



newsletter

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

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



ISSN 0273-3080

SCAN-TECH[®] SPECIAL SHOW '82 EDITION

Volume VI Number 3

November 1982

Welcome....

....to the World of Bar Code Scanning and Scan-Tech 82. This is by far the largest and most significant gathering of exhibitors and registrants to a conference devoted entirely to this technology and its applications. SCAN NEWSLETTER has been the published voice of this industry for over five years, and is proud to have provided support and impetus to this important convention.

Machine-readable bar codes have been around for a number of years. The highly visible Universal Product Code (UPC) has been speeding things up at the supermarket checkout counters for almost 10 years. The UPC code and symbol has proven itself many times over on the 65,000 scanners located at the front end of stores in the US and Canada. It is now becoming an integrated part of total operations.

And UPC with EAN, its world-wide counterpart, are not just for the supermarkets. Many other types of retailers are on the verge of automating with those "funny little lines" or "zebra stripes". Mass merchandisers, drug chains, liquor stores, record shops, and just about every other consumer outlet (except department stores) are rapidly moving in this direction.

From the consumer unit of sale, it is only a short step to the Case Code, soon to be implemented. Symbols will be appearing on all shipping containers. At that point the means will be available to scan a major portion of all consumer goods world-wide. It will lead to in-plant systems and scanners will track merchandise through transportation and on to distribution warehouses.

On a parallel track, the bar code is becoming the machine-readable symbol of choice in service and manufacturing industries. It is being standardized by

the automobile producers; appearing in school and public libraries; controlling distribution in blood banks; providing input to talking books and musical instruments; and the list goes on and on. With the US Department of Defense requirement that bar codes appear on all items procured after July 1, 1982, the loop is almost completed.

What remains is the understanding, acceptance and implementation of this relatively new technology by individual companies, to improve productivity, increase accuracy and reduce costs.

And that's what this conference is all about. Two days may not be enough time to see everyone and ask all the questions -- but it's the best opportunity ever provided to see it all together.

The day we mailed....

....our October issue of SCAN, we learned of the suspension of negotiations between Photographic Sciences and Identicon. Last month's page one feature story was a has-been before the Post Office cancelled our stamps.

In that story we described the agreement in principle for Photo Sciences to acquire the assets of Identicon for \$1.1 million in convertible preferred stock. The agreement was subject to the approval of the directors and stockholders of both companies, which was expected in late October. Before that happened, however, the lawyers were instructed to break off negotiations.

The difficulty stems from the poor operating results reported by Photographic Sciences for Fiscal Year 1982 (6/30/82), and the delays the company was experiencing in obtaining additional financing. The audited year-end results reflected a \$1.5 million loss on sales of \$4.3 million. The net working capital of the company was reported as a negative \$2.1 million, a \$3.5 million reduction from the year before. Because of the uncertainties regarding the operating losses and the rights of the banks to accelerate the maturities of the company's long-term debt, the auditors withheld their opinion on the year-end financial statements.

These facts convinced Ferranti-Packard, owners of 80% of Identicon, to suspend negotiations. Under the proposed terms of the sale, Ferranti-Packard could have wound up with almost 25% of the stock of Photo Sciences. Barry Hercus, President of Ferranti-Packard, told us that he likes the bar code scanning industry. Identicon is too small an operation for his company to give it the kind of management attention it needs, and that's why he has been looking for a buyer. But he would like to retain a position in this industry. He had hoped the Photo Sciences' plans for integrating the Identicon operations into the other bar code product divisions of the company would be successful. He believes, however, that the means to accomplish all this were dependent upon Photo Sciences acquiring the substantial new capital investments that they needed, and that this had not yet happened.

Jack Hickman, Chairman of Photographic Sciences, is still optimistic. He refuses to characterize the Identicon negotiations as terminated; he states that talks with potential investors are continuing; and he believes that his company's chances of survival past the end of the year are good. There have been sharp cutbacks in personnel to reduce overhead and expenses, but Hickman says we will see the company represented in Dallas, at Scan-Tech 82, as planned.

You may not always agree....

....with Harry Burke, but you certainly can't ignore him. Let us first quote from the first and last paragraph of a new paper dashed off by Burke after he visited the Symbology 82 Conference in Orlando (SCAN Sep 82):

"Judging from the text of Mil Std. 1189, the rumored features of the postal services BAR-ZIP Program, and the activities of two recent meetings focusing on bar codes (Symbology 82 and APICS Santa Clara) the bar code technology is being sold short! If the current trend continues bar coding may well be permanently compromised: more expensive to use, less versatile in application, and much less reliable than it could otherwise be."

and he finishes the 15-page document with:

"As a member of the bar code community, the degree to which you ignore the issues discussed above so are you compromising this potential."

In between these dire warnings, Burke lays out his newest "creed" which we are admonished to follow, lest we lapse into total chaos. The eight-point expression of faith is expressed as follows:

1. I will never require scanning with infrared light.
2. I will never specify a continuous code.
3. I will always use four coding components.
4. I will always specify a 3/1 wide/narrow ratio.
5. I will always use a check-cipher.
6. I will maximize commonality in cipher-set features.
7. I will maximize differences between ciphers in cipher-set.
8. I will never use a unique bar code scheme in a "lock-out" program.

Each point is expanded in detail with the ramifications involved if you don't follow along. Just so you understand that Burke takes his subject, but not himself, very seriously, he signs the paper, "Concerned Taxpayer, Private Citizen and Misanthrope." Burke earns his living with the Data Pathing Division/NCR. You owe it to yourself to send for a copy: Harry Burke, 3227 Mt. Rainier, San Jose, CA 95127.

In a very aggressive....

....move into the marketplace, President Mike Sanyour announced a number of new personnel and product moves for Metrologic Instruments:

- On October 18, Dick Wheeler joined the company as Vice President of Marketing. He will be in charge of all national sales activity. Wheeler was originally from MRC/Scope and spent the last year or so at Control Laser.
- Mike McShea is now the Vice President Product Manager of the scanner product line. His background includes a stint with IBM.
- Benny Tafoya is aboard as Project Manager, with assignments in special engineering and application areas. Tafoya was originally with Accu-Sort Systems.

- Metrologic will introduce their new MS190 laser scanner at Scan-Tech 82. The company describes this scanner as lightweight (under 1 lb.), with a single chip controlling all functions. The hand-held device incorporates complete scan, decode and transmit functions. The MS190 interfaces with all types of output and has been designed for rugged use in an industrial environment. The company is planning to sell the MS190 for under \$1,000 in large OEM quantities.

Metrologic Instruments, 143 Harding Avenue, Bellmawr, NJ 08030; 609/933-0100.

We get the feeling that....

....bar code scanning technology has been formally adopted by the American Production & Inventory Control Society (APICS). This organization of production and inventory control specialists has taken a very active interest in bar code scanning. A number of papers have been published and seminars conducted during this past year. The Symbology 82 Seminar in Orlando (SCAN Sep 82), for example, was conducted by P&IM Review and was directed to APICS members.

The latest is the 1982 Fall Seminar scheduled for November 15-17 in Downingtown, PA. There are 10 sessions, scheduled during the three-day period, conducted by specialists from scanning equipment companies as well as presentations of applications by user companies. Some of the papers to be delivered:

- Selecting A Bar Code Symbology (David Allais/Intermec)
- Application of OCR Coding In A Distribution Environment (Daniel Schloemer/Rockwell International) (How did this get on the program?)
- Product Identification For Automated Handling and Distribution Systems (Ben Nelson/ScanMark)
- Manufacturing Control Using Bar Code Data Collection (John Leckenby and Morton Cash/General Dynamics)
- The AID System (C. Randall Jost/Ford Motor Company)
- Real Time Bar Coding In Repetitive Production (Bruce Marsh and Henry Waldenberger/Custom Systems)
- The Use of Bar Code Wands In A Factory Control System (Frank Harrow/Sperry Univac)
- The Quality Revolution, the "Pen" Is Mightier Than the Pen (Neil Glenney and Robert Rylander/The Confacs Group)

For more information: APICS 1982 Fall Seminars, Box 2228, Rockville, MD 20852; 201/984-8400.

We have nothing really new....

....to report about the UPC Case Code, except that the unofficial revised publication date for the guidelines and specifications has been moved back to January 1983.

All of the major issues seem to have been resolved. The Case Code will be a 14-digit interleaved 2 of 5 symbol incorporating the UPC code and filling in with zeros up front. There is still considerable effort afoot to make the UPC Case Code compatible with the requirements for the meat and produce industry and the possibility even exists that some compatibility will be resolved with the various EAN codes.

Comment

A revised document is being circulated for comment and we can only hope for the best. We tend to doubt the first of the year completion date. We do feel there is just not the push behind this project that it warrants. Some companies are moving ahead on their own based on the assumption that the agreed format will become the final specification. It may become a fait accompli before the UPCC gets its final act together.

The quarterly scanning scoreboard....

....of UPC supermarket installations (US and Canada) is noteworthy due to the continued aggressiveness of National Semiconductor's Datachecker. This is the first time since FMI started keeping these statistics that anyone has reported more new store placements than NCR or IBM. Datachecker's position as the leading scanner supplier to the top 10 retailers becomes more credible each month. These 10 chains account for one-third of the total installations reported (Winn-Dixie is No. 1 with 453):

	Installations		Total Installations	
	July thru	September	As of 9/20/82	
	#	%	#	%
NCR	169	28.8	2,361	36.5
Datachecker	173	29.5	1,580	24.4
IBM	103	17.6	1,491	23.1
DTS	105	17.9	593	9.2
Sweda	29	5.0	383	5.9
Berkel	4	.7	33	.5
TEC	3	.5	25	.4
TOTAL	586	100.0	6,466	100.0

The development of bar code scanning....

....of paperback books in the US is an excellent case history study of the total system effect resulting from the changeover to machine-readable symbols. The UPC symbol, plus supplemental code, began appearing on the back covers of so-called mass market paperbacks in late 1979. Initially led by Bantam Books, every major publisher now includes the scannable code on its back covers.

What many did not appreciate was that use of the symbol would lead to a totally integrated, computerized system within the industry's distribution operation. The system ultimately provides for scanning of returns, inventory control better ordering and reordering systems, management reports of value to both wholesalers and publishers, and improved operational controls in all phases of distribution. With about 300 wholesalers already scanning periodicals and paper-

backs, this commitment to scanning has changed the nature of the distribution and control of paperbacks, while satisfying the retailer's needs for front-end scanning.

One of the unique features of the paperback book symbol is that it incorporates both bar code and OCR-A machine-readable symbols in an integrated format for different scanning requirements. This allows for scanning the basic UPC symbol in the supermarket, which decodes the publisher and price codes only; the basic UPC symbol, plus an add-on bar code which provides the specific title number, is read by the wholesaler/distributor; books stores and department stores scan the OCR-A portion which encodes the ISBN number only. It was all based on a series of compromises which seems to work well for everyone.

There have been persistent rumors (probably based on wishful thinking by bar code scanning supporters) that OCR scanning is not working at the retail level, and that sooner or later everyone will be switching to bar codes at the front-end. Until that happens, the mass market paperback book approach provides a good solution to crossover merchandise sold in a variety of retail outlets, and used in the industry's distribution network.

The Final Report of LOGMARS....

....is now available for distribution. Originally printed in very limited quantities, there has been an increasing demand for the report. It contains a great deal of interesting data relative to the tests and studies completed, and the conclusions reached. The Department of Defense spent five years exploring the various options available, and the results of these studies can provide substantial background to help those considering bar codes for their own operations.

To obtain your copy, including the basic report and Annexes A through O, ask for National Stock Number 008-020-00916-4. (We wonder if a 3/9 LOGMARS bar code is printed on the cover or wrapper?) It costs \$20.00 (check, money order, VISA or Master Charge) from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

The persistence of the....

....National Association of Recording Merchandisers (NARM) is finally showing some payback to the industry. Three of the largest producers of records (CBS, Capital and Chrysalis) are totally committed to UPC coding on all LP's and cassette releases. Additional products and re-releases will also be coded soon. The other industry leaders are at varying stages of placing the UPC symbol on their new releases but, most important, they are all committed to the program. The only significant holdout is Motown and that company is feeling retailer and jobber pressure to come aboard.

Based on this general compliance by the producers, the retailers are starting to crank up for in-store scanning. The first step is usually inventory control, which is a critical part of retail operations. Some retailers have moved into front-end scanning at a few important test locations.

One of the most-watched chains is the 35-store Recordland Group based in Cleveland. They have been labelling all store merchandise since March 1982 and using scanners for inventory. To the Recordland management, it is a

revelation. In an industry which depends on current "hits" to be available in the store, they are managing purchasing, warehousing and stock replenishment as never before. By the end of 1982, Recordland expects all stores to have front-end scanners.

The success of this operation, plus test operations in other chains in New York, are expected to provide an important stimulus to bar coding in the industry. A great deal of the credit, for the cooperation by both the manufacturers and the retailers, must go to the executive and administrative staffs of NARM. They still have a long way to go, but they recognize how hard they can push, and where.

Keeping up with....

....the Automotive Industry Action Group (AIAG) and their activities with regard to bar code scanning, these are the latest developments:

1. By 1983, suppliers will be expected to bar code shipping and parts identification information. The data, which will be helpful to both suppliers and customers, will be used to: capture production counts; take inventory at all levels; generate shipping and receiving documents; route material in the plants; and track shipments by the transport companies. Tag and label layouts, and specifications, will be developed during the next few months.
2. The Company Identification Coding Team is exploring the needs, benefits, coding structure and means to implement a work plan. They would like to start a full program in early 1984 for a coding system to uniquely identify each manufacturer and supplier in the industry.

The AIAG encourages the exchange of information with suppliers of bar code scanning equipment, services and supplies, and with other industries working on similar projects. For a subscription to the AIAG Newsletter (\$35 per year): AIAG, c/o Robert Nitzgorski, Douglas & Lomason Co., 24600 Hallwood Court, Farmington Hills, MI 48018

The National Retail Merchants Association (NRMA)....

....has announced its expanded National Retailers Business and Equipment Exposition and renamed it Retail Directions. Scheduled for January 9-12, 1983 at the New York Hilton and Sheraton Centre Hotels in New York City, the Exposition will be held in conjunction with NRMA's 72nd Annual Convention.

Retail Directions will feature the latest trends and developments in operating technologies, equipment, fixtures, products and services available to retailers of all sizes. It will include exhibits devoted to inventory control, point-of-sale and merchandise marking. Many of these will demonstrate machine-readable codes.

In the past, NRMA has sponsored OCR-A systems almost exclusively; last year's program included references to bar code scanning as well. With the strong movement of mass merchandisers into UPC systems (SCAN Aug 82), more about bar codes may be evident at this meeting. Contact Dan Soskin, NRMA Enterprises, 100 West 31st Street, New York, NY 10001; 212/244-8780.

The maturing....

....of an industry is often reflected in the growth and aggressiveness of its trade organizations. The Automatic Identification Manufacturers (AIM) has been expanding rapidly this past year, due to the broadened scope of its outlook and attitudes. A great deal of credit must be given to the outgoing administration, headed by Chairman Dean Percival.

The new officers, Chairman Ed Andersson (Computer Identics) and Vice Chairman Dick Dilling (Intermec), plan to accelerate the programs already begun and institute new ones during the coming two years:

- Completion of the Scanning Handbook with the sections on hand-held scanners, terminals and printers to supplement the already published Moving Beam Scanners
- Scheduling of Scan-Tech 83 for next fall in San Diego
- Expanded liaison with other societies and trade organizations to include joint seminar programs
- Broadened membership drive to increase the current roster from 30 member companies to 40 by the end of 1983
- Increased emphasis on technical publications and articles

It isn't always easy to measure the tangible benefits to be derived from membership and activity in trade organizations. Scan-Tech 82 is just one real benefit we can all touch and feel right now. There are many others. This industry needs and should support a strong Automatic Identification Manufacturers organization.

One last word....

....before we wind up this SPECIAL SHOW ISSUE.

We have avoided any type of show "Preview" which has been properly done by AIM and the show management. During the next few issues we will be covering the impact of Scan-Tech 82 in terms of new products, significant seminar presentations and some predictions as to what the future may bring.

As always we encourage a full and open dialog. We will continue to provide an active and vocal forum for all of the supplier and user members of this industry. In order to do this we must hear from you as often as possible to discuss the events that will shape the future course of bar code scanning.

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