



# newsletter

The management  
Newsletter for all  
industries involved  
with bar-code  
scanning and  
related  
technologies.

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## We reported last year....

....that Sears "supports bar coding" (SCAN Sept 86) but had not yet decided on which symbology to use. At that time, industry pundits tended to agree, but Sears, they said, was going Code 39 and would not follow the rest of the retail world with UPC/EAN.

They were right. With almost 90% of all Sears products sold under its own label, and with an installed alpha-numeric numbering system, the retail giant was not prepared to change. The choice was a foregone conclusion. As Sears' National Operating Manager Paul Baffico put it to us: "We adopted Code 39 because of all the codes available, it meets our needs."

Notices have gone out to Sears' vendors to be prepared to start bar coding packages and tags later this year. Two stores are currently under test in the Chicago area and, remarkably, there will be some scanning in the majority of the Sears stores by the first quarter of 1988. The plan is to install scanning in a few departments and let it gradually spread across the store. The Auto Centers will be among the first departments to automate because they are "contained areas" and easily controlled.

The front-end equipment and software will also have to accept the UPC symbols that are on the nationally branded merchandise carried on the Sears shelves. For a short time, OCR-A will be retained on the packages, but they are expected to be phased out as soon as possible. Fewer and fewer Sears checkouts are still scanning the OCR-A tags.

As of now, hand-held lasers, wands and LED scanners are being tested in the stores. Slot scanners have not been evaluated yet because none are available that read Code 39 -- although the company does not expect this to present a difficult problem. Sears has some reservations about slot scanners in any case. They feel that "customers tend to object to garments dragged over the scanners."

## COMMENT

*With Sears committed to bar code scanning, and with the recent rapid movement by the apparel industry and department stores, penetration in retailing is quickly moving toward saturation. Within the next few years, you will be hard put to purchase anything at retail that will not be automatically identified and processed using the ubiquitous bar code.*

We really cannot recall...

....any other project with so much concentrated clout as there has been behind the move to get bar code scanning up and running in the apparel industry. The VICS (Voluntary Interindustry Communications Standards Committee) group first met last June (SCAN Dec 86) as the brainchild of Roger Milliken, Chairman and CEO of Milliken & Co. On March 10 and 11 VICS held its second general meeting.

We will describe what we mean by clout: The session attracted over 200 attendees from 129 US companies; the roster included the top 65 retailers, 39 apparel manufacturers and 25 textile manufacturers who probably account for over 75% of US the sales of apparel; these companies were represented by their top executives, including over 60 Chairmen, Presidents and CEOs. (Our informal estimate is that the talent in the room represented about \$50,000 an hour.)

The VICS efforts cannot be compared to the really seminal, ground-breaking work that was done by the Supermarket/Grocery Ad Hoc Committee of the early 1970's. That UPC group introduced the radical concept (at that time) of scanning at retail. VICS, on the other hand, recognizes the clear and present danger to the profitability of the US apparel manufacturers and retailers as well as the footdragging in the industry that has held back progress for over 10 years with the wrong technology.

So they appointed a Steering Committee and a Technical Advisory Committee. And the Technical Advisory Committee appointed four sub-committees to surround and attack all of the outstanding issues. And they are exchanging information, adopting standards, and most important, providing the needed leadership to get bar code scanning going.

VICS intends to legislate itself out of existence within the next 12 months and to fold all of its activities into the Uniform Code Council. As a matter of fact, the UCC has already established a general merchandise group to address the questions and problems of the apparel industry.

No vendors of auto ID equipment or supplies are allowed at any of the VICS meetings. The group feels it is not yet ready for what they see as that additional diversion or distraction. A few companies are out there taking orders from those manufacturers and retailers who are already installing systems. There's lots more to come. Are you ready?

Since it was acquired....

....by Signode 2 1/2 years ago, RJS Enterprises has not been in the news as prominently as before. The Signode deal was a two step buy-out. The initial step was to purchase half the company (49%) from Harry Palmer and his partners with a commitment to buy the balance in three years. Last year, Signode itself was bought by ITW (Illinois Tool Works). ITW accelerated step two and the acquisition of RJS was completed in mid-February, 1987.

Up until three years ago, RJS was a very successful manufacturer of film masters and bar code verifiers. RJS also designed and manufactured the generators to make the film masters. These generators were installed with a number of companies throughout the world under a licensing agreement whereby significant royalty fees flowed back to the company. When Signode bought RJS, the deal did not include the business of making and licensing the film master generators. This was transferred by Harry Palmer to a separate company he owned

called Codemasters Technology. RJS retained exclusive license to produce film masters in the US only.

The major incentive for Signode to acquire RJS was the thermal printer that RJS had just developed and introduced in 1984. Demand printers were viewed as a major product with enormous growth potential in many industries, particularly automotive. It was because of this printer that Signode reportedly paid an 8-figure price for the company. At the time, RJS sales were running at about \$5 million per year.

ITW/Signode do not release any sales or profit figures for their RJS subsidiary. It is generally suspected, however, that the sales of the thermal printers have not met expectations. We spoke about this to Tee Migliori, who was brought in last year as President of RJS. He confirmed that performance problems persisted with the thermal printer until October, 1986. These difficulties have been remedied, he explained, and retrofits were installed to correct the problems with the units that had been sold. "Since then," he says, "the equipment is performing well and the company is working on software enhancements for the new units."

Another important reason for the lower profile of RJS is that the two people from the company who were most visible in the industry are no longer there. With the completion of the acquisition, Harry Palmer left to devote his energies to Codemasters Technology and to his other investments. And Kathleen Parsons, who is known for her spirited presentations at industry seminars and meetings, has retired. She and her husband, who is still active with RJS, were also original RJS shareholders and have shared in the substantial proceeds of the acquisition.

Last fall, when we interviewed Migliori at SCAN-TECH 86 (SCAN Nov 86), he emphasized that RJS will be selling the systems approach to bar code scanning. The company's manufactured products were to be augmented by hardware bought from other sources. He is still pointing the company in that direction, although there has not yet been too much evidence in the marketplace of any success.

#### As publishers of a newsletter....

....with subscribers in 22 countries, many of our story leads originate in the most unlikely places. This one started as a rumor in the Far East where it was told to a London associate, who relayed it to us -- and from what we can determine, the rumor is unfounded!

But it did lead us to a long, overdue review of what's happening at Instaread (Orlando, FL). The rumor was that Instaread was up for sale by its parent company, Rexnord (which bought Instaread from Control Laser in 1984). The story seemed reasonable because Rexnord was going through some corporate restructuring and coping with its new owners, Banner Industries.

The Instaread executives we spoke with say they have no knowledge of a proposed sale of their division. As a matter of fact, VP Sales Jack Cochran says: "Business has never been better. Sales in '87 are expected to double the \$2.5 million in '86 and double again in '88 to \$10 million."

The major product in the company's line is the LaserTrak fixed position omnidirectional scanner. Instaread has had success with this unit in large warehouse/distribution centers, particularly with catalog operations. Cochran

tells us that they have been winning all of the major awards for this application, including Sears, Target, Penney's and Consolidated Stores. The LaserTrak works especially well on high-speed conveyors with packages of varying sizes.

At the present time, Instaread is reported to have the largest back order position in its history. The company is not planning to offer any new products but will continue to emphasize its strength in high-speed, high-performance, fixed-position laser scanners.

#### With the many changes....

....occurring at Photographic Sciences this past year or so, a scorecard is needed to reasonably analyze their financial results. And, although we don't have one, bear with us.

For the year ended December 31, 1986, the company posted net sales of \$5.6 million, with a profit of \$124,000 from ongoing operations. Late last year, the company sold its Polygraphix Systems subsidiary, which must have been hemorrhaging badly -- based on the company's reported loss of almost \$700,000 from that unit alone.

Fourth quarter sales were \$2.4 million for Photographic Sciences, with an operating loss from ongoing operations of \$165,000. These ongoing operations include Optel Systems (acquired in August, 1986) and Techtran (with whom Photographic Sciences merged in November, 1986). Techtran produces a line of commercial and industrial digital recording equipment and telephone recording systems. Techtran's sales, based on one of last year's interim quarterly reports, run at about \$4.5 million per year.

We are really going to have to wait for future reports before we can evaluate the company's financial performance. In addition to the divestiture and acquisitions, Photographic Sciences changed from a fiscal year to a calendar year and comparative figures for equal periods are not reported.

Meanwhile, Chairman Jack Blackert anticipates that Optel's hand-held solid state laser guns will contribute significantly to sales and earnings in 1987. In addition to the Optel scanner and the newly acquired Techtran product line, Photo Sciences also produces and markets bar code film masters and verifiers, form slides for COM devices, and image test patterns.

Photographic Sciences, Box 328, Webster, NY 14580-0338; 716/265-1600.

#### The commitment....

....by Toys 'R Us to convert all of its 271 stores to UPC scanning was reported in SCAN last month. We said the major toy retailer planned to complete the installation within 18 months. Our basic facts were correct, but the speed with which the company expects to finish the job has already been accelerated.

Toys 'R Us awarded Symbol Technologies a \$5 million contract to deliver approximately 5,000 hand-held laser scanners by the end of this year. According to TRU's President and CEO, Norman Ricken: "We are now committed to be fully outfitted with these scanners for next Christmas season."

This is one of Symbol Technologies' largest orders for retail application, an area that the company continues to dominate with its helium neon Model LS7000.

### Soon after the...

....International EAN Association began taking in members from all over the world, rather than just from Europe, it realized that it would soon be running out of two-digit country prefix codes. Some years ago the Association took the initial steps to preserve the number bank by allocating three-digit country prefixes which allows for a four-digit field for manufacturers' numbers. This was designed for countries whose need for manufacturers' numbers were not expected to exceed 10,000 names.

The Association has now set up a new procedure which insures global coverage. A class of "small countries" has been established, which will all share the same prefix code: 950. Companies from these small countries will now be able to apply directly to Brussels for an EAN number. For example, Dolphin International Marketing Limited, based in the Cayman Islands in the British West Indies, has been assigned number 950 1001.

For those countries large enough to warrant their own three-digit country code, but which have not yet applied for membership, International EAN has pre-assigned numbers to them. Any companies within those countries can apply directly to Brussels for a number. A recent example is Ets Agouzzal & Cie, based in Essauoira, Morocco, which has been allocated number 611 1001. The prefix 611 identifies Morocco, and the remaining part is the manufacturer's number. Similarly, the Tunisian company, Sotasud, has been allocated the number 619 1001, with 619 identifying Tunisia.

These procedures should enable any manufacturer anywhere in the world, who meets the required standards, to be able to bar code products and sell them to scanning countries.

### South of the border....

....down Mexico way, they are gearing up for EAN bar coding. AMECOP is now officially the EAN affiliate for Mexico, which has been allocated the EAN prefix 750. Mexico thus becomes the 31st member of the International EAN organization.

Question: Considering the large number of Mexican imports brought into the US, particularly in the western and southwestern states, will the Mexican manufacturers choose to source-mark with UPC or will they use the EAN symbol?

Second question: Should there not be some pressure brought to bear on the US retailers by the Uniform Code Council to require that all new front-end installations be fully equipped -- both hardware and software -- to scan both symbols? If they start now, maybe in 5-10 years, we will reach some reasonable level of compatability.

### We recognize that....

.... the number of scanning stores may not be the ultimate gauge for a comparison of scanning penetration among the EAN countries. This is because the reporting frequency, data accuracy and average size of store vary from country to country. However, the figures do serve as a rough guide to progress -- and they are fascinating to follow. So read the following statistics about EAN store installations throughout the world, but use them with care:

EAN SCANNING STORES

|                                  | <u>Oct 84</u> | <u>Dec 85</u> | <u>Feb 87</u> | <u>Increase<br/>12/85-2/87</u> |
|----------------------------------|---------------|---------------|---------------|--------------------------------|
| France                           | 411           | 1,023         | 1,626         | 58.9%                          |
| Germany                          | 281           | 718           | 966           | 34.5%                          |
| United Kingdom                   | 155           | 498           | 793           | 59.2%                          |
| Sweden                           | 131           | 385           | 575           | 49.4%                          |
| Australia                        | 115           | 275           | 561           | 104.0%                         |
| Italy                            | 18            | 18            | 550           | 2955.5%                        |
| Rest of Europe/<br>Mediterranean | 429           | 953           | 1,669         | 75.1%                          |
| Rest of Southern<br>Hemisphere   | <u>33</u>     | <u>135</u>    | <u>235</u>    | <u>74.1%</u>                   |
| TOTAL<br>without Japan           | 1,573         | 4,005         | 6,975         | 57.4%                          |
| Japan                            | 3,200         | 6,021         | 7,930         | 31.7%                          |
| TOTAL                            | 4,773         | 10,026        | 14,905        | 48.7%                          |

We have isolated the statistics for Japan for two reasons: first, with more than 50% of all installations, the figures for that one country tend to distort the data for all others; and second, we have just received direct communication from the Distribution Code Center in Japan reporting the 1986 year-end figure at 12,000 stores instead of the previously reported 7,930. We note this wide discrepancy. Because we do not know the reason for it, however, we have arbitrarily chosen to use the lower figure to retain consistency with the data reported by the International EAN group.

The explosive growth in the number of scanning stores in Italy prompted us to double check the figures with the International EAN Association. The 30-fold increase is no typo. It turns out that for many years scanning systems required the approval of the Italian Ministry of Finance. Since approval had been withheld from all but one or two manufacturers, progress was slow. The restriction has now been removed, and it has unleashed the pent-up demand from those retailers who were waiting to install systems. We will be reporting more about what's happening in Italy in the near future.

There are 8 additional countries which are in the "100 Club": The Netherlands (386 stores), Norway (342), Belgium (278), Spain (188), New Zealand (155), Austria (116), Finland (116), and Denmark (107). Two other countries with a smaller number of automated retailers also deserve mention. Argentina now has 22 scanning stores, with one chain, Supermercados el Alcazar De Toledo, accounting for about half the installations. Yugoslavia has 42 stores, 40 of which are part of the Robne Duce Beograde department store chain. The other two installations are Duty Free stores at the Dubrovnik and Ljubljana Airports.

The riots and near-riots....

....that have increasingly occurred at sporting events in Europe -- particularly at English football (soccer) matches -- have prompted the

development of a new system for improved security. Significantly, the system, designed by Aquix Security (Lincoln, England), is based on bar code scanning.

The requirements are that the tickets must be sold in advance and that they are each printed with a unique bar code identification. When the bar coded ticket is presented at the gate -- and the entry gates for each ticket are specified -- the symbol is scanned and matched against the registered number in the host computer. The gate is then opened (within one second), admitting the ticket holder only. Once scanned, that ticket cannot be passed on to anyone else, because the computer will only allow that bar coded number to be used one time at each event.

The Aquix system was recently installed at the Luton Town Football Club in England using Symbol Technologies' LS8000 scanners to control the 29 entrances to the stadium. These newer, solid state laser diode units, normally hand-held, are mounted in a fixtured position for this application. The bar codes, which are incorporated within the plastic of the membership cards, are said to be of a complex form that is difficult to forge.

The Aquix Group is a research and development organization specializing in bar code applications to aid office efficiency, direct mail handling and security. Bar codes are being used for entry cards, over-printing of negotiable instruments, protecting cash and travelers checks and other documents subject to forgery, fraud or theft. The ticket-entry system is expected to find a wide range of applications in sports arenas, clubs, concert halls, theaters, convention centers and possibly even offices, factories, and blocks of apartments.

#### After a couple of years....

....of struggling to survive, Bar/Code Inc. (Richardson, TX) is still on the razor's edge. But VP Hugh Calder thinks they're going to make it.

We met Calder at the very first SCAN-TECH/US in Dallas (1982) where he was touring the show to learn more about the technology. He wanted to apply some of his talent for raising money in order to start up a new venture in this field.

He teamed up with Ed Halley who would become the company's Chairman and technical director. They developed a line of equipment that included portable and fixed scanners and wedges. In 1985, after a few delays (SCAN May 84, July 85), the company went public and raised some fresh capital.

But Bar/Code Inc. just hasn't taken off. Sales reached about \$700,000 in fiscal year 1986 with, unfortunately, about the same amount in operating losses. Cash ran out and the company wasn't able to meet all of its obligations. In addition, there were problems with the IRS; the company's stock was de-registered; there wasn't enough money to pay the accountants and lawyers to file the required SEC reports; and, at one point, orders came in for a new product and cash wasn't available to finance production.

Calder admits that it's been tough, but maintains that: "We have a good chance to pull through." He feels they have good products, a substantial ongoing order from Texas Instruments and a growing group of sales reps. He conceded that sales and marketing have been their weak link -- but he is optimistic based on active bids out for \$3.5 million in contracts. "We did too much too quick," he explains, "and now we're paying for it."

In order to meet....

....his prediction that sales will increase 20% and profits 50% for this fiscal year (SCAN Feb 87), Jim Williams, President of Imtec, will have to have a very good second half. It will certainly help if, during the next few months, substantial shipments are made against the government subcontract just awarded to Imtec by Severn (SCAN March 87).

| <u>IMTEC</u>       | <u>3 Months ended 12/31</u> |             | <u>6 Months Ended 12/31</u> |             |
|--------------------|-----------------------------|-------------|-----------------------------|-------------|
|                    | <u>1986</u>                 | <u>1985</u> | <u>1986</u>                 | <u>1985</u> |
| Revenues (\$000)   | \$ 858                      | \$ 877      | \$1,656                     | \$1,549     |
| Net Income/(\$000) | 40                          | 40          | 105                         | 78          |
| Net Income/Share   | .04                         | .04         | .10                         | .07         |

The grand-daddy of trade shows....

....featuring retail automation is the Supermarket Industry Convention and Educational Exposition. It is sponsored by the Food Marketing Institute (FMI) and will be held May 3-6 at Chicago's McCormick Place.

This year, this monster show encompasses 300 product categories featured by over 1,000 exhibitors. FMI says the exhibitions are arranged along "7 1/2 colorful, carpeted miles on 3 levels of the hall." More than 70 workshops are scheduled covering all aspects of supermarket operations.

Since 1974, the FMI convention has been the traditional showcase for the latest in point-of-sale scanning systems. As the technology has matured, there has been less attention paid to the hardware and more emphasis placed on the use of the UPC data obtained. One of the featured workshops, for example, will take a look at what retailers are doing today to realize both hard and soft savings from front-end automation.

If your product or interests are in retail scanning, then the FMI show is a must. FMI, 1750 K Street N.W., Washington, D.C. 20006; 202/452-8444.

Although Southeast Asia....

....doesn't immediately come to mind as one of the prime market areas for bar code scanning, Intermecc has established a beachhead there.

The company has opened the Intermec Pacific Support Center (IPSC) in Singapore to provide technical support services to the Pacific Rim. According to Gene Moore, International Service Manager: "This particular center is a major boon to manufacturers in Malaysia, Indonesia, Thailand, the Phillipines and elsewhere in the region, where bar code technology is highly applicable but, until now, comprehensive technical support was not available."

(Under the circumstances, SCAN Newsletter plans to start soliciting subscribers from that region with our next promotion effort.)