



# newsletter

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

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Everyone seems to be overjoyed....

*also mergers!*  
....at the proposed merger of Data Terminal Systems and National Semiconductor. Warren Tyler, president and chief executive officer of DTS, says "The proposed merger...will significantly strengthen our company. The technological and financial resources of National Semiconductor will give our customers, distributors and dealers the added confidence they need to commit themselves to our products."

From Johnny Humphreys, National Semiconductor vice president and general manager of the Systems Division, "This represents an important opportunity for NSC. I am looking forward to working with the DTS employees, dealers and distributors who make up the DTS team."

At \$8.00/share, totalling approximately \$50 million, National Semi may have picked up a bargain. This gives them instant entree into the retail market for smaller systems, which promises to be the next major area for expansion. Certainly DTS can use the financial backing and excellent marketing ability of NSC, which has been nothing short of phenomenal in Datachecker systems sales to supermarkets this past year.

The tender offer was formally made on January 20, 1983 and will remain open until February 24. Tentatively, a new subsidiary will be formed called NS Development Corporation with two divisions: Data Terminal Systems, and the NSC Systems Division. According to preliminary reports, DTS will retain their manufacturing facilities in Massachusetts. There has been no decision as yet as to how the merger will affect the marketing organization.

The merger gives NSC diversification into the front-end systems for smaller retailers including restaurants, discounters, variety, drug, liquor and convenience stores. It also gives NSC access to other markets in the UK, Europe and the Far East where DTS has established its sales presence.

National Semiconductor is running neck and neck with NCR in the current sale of scanning systems to the supermarket chains, although NCR still maintains a substantial lead in total systems installed. NSC optimistically projects that it will continue at this fast pace through 1983.

We had just about....

*also mergers!*  
....gotten over our surprise, and were attempting to analyze the advantages of an acquisition by Sensormatic Electronics of MSI Data, when we learned that the deal had been called off.



On January 10, the companies announced an agreement for Sensormatic to acquire MSI for approximately \$100 million. This was based on Sensormatic's market price of \$45/share and an exchange of approximately one-for-one with MSI shares. Three weeks later they changed their minds.

Sensormatic is a very successful and profitable manufacturer and marketer of electronic article surveillance equipment for use by retail stores for protection against shoplifting. This is the company that provides the plastic tags that are affixed to the more expensive items, and the equipment to sound the alarm if any of these tags are still on the items when taken from the store. MSI is the world's largest manufacturer of portable data collection systems with direct sales and service offices in the US, Canada, Belgium, France, Italy, United Kingdom, Austria and West Germany.

What happened was that preliminary to completing the merger, each company was going through the usual pre-acquisition routine of "due diligence". According to William Bowers, chairman of MSI, the more they looked, the more they realized that the synergism just wasn't there. Sensormatic is a one-product company, with excellent marketing facilities to the retail trade, but limited involvement in technical products. MSI is a much more complex company, in its product line, supporting technology and marketing staff. In our followup discussion with Bowers, he raised the added point that MSI Data is not always perceived as a company deeply involved in bar code scanning. Quite the contrary, according to Bowers. More than 50% of all the equipment now being sold by MSI includes bar code scanners for the collection of data.

And so, after three years of casual discussion and one year of serious negotiation, the deal fell out of bed. One gets the feeling that it was a mutually arrived at decision and the companies remain friends.

For the third quarter of FY 1983 (ended 12/25/82) MSI reported net income of \$787,000 (\$.32/share) down from \$1,099,000 (\$.45/share) for the same period last year. Sales increased to \$13,762,000 from \$13,195,000 last year. US sales were reported as "flat" and although European sales were up 20%, margins were down. Backlog was \$11.2 million, down significantly from the \$18.5 million a year ago (which included a \$6.7 million order from IBM).

As a result of the announcement, and subsequent demise, of the merger, MSI stock (Amex) has been fluctuating like a yo-yo this past month. With the stock market booming along the way it has been these past 6 months, many companies look to take advantage of their increased stock prices, and there are a number of companies in this industry which may be good merger/acquisition candidates. There are probably lots of chief executives who would jump at an offer to sell at a 25 times earnings multiple, which is what MSI was offered in this almost-completed deal.

#### In a continuing effort....

....to get their ship back on course, Photographic Sciences has taken some draconian measures:

- John Hickman has left the company. He had been chairman of the board since early 1982 (SCAN Feb 82) and had attempted, unsuccessfully, to expand the company through acquisition and the introduction of new product lines. During this past year, Photo Sciences completed two acquisitions in England, and fumbled one here in the United States (SCAN Nov 82).



- also merged*
- The two companies acquired in the UK: Harland Data Systems (SCAN Mar 82, Apr 82); and Microfin Systems (SCAN Aug 82), have been placed into receivership under English law. Under this arrangement, the assets of the companies are offered for sale, with the proceeds to be distributed among the creditors. As we understand these proceedings, the companies continue to operate while these legal remedies are being pursued -- and it is even possible that Photo Sciences may wind up buying back their own company. The two UK companies employ 55 and have annual sales of £1.5 million.

In announcing the placement of the subsidiaries into receivership, Photo Sciences was careful to state, when referring to the creditors of the UK companies, "If those creditors pursue all remedies against the parent company which may be available to them in the United States, then the company's ability to meet all of its obligations may be in doubt."

John Blackert resumes his position as president, chairman of the board and chief executive officer of the company. Robert Ehrlich, a specialist in finance and company turn-arounds, has been retained as a special advisor.

We will have a more detailed analysis of what is happening and how this will affect the UK companies, people and markets in our February INTERNATIONAL EDITION.

#### Symbol Technologies continues....

....to report large losses on reduced sales (SCAN Dec 82). For the first quarter of FY 1983:

#### Consolidated Statement of Operations for the 3 months ended November 31

	<u>1982</u>	<u>1981</u>
Sales (\$000)	\$ 791	\$ 810
Net (loss) (\$000)	(517)	(136)
Net (loss) per share	(.19)	(.05)

The company explains the major transition it is going through, and points to some bright spots on the horizon. Changes in the company's operations relate to the switch from verification products (Laserchek) to scanners (Laserscan). Laserscan sales constituted 55% of the company's sales in the first quarter of FY 1982 -- compared to 26% during the same period last year.

More important, according to the company, is the reception in the marketplace of the new LS7000 hand-held laser scanner. Symbol Tech reports backlog as of 12/31/82 of \$3.3 million (of which \$640,000 is either guaranteed or released). The backlog a year earlier was \$475,000.

Although these figures suggest long-term optimism, the company is still anticipating "adverse results from operations for several more months until the company successfully completes the transition to high volume manufacture of the LS7000 and has absorbed the continuing expenses associated with the introduction of the LS7000".



An important notice....

....to those in the industry concerned with standards and specifications: ANSI is now circulating a proposed final draft of the Specifications For Bar Code Symbols on Transport Packages and Unit Loads. The proposed standard is out for public review between February 4 and April 4, 1983. You can obtain a copy from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Comments can be sent to the same address or to the new chairman of the subcommittee, Allan Gilligan, Bell Labs, Bldg. WB2F109, Holmdel, NJ 07733. Gilligan succeeds Mike Noll, who has a new assignment with the Department of Defense. (We have learned, that Noll is now embarked on a new project which may involve bar code scanning on Department of Defense documents.)

This is a significant standards document. If you have any comments, now is the time to make them.

In our view....

....there have been four major steps in the maturation of the bar code scanning industry: UPC/EAN, which gave bar codes enormous visibility and a wonderful testing laboratory; LOGMARS, the government program which will introduce bar codes to over 25,000 companies; industry standardization, as exemplified by the Automotive Industry Action Group; the UPC Case Code, about to be issued.

The UPC Case code represents the movement of bar codes across industry lines -- originating with the producer, and touching on all elements of distribution on its way to the consumer. The Case Code has been anticipated as the keystone for the widespread implementation of bar code symbols on shipping containers for many other industries.

We can finally announce the imminent arrival of the official UPC Case Code. At its January meeting the UPCC Board of Governors filled in the final details, and the official documentation is expected by March/April 1983. There are some wrinkles, but no real surprises:

1. It will be the 14-digit interleaved 2/5 symbol.
2. Reading from the left, the first position will signal whether the Case Code is the same as the manufacturer's number and item code on all products within the case (indicated by a "1"); or whether it is different ("0").
3. The next two digits are the number system character (00-09 in the US and Canada) corresponding to the EAN Flag Codes.
4. These are followed by the 10-digit manufacturer's number and the item code number.
5. The 14th digit is the check digit, independently computed for the Case Code and separate from the UPC check digit on the product itself.
6. For variable-weight products, a 5-digit weight code will be added, with its own check digit. Variable-weight Case Codes will therefore comprise a 20-digit code and symbol.



7. For printing on corrugated cartons, the recommendations of the Distribution Symbology Study Group (DSSG) will be followed. Smaller bar codes, printed on pressure sensitive labels, will be acceptable.

This is another major event that will open up important new markets for the suppliers of bar code equipment, supplies and services, and provide the super-markets and their vendors the opportunity for increased productivity and efficiencies. The question of conformity with the EAN nations has not yet been resolved.

Hewlett-Packard is continuing to demonstrate....

....its serious attitude toward bar code scanning and has published Elements Of A Bar Code System. The four sections of the 28 page paper address:

- Fundamental System Design, covering storage and retrieval of data and how to evaluate system performance.
- Bar Code Symbology, which discusses the attributes of various types of bar codes and provides a code-selection summary.
- Symbol Generation, which talks about media and printing.
- Data Entry, which presents information on scanners, optical parameters, electrical characteristics, resolution and decodability.

A glossary of terms and an appendix on bar code standardization are included. To add a free copy to your library, contact your local Hewlett-Packard Sales Office, and ask for Application Note 1013.

H-P has also announced two new bar code readers. The programmable 16800A can operate as part of an interactive data-entry system and is priced at \$1150. The model 16801A is non-programmable and costs \$965. Both can read codes 3/9, interleaved 2/5 and industrial 2/5, and other symbols will be added soon. Both are equipped with sealed sapphire-tipped scanning wands.

The grocery industry's gamble,....

....to fight the Kaslow patent on the use of bar coded symbols on coupons, may be nearing decision time (SCAN Sep 82). We have learned that the "coupon case" is now in the US Court of Customs and Patent Appeals, the final court of appeal for cases of this kind. So far all previous decisions, as they worked their way up through the Patent Office appeals' structure, have gone against Kaslow and in favor of the grocery industry. Based upon this, members of the Grocery Manufacturers Ass'n (GMA) privately express optimism regarding the final outcome. The basis for the GMA case has been that the patented claims were "obvious".

There are indications that in anticipation of a timely settlement of the issue, some companies are stepping up their programs to explore the use of the UPC symbol, and variations thereof, on their coupons. Scanning of coupons can be a major boon to those manufacturers who use them extensively and who suffer enormous losses due to fraud and misredemption. If this situation clears up, and some expect that to happen within the next 30 days, we will probably see a rush to the marketplace for testing the viability of coupon scanning.



Hard on the heels....

*also conferences*  
....of the successful Scan-Tech 82 in Dallas in November (SCAN Dec 82), the Automatic Identification Manufacturers have announced preliminary plans for Scan-Tech 83:

September 25-28, 1983; San Diego, CA at the Sheraton Harbor Island Hotel; provision for over 100 exhibitors with larger and more elaborate booths; presentations concentrating on user applications.

The above is what the advertising trade calls a "Teaser". We just want to make sure that you set aside those dates, get your bid in for space if you are a potential exhibitor, and your hotel and attendance reservations if you are going to be a visitor. You will be hearing much more about this on these pages in the months to come.

Like a voice in the wilderness....

*also literature*  
....Craig Harmon, cries out in an article in the Jan/Feb 1983 issue of Bar Code News. Harmon's title tells most of the story: The New Tower of Babel: When Enough Is Too Much". The thrust of the article is stated in the first paragraph "It is not encouraging to see the continuing proliferation of symbologies in our industry just as various standards organizations have begun wrestling with the task of evaluating and adopting standard industry symbologies".

Harmon stretches just a bit when he traces the history of the benefits of standardization in other industries and civilizations going back to the Tower of Babel, and continuing through 1838 and the Morse Code, and into the 1960's and the activities of the American National Standards Institute (ANSI) and others. He does make an eloquent case for the fact that code proliferation affects manufacturers, suppliers, transportation companies, and all other services involved in the total distribution system.

After a full analysis of all of the available symbols and their attributes he concludes "anyone considering codes other than UPC/EAN,....Code 3 of 9, Codabar and Interleaved 2 of 5 should use caution. It is highly unlikely that any of the other codes possess sufficient benefit to outweigh the arguments for standardization."

Bravo!

Applied Image has appointed....

....George Madden as operations manager, responsible for the company's manufacturing activities. Madden was previously with Photographic Sciences and RJS Enterprises.

Applied Image specializes in precision photo plotting and imaging services for the electronics optical industries. The company recently purchased a Gerber Scientific Instrument Model 4433 Photo Plotting System. Applied Image, 1628 Dewey Avenue, Rochester, NY 14615; 716/254-4010.