



# newsletter

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

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## The introduction....

....of the new Telepen bar code system is generating some heat in the US market. Telepen was developed by S. B. Electronics in the UK, and has been marketed there for 10 years. It was patented in the US in 1972. Under a recent agreement, exclusive marketing rights have been assigned to KPG, Inc., of Atlanta, GA. The agreement covers North America, Western Europe and the British Commonwealth.

KPG is coming on very strong with this full 128 character (ASCII) symbol set. In particular, it is making claims as to its superiority when compared to the interleaved 2 of 5 and 3 of 9 codes:

- Telepen is the only bar coding system which can print and read the full ASCII set.
- Printing can be done on a "simple and inexpensive dot matrix printer."
- Telepen's standard check character and second checking system makes it "almost impossible to read inaccurately."
- Telepen's fibre optics, bi-directional bar code reader does not require direct contact with the surface of the bar code.
- Severely degraded printed symbols can be read on a variety of surfaces including textiles, brown kraft paper, and glossy white paper.

Many of the claims made by KPG are being disputed by other companies in the industry. Ted Williams of Computer Identics points to their new Code 128 (SCAN Dec 81) as having full ASCII compatibility and questions the security of the Telepen System. David Allais, President of Intermec, has gone so far as to set down his comments in a formal document, "Some observations on Telepen bar code". Allais' major points:

- Why is it needed at this late date in the development of this industry? The user community has UPC/EAN, 3 of 9, interleaved 2 of 5, Codabar and Code 11, all of which have been successfully applied.
- Promotion of an alternative bar code symbol is disruptive, confusing and will slow down acceptance of all types of bar codes.
- Telepen has none of the three desirable properties of bar code symbols; i.e., constant number of bars and spaces per character; self checking applied to each character; discrete structure.

- Telepen's code density is not better than existing codes despite its claims.

Allais summarizes that Telepen offers "no material technical advantages over existing established bar code symbologies...(and) is unnecessary, confusing and counter productive."

For more specifics and fuel for the fire: KPG, 6075 Barfield Road NE, Atlanta, GA 30328; 404/252-7366. Intermec, 4405 Russell Road, Box N, Lynnwood, WA 98036; 206/743-7036.

#### In a feature story....

....based on an industry-wide survey, Material Handling Engineering (Dec 81) reviewed the use of bar codes and scanning in the manufacturing/industrial environment. Their conclusion: "After a somewhat tentative start, industrial bar codes and scanning are booming."

The upbeat article includes interviews with leading scanning hardware manufacturers. Special applications already installed, and potential uses in all phases of material handling and distribution, are covered in detail. The report advises users and builders of scanners to consider scanning as part of a plant-wide control and information network. The progress and achievements of the major organizational efforts are also reported. These include AIM, LOGMARS, DSSG and ANSI.

Lamenting the "confusing babble" of the past where many different codes were available to a potential user, the report commented that the move toward standardization of a few codes and symbols will help to promote use of scanning. The positive thinking of the survey and article is summarized by the advice to users: "If you aren't now using bar codes and scanning systems in your facility, you're missing a great way to improve controls and boost throughput".

#### It all comes down to....

....your point of view. Consider the following headlines from two different trade papers covering the new Uniform Communications System (UCS) now in its test phase.

- Supermarket News  
"UCS Transition Is Easier Than Pilot Firms Expected"
- MIS Week (two articles):  
"Grocery-ordering Test More Arduous Than Expected"  
"Uniform Communications Test Methods Called Obsolete"

The negative comments by the more technically-oriented MIS Week reporters related to the Transportation Data Coordinating Committee (TDCC) software package. This was developed a few years ago and used as the basis for the UCS package. MIS maintains that this program is no longer state-of-the-art and "the Uniform Communications System is using obsolete techniques in its current test because it's going with what's available."

The program, which will permit the computers of the retailers and suppliers to talk to each other, is moving ahead and will continue for four months. All participants are expected to start testing the computerized data exchange for the transmission of purchase orders and invoices in January. As the tests continue, companies may expand their activities and other companies who have expressed interest may join in.

The system is intended to eliminate costly paper work utilizing existing computer installations with minimal additional front-end cost. Estimates of the potential benefits of this system run from \$300 to \$600 million per year for the entire industry. Some of these benefits will include improvement of production scheduling and inventory management; shipment tracing and tracking; cash planning and cash application to receivable open items; and reduction of errors in ordering and invoicing.

#### At the November meeting....

....of one of the working committees of the Technical Association of the Pulp and Paper Industry (TAPPI), there was an informal discussion of the current situation regarding the printing of bar codes on outers. The tentative conclusion of the group was that the Distribution Symbology Study Group (DSSG) report analyzed the feasibility of printing bar codes on corrugated board, but may not have truly reflected the state-of-the-art of new developments in plate-making and printing. Concern was expressed that definitive specifications, when issued, should reflect the true printing capabilities of the industry. In effect, the sense of the members was that all decisions regarding bar code printing on corrugated be put on "hold".

#### Comment

*Although the group did not choose to issue a formal statement, this represents another response from a trade or professional organization concerned about the final shape that these specifications will take. There was similar concern at a meeting of ANSI committee members recently (see below). It seems that those who have actually run tests and evaluated the results have a high level of confidence that a scannable code can be printed on corrugated. This suggests that the sooner we get started as an industry, the quicker we will put all of these doubts to rest. There is a growing unease among many people we have spoken to that this project is dragging on too long and will never come to pass as a broad-based industry program. We don't share that view -- yet.*

#### There was a healthy

....and much needed airing of differences between two working sub-committees of the American National Standards Institute on December 16, 1981. The meeting was held in New York at ANSI headquarters and was attended by a substantial representation of the two committees involved.

The problems developed around the draft standards submitted by the MH-10, SBC-8 sub-committee which was charged with the development of a standard for bar code symbols on transport packages and unit loads. The conflict arose because there was a perceived lack of communication and coordination with the X3A1 sub-committee of ANSI, which has developed standards for optical character recog-

nitition, and which has been working on related standards for a number of years. There was a natural overlap of subject matter between the two sub-committees. A feeling developed among some members of the OCR group that substantive parts of the bar code scanning standard were in conflict with existing documents related to OCR.

It is to the credit of the members of both committees that the issues were desensitized during the December 16 meeting. Most members came away with a better understanding of how the standards would proceed. The SBC-8 draft standard for bar code scanning will be circulated as written although it is anticipated that there may be objections to particular portions which will have to be resolved.

At the same time the two committees agreed to join forces at some future date to write a common standard directly relating to printing quality for all machine-readable codes. It was a constructive compromise, which will permit the bar code scanning standards to move forward quickly and as planned. It will also lay the foundation for a future ANSI standard which will coordinate the requirements for all machine-readable codes, and utilize the expertise of representatives from both technologies.

#### Azurdata has introduced....

....a software package designed to verify shelf prices in UPC scanning supermarkets. Used with Azurdata's Scorepad II programmable terminal, the Shelf Price Audit System enables a clerk to scan the UPC item labels and receive instantaneous verification of price in the terminal's 24-character LED display.

With 256K of RAM memory, the Scorepad II can store the UPC numbers and prices for up to 20,000 items. Shelf tags may be corrected on the spot, or the terminal can be connected to an Azurdata printer to produce a detailed error report showing product codes, descriptions and prices. The Scorepad terminal may be connected to a modem and the entire error file may be transmitted to a host computer for updating the point-of-sale controller. Contact: Azurdata, Inc., 4102 148th Avenue NE, Redmond, WA 98052; 206/881-5100.

#### In what seems to be....

....an adaptation of a UPC point-of-sale scanner, Rexnord is marketing the Rex Lasertrak scanner. The unit is featured by the company as a "practical and reliable source for on-line data collecting, ideal in such applications as warehousing, shipping, feeding selected products to automatic case sections, counting, inventory control, automatic order assembly and sorting of products."

The Rex scanner reads UPC only (A and E versions) with a full 30" scan width up to 30" above the conveying surface. Read rates are claimed at speeds of up to 500' per minute. Scanners have been installed at a J. C. Penney Catalog Distribution Center and are also being promoted for use in baggage handling areas for airlines.

Rexnord (also known as Recognition Systems), 4701 W. Greenfield Avenue, PO Box 2022, Milwaukee, WI 53214; 414/643-3252.

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

....newsletter-type of publication "Retail Automation" has been started in England. The goal of the editors is to provide retailers with information on the latest offerings from equipment suppliers, and informed independent opinion on the systems and philosophy behind them. The publication will also carry feature articles about advances in the use of technology in the retail area, research reports, case studies of new retail installations and articles from leading retail personalities.

Of particular interest in the first issue was a fairly extensive survey of customers at scanning supermarkets. At the time of the study there were six scanning stores in the UK, and Retail Automation interviewed 991 customers as they left five of these stores. For the most part the results were favorable but, as is usual in surveys of this kind, scanning does not show up as a significant reason for choosing to shop at a given store.

Retail Automation costs £48 per year. Address: RMDP, 5/6 East Street, Brighton, Sussex BN1 1HP England.

#### The NABSCAN Division....

....of the Newspaper Advertising Bureau has been sold to a consortium of research companies and individuals. The operation will be moved from New York City to Pittsburgh. NABSCAN was one of the first organizations to gather UPC scanning data for market research evaluation. Established in 1974, the organization is now collecting data from 450 supermarkets in 30 states and has become the largest such operation in the world.

Ironically, according to Jack Kauffman, President of the Bureau, one important reason for selling NABSCAN was its success in the marketplace. "As NABSCAN grew it became evident that scanner data is probably going to be the long-range future of the market research business and that NABSCAN, in fact, might eventually become bigger than the Bureau. And since the Bureau's mission is to sell newspaper advertising, rather than operating a market research company, we decided somewhat reluctantly that NABSCAN belonged outside of the Bureau." All continuing contracts with stores, suppliers and clients will remain in effect.

The new owners are still being kept secret, but probably include Market Research Association of Pittsburgh, the company that has been the chief processor of NABSCAN data.

#### The 1982 Convention....

....of the National Association of Recording Merchandisers will again promote bar code scanning and its potential benefits to the industry. The 24th Annual NARM Convention will be held March 26-30 at the Century Plaza Hotel in Los Angeles. It will feature an audio-visual presentation on the success stories already achieved at the retail level and give merchandisers the opportunity for hands-on experience with bar coding equipment in a demonstration room.

There has been limited success in introducing scanning in record retailing so far. NARM is attempting to keep the subject alive, but the level of interest

by the retailers is still minimal. We think a demonstrable package is needed, clearly setting forth the costs and benefits. This has been sorely lacking and is required to make this a successful area for the implementation of bar code scanning. This can only be done by equipment suppliers and, so far, no one has seen fit to undertake this program.

#### The third quarter (FY82)....

....financial results of Data Terminal Systems (ended 10/31) showed significant improvement for the troubled maker of front-end POS systems. An operating profit of \$1.1 million for the quarter was its first for the fiscal year. After interest expense and tax provisions, however, there was a net loss of \$312,000 or \$.05 per share.

Sales for the third quarter were at a record high of \$36.7 million and although fourth quarter results are expected to exceed last year's sales, they will not reach the third quarter's figures.

#### Computype is emphasizing....

....their versatility in the production of bar code labels with a new set of product literature. The company describes its capabilities which include "the production of any bar code or OCR symbology, sequentially numbered or randomly numbered labels" and a wide variety of label types and adhesives for many uses. Computype, 2285 West Country Road C, St. Paul, MN 55113; 800/328-0852.

#### A recent "comment"....

....by Jim Young, Editor of Paperboard Packaging, about his difficulties in describing the industry he is in, prompted a sympathetic response from us.

If he thinks "paperboard" is difficult to explain at a non-industry social gathering, he ought to try "bar code scanning". The only glint of intelligent response we ever get is when we refer to "those funny little lines on the packages in the supermarkets." At that moment, the listeners' eyes either glaze over, or they tell us about how it will never succeed.

With a little effort, however, we are sometimes able to gather an interested and appreciative audience by dropping hints of the fantastic benefits gained in supermarkets, libraries, blood banks and other environments readily identifiable to the layman. We've learned to keep away from discussions of inventory, transportation, production and accountability in the commercial-industrial areas. And how do you explain to the uninitiated the speed and method by which a scanner can measure and decode the black lines and white spaces?

Finally, a certain amount of disbelief is evidenced when trying to convince the group that this esoteric industry can support a newsletter with subscribers in over 20 countries. We usually wind up by referring to ourselves as "Management Consultants" and let it go at that.