

# DISCOPYLABS

# Perfect Original Quarterly

August, 1986

Volume 2, Number 1

## THE HIDDEN COST OF POOR QUALITY

The cost of duplicating disks for a business software package is probably one of the smallest portions of the total cost of goods sold. Yet, if the diskette duplication is not done correctly, it has a major impact on the company's bottom line. Too often the decision to select a duplicator is based on price as a major criteria, with quality, service, reputation and capability as only secondary considerations.

I recall a year ago a customer went to another duplicator because of lower prices. The customer was aware that some of the quality control procedures would not be done and the media grade would be lower. Unfortunately, the product was incorrectly produced and was not caught by either the duplicator or the customer.

This resulted in a major recall from distributors, dealers and end users. The cost to the customer was well over \$40,000. In this case, trying to save a few cents per disk ended up costing over \$20 more per unit, not to mention bad public relations and customer dissatisfaction. Needless to say, the customer is back doing business with DisCopyLabs.

Although this is an unusual case, it illustrates that the hidden cost of poor duplication is so high that DisCopyLabs refuses to compromise quality for price because the risk to you is immeasurable. That is why we have a quality control group and manager who report directly to our Vice President of Operations whose charter is to make sure we produce a zero-defect product.



## DISCOPYLABS IS FOUR YEARS OLD

DisCopyLabs marked its fourth anniversary and the beginning of its fifth year in operation on July 1, 1986.

In the past year, DisCopyLabs: moved into new facilities in San Jose; expanded duplication and packaging services and the quality control department; created a fulfillment division; increased warehouse space for customer materials; and announced a number of copy protection products.

### PROJECTIONS

For the coming year, President Norman Tu is committed to providing a total production solution for customers through services from DisCopyLabs' duplication, packaging and fulfillment divisions.

To take advantage of current

*In the past year we have further refined our process control based on customer input. We consistently produce near-perfect orders, thereby saving customers additional costs of returning and redoing products. The savings on returned products can be as high as 40 cents per disk.*

*When selecting between duplicators, I recommend giving equal weight to the following criteria: a) duplicator process control procedure, b) duplicator reputation, c) duplicator commitment to service and attention to detail, d) duplicator technical capabilities, e) duplicator capacity, f) duplicator organizational structure to support customer growth, g) duplicator pricing, h) duplicator references and customer base, i) duplicator facilities.*

*I thank you for your support and your belief in our commitment to "each a perfect original".*

Norman Tu, President

technologies, DisCopyLabs is developing an electronic mail access system that allows customers to send and receive shipping and order instructions and to inquire about order and inventory status.

### PRODUCTION SERVICES

Diskette duplication is still DisCopyLabs' primary service.

***"Committed to providing a total production solution."***

Production services include strict quality control, beginning with the certification and degaussing of blank media. Duplication capacity is 30,000 disks per day. Numerous quality control tests are executed on host computers to check each order.

Although the demand for copy protection has decreased, DisCopyLabs continues to develop LockGuard as a service for customers who need copy protection.

### PACKAGING DIVISION

The packaging division does label printing, label application, serialization and envelope insertion as well as assembling full packages, with final shrink-wrapping completed on automated assembly lines.

The packaging manager tracks with a computerized inventory reporting system customer materials needed for package assembly.

### QUALITY ASSURANCE

Consistent with DisCopyLabs' philosophy of quality products, the  
*(continued on page 2)*

### FIRST EMPLOYEE IS DUPLICATING EXPERT

Less than five months after DisCopyLabs opened its doors, Beth Chang joined the company as its first employee. In those early days, Beth duplicated media on manual loaders, working out of a small office in Menlo Park.

Today Beth is DisCopyLabs' lead duplication technician. She operates high-speed autoloaders and manages



Beth Chang

several duplication stations at a time. Because of her extensive experience with manual as well as automated duplicating equipment, Beth is a top-notch and knowledgeable duplication technician.

Beth's philosophy concerning work is based on a spiritual belief of loyalty and honesty towards the company that gave her a start in California.

Born in Hong Kong, Beth graduated from the Alliance Seminary with a degree in religious education. She immigrated to Winnipeg, Canada in 1969 before moving to Mountain View and beginning her career with DisCopyLabs.

Along with the responsibilities of being a minister's wife and spiritual teacher, Beth is raising two teenaged boys. In her spare time Beth enjoys gardening, playing the piano, and singing. Beth can be often heard humming or singing in DisCopyLabs' hallways or at her work station.

### FORMER SHIPPING TECH TRACKS INVENTORY



Kirk Smith

Kirk Smith was recently promoted to data entry technician, managing the inventory control system for the packaging division. He joined DisCopyLabs a year ago initially as shipping/receiving clerk and then became DisCopyLabs' first fulfillment technician.

Kirk's new job requires him to manage raw materials and finished goods inventory for customers. He makes sure customer reports are accurate and updated using the computerized inventory control system.

Kirk hails from San Diego where his family resides. He joined his sister a year ago in the Bay Area for better employment opportunities. Interested in marine biology, Kirk hopes to pick up courses related to the marine biology field and pursue a degree in the future. In the meantime, Kirk feels there is the opportunity for job growth at DisCopyLabs.

In his spare time, Kirk enjoys surfing which he finds is an exhilarating experience.

### STAFF PROMOTIONS & NEW STAFF

Randy Powell, DisCopyLabs' new Fulfillment Manager, was production and materials requirements manager at Lifetree Software in Monterey.

Steve Chandler, previously DisCopyLabs' Production Supervisor, has been named Quality Assurance Manager.

Sandra Woodrow, Office and Facilities Manager, moves into customer support by coordinating customer inquiries and orders with our production department. Lenora Dun, a former public relations senior account representative, takes over purchasing responsibilities. Our new receptionist is Joan Westhefer. Joan previously worked in the post office and as a restaurant manager.

Francisco Paredes and Geri Grozier work in fulfillment. An experienced shipping clerk, Frank came to California in 1983 from the Philippines. Geri was formerly a receptionist.

Louis Wong, formerly a duplication technician, handles hardware support as one of DisCopyLabs' Technical Specialists.

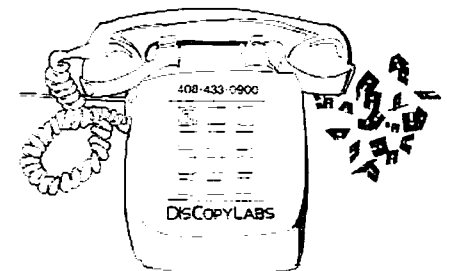
### QUALITY CONTROL WITH FORMASTER'S Q/A BOARD

DisCopyLabs will be using Formaster Corporation's newly-introduced Q/A Board in its duplication production process to ensure a comprehensive check of duplicated diskettes.

The use of the Q/A Board serves as an automatic loader while allowing final control over not only the quality of duplicated products, but also a final check on media quality and a continuous quality evaluation of the drive condition.

The quality of media is measured during duplication, including amplitude modulation, average track amplitude, and transition interval analysis (TIA).

The ultimate measure of quality is whether the disk works on the target computer, best measured by TIA. The Q/A Board also minimizes the time for drive alignment tests and headwear tests.



## NEW SERVICES

### FORMATTED DISKS

By popular demand, DisCopyLabs is pleased to announce the availability of formatted 9-sector disks. Pre-formatted disks will allow customers easier use of the computer without work interruptions to format disks.

The introductory price for formatted disks is \$.99 each for a minimum of 100 disks until October 1, 1986, when the price returns to \$1.50 each.

Orders include Tyvek envelopes and shipping to your destination. DisCopyLabs will guarantee a 24-hour turnaround time.

### COLOR MEDIA

Diskettes in 15 colors will be available for 5.25" duplication orders beginning October 1, 1986. Call for colors and prices.

### TAPE DUPLICATION AVAILABLE

Beginning October 1, 1986, DisCopyLabs will be offering duplication of DC300 and DC600 1/4" cartridge in QIC24 and QIC11 formats. Call Norman for further information.

## NEW DEVELOPMENTS

### ELECTRONIC DATA TRANSFER

We are doing a joint project with a major software firm in Silicon Valley to develop an electronic mail system to send and receive shipping, inventory, and order data via phone lines.

### APPLE QUALIFIED

DisCopyLabs is one of the first vendors to be qualified by Apple to do single- and double-sided duplication for the Macintosh. The qualification process took four months to complete.

### LOCAL AREA NETWORK

DisCopyLabs recently installed a Corvus Omninet with Novell Netware, providing several departments with access to business and technical information. Customers will also benefit when the electronic data transfer project is implemented.

### NEW PHONE NUMBER

Beginning September 1, 1986, DisCopyLabs' will have a permanent phone number: (408) 433-0900. We look forward to hearing from you.

## STAFF VIEWS ON GROWTH

Staff commitment and pride to "each a perfect original" reflects that extra mile of service.

Fulfillment Manager Randy Powell, formerly of Lifetree Software, has viewed DisCopyLabs both as a customer and as an employee. He recently said, "Although DisCopyLabs has grown at a rapid pace, the goal of quality customer service is maintained in spite of the drastic changes."

Some staff members view DisCopyLabs as a company changing for the better while allowing room for employee growth. Steve Chandler, QA Manager, commented, "It's great to work for a growing company in an environment where there are constant changes." Mark Raintree, Technical Specialist, feels DisCopyLabs has acquired a professional look since

moving, plus the benefit of added space to implement new projects and better services.

Productivity and efficiency of the production facility has changed dramatically. DisCopyLabs doubled its production capacity and space. As Ann Hsiao, Labeling Technician, said, "The production flow has changed for the better in layout and efficiency."

Customer service and the quality of that service is key to DisCopyLabs' success. Quality Control Technician Lorey deGeus said, "Because of the quality service and customer satisfaction, the growth doesn't surprise me. I expect more in the future. DisCopyLabs is the most quality conscious company I have ever worked for."

*(continued from page 1)*

## ONE-STOP PRODUCTION SERVICE

Quality Assurance Department inspects every order for perfection in software and finished package.

This new department was created using the quality control staff, originally part of the Production Division. The QA manager and staff operate independently of the production, packaging, and fulfillment divisions.

Only after each order is tested and approved does it proceed into the fulfillment area for shipping. Customers are encouraged to source inspect the finished goods.

### FULFILLMENT SERVICES

Duplication customers asked for and received a new fulfillment service provided by DisCopyLabs. The fulfillment division takes a finished package and ships it direct to the customer's distributor, dealers and end-users. This eliminates the customer's need for a full shipping department.

Two computerized manifest systems handle a shipping capacity of 3,000 packages per day. Within 24 hours after receiving shipping instructions, DisCopyLabs can complete the

processing of shipping requests.

Customers receive daily computerized documentation of packages shipped that includes freight costs and manner of shipment.

The fulfillment division can set up customer accounts with common carriers and ships packages via UPS, Federal Express, U.S. Postal Service, and other common carriers.

DisCopyLabs expects to see more activity in fulfillment as customers use this service. The expansion of fulfillment services is another way that DisCopyLabs provides customers with a one-stop production service.



Automated duplicating equipment produce 30,000 disks per day.

**PROFESSOR ON  
BOARD OF DIRECTORS**



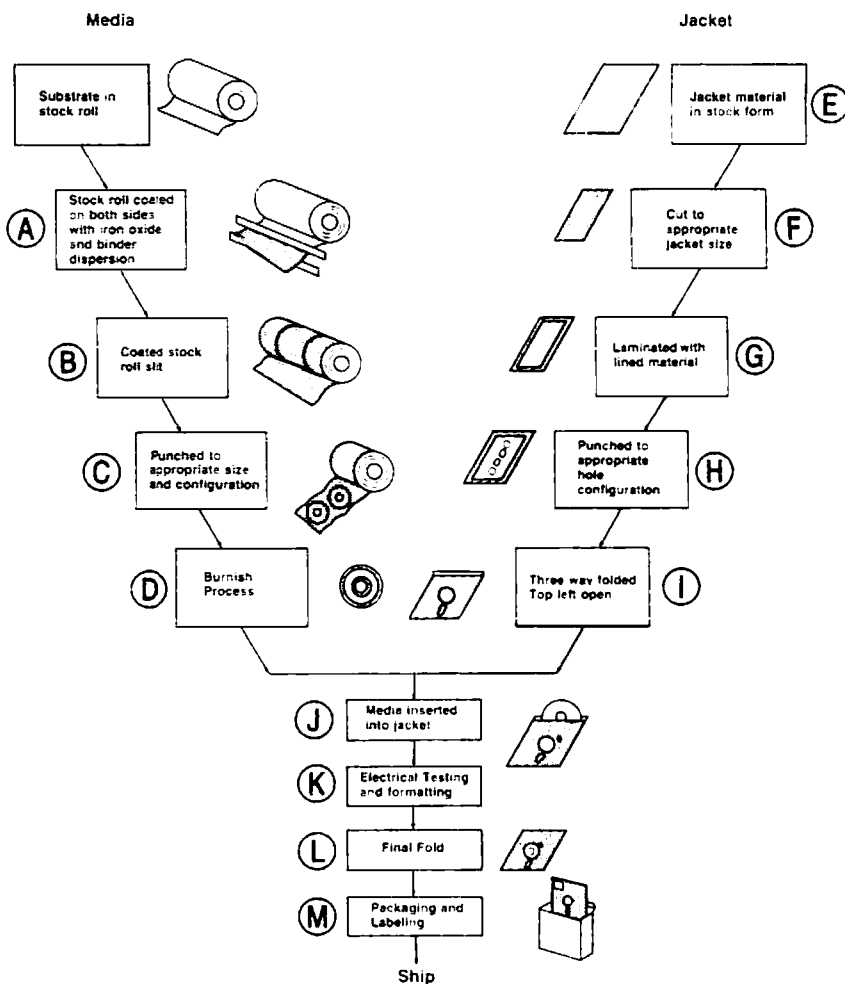
Harold Tu

The fifth and last member of the DisCopyLabs Board of Directors to be spotlighted is HAROLD TU, Assistant Professor and Residency Program Director of Oral & Maxillofacial Surgery at the University of Nebraska Medical Center, College of Medicine and College of Dentistry, in Omaha, Nebraska.

Interested in business, Harold has been active in national professional organizations and serves on the Board of Directors of Return Investment Inc.

Harold completed his general and oral surgery residencies at the University of Nebraska where he received his medical degree. He holds a D.M.D. degree from the University of Oregon Dental School and a bachelors degree from Linfield College. Harold is married and the father of two boys.

**Manufacturing Process for Diskettes**



Courtesy of 3M

Throughout the manufacturing of 3M diskettes there are numerous mechanical and electrical tests/controls that must be satisfied to produce a quality product.



2610B North First Street  
San Jose, CA 95134

**SERVICE DIRECTORY**

For information, call (408) 435-5444.  
After September 1, 1986, call (408) 433-0900.

- Quotation for duplication      Sandra Woodrow  
New orders

---

- Order placement                      John Tan
- Downloading, conversions          Clay Johnson
- Copy protection and master evaluation      Raman Marwha

---

- Shipping and delivery status      Tony Chanbandith