



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

Volume V Number 3



ISSN 0273-3080

November 1981

The final report of LOGMARS....

....has been published. The 200-page report (with over 1,000 pages of supplemental material) represents a complete documentation of the work and conclusions of that significant government group.

LOGMARS, an acronym for "Logistics Applications of Automated Marking and Reading Symbols" was commissioned in July 1976 and will be recognized for a great deal of the seminal work done in this industry over the past five years. LOGMARS' initial charter included the establishment of a machine-readable symbology to be marked by DOD activities and their commercial vendors on items, unit packs, outer containers, and selected documentation. It was to establish procedures for the use of the symbology and to avoid proliferation and duplication of efforts within the Defense establishment. Its long-range project objective was to improve productivity, timeliness and accuracy, and thereby reduce costs.

In its activities, LOGMARS was constrained by instructions that the use of symbology must only be incorporated into existing systems. It must not recommend system changes just to accommodate the use of a machine-readable code. No research and development work was to be done and only current state-of-the-art equipment would be used.

In its final reports LOGMARS recommends the use of the 3 of 9 bar code as the standard symbology, and describes the laboratory and field tests conducted to support the conclusions. The report also recommends: that a Symbology Coordinating Group be established for on-going supervision and coordination of efforts within the Department of Defense establishment; that implementation of the program be aggressively pursued and funded; and that this technology should be incorporated into current and future systems where it is determined to be cost effective.

Since only limited copies of the final report were printed, they will not be for distribution to individuals or companies. LOGMARS will send a limited number of review copies to trade associations and industry groups. Those organizations wishing to obtain copies should contact DARCOM, HQ Tobyhanna Army Depot, Tobyhanna, PA 18466, Attn: SDSTO-T; 717/894-7144 (Mike Noll).

Comment

We have tracked the work of LOGMARS starting with the very first article in our charter issue of September, 1977. It has done its work thoroughly and

professionally and its contributions will be recognized both inside and outside government circles.

At the risk of offending many people who were involved in the activities of this group, we would like to single out Beverly Joyce and Michael Noll, who were Army members of the Joint Steering Group, based out of the Tobyhanna Army Depot. Beverly and Mike became well-known in this industry and participated in many of the working groups and committees which have moved this technology forward over the past few years. Although Beverly Joyce has been assigned to other work in another government agency, we are looking forward to the continued involvement of Mike Noll as system implementation moves ahead.

There was record attendance....

....at the Third Converting Machinery/Materials Conference Exposition (CMM3) in Atlantic City, October 12-15. And this record crowd was exposed to a record number of UPC/EAN verification equipment devices.

- General Graphics (Tarentum, PA) was jointly exhibiting their verification device with their new national distributor, Scangraphics (Bensenville, IL). The models QC-I, QC-II and QC-III are priced from \$1995 to \$2495 depending on features (SCAN May 81).
- Metrologic Instruments (Bellmawr, NJ) introduced their hand-held laser bar code verifier, Model MS140 at the CMM3 Show. The complete system (nothing is optional) costs \$4330 and includes the laser scanning head, head stand for mounting, microcomputer/controller, printer, and power supply. This was the premier showing of this system, and the company is particularly featuring the very competitive price for a laser unit.
- Photographic Sciences (Webster, NY) showed their new Quick Check which is priced at under \$1000. This is a go/no-go device without printer or display (SCAN Aug 81). It is also being distributed by Anderson and Vreeland.
- R.J.S. Enterprises (Monrovia, CA) showed the Series 7000 Autoscan, which is their top-of-the-line cartridge loaded unit for reading and verifying all types of printed bar codes and film masters. They also featured the new Codascan, a hand-held verification instrument that weighs less than two pounds, is small enough to fit into a brief case, and is priced at \$2495.
- Skani-A-Matic (Elbridge, NY) had their Model V32240, EAN/UPC verifier with code pen, priced at \$4495. Additional options include the automatic read head (\$1500), code pen with preamplifier (\$250), and the positive/negative option (\$50). The company also demonstrated its other bar code reading systems in various configurations.

Comment

At the Westpak Show in California later in October, Photographic Sciences, R.J.S. and Skani-A-Matic were joined by Symbol Technologies, all demonstrating their verification equipment at that packaging exposition. There has been an enormous increase in new devices and expanded marketing efforts for UPC/EAN verification capability this past year. Trade shows, expensive brochures, ads in the trade journals, all trying to cash in on the larger number

of scanning retailers with their concern about symbols that do not scan. The variety of approaches to verification, the broad range of prices and the conflicting claims by the manufacturers are going to make the user's life very confusing for a while. We question whether the market can support all of that technology. It will be interesting to see how many register for CMM4 on September 26, 1983 in Philadelphia.

The star performer....

....in the UPC scanning scoreboard for the third quarter (US and Canada) was Datachecker, the POS Division of National Semiconductor. The company achieved a 50% increase in market share for this period over its totals to date. As before, most of this came at the expense of IBM, whose North American sales have dropped off sharply this past year.

	Total as of 6/30/81		3rd Quarter 1981		Total as of 9/30/81	
	#	%	#	%	#	%
NCR	1,539	39.0	158	35.2	1,697	38.6
IBM	1,090	27.6	66	14.7	1,156	26.3
Datachecker	811	20.5	143	31.8	954	21.7
Data Terminal Systems	263	6.7	51	11.4	314	7.1
Sweda	230	5.8	28	6.2	258	5.9
*Berkel Systems	14	.4	3	.7	17	.4
Total	3,947	100.0	449	100.0	4,396	100.0

(*We will no longer reference this company as Datacash.)

As for the total number of new installations, the market seems to be stuck at the monthly average of about 150, where it has been for most of the past two years. If the overall economy is the restraining factor, don't expect any significant changes for the next year or so. The real highlight of the ballgame will be to watch the developing changes in market share. At its current torrid pace, Datachecker will be pushing IBM out of second place by mid-82.

Remember our articles....

....on the New York Marathon (SCAN Oct 79; Nov 79) and the use of bar code scanners to record the time and order of finish of the 15,000 runners in this annual event? Well, Computer Identics, Printronix and QMS have teamed up to expand the use of machine-readable symbols for the race with some unique new systems.

Of the 50,000 runners who applied for the race, the first 16,000 applicants were accepted and sent a verification letter. This letter contained a bar coded "runner number" which was scanned when presented at the registration table the week before the race. The scanner was tied to a Printronix printer via a QMS controller. It took six seconds to print each runner's bib with his number in large reverse type and a smaller tear-away bar code section. The bar codes were removed at the end of the race where they were scanned to record the finishing time and position of each runner. The bibs were printed on four printers in four days, operating eight hours each day.

According to the companies involved, the system worked so well that several other marathon organizations are expected to adopt it. It was a highly visible and effective use of bar code scanning, and we wish it could have gotten more publicity on the national televised event.

Don't move too quickly....

....to adopt a code and symbol for your shipping containers, and don't rush into final software for your scanners and verifiers for that market.

There are still some open questions regarding the final symbology and format of the UPC Case Code. Although Interleaved 2 of 5 still seems to be the symbol of choice, the number of digits, the use of the modulo check digit, location of the symbol (how many sides and where) and whether a ladder or picket fence should be used, are still not finalized. The UPC Board of Governors is meeting in November. It would be great if all of the decisions were made at that meeting -- but we may have to hold our breaths a little bit longer.

There are a number of ways....

....to measure the penetration of bar codes into the pre-recorded music industry. One popular bench-mark of industry activity is the Top-100 LP's (as published in Billboard Magazine). The National Association of Recording Merchandisers (NARM) has tabulated the mid-September Top-100 listing and found two-thirds are bar coded. This is double the one-third from a year ago and reflects the increased commitment by more companies. The only major hold-outs at this time are Atlantic, Elektra, MCA, Motown and Polygram. The significance, of course, is that the retailers will be much more receptive to installing front-end (and backroom) automation when a larger percentage of products are bar coded. This is similar to the UPC/EAN experience where 70% source-marking was the magic number.

The producers have been dragged into the program one-by-one, some screaming at the "defacement" of their record jackets. NARM is now conducting on-site tests at some retail establishments, and expects the results to help push the program along. The record producers have cooperated, for the most part, and are awaiting some commitment from the retailers. By most informed estimates, however, it may not happen for a couple of years.

After taking about a year....

...to absorb the acquisition of the Monarch Marking/Codabar operation from Pitney Bowes, Welch Allyn is now going public with its new Decoder Products line. Although designed to scan all the popular codes, Welch Allyn is heavily promoting Codabar as the most reliable, claiming it allows for wide variances in print quality and includes self-checking features. The new Decoder line includes fiber optic wand scanners; fixed position laser scanning heads; fixed position fiber optic scanners; universal decoders; data terminal entry terminals; and a data collection system including a multiplexer.

Chett Benoit, Marketing Manager, is emphasizing applications in warehouse and manufacturing operations, libraries, blood banks, and photo labs. A new slick brochure is available from the company with additional detailed product

bulletins. Welch Allyn, Industrial Products Division, Jordan Road, Skaneateles Falls, NY 13153; 315/685-8315.

Symbol Technologies is launching....

....a more aggressive marketing program for its Laserscan products. At the COMDEX '81 Show in Las Vegas, November 19-22, the company will formally introduce and demonstrate the Laserscan 1000 portable hand-held unit; and the Laserscan 3000 multi-mount unit.

The Model 1000 reads at 100 scans per second up to 2½ inches from the symbol. Although this is the formal introduction of the unit to industry, the Model 1000 has been operating at CBS Records (SCAN Oct 80), and 38 units were sold a few months ago to Cordis Dow (SCAN Aug 81). The unit is priced at \$4,000 for single units.

The Laserscan 3000 is designed for fixed mounting in a number of configurations and will scan at a distance of up to four inches. Applications include retail POS, blood banking, library circulation, inventory control and work-in-process. The scanner may be mounted to incorporate manual or automatic item transport and is not affected by high ambient light conditions. A system, incorporating the Model 3000, may include a scan head, console, keyboard and dot matrix printer, and is priced from \$4,000 to \$6,200 depending on options. All prices are subject to quantity discounts of up to 40%. Symbol Technologies, 90 Plant Avenue, Hauppauge, NY 11787; 516/231-5252.

Intermec has reported lower sales and profits....

....for the second quarter of fiscal year 1982. For the six months ended September 30, sales were up, but profits were sharply down.

	3 months ended		6 months ended	
	9/30/81	9/30/80	9/30/81	9/30/80
*Revenue	\$3,535	\$3,830	\$7,496	\$6,863
*Net Income	109	415	412	667
Earnings per share	.05	.21	.19	.34

(*Figures in 000)

Reviewing the disappointing second quarter results, President David Allais indicated that "orders have slowed and original equipment manufacturers have been delaying delivery of Intermec products. Interface Mechanisms is geared to shipment levels substantially higher than the abruptly lower levels of the past three months. Our bottom line reflects the difference."

Intermec also announced some new products, including the enhanced capabilities for the 9400 Portable Bar Code Reader; the new S-35 Bar Code Printer, designed to print alphanumeric bar codes and up to 10 lines of human-readable text; and the new Model 9160 Port Concentrator, which manages two-way data traffic between a host computer and up to 16 bar code readers.

We like the new Intermec ad showing the plant manager plugged into every department of his operation, tracking work-in-process, inventory control, quality

control, engineering changes and shipping and receiving -- all through bar code scanning. Ironically the ad also offers a new booklet on "How To Turn Better Data Into Higher Profits".

MSI's second quarter financial results....

...reflected increased profits on revenues that were relatively flat.

	3 months ended		6 months ended	
	<u>9/26/81</u>	<u>9/27/80</u>	<u>9/26/81</u>	<u>9/27/80</u>
*Revenue	\$13,633	\$13,511	\$27,828	\$25,574
*Income (continuing operations)	1,100	851	2,210	1,667
Earnings per share	.50	.37	.95	.73
(*Figures in 000)				

Backlog at the end of the second quarter was over \$19 million, up from \$15 million a year earlier. This included approximately \$6 million of the current backlog representing a contract with IBM customer service division for MSI hand-held portable data entry terminals. Shipment of these terminals are due to begin in the current fiscal year in accordance with the contract signed with IBM on September 14, 1981.

A new label-printer mechanism....

....is looking for OEM applications. Data Specialties has introduced Moduprint as a demand printer for generating labels, tags, tickets or forms containing random, variable information. The high-speed dot matrix head provides sufficient impact to print up to six layers of forms. It can produce bar codes, text quality letters, line drawings and OCR characters of various sizes.

Bill Hoff, Jr., Marketing Manager, indicates that the unit is available for demonstration now and for delivery by February 1982. Primary applications will be for UPC/EAN product identification. The printer does not have the size capability to print case codes. Emphasis has been on rugged construction. The print head has a rated MTBF of 300 million printed characters. The printer mechanism, complete with label supply and take-up systems, is priced at \$1200 with OEM discounts available. Data Specialties, Inc., 3455 Commercial Avenue, Northbrook, IL 60062; 312/564-1800.

As a service to this industry....

....the Automatic Identification Manufacturers (AIM) has published the Distribution Symbology Study Group report in its entirety. It also includes the complete symbol descriptions previously published by AIM in separate pamphlets. These are USD-1 (Interleaved 2 of 5) and USD-2 (Code 3 of 9-subset). To obtain a copy, send \$15.00 to AIM/MHI, 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.