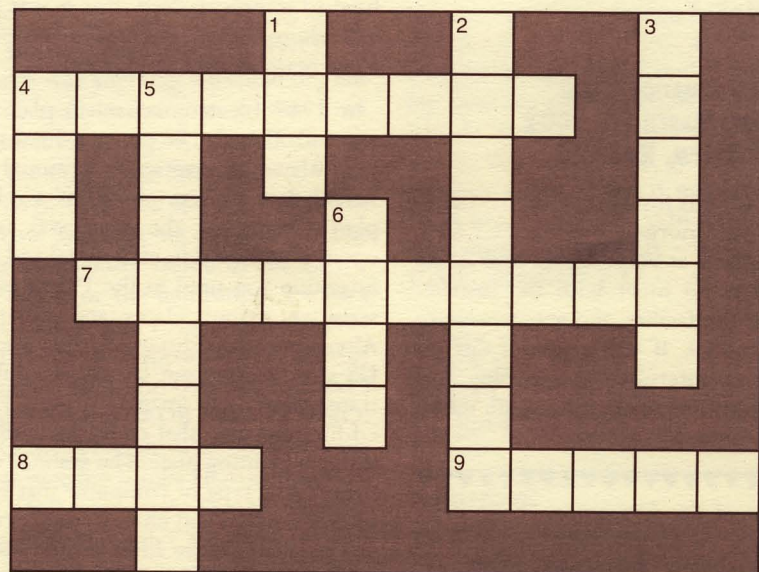
CROSSWORD PUZZLE

ACROSS:

4. A tangible, stable proof such as an ink on paper proof.
7. The process where a change in light will cause visual shift in metameric colour for a given observer.
8. Joint Photographers Expert Group.
9. A supplementary pigment that is added to printing inks for greater tinctorial strength or improved colour.

DOWN:

1. A device's resolution measurement.
2. Difference between light and dark tones, including the visual relationship of the tonal values within the picture in highlight, middletone, and/or shadow tones.
3. A term used to describe a colour transparency.



5. The patterns observed in lighter and medium tones when halftone colour images are printed in register at the correct angles.
6. The subtractive secondary colours used in colour printing.

ANSWERS FROM LAST ISSUE

ACROSS:

1. Stripper, 5. Calibration, 7. Bleed, 8. Ghosting, 10. Diecutting, 11. Window

DOWN:

1. Serif, 2. Embossing, 3. ICC, 4. Lignin, 6. Amended, 9. Burn

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