



newsletter

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

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Although its informal billing....

....as a "Summit Meeting" may have been a little pretentious, it was, nevertheless, a gathering of the major players from the major user organizations involved in bar code scanning. The Automatic Identification Manufacturers (AIM) organized and sponsored this meeting, a first of its kind, and it was conducted in a very professional manner (in Baltimore on August 23).

Each user organization first presented a brief overview of its activities related to scanning:

- Uniform Product Code Council: The history of UPC, and its successes at retail checkout, will be augmented by new ventures into case coding and the administration of the number assignments to industrial firms.
- American National Standards Institute: ANSI has applied to the International Standards Organization to adopt the ANSI standards on bar coding of unit loads and transport packages, and is striving to maintain an up-to-date standard that will reflect current technology in printing and scanning.
- Automotive Industry Action Group: AIAG expects final acceptance and publication of the shipping parts label within the next few months with some company units already implementing the label on all supplier products. Educational conferences to spread the word among all auto company and supplier personnel is continuing. New bar code standards are being planned for individual parts labeling, returnable containers and documentation.
- Department of Defense: The LOGMARS Program is being implemented worldwide. Mil Std 1189A is not yet out of the woods, but final publication is still slated for this month or next.
- Health Industry Bar Code Council: Although the HIBC program is in its earliest stages, there is significant pressure from the hospitals to get moving. An associate membership category will be created within the Council to encourage supplier participation. The National Wholesale Druggist Association (NWDA) presented its special perspective on the development of the health industry bar code, and why UPC has become an integral part of the system.
- Other representatives from the Federal Drug Administration, Graphic Communication Association, National Bureau of Standards, and the American Paper Institute all described developments within their industries.

The second half of the program was conducted by the AIM Technical Symbology Committee and explored a host of technical issues including print quality, verification, mixed density, autodiscrimination, scanner performance, substitution error rate and other areas. It was readily admitted that each of these topics was worthy of a two-day discussion and that only some of the key points of each could be addressed at this first meeting.

During the final hour of the meeting, the discussions moved over a broad range of subjects. In view of current advances in printing and scanning technology, questions were raised as to the continued relevance of some standards and specifications written over two years ago. There were strong feelings about the lack of objective, definitive data on symbol/scanner performance vis-a-vis first read rates and misread rates. AIM described a proposed study under consideration to tackle this problem. They are exploring industry and government financing, and participation by a university to provide the objectivity required.

Although no poll was taken, the general concensus was that the meeting was very worthwhile (although at times it did sound like what one attendee called a "tutorial" by AIM). It was agreed that user/vendor dialogues should continue. A more formalized approach to the meetings and agenda will be explored by an ad hoc committee of representatives from AIM, HIBCC, AIAG, DOD and UPC.

Pitting Grand Masters,....

....and lesser players, against a computer with standard keyboard input, is old-hat to chess aficionados; but high-stakes poker needed bar coded playing cards as the coded input to the computer. A poker program was developed for the Apple computer by Databar. To insure accurate input (no cheating) to the computer, the company developed a special reader to scan the face down "hole" cards, plus a wand reader for the "up" cards. A challenge game was arranged with the winner of the World Series of Poker. Because of some computer glitches, the results were inconclusive.

But all is not lost! According to Databar, out of this experience a new product emerged which they added to the company's line (SCAN Aug 84). Using the Databar-developed special scanning optics, the company has introduced a series of self-contained counter-top scanners for various retail trades. The scanner is described as not a wand but "a unique optics system that uses visible light to view much of the entire height of the bar code not just a spot...(and) produces the industry's highest First Read Rates."

The resulting 920 series includes the Boxscan 920 for shoe boxes; Vidscan 920 for video cassettes; and the Bookscan 920 for library books. All are priced at \$450 in quantities of 1-9 with quantity discounts available. The company will arrange special scanning configurations for other product applications.

We don't think we've heard the last of this inventive and adventurous company. Databar, 6825 Shady Oak Road, Eden Prairie, MN 55344; 612/944-5700.

Computer Identics continues....

....to report solid gains in sales and earnings for 1984. Sales more than doubled in the second quarter and for the six months period, and earnings continued in the black, all compared to similar periods last year.

<u>Computer Identics</u>	<u>3 Months ended 6/30</u>		<u>6 Months Ended 6/30</u>	
	<u>1984</u>	<u>1983</u>	<u>1984</u>	<u>1983</u>
Sales (\$000)	\$2,354	\$988	\$4,471	\$2,197
Net Income (Loss) (\$000)	165	(289)	289	(428)
Net Income (Loss) per share	.04	(.20)	.07	(.31)

President David Collins reported the company's backlog has continued high and that shipments of the new SCANSTAR Model 100 and 500 scanners will start during the third quarter.

Although sales are moving....

....smartly ahead for Symbol Technologies, sustained profits are still eluding the company. Chairman Jerry Swartz had expected and predicted (SCAN Jun 84) a profitable fourth quarter for F/Y 84 (ending June 30), but preliminary management figures do not bear that out. The indicated losses for that quarter (final figures have not yet been released for F/Y 84) are expected to be cut sharply, compared to previous quarters, but profits are not expected until F/Y 85.

According to Swartz and President Ray Martino, "fiscal year 1984 was the Year of the Foundation; F/Y 1985 will be the Year of the Profit." The favorable renegotiation of their manufacturing contract with Mars Electronics, and the startup of limited in-house manufacturing, will improve gross margins for the LS 7000. The company will be in the black by second quarter F/Y 85, all according to Martino.

There is a great deal of confidence and optimism put forth by this newly-forged management team. Swartz is now free to do the forward planning and research; Martino is handling operations. After the troubled history of management problems this seems to be a welcome change for the company. Martino predicts sales will double in F/Y 85 and double again in the following year. With F/Y 84 sales at about \$8.7 million, this would put the company in the \$30-\$40 million range by F/Y 86.

All of this emerged during a recent interview with Swartz and Martino. They are confident that their primary product, the LS 7000 hand-held laser, can now withstand the retail and industrial environments. Recent reported maintenance problems have been corrected, they say. New markets are being explored for the LS 6000 fixed-position scanners, and in a few years the company expects sales of these units to equal the laser gun. The newest product of the company is the LASERLINK, an interface to the LS 7000 laser gun that enables the user to plug the unit into any port now using a hand-held wand. There is much optimism about the potential for this "palm-sized translator" which is offered free to anyone buying the hand-held laser scanner.

Research is continuing in other areas, including the laser diode. There is great promise for improved costs and performance over he-ne lasers from these devices. They are potentially smaller, less expensive, sturdier, and draw less power -- all contributing to a smaller, portable, battery-operated device. (Symbol Technologies, of course, is not the only company exploring laser diodes. Other than Optel, however, we know of no bar code scanners on the market using this type of laser source.)

Symbol Technologies, 1101 Lakeland Avenue, Bohemia, NY 11716; 516/563-2400.

One of the newer....

....public companies with bar code products is Graphic Technology (Olathe, KS) -- and their first year-end results since going public (SCAN Dec 1983) are impressive:

<u>Graphic Technology</u>	<u>Year Ended</u>		<u>3 Months Ended</u>	
	<u>6/30/84</u>	<u>6/30/83</u>	<u>6/30/84</u>	<u>6/30/83</u>
Sales (\$000)	12,334	7,698	4,471	2,197
Net Earnings (\$000)	1,344	901	457	204
Net Earnings/Share	.84	.72	.24	.19
Shares Outstanding (000)	1,607	1,266	1,900	1,099

G/T's primary products are bar coded shelf labels and computerized pressure-sensitive labels. These are used by wholesalers and retailers, mainly in super-markets, discount merchandisers and drug chains. Major customers include K-mart, Wal-mart, Fleming, Eckerd Drug and Kroger.

According to President Terry Van Der Tuuk, the 60% increase in sales were from all parts of the business. He says he expects "the momentum of our sales increases to continue. The new laser production operation based at our headquarters, and a second new facility to be operational in the massive Los Angeles market in September, should further sustain our growth." The company's sales growth over the past seven years has exceeded an annual rate of 60%.

We happen....

....to like Harry Burke. He may be contentious at times, but he knows his bar codes, and has been an ardent supporter of the technology for years. He has certainly never displayed any reluctance to take a position he thinks is right -- even in the face of strong opposition.

Burke, now with the Data Pathing Systems Division of NCR Corp., has just completed his most ambitious work devoted to bar code scanning titled Handbook Of Bar Coding Systems. It is a hard-covered book published under the aegis of Data Pathing/NCR (that means, incidentally, that all royalties go to NCR and not to Burke -- but don't let that deter you from buying your copy).

In its 11 chapters, 7 appendices and 220 pages, the book covers the origins, growth and technology of bar codes. In the words of the author, it is "a guide which an organizer of a bar code program can use to chart his way through the morass of industry standards and commercial sales literature."

Burke sees the pervasive movement of the industry as now inhibited by four issues:

- "(1) The confusion engendered by the proliferation of bar-coding schemes;
- (2) the fact that those bar-code features which determine both print and read reliability are not well understood;
- (3) the performance characteristics of available printers; and
- (4) a lack of inexpensive reading devices which do not require manual manipulation."

And just in case you think that becoming a writer of books has diminished his irreverent approach to a subject he considers serious, check the glossary of

terms. You will be surprised to discover the relationship to bar code scanning of the following: Boustrophedon; Kipling, R.; Panache; and Poor Man's Header Printer.

Copies are \$42.50. If not available at your local book store contact the publisher directly; Van Nostrand Reinhold, 135 West 50th Street, New York, NY 10020; 212/265-8700.

We may just have to....

....retain a full-time book reviewer. Another book on bar code scanning is about to be published. Reading Between The Lines, An Introduction To Bar Code Technology is written by Craig Harmon, bar code consultant, and Russ Adams, Editor of Bar Code News. Published by North American Technology (which also publishes Bar Code News), this 250 page handbook covers all aspects of creating and scanning codes, collecting and transmitting data, and systems design.

Although we found the first section of the book, describing the technology, to be straightforward and useful, some of the 17 chapters on applications are articles lifted directly from Bar Code News. Many of them, it seems to us, are too blatantly commercial -- extolling the virtues of the authors' products -- to be included in a book of this kind.

We are really pleased to see so many worthwhile additions to the industry's literature. North American Technology, 174 Concord Street, Peterborough, NH 03458; 603/924-7136. Prepublication price \$14.95 (add \$8.00 for overseas airmail)

One of the bellweathers....

....of this growing industry is the annual Bar Code Manufacturers and Services Directory. The 1985 edition lists 220 companies with bar-code-related products and services -- 80 more than in 1984. Some of the additions are new organizations, others are established companies with new products for this market.

Included are 66 companies offering prewritten software; 89 with custom software. There are 34 different categories of scanners and 33 groupings of printers of every type, method and application.

The 165 page directory costs \$34.95 (\$36.95 in Canada; \$44.95 elsewhere) and is available from North American Technology, 174 Concord Street, Peterborough, NH 03458.

In its expanding efforts....

....to broaden the scope of educational material related to bar code technology, the Automatic Identification Manufacturers (AIM) has issued seven new brochures related to bar code printing and label production: Matrix Impact Printing, Electrostatic Printing, Letterpress Printing, Offset Lithographic Printing, Ion Projection Electrographic Printing, and a review of Photographic Label Products.

This is a departure from AIM's previous publications which covered symbologies and scanning equipment. This reflects the increasing number of AIM member com-

panies whose primary products relate to the printing of bar codes; and it also emphasizes the growing awareness that a scanning system is only as good as its printed symbols. The new brochures are formatted for easy reading and explain the essentials of each printing method. Each one moves from a basic explanation of how the process works to specific factors related to bar codes. There are details on advantages, applications, costs, speeds, resolution, and some schematics to demonstrate the actual printing processes.

AIM's newest brochure in the scanning series is on Fixed Beam Scanners, describing scanners for applications such as supermarket checkout, industrial assembly-line operations and numerous inventory, shipping and assembly procedures.

The brochures cost \$5.00/each (\$28.00 for the entire printing series).

Send orders and prepayment to: Literature Department, AIM, Inc., 1326 Freeport Road, Pittsburgh, PA 15238; 412/782-1624.

We find it a little hard to believe....

....that we are beginning our eighth year of publication with this issue.

In the early days most of our material was concerned with UPC, which was just emerging from its development period. Industrial scanning was over the horizon and we were busy watching for the newest developments in products, systems and markets. The major challenge in those days was education. Bar code scanning was not yet accepted in the manufacturing and service environments, and a handful of companies and organizations were concentrating on seminars and educational forums to spread the word.

In the years that followed, the technology moved quickly ahead into new types of scanners and printers. New and rewarding applications were being discovered almost daily. Technology was leading the way and the market was being dragged along behind.

Our perspective has changed this past year as we witnessed the commitment of major user groups: the active entry of the US Government through its LOGMARS program; the automotive industry, spearheaded by the Automotive Industry Action Group; the health care sector implemented by the Health Industry Bar Code Council. With the enormous increase in interest and applications worldwide, by user companies from all environments, the roles have been reversed. We now believe the marketplace has leapfrogged over technology and is demanding performance and capability that is not always available.

And that's just fine! It will shake out the marginal producers and the less-than-adequate equipment. It will spur even faster growth than before. It confirms acceptance of the underlying technology as no other indicator has done. It offers a challenge that will bring out the best in all of us.

The next seven years should be really exciting!