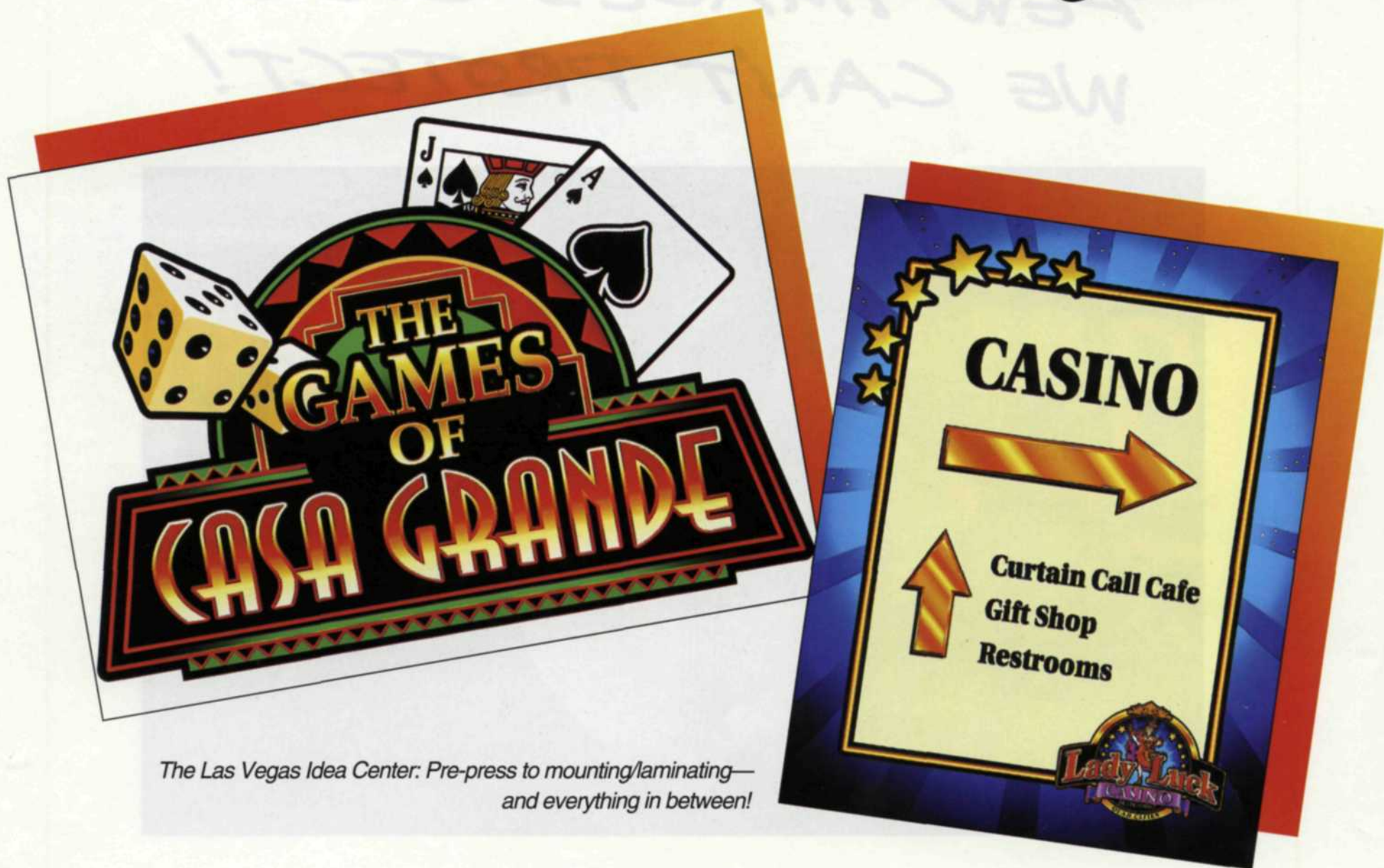


DIGITAL DIRECTIONS

The Las Vegas Idea Gaming's the



The Las Vegas Idea Center: Pre-press to mounting/laminating—and everything in between!

Jack and Sue Drafahl

WELCOME TO LAS VEGAS! We're going to take you on a quick tour of an exciting photo lab in this city of glitter and lights. What you see here is what these folks do—from pre-press and design to a variety of end products.

Following is an interview with Gary Harris, owner, founder and president of The Las Vegas Idea Center, and Claude Smith, vice president and CEO.

Drafahl: How long have you been in business?

Idea Center: The company was formed about 5 1/2 years ago.

Drafahl: How many employees do you have?

Idea Center: It varies, between 25 and 30 employees.

Drafahl: What type of clients do you serve?

Idea Center: We are in the gaming industry. Our customers are primarily the casinos, slot manufacturers, sign manufacturers that sell to the casino industries and the casino's advertising agencies.

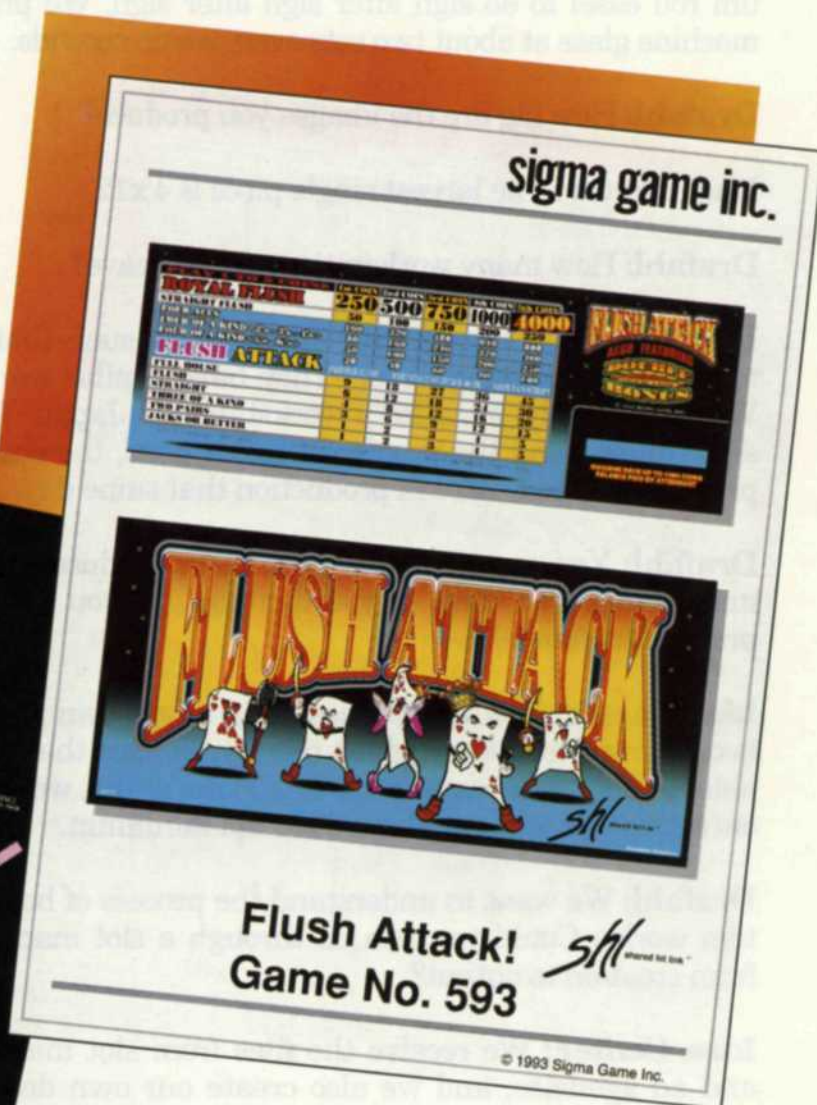
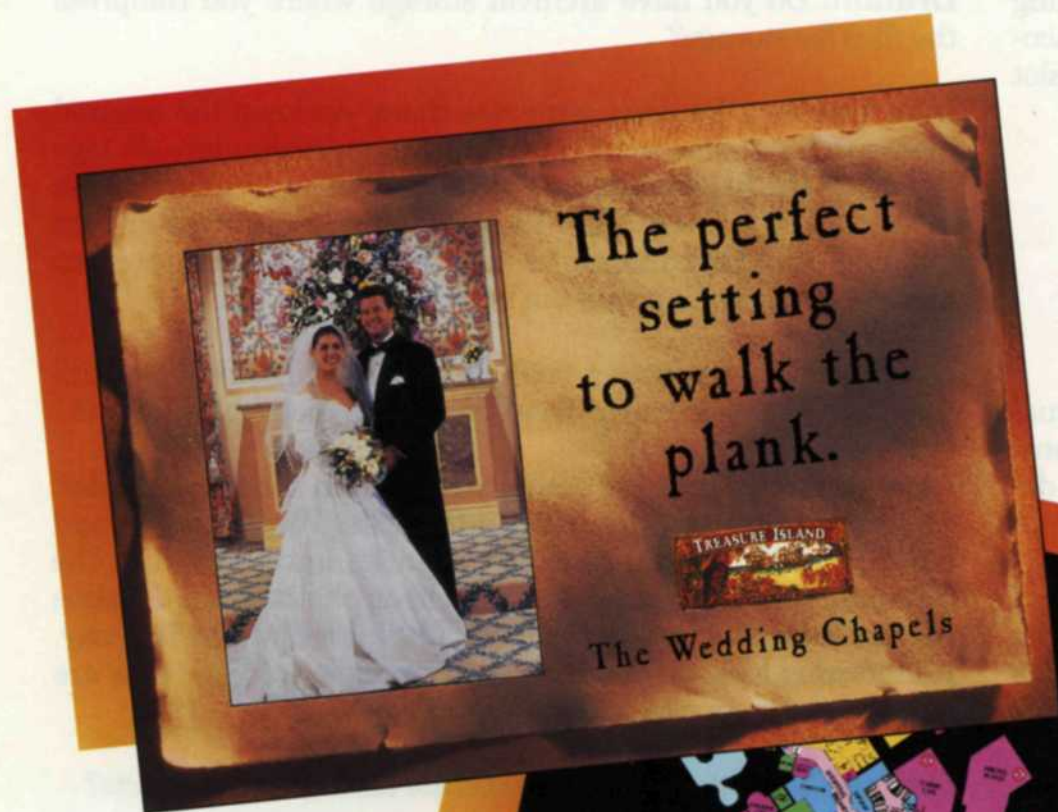
Drafahl: The services you offer are the projection images for illuminated displays?

Idea Center: We use the Ilford material. We build the sign faces for the sign manufacturers, and we build slot machine glass.

Drafahl: So you do the whole thing, not just the material. You put the whole display together for them?

Idea Center: Right; first, we are pre-press. We have one of the largest computer-imaging operations in the world. After we have designed the images, then we become the press and produce the originals. Then we go to production where we produce the images on a one-to-one scale. Then we are post-press

Center: Name of the Game



where we laminate the images to glass or Plexiglas or whatever the job calls for. We are like a factory.

Drafahl: When you first started, did you start with traditional photo methods or did you start with digital equipment?

Idea Center: Digital. When we started, we knew nothing about the photographic industry. We sat down and read all the manuals and consulted with the experts and decided to build a fully automated photo lab.

We produce from 30 to 50 8x10 original images per day, and that is just our original work, not production jobs. For example, most people who purchase a film recorder like ours average three to five images per day. Our operation actually runs 24 hours a day, seven days a week.

Drafahl: What film recorder do you use?

Idea Center: We use a Cymbolic Sciences Fire 1000.

Drafahl: Tell us about your computer system.

Idea Center: We are primarily UNIX-based here, which means that we use Sun and primarily Silicon Graphics computers. Silicon Graphics is the same computer that just made Toy Story and does many of the special effects for Hollywood movies.

Drafahl: Have you run into the problem we have seen with some of the labs where quantity and speed are becoming more important than quality?

Idea Center: In our operation, it is our strategy to have the highest quality possible. So, it is not even a question. Speed is what we built into the automation process. A typical job for us is turned around in 48 hours.

For example, we just finished redoing every single backlit sign in the Showboat Casino. That is some 150 signs. What that means is that when you walk into the Showboat, whether you look at a directional that points you to an elevator or you look at all the restaurants in the backlit displays or you look at the slot department and it says "Win a Jeep," etc., we produced 100% of those images. Those images only took us three days to produce from beginning to end.

Drafahl: You are using three different Ilford products: the clear, translucent and print material?

Idea Center: Right. We are running Ilfochrome. Ilfochrome is positive to positive. We create an 8x10 original. We put it through the E-6 processor and it is now a positive. We go directly to an Ilfochrome print processed in a P-3X processor. We print on Translucent Display Film, Clear Display Film and Pearl Paper. We have three enlargers here, and we're enlarging depending on what size. We actually have an automated vacuum roll easel to do sign after sign after sign. We produce slot machine glass at about two sets every seven seconds.

Drafahl: How big are the images you produce?

Idea Center: The largest single piece is 4'x12'.

Drafahl: How many workstations do you have?

Idea Center: Sixteen. Our operation is such that our customers are designing for us. They have similar workstations. We just recently, installed a workstation in Japan. We can design things, send the proofs via ISDN lines, the customer approves them and we're in production that same day.

Drafahl: You say that your customers produce many of the images and give them to you digitally. Do you do any of the production yourself?

Idea Center: The ad agencies design their own products, but because we want the highest quality, images that are acceptable to other businesses such as 400 dpi scans, we will re-scan ourselves. We work at about 2000 dpi minimum.

Drafahl: We want to understand the process of how your system works. Could you run us through a slot machine image from creation to output?

Idea Center: We receive the files from slot manufacturers and ad agencies, and we also create our own designs. Currently we have 10,000 original designs that belong to Idea Center. We also license from other companies. For example, we own the rights to produce Marilyn Monroe, W.C. Fields and Humphrey Bogart. We purchased those rights from the estates of the celebrities and produce those images for the gaming industry.

Let's start from the beginning. Let's take an easy one where we are creating the new slot glass design. We have a person at a workstation who creates the image on a computer. Let's say that we are using Adobe Illustrator. We rasterize that image and send it over our network into the Fire 1000 film recorder. We use Quark as the rasterize program. Now the image hits the film recorder. We like our Fire 1000 film recorder because it is automated. We can let images be sent all night long into a roll of electronic output film.

Drafahl: What size and type of output film do you use?

Idea Center: Fuji. It is a 100' roll of film. Each image is 8"x10".

Drafahl: What is the size of each file?

Idea Center: Each 8x10 image is 460 megs.

Drafahl: What kind of storage devices do you use?

Idea Center: We use a Silicon Graphics file server, a Silicon Graphics workstation, Sun workstations, and Macintosh and IBM computers. We actually accept any medium from any customer. We have CD discs, as well as every kind of SyQuest and optical disk. Each computer has five gigs on each workstation.

Drafahl: Do you have archival storage where you compress the files for storage?

Idea Center: We don't compress them, we keep the original files, not the rasterized files. We have approximately 22 gigs sitting on the file server. Now we are adding optical jukeboxes so we can save more than the 22 gigs. We also working on building communication lines with the casinos where we can move 100 megs of information very quickly.

Drafahl: Now you've got your 8x10 roll images off your film recorder. Where do you go from there? Are these then cut up?

Idea Center: These are actually notched in the film recorder. Then the operator puts them into racks. We use a dip and dunk E-6. We will throw 10 to 15 racks into the E-6 in the morning. It is like a large-scale one hour photo. From the time we put the racks in it is one hour until the first one is ready. All morning long the originals are coming out. Then these are given to production to enlarge.

Drafahl: Then the enlargers generate all the final products?

Idea Center: Yes, the output.

Drafahl: This is where you use different Ilford products?

Idea Center: Correct. We chose Ilford because of its durability. We talked to just about every manufacturer about output devices, and we focused on longevity and archival quality.

Drafahl: How long do these photos last before the casinos makes a change?

Idea Center: Ilford guarantees backlit for five years and the non-backlit are guaranteed for 200 years. We have patents on our lamination process. We actually laminate our Ilfochrome to Plexiglas and glass and have received patents from the patent office for the application.

Drafahl: Since the digital area is so new, do you train your employees or find them pre-trained?

Idea Center: It is our strategy not to hire pre-trained people. We actually start from scratch and teach them.

Drafahl: If you were to look into a crystal ball, what do you see for the future of your business?

Idea Center: I would think that eventually our entire business is going to be run over communications lines—computers and the Internet.

Jack and Sue Drafahl own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.