SCANNING, CODING \& AUTOMATION NEWSLETTER • 11 Middle Neck Road • Great Neck, N.Y. 11021 • (516) 487-6370

By far the largest aggregate....
....of companies devoted to bar code scanning technology, and gathered under one roof, will be exhibiting at Scan-Tech 82. At press time 42 companies had already signed up.

Accu-Sort Systems
Analog Technology
Computer Identics
Computype
Control Laser
Control Module
Creative Data
Data Composition
Data Specialties Datalogic Optic
Dennison Mfg
Electro General
Hewlett Packard Identicon

Identronix
Imaging Technologies
Industrial Engrg
Intermec
Laser Identification
Lord Label
MSI
Marsh Stencil
Matthews Int'1
MEKontrol
Metrologic
Modern Matls Handling Photographic Sciences Printronix

## QMS

RJS
Rexnord
SB Electronics
Scanmark
Scope
Skan-A-Matic
Standard Register
Symbol Technologies
Technical Analysis
Teknekron
Weber Marking
Welch Allyn
York Tape \& Label

There are still some booths available. Scan-Tech 82 is scheduled for November 3-5, 1982 at the Amfac Resort Hotel/Dallas. Registration for attendees is \$325. Brochures and detailed information have just been released and AIM/MHI reports over 1,000 inquiries already.

Contact AIM/MHI, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

## The Automatic Identification Manufacturers....

....continues its aggressive program of publishing brochures on all aspects of bar code scanning. The latest publications include:

- Moving Beam Scanners: Part I of a series on Scanning Products On The Move. Other parts of this series planned for future publication include fixed beam scanning; hand-held scanning; printing; presence/absence code; CCD array scanning; broad beam illumination scanning; presence scanning; passive RF device identification. All will be available soon in a threering notebook.
- Additions to the series of Uniform Symbol Descriptions: USD-4 (Codabar); USD-6 (Code 128); USD-7 (Code 93); and USD-8 (Code 11). For information
and prices for these publications, contact the Literature Department, Material Handling Institute, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

As part of its reorganization program....
....Symbol Technologies has taken some sharp write-offs and showed substantial losses for the three and nine month periods ended May 31, 1982:

|  | 3 months |  | 9 months |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Ended May 31 |  | Ended May <br> 3 |  |  |  |
|  | $\underline{1982}$ | $\underline{1981}$ |  | $\underline{1982}$ | $\underline{1981}$ |
| Sales | 699 | 854 |  | 2,280 | 2,464 |
| (Loss) From Operations | $(498)$ | $(3)$ |  | $(1,008)$ | $(41)$ |
| Net Interest Income | 31 | 64 | 128 | 210 |  |
| Net Income (Loss) | $(467)$ | 61 | $(880)$ | 169 |  |

(All figures in \$000)
President Jerome Swartz has detailed a number of factors to account for the drop in sales, and the increased losses, and outlined some of the steps that are being taken to turn the company around:

1. There was a significant shift in the company's product mix from verification equipment to scanning equipment. Sales of verification products declined $50 \%$, and the trend in this direction is expected to continue.
2. The company has taken current write-offs of the development costs for the new LS 7000 laser scanner. This amounted to $\$ 581,000$ for the nine month period reported above; $\$ 368,000$ for the three month period.
3. There was a change in the Laserchek (verification device) accounting standards formerly used by the company.
4. The company has sold the new building that it had under construction and into which it had planned to move this fall. $S / T$ anticipates a one-time loss on the sale of the building of approximately $\$ 300,000$.
5. In a major change of direction, $S / T$ has taken steps to contract out the manufacturing and design of the LS 7000 hand-held laser scanner. This unit is expected to be the mainstay of the company's equipment sales over the next few years. A contract is almost completed with Mars Money Systems, (a division of $M \& M / M a r s$, Inc.) for that company to manufacture the LS 7000 in high volume. The design of the unit had been completed by TNO Instrumentum/Holland. All engineering, design and production had been done in-house on all of the company's previous products.
6. Initial shipments of the LS 7000 are expected to begin in fiscal year 1983. Although no firm estimates have been supplied by management, there has been a great deal of privately expressed enthusiasm for the success of this unit.

In spite of a difficult year, the company management expresses optimism for the future. Symbol Technologies believes it has the product and the marketing plan to successfully compete in the bar code scanning industry.
....the enormous growth in the requirements for bar codes printed on pressure sensitive labels, and has been striving to develop new technology to keep up with the demand. This major producer of pressure sensitive labels has just announced Presidax, a new microprocessor controlled on-press imprinting system based on a proprietary ion deposition printing process developed by the company.

According to Paul Colletta, General Manager of Dennison's Industrial Systems Division, infinitely variable information can be added to any custom label. Copy changes and machine-readable code changes are pre-programmed and occur automatically as the labels or tags are printed on-press: individual bar codes can be batch, random or sequentially numbered; serial numbers can be incremented or decremented as required; multiple codes or serial numbers can be included on any labe1, all sequencing individually; large amounts of man-readable information can be included in various sizes and type fonts (including OCR) on the same label; labels can be laminated, die cut and printed in 4 colors.

This is all made possible because the Presidax print station is in line with a 4 -color rotary press at the Dennison plant. Roll-fed stock passes through the station and when the Presidax printing is accomplished, proceeds through the other four stations to complete the conventional printing operation.

With the addition of this innovative process, Dennison claims to be the only supplier in the industry that can offer the capability of printing labels with variable information and machine-readable codes at rotary press speeds. Please note that Dennison is not offering the Presidax system for sale. The company is selling printed labels produced in the Dennison plant using Presidax. Contact Dennison Manufacturing Company, Identification Systems Division, Framingham, MA 01701; 617/879-0511.

Although we do strive....
....to keep our readers stirred up and alert, we try not to make them too upset. In the May 82 lead article about market research applications about UPC scanning data, we noted that A. C. Nielsen "has done very little to date" in this area. "Not so," says Paul Schmidt, Vice President and Director of scanning services for Nielsen's Market Research Group, USA, who wants the record set straight. Some of the Nielsen developments and activities he cites:

- Local ScanTrack Service through which manufacturer/clients conduct controlled store tests in 7 cities.
- National ScanTrack Service based on weekly reported scanning data from 120 stores. This is a "scientifically designed sample representative of scanner stores and projectable to that segment of the food store universe".
- Participation in industry seminars and committees related to the development of scanning applications to business problems.
- Development of the Nielsen Master Universal Product Code Order File of almost 200,000 UPC codes linked to 800 specific product classifications.
- Other activities involving coordination with retailers and manufacturers to improve and enhance the accuracy of the data.

We hope we have set the record straight, although we cannot resist one final comment. We believe the analysis and use of supermarket scanner data is still somewhat crude and incomplete compared to the quantity and quality of data already being generated. But by no means does this refer only to Nielsen -- we just think that the innovative and constructive use of this information is still in its infancy. One of the problems is that, while the established market research companies seem to be exploring ways and means of providing new services to their clients, they are also holding on for dear life to their old, time-tested methods which are still selling very well. It may be economically justifiable and understandable, but we just happen to believe there's a better way.

There were two benchmarks of note....
.....in the US/Canada UPC Scanning Scoreboard these past few months. In July, the total installation count topped 6,000 ; in June the $1-2-3$ positions in the tally of hardware manufacturers were rearranged when Datachecker pushed IBM out of second place:

|  | Installations <br> May thru Ju1y |  | Total Installations$\qquad$ As of $7 / 30 / 82$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | \% | 非 | \% |
| NCR | 170 | 29.2 | 2,235 | 36.7 |
| Datachecker | 152 | 26.1 | 1,448 | 23.8 |
| IBM | 71 | 12.2 | 1,419 | 23.3 |
| DTS | 121 | 20.8 | 563 | 9.2 |
| Sweda | 50 | 8.6 | 371 | 6.1 |
| Berke1 | 7 | 1.2 | 31 | . 5 |
| TEC | 11 | 1.9 | 24 | . 4 |
| Total | 582 | 100.0 | 6,091 | 100.0 |

FMI, the official tabulator, has brought these statistics up-to-date by including in these three months' figures a large number of installations not previously reported: DTS added 106 stores, many going back to 1979/80; Datachecker located an additional 30 stores it had not reported.

Datachecker has not let the company's movement into second place go unnoticed. It emphasizes, and properly so, that Datachecker is now the number one supplier to the top 10 supermarket chains ( $39.1 \%$ share) ; and has been running just a tick behind NCR in store installations in the first half of 1982.

In the current political parlance....
....the parties to the coupon-scanning dispute are now playing "hardball". The disputants are Walter Kaslow, holder of the patent for scanning UPC symbols on coupons; and the UPC Council which has sued Kaslow to invalidate the patent (SCAN Nov 80; Apr 81).

Up to now, all meetings and negotiations had been conducted by the lawyers only. The principals finally met on July 30, 1982, and that's when things
really heated up. The UPCC staff attorney, Stephen Brown, accompanied by a member of the UPCC Board of Governors, Barry Franz, met with Kaslow. The purpose was to see if direct contact could resolve this difficult impasse. The meeting was not successful.

By one account, the parties are still "a million dollars apart," and neither seems to have budged from previously hardened positions. The UPCC feels it has won every place the case has been taken for decision. The patent examiners and Board of Patent Appeals have ruled against Kaslow's patent. A decision is now pending in the Court of Customs and Patents, the final appeal procedure remaining within the Patent Office framework. After that decision is handed down, it is certain to go back to the New York District Court and the long drawn-out legal procedure will continue. In our discussions with the individuals involved, neither side even hints at giving up at this point.

Meanwhile, Kaslow has gone public with this case in an apparent attempt to force the issue. He sent out a combative news release, titled UPCC Interest Heats Up In Redeemer-Screener: "The Universal Product Code Council, after trying to invalidate this patent, is now trying, unsuccessfully, to buy all rights from its inventor, Walter Kaslow." Kaslow is quoted as saying, "To save millions, they're offering peanuts." Kaslow goes on to describe the July 30 th meeting and concludes "Apparently, they feel they can't break the patent, so now they'd like to buy it outright. But their offer is totally unrealistic."

## Comment

It has gotten messy. We continue to think that some constructive negotiations could resolve this dispute, but it doesn't look as if it's going to happen in the near future.

## An important reference document....

....has been published for the bar code scanning industry. The 1982 Bar Code Manufacturers and Services Directory is a source listing of manufacturers of complete bar code systems, scanners, printers, data collection terminals, film masters, labels and label testers. In addition, consultants and database publications are listed.

General information about each company, plus addresses, phone numbers and representatives' names are provided. The directory costs $\$ 24.95$ and is available from: North American Technology (Bar Code News), 174 Concord Street, Peterborough, NH 03458; 603/924-6058.

Scope will continue....
....to participate in the industrial bar code scanning market despite the sale of the Automated Systems Division (ASD) portion of their MRC subsidiary.

So says Adolph Waizecker, Program Manager, who clarified previously confusing reports (SCAN May 82). Prior to the sale of ASD to the Chamberlain Corporation, the MRC Soanner Division was transferred to the Scope Electronics subsidiary of the company. Scope Electronics will continue to sell the Model 8500 and the newer Model 8200 scanners and will exhibit them at Scan-Tech 82. Scope Electronics, 1860 Michael Faraday Drive, Reston, VA 22090; 703/471-5600.
....its Model 8424 I Bar Code Printer. The unit prints codes $3 / 9$, interleaved $2 / 5$ and $2 / 5$ with up to four lines of human readable text. The 8424 I features a formed-font printing mechanism with carbon ribbon, and prints on roll-form paper, vinyl or polyester labels and tag stock. It is designed for continuous duty in industrial environments. The unit has both RS-232-C and 20 mA Current Loop interfaces with data input for on-line printing of simple ASCII characters. It can receive and buffer up to 1500 characters while printing, reducing computer time service.

The price of the Model 8424 I is $\$ 8,499$ for a quantity of 1 ; discounts for larger orders and OEM arrangements. Intermec, Box N, Lynwood, WA 98036; 206/743-7036.

The five percent drop in revenues....
....reported by MSI for the first quarter of FY 1983 was attributed primarily to a decline in European sales, and production delays on a large special order. No reason was given, however, for the much sharper (30\%) decline in earnings.

Quarter Ended

| $6 / 26 / 82$ | $\underline{6 / 27 / 82}$ |
| ---: | ---: |
| $\$ 13,527$ | $\$ 14,195$ |
| 860 | 1,229 |
| .35 | .50 |

In a new paper....
....presented at the August meeting of the International Society of Optical Engineering in San Diego, Eric Barkan and David Sklar of Symbol Technologies, covered The Effects of Substrate Scattering On Bar Code Scanning Signals. Quoting from the abstract:
"When a beam of light strikes a piece of paper or similar substrate, a portion of its energy penetrates into the bulk and, due to multiple scattering, may re-emerge at some distance from the point of entry. We refer to this phenomenon as substrate scattering.
"In this paper we describe a general model for scattering substrates and, using linear systems theory, we investigate its implications for bar code scanning. We show that the effects of substrate scattering can be represented as a modified reflectance distribution associated with the original printed reflectance distribution. This effective distribution is shown to be independent of the details of scanning system configuration. We show that under a broad range of conditions substrate scattering will decrease modulation and will cause scanners to overestimate bar widths."

For a copy of the paper: Symbol Technologies, 90 Plant Avenue, Hauppauge, NY 11787; 516/231-5252.

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