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

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INCLUDING THE INTERNATIONAL EDITION

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There is growing evidence....

.... of a greater awareness of the importance of the quality of the printed bar code symbol as it relates to scanning system efficiency.

In the UPC area, scanning supermarkets have always been a bit ambivalent about insisting that source-marked symbols meet specification and provide high first-time read rates at the checkout counter. The UPC Council in turn has waffled over approving any verification procedures which provided absolute measurements of bar/space widths. The UPCC opted instead for a non-specific caution to printers to follow the somewhat simplistic procedures in the specification manual (printability gauges, test print runs, etc.).

Now it seems as if the individual retail chains are trying to sound a bit tougher — but the bark may still be worse than the bite. Pathmark (Supermarkets General/NJ) released a study estimating that poorly printed symbols are costing the company about \$2 million per year in time lost rescanning. Truncation, symbol location, and color contrast have been pointed out as the primary culprits, and the chain has told their suppliers to shape up or else. Actually "or else" may mean different things to different vendors: if you are a new or non-essential supplier, you may actually be banned from the store after one or two warnings; if you are an established national brand you may be notified and get your wrist slapped now and again (loss of shelf position, restrained promotional activity).

The US Department of Defense is also aware of its dependency on the readability of the code and accuracy of the encoded data under its LOGMARS program. "Concern within DOD pertaining to the readability of the bar codes has resulted in a determination that bar codes will be examined through an intensified verification program.... Contractors not providing bar codes in accordance with the standards will be advised of such discrepancies." Inspectors have been known to hold up shipments where bar codes do not meet spec. Of immediate concern is a long laundry list of symbol deficiencies starting with missing labels and ending with incorrect data encoded.

The bottom line is that scanning systems which do not directly control the printing and verification of bar coded labels are at the mercy of those that do the source marking. As the auto and health industries get into their respective programs, they will face similar difficulties. It is important that the end users, such as supermarkets and the DOD, continue to point out the deficiencies, and demonstrate that they are actually monitoring symbol quality. The suppliers are bound to cooperate and improve the printed bar code quality on their next runs.

This could provide a shot in the arm to the companies offering verification equipment: Photographic Sciences, RJS, Skan-A-Matic and Symbol Technologies.

The Pathmark, DOD reports could be effective marketing and promotion tools for these type of devices.

## Another important European....

....supplier of bar code equipment is moving into the US arena. <u>Swedot</u>, of Gothenburg, Sweden, is in the process of establishing US operations to market its line of thermal, needle and ink jet printers.

President Olle Hiden called to tell us that offices will be opened on the west coast in the Los Angeles area. The US effort will be headed by Ed Andersson, newly appointed Vice President of US Operations. Andersson has left Computer Identics after almost 15 years with that company, where he was VP/Communication and in charge of international operations. He was actively involved in negotiating the European joint venture of Computer Identics with Bekaert (SCAN Nov 84; Dec 84). Andersson also just completed a very successful two-year stint as President of AIM/US where he is generally credited with enlarging the scope, size and influence of that organization.

Swedot has been selling printers in the US market on an OEM basis. Companies like Toledo Scale and Mathews International have integrated the Swedot products into their own systems or marketed them under their own names. The company now plans to establish its own identity with a dedicated staff and distributor network.

This will not be the last of the foreign companies to bring their products and expertise to the US market: Datalogics (Italy) has been here since 1979; Barcode Industries (France) since 1984. Others will follow bringing new products to the largest market concentration that exists today.

Swedot Systems AB, Gamlestadsvagen No. 8, 4502 Gothenburg, Sweden; tel. 031 250205.

# Not all success stories....

....in the bar code industry relate to the established industry applications such as UPC, automotive, DOD LOGMARS, or health industry. Metrologic Instruments is flourishing by seeking special situations and applications for scanning:

- Kodak, which has extensively adopted bar coding on its products (especially the disc film), has standardized on Metrologic's scanners for use in their film processing operations. Each processing lab uses about 9 or 10 fixtured laser scanners. Metrologic has also sold scanners for similar systems to independent film processors and expects this to be a growing market.
- A fare collection system, designed by Systems Assurance Corp. (Yarmouth, ME) uses Metrologic laser scanners on the Maine Turnpike. Bar coded tickets are scanned when issued to vehicles entering the highway, and again when returned at the exiting point. Registered into a central computer, vehicles are tracked and traffic movement analyzed. About 100 fixed-position table-top laser scanners have been installed, and other Turnpike authorities are being solicited to install similar systems.
- Republic Bank/Dallas has adopted bar code scanning to control and manage the flow of incoming and outgoing work throughout their entire check

processing operation. As part of the system bar coded deposits are laser scanned, weighed and receipted at time of arrival to provide positive time, source, customer, courier and processing priority.

- The Envipco bottle and can return scanning units using Metrologic laser scanners (SCAN Aug 83) seem to be doing quite well. Envipco just installed their first machines to handle plastic bottles and that is expected to increase the market. With other state legislatures exploring bottle-return laws, the company expects that this could become a well-developed product area.
- One of the new products, not yet released, that President Mike Sanyour described to us is a "small, attractively priced slot scanner for the smaller retail stores." Sanyour hopes to be able to debut this product at the FMI Convention in May. Metrologic continues its current arrangement with NCR selling hand-held laser scanners for retail applications.

Metrologic annual sales are approaching \$10 million and there are a number of new products underway, according to Sanyour. The company would seem to be a prime candidate for a public offering, and in fact some preliminary investigation has gone forward.

Metrologic Instruments, Inc., 143 Harding Avenue, Bellmawr, NJ 08031; 609/933-0100.

#### Due to lagging sales....

....in January and February, <u>Intermec</u> anticipates revenues for the fourth quarter F/Y 85 (ending 3/31) to be somewhat less than the previously forecast \$12-13 million. Sales and earnings will be about flat with the second quarter results which were \$10.2 million in sales and \$941,000 in profit. At these reduced levels, annual sales will be about \$40 million and profits \$.77/share (compared to last year's \$27 million and \$.66 profit). This may be the first three-month period in a few years in which Intermec sales were not greater than the previous quarter.

We spoke with President David Allais about the reasons for the drop in sales during the fourth quarter, and whether this portends a leveling off in the substantial sales increases experienced by his company over the past few years. Allais feels that it is realistic to expect that Intermec will continue in F/Y 1986 with the levels of sales growth (over 50%) that it has posted in recent years. His only caution is whether or not the economy holds up. "Although bar code scanning may be somewhat more resistant than other industries to fluctuation in the general economy," he states, "nevertheless any general recession would have to affect sales and profits in this industry as well." He did not seem too concerned about the fourth quarter drop in sales, attributing it more to "glitches" in scheduled deliveries and contract fulfillment, than to any basic change in direction.

#### The supermarket industry's....

....monster annual FMI extravaganza is larger than ever this year. There will be an additional 100,000 sq. ft. of exhibit space on the 17 acre, four floor exhibit area at McCormick Place in Chicago, all vying for the attention of the expected 23,000 industry executives. As usual, this convention provides an

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early preview of the merchandise that will appear on the supermarket shelves, and the systems that will handle the goods, services, customers and employees. There will be seminars on the analysis and use of scanning data for merchandising decisions exploring expanded use of scanning beyond front-end checkout.

The leading POS/scanning equipment companies (NCR, Datachecker/DTS, IBM, Sweda, TEC, Spectra Physics) will be showing their latest; MSI Data and Telxon will be demonstrating their portable telecommunication data capture units; Dennison will have a new UPC tag and label bar code printer; and there will be many other bar code-related exhibits. National Semiconductor's Datachecker/DTS Division will showcase an improved operating system for scanning controllers, which doubles communication speed (to 4800 Baud) and greatly increases file capacity (to 64,000 PLU's).

And, of course, if you just can't wait to see the latest in a complete, uncut, deboned chicken; or a double-sized Baby Ruth candy bar; or in-store insurance centers and video tape rental; or a pre-sliced ham, sliced in one continuous spiral around the center bone and put back in the package; plus some low calorie extruded potato snacks or not so low calorie cookies and cakes galore; then make your reservation now for the <u>FMI Supermarket Industry Convention & Exposition May 5-8</u>, 1985.

FMI, 1750 K Street NW, Washington, DC 20006; 202/452-8444.

#### Ever since its introduction.

....in June, 1981, we have been alone in attempting to warn the world about the invidious campaign by National Semiconductor's Datachecker Division to flood the world's supermarkets with their Positalker talking cash registers.

But no one would listen to us. Now the company has announced that in addition to English, French and German, scanning cash registers in Jakarta will be intoning items and prices, and thanking shoppers, in Indonesian.

Mark our words: this is the real manifestation of the "domino theory" we were warned about in the 1960's. Today Indonesia; tomorrow the Philippines, Hong Kong, Korea and China. Big Sister is talking to you!

#### According to a letter ....

....we received from Marianne McKeown of <u>Sumitomo Electric USA</u>, the National Retail Merchants Association (NRMA) exposition in January wasn't as devoid of OCR-A scanning equipment as we described (SCAN Feb 85). "Since your primary interest is in bar code, you obviously missed the OCR-A systems being demonstrated at the IBM and Fujitsu Systems of America exhibit, and at the Sumitomo and REI booths. These same manufacturers also exhibited this equipment at the 1984 NRMA exposition."

According to McKeown "as systems are evaluated, each retailer must examine all automatic identification technologies available, and determine what best suits their requirements.... At Sumitomo we share in your excitement and enthusiasm of bar code systems being tested and installed. We also feel that OCR-A is not dead -- there are applications best suited to OCR-A and others best suited to bar codes."

### Two of the stalwarts....

Deloitte Haskins & Sells, one of the big 8 accounting firms. They will be the nucleus of the Manufacturing Management Advisory Service within the company's Management Consulting Division. Larry Higgason was one of the founders and served as a Managing Director of the AIAG; Ed Coe was active with the bar code group of AIAG and has been arranging and conducting seminars on the subject for the automotive industry.

Coe will be Senior Project Manager with emphasis on bar code scanning in manufacturing. Initial focus, of course, will be on the auto industry (DH & S just happens to be the accounting firm for General Motors). The new management group now consists of 2 people — the plan is to have an international group numbering over 100 within 2 years. The approach will be management advisory; i.e., survey the manufacturing operation, recommend equipment, and then coordinate, design and implement the systems. Both Coe and Higgason plan to remain active with AIAG.

Deloitte Haskins & Sells, 100 Renaissance Center, Suite 3100, Detroit, MI 48243; 313/446-0178.

#### A sufficient number of books, ....

....are now carrying EAN bar codes in some EAN-member nations to encourage retailers to move ahead briskly with front-end scanning systems. In the UK, for example, the level of source marking is over 60% of the copies sold. The combined OCR-A/EAN bar code symbol is most commonly seen on paperbacks, but many hardback and children's books are being coded.

W. H. Smith and the Blackwell Group, acknowledged as the No. 1 and 2 booksellers in terms of market share, are making known their EPoS plans. This year, W. H. Smith is equipping 6 more stores with DTS scanning terminals to add to its pilot store which has been operational since 1980. The big move forward comes next year when the company plans to convert an additional 100 stores. By 1990 all 360 stores could be scanning. Blackwells had installed two EPoS systems using OCR-A data capture but were disappointed with the results. Their plans are to convert the OCR-A stores to bar code data capture, replacing all EPoS equipment. A gradual installation program will be implemented throughout the 53 stores in the chain, using Nixdorf equipment.

Publishers have started to make use of the bar code for returns processing. Hodder & Stoughton (publishers of a number of paperback and hardback imprints) have installed a system developed by Numeric Arts, based on the Laserscan 3100 scanner. The scanning computer is linked to Hodder & Stoughton's mainframe computer as part of an integrated accounting and management control system. Numeric Arts is also the vendor of a slightly different system installed by Transworld Books (the UK subsidiary of Bantam). This system is conveyor based and can handle over 3,000 books an hour.

In France, where a number of books carry EAN bar codes, Hachette (the French book store chain) has 18 scanning stores. In Kempton City, South Africa, the CNA store is scanning books, magazines and stationery. The APNA (Australian EAN affiliate) has adopted standards similar to those of the United Kingdom.

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The American book trade has got itself into a dilemma (SCAN Feb 85) with the controversy over price-point codes and symbols. The EAN community has been able to move steadily forward in this sector because price-point coding, whereby supermarkets can have one code for all titles of a particular price from a publisher, is not allowed under EAN rules. If supermarkets want to sell books — and many do throughout the EAN domain — they must accept title specific code. Given this adherence to the principle of "unique and unambiguous coding", the EAN community has moved ahead: first with national standards for books; then growth in source marking; and now the implementation of scanning systems.

#### Datalogic SPA, the Italian....

....manufacturer of bar code equipment has decided to change the basis of its distribution in the United Kingdom. Under Pepperl & Fuchs the business expanded, but it became obvious that the market required services, such as local software support, that only a subsidiary could provide. A wholly-owned subsidiary, Datalogic (UK) Limited, has been established and this organization assumes all marketing activities for Datalogic's bar code reading equipment. The relationship with Pepperl & Fuchs is still very good and it will continue to market Datalogic's photoelectric range of products. Chris Harrison transfers to become Product Manager, Datalogic (UK).

Datalogic (UK) Limited, Unit 8, Redbourn Industrial Park, High Street, Redbourn, St. Albans, Herts AL3 7LG, United Kingdom; UK 'phone: (0582 85) 4344; Telex: 826347.

#### At the RMDP-sponsored....

.... Monte Carlo Convention on Retail Automation (Feb. 26-28) there were 250 delegates from 15 countries (including one from Monaco!). Some seminar highlights:

- RMDP estimates that European EPoS expenditures will be close to £2,000 million (\$2.2 billion) over the next five years. Some individual retailers will spend up to £100 million (\$110 million). This will be for scanning and non-scanning systems, including hardware and software.
- At the session on "Setting the Industry Standards for Coding and Marking" there was a clash of opinion about EAN bar coding vs. OCR. Denis Levy, Nouvelles Galaries Renuies, the French department store, argued strongly for OCR on the basis that source marking was unlikely and that OCR labels were far cheaper than bar code labels. Much of his argument centered on the fact that for general merchandise, the retailer has to price mark the goods. John Read, of W. H. Smith, the UK variety store, stated his company's commitment to EAN and cited the excellent progress achieved to source mark books, records, stationery, periodicals, toys, computer software, greeting cards, knitting wool, etc.
- RMDP data on the cost of scanning indicated that the newer microcomputer based EPoS equipment was cheaper per lane than large systems using in-store controllers. With the cost of scanning no longer biased to favor the multi-lane outlets, this will tend to encourage the spread of scanning to smaller stores.

- One UK department store plans to adopt EAN scanning to include 232 terminals with phased installation department by department through 1987, all costing £2.3 million (\$2.5 million). Plans are going forward in spite of their projection that, based on hard savings, the break-even point of the project is not reached until the eighth year.
- Luigi Penati, Editor of Italy's <u>Distribuzione Moderna</u> reviewed legislation in that country requiring precise sales logging. Although this may encourage the use of more sophisticated terminals, other factors, particularly the country's widely-distributed population with smaller retail outlets, will restrict the growth of scanning. According to Penati "It is a question of evolution. The social structure, the dispersed population will always act as a limiting factor".

#### A new software....

....package is available for demand printing of bar code labels. Designed and sold by <a href="Tharo Systems">Tharo Systems</a>, the software runs on the IBM PC and will address any printer currently supported by a QMS Magnum Controller or Analog Technology's Model 195 Controller.

According to the company, the <u>Easylabel 1</u> program is very flexible, and will meet automotive, LOGMARS, health industry, and UPC shipping container symbol standards. It also has the capability for designing and printing customized formats in an area of 13.1 inches by 9.65 inches. Prices start at \$1500 and drop to \$1000 for quantities of 100. Tharo Systems, 1204 Queens Avenue, Brunswick, OH 44212; 216/273-4408.

# A fully portable....

...electronically controlled labeler by Monarch Marking prints a variety of bar codes and human readables. The Pathfinder can operate off-line using a battery powered handle, or AC power cord; or with its newer on-line model, which interfaces with the retailer's computer to receive and send merchandise data. According to the company, the most innovative feature is the combining of thermal print technology with print and apply technology. Monarch recently received a \$2.5 million order from Wal-Mart for thousands of these Pathfinder label printers and model 2020 stationery printers.

Monarch Marking, Box 608, Dayton OH 45401; 513/865-2123.

# We noted an unusual ....

....number of companies offering <u>bar coded metal tags</u> and labels at the SCAN-TECH '84 Conference (SCAN Dec 84). Now comes another entry into this specialized area.

Miller Dial has introduced its Fotofoil M material for photographically printing labels with bar codes. According to President Leonard Kranser, "Fotofoil M is the aluminum equivalent of black and white photographic paper and can be contact printed using conventional film negatives. The resultant metal labels are extremely durable and meet or exceed all applicable government specifications".

Miller Dial/Fotofoil Division, Box 5868, El Monte, CA 91734; 800/423-4548.

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#### Over the years....

...we have been subjected to some outrageous puns and malapropisms related to automatic identification, to which we now add a few of our own:

Baa codes for identifying sheep

Bark codes for systems installed in kennels and forests

Bach codes for music automation

Bad codes for upper respiratory infections

Baal codes for fertility rite procedures

Bah codes that don't work

Blah codes when you're feeling the blues

Bark odes for canine poetry

OCRA for your vegetable garden

OCRB for hive keepers

ANSI standards designed to relieve nervousness

Do you have any of your own that you are not ashamed to see in print?

#### Intermec UK is....

...."bursting at the seams" in its existing premises according to Roger Lavery, Managing Director. So it is on the move to new quarters with better facilities for offices, workshops and a demonstration room. The new address: Intermec (UK) Ltd, Unit 8, Cutbush Park, Danehill, Lower Earley, Reading, Berks RG6 4UT.

### A new bi-monthly publication....

....with the catchy title <u>IN-HAND</u> deals with the portable terminal sector. Coverage ranges from hand-held computers up to the larger devices that sit on your lap or need a case to lug around. Stories cover new equipment, applications, conferences and comments.

IN-HAND is published by <u>Nydus Consultants</u>, who provide consultancy services and organize conferences. Two seminars planned for the future are: Portable Computing For Sales and Marketing Management (25-26 April); and Portable Computing and Data Capture (1-3 October).

Nydus Consultants, Ltd., Victoria House, 411a London Road, Camberley, Surrey GU15 3HZ United Kingdom.

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