



# newsletter

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

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## The important work of the Distribution Symbology Study Group....

....is close to completion but experiencing delays. The recommendations of the DSSG have been submitted to the Fibre Box Association in an attempt to assure cooperation from all concerned industry groups.

In fulfilling its charter, the DSSG wants to be sure they have reconciled symbol size, printing capabilities, possible use of pressure sensitive labels, various substrates and inks and all other factors affecting the ultimate choice and printing of a scannable symbol on outer cartons (SCAN Nov 78; May 78; Apr 78; Dec 77; Nov 77; Sep 77).

The Group is attempting to wrap up its work as soon as possible and they are hoping that one more meeting held within the next two months will complete their work. It is contemplated that at that time they will recommend that a new group be formed to digest and incorporate the findings of the DSSG and select the actual symbol to be used.

One of the dangers of any further delay is the possibility that individual industries may decide to select symbols on their own, and the enormous advantage of a uniform symbol for all industries will be lost. The European Article Numbering organization in Brussels is already circulating a proposal for "Transit Packaging Bar Symbol Specifications" for use on outers or corrugated containers. The symbol format being proposed is not standard, in terms of any known symbology, and is designed to be read "uni-directionally" by a fixed-position scanner or hand-held wand or light pen.

### Comment

*We can only hope that the work of the DSSG will be completed as soon as possible, and that immediate steps will be taken to incorporate their findings into the selection of a uniform symbol for all industries on an international basis. Although the work of the Group has been concentrated in the United States, they have been watched by representatives from other countries.*

*This project has been dragging for three years or more and it is hoped that the final selection of a symbol will not create additional long delays. Although the DSSG has steered clear of recommending a symbol format, the printing constraints highlighted by the data accumulated from the various tests performed by the Group, should seem to narrow down the selection. It would then be up to the various industries to agree to adopt a common symbol for printing on their outer cartons.*

There was a full house....

....at the Automatic Identification Manufacturers (AIM) Conference in Atlanta on March 14, 1979. Many who wanted to attend were turned away because of the lack of space and those who did attend represented some of the top companies in the United States. The full day presentation of scanning and scanning systems took the audience through the various methods of scanning, label printing, and system implementation.

The following presentations were made:

- Bernie Knill of Material Handling Engineering presented a paper on photo-sensors. These are not scanners in the true sense, but are photo electric controls which sense the presence, absence, or markings on an object. Photosensors do not identify the product in the same manner as bar code scanning.
- Chris Bell of Avery Label discussed the various types of code generation on pressure sensitive labels. Batch, sequential and random codes can be produced on pressure sensitive labels for hand, semi-automatic or automatic application. Source marking, or the printing of large quantities of labels with the same code was not included in the presentation.
- Joel Kaplan of Dennison Manufacturing discussed new printing technology for pressure sensitive labels with bar codes or, as he characterized them, "machine readable marks". He described the improvement in the versatility of printing the codes which opens many new applications. These include microprocessors for logic and control of the character size, shape and density of the code and the communication with other computers for on-line information. The basic types of bar code printers are electrostatic, pre-formed character impact printers, dot matrix impact printers and continuous ink jet system printers. High quality readable codes can be produced at plant site on demand.
- Ken Nelson of Markem discussed the selection of the code. Better scanners have created new codes with smaller bars and higher code densities. Considerations, when selecting a bar code, include the depth of field, the placement on the cartons (tilt, skew, etc.), label position and print quality. Nelson strongly suggested that you first decide what you want to do and then speak to the experts before making the final and critical decisions as to code selection.
- Dean Percival of MEKontrol described fixed-beam code readers and their application. Generally this type of reader is less expensive, where appropriate for the application.
- Ed Andersson of Computer Identics wound up the presentations with a description of many significant applications for bar code scanning. He included examples of product sortation, production monitoring, component assembly and auto-verification.

Comment

*This was an excellent opportunity for AIM, that part of the scanning industry devoted to industrial applications, to make a very powerful presentation and impression on a most important audience. Although some presentations were workmanlike and included some excellent visuals, for*

the most part they were mundane. Scanning lends itself to innovation, excitement and pizzazz, and these were lacking during the conference. Few examples of before and after savings were shown.

It is obvious that scanning can draw a large and attentive audience, ready to listen and anxious to know more about this technology. This audience came to learn and seems to have left with a great deal of information. It might have been expecting too much to see any of them whipping out their order pads.

#### A very significant industry study....

...was prepared for the National Association of Recording Merchandisers (NARM). Titled "What UPC Means to the Recording Industry", the study was released at the NARM Convention in Florida as two manuals: one for the retailers and one for the rack jobbers.

The studies describe UPC, how the symbol is read, the types of UPC systems, and the potential for the record industry. A description of the UPC system capabilities for the retailers and rack jobbers details the principal benefits, including identifying each item and capturing and recording the movement of products through the entire distribution channel. The cost of the system and the cost benefit to the users are also detailed. In general, the reports are very positive in their review of the advantages that will accrue to the retailers and rack jobbers when and if they adopt the UPC code.

Although a few of the record manufacturers have already begun to include the UPC symbol on their record jackets a great deal of pioneering effort remains to be done to install scanning equipment with the jobber and retailer companies.

The NARM is to be commended for their excellent effort to present these facts to the industry. Copies of the reports can be obtained from NARM, 1060 Kings Highway North, Suite 211, Cherry Hill, NJ 08034: 609/795-5555.

#### Markem Corporation has announced....

....that they will not exercise their option to purchase Interface Mechanisms. In 1974, Markem (Keene, NH) had invested in Intermec (Lynwood, WA) to assure themselves of a current and adequate supply of the pen scanners made by Intermec. The reason now given by Markem for not exercising the option is that "Intermec's performance has improved since then and they are now able to provide Markem with products in sufficient quantity to meet its present needs and have given us assurance of a continuing flow of products for future needs."

What was not said in the official release was that Markem considered the purchase price, which under the terms of the agreement had escalated each year, to be too expensive for what they were buying. There just did not seem to be enough advantage in the acquired technology or equipment to warrant the exercise of the option.

The two companies will retain their customer/supplier relationship but will also continue to be competitive in the market place.

"The mouse that roared"....

....would seem to be an apt description of the effort by the Control States to impose the Uniform Code for Alcohol Beverages (UCAB) on the liquor industry.

No one is speaking for attribution but there is every indication that the UCAB scheme for assigning a unique 5-digit code to every product sold by the Control States has died aborning (SCAN Mar 79; Dec 78). The effort by the Control States to impose the UCAB numbers on an unwilling industry seemed doomed from the start. Lack of complete planning, confusion as to details of the plan and the patronizing attitude of the Control States did not help matters any.

Finally, official objections by the Wine Institute and the Uniform Product Code Council, along with the more timid objection of the distillers, forced the Control States to back off.

Comment

*We have always admired the coordinated effort that produced the Universal Product Code and the European Article Numbering systems. Every industry concerned was included in the initial planning and in the final decisions. These were momentous decisions that affected the product and equipment manufacturers, retailers and packaging converters and each was consulted and involved before the final code and symbols were adopted. The evidence of what happened in the liquor industry is another example of how not to implement a system without understanding its full implications.*

Nothing pleases us more....

....than to report real progress at LOGMARS, the Department of Defense group studying automatic scanning implementation (SCAN Feb 79; Jan 79; Aug 78; Mar 78; Jan 78; Oct 77). The group has received approval of their program to test Code 39, in six locations initially:

1. Marine Corps Depot -- Inventory/location survey
2. Air Logistics Center -- Wholesale receiving
3. Army/Overseas -- Retail distribution to customers in the field
4. Navy Mobile Logistics Distribution -- Ship-to-ship distribution from a carrier base
5. Military Traffic Management Command/Army -- Cargo processing at a port
6. Defense Logistics Agency -- Shipping actions

The LOGMARS Steering Group will establish test managers for each location. The overall Test Director will be Beverly Joyce of the Army. Currently underway is a compilation of equipment lists, bidders' lists, specifications for the equipment and specifications for code labels.

The proposed initial testing will include vendor source marking of symbols on packages being directed to the Air Logistics Center (#2 above). In the other

locations the codes will be applied in-house using pressure sensitive labels. The vendor source marking program may include the printing of bar codes on outer cartons.

In a separate effort within the LOGMARS project, the 13-digit National Stock Number (NSN), will be broadly applied in symbology on many packages within the DOD. They will be coded both in Code 39 bar codes, as well as OCR-A, on the same packages. The primary purpose is to create an awareness of these codes throughout the Services, to create new ideas and responses and to familiarize the broadest base of personnel with the coming technology.

December 1980 is the target date for completion for the initial testing at the six sites. Additional testing of bar codes and/or OCR-A could extend the time frame.

#### NCR could hardly contain itself....

....in announcing leadership in the placement of supermarket scanners in the United States -- and justifiably so. The company grew in the number of scanner stores from 50 at the beginning of 1978 to 224 at the end of that year. NCR now claims a leading position in the industry in terms of the number of systems installed, the number of separate companies installing systems and in the geographic dispersal of systems installed.

And the total number of UPC scanning installations in the United States continues to grow at a rapid pace. There were 61 additions in February bringing the total to 675. Industry estimates are that that count may well reach 1200 by the end of 1979, again more than doubling each year in the quantity of installed units. The break down in February, by the way, was NCR = 25, IBM = 21, Datachecker = 11 and Sweda = 4.

#### The scanning of magazine returns....

....by the wholesaler/distributors has been rapidly expanding. A very large percentage of all magazines sold on the newsstands now display the UPC symbol with supplemental code on the cover. The primary purpose for these symbols was to facilitate the handling and recording of unsold magazines returned for credit to the wholesalers.

Of the 350 wholesalers serviced by computer service bureaus approximately 80 have installed scanning devices -- both automatic and semi-automatic. The leading service bureau handling these installations has been Computac, working with a Spectra Physics scanner, and they claim to have made over 60 such installations. Up to now the other service bureaus have not been able to successfully compete with Computac and have not been able to locate a source for efficient scanners to do the job.

Now Symbol Technologies of Hauppauge, NY announces a contract with Data Processing Services to supply that service bureau with scanners for their wholesaler clients. Symbol Tech's Laserscan Model 550 was designed specifically for magazine return processing, and incorporates a "scan-above" approach, which lends itself to conveyor belt applications as well as semi-automatic handling.

The contract calls for delivery of 100 units over the next 15 months. At a

recent showing of the Laserscan at a wholesalers' convention in Florida, Symbol Tech claims the unit was very well received and wholesalers were reported to have placed orders.

#### Exit DCI....

....enter DCI!

Distribution Codes, Inc., an organization created by the National Association of Wholesaler-Distributors, was the organization selected by the grocery industry to administer the UPC code in its early years. They developed specifications and monitored them, issued manufacturers' numbers and were the central source for all technical matters related to UPC. Distribution Codes, Inc., lost its contract with the Uniform Product Code Council a little over a year ago (SCAN Jan 78; Dec 77). Since then the organization has been doing consulting work.

Now the NAW announces the dissolution of Distribution Codes, Inc., and the incorporation of Distribution Codes Institute. They state this action was taken as evidence of a continuing commitment to the distribution code system by the wholesale distribution industry. "Now that the code is ready for industry implementation...we believe that creation of the Distribution Codes Institute will successfully attract a broad membership base of national wholesale commodity line associations interested in advancement of the DC numbering system" states the new DCI president, Robert Clifton.

The distribution code system is a numbering system which facilitates product identification throughout the distribution process. The distribution code is an 11 digit numeric code using six digits to identify the manufacturer and 5 digits to identify the manufacturer's item. This, of course, is the same distribution code that the NAW has been sponsoring for many years. The new DCI will administer the code assigning the manufacturer portion of the identification number.

For further information contact Distribution Codes Institute, 1725 K Street NW, Suite 710, Washington, DC 20006, 202/223-0005.

#### Comment

*We don't fully understand Clifton's statement "Now that the code is ready for industry implementation...." It is the same code that was established 7 or 8 years ago, and they don't seem to have resolved any of the problems that have inhibited the widespread use of the code up to this time. We'll try to find out more about what is happening with the all-new DCI.*

#### And from the ashes of Distribution Codes, Inc.....

....arises Electronic Transactions, Inc. Don Martin and Bob Petersen, who were active with the old DCI, have formed a new consulting organization in Alexandria, VA. Electronic Transactions will be consultants primarily to manufacturers and government agencies setting up coding systems for all types of product identification.