



# newsletter

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

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## In what could be a major technological break-through....

....in this industry, Norand has announced their new Model 20/20 bar code reader. According to the company, "the new device represents the newest and most advanced patented technology available to read, decode and process data encoded in the form of bar codes."

The new unit uses a xenon flash tube to illuminate the symbol by the touch of a button, and captures the reflected image on a photo diode array. The device is relatively small (8 oz.), hand-held, and has a depth of field up to 1 inch. For UPC version A symbols, it is claimed that the first read rate is 98%, and the second is 99.5%. In addition to UPC/EAN, units are available to read Coda-bar, Code 3 of 9, and Interleaved 2 of 5. The initial device will read a bar code up to 2 inches long. Additional features claimed by the company include ability to read any color combination bar code, on variable package shapes, and on most all surfaces.

The company reports that three patents related to this scanner have been approved but not yet issued. A major marketing effort for retail applications was launched at the FMI Show in Dallas. At this time the primary efforts will be to OEM to other companies which will interface (standard ASCII output) the Model 20/20 to their own data processing hardware and market the package.

Norand sees supermarket applications at both point-of-sale and backroom operations such as direct store delivery control. They are now in field test with Data Terminal Systems, and other companies are being approached. For non-supermarket retail applications, the manufacturer anticipates that the smaller retailers, such as liquor, drug and convenience stores, will represent their major opportunities.

As their marketing plans were described to us, Norand plans to attack the large middle portion of the potential scanning universe. They do not expect to compete with the high-speed supermarket laser slot-scanners at one end; nor with the wands purchased for infrequent, sporadic use at the other end. They believe that this leaves the center of the market, representing 80% of the total, which will be fair game and where Norand expects to capture its significant share. One of the major claims made by the company is that the 20/20 "will not re-read a code in error as wand units frequently do. Once a bar code impression is registered, another impression will not be registered until the button is depressed again."

The Model 20/20 is priced at \$1,350 for a quantity of 1 and the company will assume "an aggressive discount posture" for larger OEM procurements. The unit has been shown privately to a number of companies, and Norand claims to have

sizeable confirmed purchase orders in hand. Norand Corporation; 550 Second Street SE, Cedar Rapids, IA 52401; 319/366-7611 or 800/553-5971.

In a move....

....that has been rumored for a number of months, Photographic Sciences has filed with the Securities and Exchange Commission for an initial public offering of its securities.

According to the preliminary prospectus, dated April 6, 1981, the company is offering 2200 units at \$1,000 each. Each unit consists of 250 shares of common stock, plus 110 Class A warrants (exercisable at \$4.00/share), and upon exercise of such Class A warrants, an additional 110 Class B warrants (exercisable at \$3.75/share). (You'll have to read that a few times to get it straight. We interpret it to mean the stock is priced at \$4.00/share, with an opportunity to buy 220 additional shares, at about the same price, at a later date.)

As is usual when a company is about to go public, the prospectus can be very revealing. For the fiscal year ended 6/30/80 the company's sales were \$4.4 million on which the earnings were \$22,000. During the previous fiscal year, ended 6/30/79, sales were \$3.1 million and earnings were \$140,000. For the six-months period ended 12/31/80, there was a drop in sales to \$1.6 million and a reported loss of \$209,000. The company attributes this loss to a "combination of decreased sales due to the loss of the major supplier of equipment for resale and the expansion of product development." There are also detailed breakouts of the company's sales by product line for the past 5 years, plus announcements of new products and marketing plans.

For a copy of the prospectus, contact Foster, Hickman & Zaenglein, 183 East Main Street, Rochester, NY 14604; 716/232-3320 or Photographic Sciences directly. The company has announced that it expects the public offering to commence in late May 1981.

Symbol Technologies continues to report....

....favorable earnings (SCAN Apr 81). For the six-month period ended February 28, 1981, the company had sales of \$1.6 million compared to \$1.0 million for the same period last year. Net income for the same periods was \$108,000 (\$.04/share) this year compared with a loss of \$110,000 last year. The latest net income figure includes \$146,000 net interest income and \$42,000 extraordinary credit arising from a tax loss carry forward. The company has also announced that they received a commitment for an Industrial Revenue Bond for \$1.5 million to finance construction of a new 40,000 sq. ft. plant and headquarters in Hauppauge, NY.

In Europe, Symbol Technologies terminated their exclusive distributorship agreement with Plessey/France and announced the appointment of individual distributors for each country. British Printing Company (UK) and Magin-Holland were the most recent appointments.

There were a few positive indicators....

....toward implementation of bar coding in the pre-recorded music industry at the April Convention of the National Association of Recording Merchandisers

(NARM) in Florida in April. Most of the major manufacturers of records and tapes are committed to printing the UPC symbol on new releases. At the present time more than half of the top selling records in the country have a UPC symbol on their jackets. CBS Records, an industry leader, is totally committed to machine readable bar codes, and has installed an in-house scanning system. A few major wholesalers/retailers are using, or planning, systems around scanning.

For the most part, however, the retailers are taking a wait-and-see attitude. There does not seem to be a full understanding of the advantages of bar code scanning and there is no ready package that they can buy. There is much work to be done in this industry, and excellent opportunities for system suppliers.

During the first quarter of 1981....

....there were a total of 385 new UPC scanning installations in the US and Canada. Although ahead of the first quarter of 1980 (304 stores) this was a sharp drop from the last quarter of 1980 (458 stores). The scanning scoreboard looks like this:

	Total as of		1st Quarter		Total as of	
	12/31/80		1981		3/31/81	
	#	%	#	%	#	%
NCR	1,192	38.4	151	39.2	1,343	38.4
IBM	929	29.8	69	17.9	998	28.6
Datachecker	621	20.0	86	22.3	707	20.2
Data Terminal Systems	174	5.6	49	12.7	223	6.4
Sweda	185	6.0	25	6.5	210	6.0
DataCash/Berkel	7	.2	5	1.3	12	.3
Total	3,108	100.0	385	100.0	3,493	100.0

NCR is aggressively holding on to their No. 1 position with 38.4% of the market. Lest anyone ignore that, their latest ads feature "The unbeatable system, from the company that's Number One in scanning installations". DTS had a good quarter and has inched ahead of Sweda to rank No. 4 in the scanning hardware sweepstakes. IBM has not been maintaining their share of market and is now running 10 percentage points behind NCR.

It is difficult to ignore that the industry has just completed a poor quarter, in spite of most predictions that the number of installations would be rising each month. There is much speculation on why this happened: normal slowdown during the first quarter of the year; shaky economic conditions; outrageous cost of money; and just possibly the most frustrating of all --

The newly revived opposition to item pricing....

....has become a hot issue once again.

- Somehow when it happens in Washington, DC, the level of attention is multiplied. It even drew a paragraph in the Kiplinger Washington Let-

ter (4/10/81). We are referring to item price removal by the Giant Food Stores. The company went "public" with this program and immediately drew fire from labor and consumer groups. Giant promised to lower prices concurrent with the removal of prices from the products, but that did not seem to satisfy any of the vocal groups. (Safeway, by the way, immediately announced that they would match prices even though they are not removing prices). Giant announced their move with a major ad campaign in print and on TV, which they later down-played in face of the strong opposition from organized consumer groups. Giant, the first chain to go 100% scanning, claims that their customers don't mind at all, but TV news coverage of objecting pickets outside their stores has muddied the water considerably.

- In Los Angeles the Scanner/Shelf-Price Monitoring Program, supervised by the City-Wide Oversight Committee on Retail Grocery Price Marking, has just issued its second quarterly report. Looking at the same set of figures, the opposing camps naturally arrived at conclusions 180 degrees apart. The scanning supermarkets believe that a total of 67 "valid responses" is a sign of minimal objections by the consumers. The unions and consumer groups point to the fact that these responses report incorrect shelf prices, missing shelf tags and difficult to read receipt tapes. It is difficult to believe that the final results at the end of one year will change the minds of any of the involved participants. The study covers 15 stores that have been permitted to remove item pricing, in 15 council districts in the L.A. area.
- In New York the Food Merchants Association is fighting to have the state law on item-pricing liberalized. Some think it is a losing battle. Pennsylvania now has item-pricing laws under consideration in the state legislature.
- In a recent Progressive Grocer interview with Stephen Brobeck, Executive Director of the Consumer Federation of America, he stated, "We think that if industry could demonstrate to consumers a significant price savings along with the ability to keep accurate price information in the computer, then consumers and consumer groups might reconsider their opposition to item-price removal." He then goes on to say that when supermarkets remove item prices, "there's less of an incentive to keep shelf labels and computer information on prices as accurate."
- In the same article, the leader of the United Food and Commercial Workers Union stated, "You can't stop technology. However, we are in favor of community activity for mandatory price marking."

#### Comment

*The issue may have grown out of proportion to the stakes involved for the consumers and unions. Reading their statements, they seem to giveth and taketh away, hardly pausing to catch their breath. It was with almost an attitude of resignation that Byron Allumbaugh, Chairman of Ralphs Grocery Company, recently told us, "Item pricing is almost entirely an emotional issue and a great favorite of the so-called consumerists, most of whom are supported by the labor union." Giant's move was a courageous one, and although, from appearances, they may have gotten clobbered in the early rounds, it's too early to tell. Doesn't anyone think it's worth some effort at an industry level?*

With the admission of New Zealand....

....in February 1981, the EAN Association now numbers 16 member countries (New Zealand's Flag Code will be 94). The EAN has indicated that it does not expect to admit any more countries to the organization and that smaller countries will tend to affiliate themselves with larger ones.

The total number of company numbers issued in all countries is about 7,000 with more than half the activity in Germany. There are 57 scanning stores: Germany--23; Sweden--7; Japan--7; Italy--6; UK--6; France--3; Switzerland--2; and Australia, Netherlands and Norway with 1 each. The hardware installed is by: IBM--26; NCR--10; Anker--7 (all wand scanners in Sweden); Nixdorff--4; DTS--2; and 8 scattered among one-half dozen other companies.

EAN has also announced that it has a working committee devoted to symbols for despatch outers and is closely monitoring the work done by groups such as the Distribution Symbology Study Group and FEFCO. The EAN Group continues to express concern about the progress of the compatible hardware in the United States to scan both UPC and EAN. It announced that DTS and DataCash/Berkel are currently installing compatible equipment, and NCR has the hardware capability which will be activated when the appropriate software is installed.

After a considerable amount of study....

....and preparation, the book publishers in the United Kingdom have adopted a code and symbol. Spearheaded by Paul Chartier of W. H. Smith, England's leading book seller, the system features a bar code symbol on all hard cover and paperback books.

The symbol adopted is similar to the one used in the US and Canada, and both are based on the UPC/EAN format plus a supplemental code for additional information. Unlike the US/Canadian system however, UK incorporates the full ISBN (with an appropriately changed check digit) into the EAN portion of the bar code symbol using a specially assigned three-digit prefix (987). The price is shown in the five-digit supplemental code.

In addition, the ISBN and price may be shown in OCR-A characters printed in two lines above the bar code symbols. This will then accommodate either the bar code or OCR scanning systems whichever is installed by the publishers, retailers, distributors and libraries. All are expected to use some portion of the machine readable symbol.

The new system was publicly unveiled to about 200 publishers and book sellers at a special session of the Booksellers Association Conference in Eastbourne on April 25. The operating manual will be published in early May and it is expected that implementation will start at that time. Major publishers in the UK have already indicated that they will support the project by placing symbols on their books as soon as possible. Roy Francis, Chairman of the Joint Working Party that supervised the program, was very instrumental in securing the cooperation of the publishers in sponsoring the bar code symbol.

Datalogic has implemented....

....its plan to establish a US base of operations to penetrate this market (SCAN Dec 79). Luciano Mattioli has been sent over from Italy as General

Manager. The company is now offering its Model M-10 mini-scanner, a helium neon laser beam scanner for reading compact codes (170 mm reading field). Priced at \$10,370, the unit has a scanning speed of 200/second, minimum bar width recognition of 0.2 mm, a reading distance of 104 mm and can decode EAN/UPC, 2/5, Interleaved 2/5, Code 3 of 9 and Codabar.

The Model LS 400 has a larger reading field (750 mm) and reading distance (500 mm) at 180 scans/second, scans the same codes and is priced at \$10,450. Datalogic also markets a fixed-position reader (incandescent light) with a reading distance of 10 mm. Datalogic Optic Electronics, 2904 Southwood Drive, Westlake, OH 44145; 216/871-0604.

#### There were two new quality control devices....

....announced this month for bar codes. Photographic Sciences announced the Quick-Check, "a versatile, solid-state quality control unit with switch selectable symbology for wand reading large volumes of code in a short span of time." The unit is made to test the quality of printed symbols, and features a visual LED display that indicates when a symbol is in or out of agreement with published specifications. The unit will be available for shipment in July. Photographic Sciences, 770 Basket Road, Webster, NY 14580; 716/265-1600.

A relative newcomer to this industry has also announced a new verification device. General Graphics has introduced a unit which it claims will verify encodation and the check digit, indicate when bars and spaces approach 75% of allowable tolerance, and check for light reflectance. The unit is said to read and verify UPC/EAN, Code 3 of 9, Interleaved 2 of 5 and Codabar. The device is priced at \$1,995 to \$2,495 depending on features and model. Maintenance contracts and 12-month leases are available. The unit can also be custom designed, incorporating a laser scanner, for on-press verification of symbols. General Graphics, Box 323, Tarentum, PA 15084; 412/224-6843.

#### Intermec has announced....

....a new bar code light pen developed for harsh industrial applications and featuring a heavy gauge stainless steel housing, replaceable heavy duty cord and rugged connectors. Two models of the hand-held scanners are available: Model 1250 scans standard density black and white bar code labels with narrow bars of .0075". Model 1251 reads low density bar code labels, including dot-matrix printed labels with colored inks. Single quantity prices begin at \$540 with quantity discounts available. Interface Mechanisms, Box N, Lynnwood, WA 98036; 206/743-7036.

#### Personnel changes....

....that have occurred during the past few months: Skan-A-Matic appointed Harold Thrippleton as Director of Sales and Engineering and David Czaplicki as Marketing Manager; Photographic Sciences appointed Roger Hewett as Vice President of Sales; Symbol Technologies has named Charles Hancock as Vice President of Manufacturing.