SCAN 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

INCLUDING THE INTERNATIONAL EDITION

Volume VIII Number 5

ISSN 0273-3080

January 1985

It was not....

....a Las Vegas computer extravaganza, nor even a McCormick Place version of the World's Fair, but SCAN-TECH '84 in Cincinnati was a major event nonetheless. It would have taken a futurist to guess, only a few years ago, that over 5,000 visitors and 140 exhibitors would assemble in Cincinnati in December 1984 to witness the state-of-the-art of bar code scanning.

A newsletter is not the place to review each seminar or exhibit or event, but we can try to give you an overview and flavor of what we heard and saw:

- There were probably more printing devices, methods, supplies and contractors than any other single category at the show -- including scanners and terminals. It has become an industry cliche that bar code systems are only as good as the printed symbols. The creation of quality scannable bar codes may become the largest market segment for equipment and supplies in the industry. Dot matrix, impact, photographic, ink jet, laser print, thermal, thermal transfer, metal etching, ion deposit, xerography, are all battling in the marketplace for quality and cost-effective advantages. This phenomonon was not apparent during the 1970's when most bar code applications involved source marking of products for retail or industrial use. The advent of demand printing -- bar coded labels to uniquely identify each product or transaction -- changed all that. There are literally dozens of companies offering equipment, services and supplies. Some are national and have been offering products for years; others are local shoe-string operations with an idea, a gimmick, a new approach to producing the critical bar code labels. It is an area that is evolving technologically, and there are some who complain that it still has a long way to go to achieve the necessary speed and quality the industry demands. The importance and potential size of this market suggest we will see many more companies and products over the next few years.

- Some are new and call themselves system integrators; others have recognized for many years that bar coding does not stand alone as an operating technology. As a result, we are seeing more companies that are offering turn-key systems for manufacturing or distribution requirements. Typically these include computer hardware and software as well as bar code readers, printers and other peripherals. In some cases companies that manufacture bar code scanners -- notably Computer Identics, Control Module and Intermec -- have broadened their scope and have integrated bought-out components to complete an operating package. Others have used specialized software as the leverage to assemble their systems. The importance to the user is that it is no longer necessary to design and assemble a working system having to choose among separate, and sometimes incompatible, components.

- Although it would be foolish to predict the demise of the prosaic wand scanner, non-contact bar code reading is clearly what is happening now. He-ne and diode lasers are being packaged and fixtured in every conceivable form for the widest applications; charge-coupled-devices are appearing and reappearing regularly; other light sources are being introduced based on the significant advantages of non-contact scanning. And as the competition and market volume increase, the cost of these devices is expected to come down significantly.

- Autodiscrimination is the newest buzz word, and that may or may not be a passing fancy. In the strictest sense it refers to being able to scan and recognize different bar code symbols; in the case of multiple bar coded labels (such as AIAG), the information is sorted out in the software; recognizing either bar codes or OCR is also a form of autodiscrimination. This is clearly the newest challenge and one of the hottest features offered by scanning hardware producers.

- There were two awards made at the conference, both signifying major milestones. The Don Percival Industry Achievement Award, co-sponsored by AIM/US and SCAN Newsletter and designated to be given to a "user", was made to the Ad Hoc Committee on a Uniform Grocery Product Code. This was in recognition of the significant contribution made by UPC to the growth and success of bar code scanning in all fields. It was long overdue acknowledgement of that forward-looking group which, back in the early 1970's, demonstrated the viability of automatic identification technology. The second award, named after the late Dick Dilling, was made to Ed Andersson. The Dilling award has been established to recognize outstanding contributions of individuals from the supplier side of the industry. Andersson is the outgoing president of AIM/US and it was under his leadership that AIM became an independent organization and broadened its scope internationally.

SCAN-TECH '84 marked a turning point. The conference may get larger and more elaborate in the years ahead, but the pattern has been established. The size, shape, interest and enthusiasm evident in Cincinnati will provide the yardstick for future events.

Back in July 1984....

....we ran an item about Hand-Held Products and their redesigned and repackaged Micro Wand unit. Buried in the article was a company prediction that a "major contract" was in the offing.

We interviewed President Mike Weaver at SCAN-TECH '84, and that major contract turned out to be for Federal Express. The large overnight courier has been gearing up for bar code automation for a few years, and has been testing various hardware configurations. The code 39 symbol has been printed on their freight bills and some scanning is being done at the terminals.

Now the shirt-pocket scanning computers produced by Hand-Held will become standard equipment on the 13,000 courier trucks running throughout the country. No word from Weaver on the total value of the contract, but it has to be significant for this relatively new and small company. We had the distinct feeling while talking to him on the exhibition floor that we were constantly looking up -- probably because he was floating a few feet off the ground at the time. Hand-Held Products, 8008 Corporate Center Drive, Charlotte, NC 28211; 704/541-1380.

A random collection....

....of items too significant to let slip by this month:

- In a follow-up to our December 84 lead story on Bullocks (Los Angeles, CA) we spoke with Bill Sumner, the project leader for this introduction of bar code scanning in a department store environment. First he wanted us to know that Price Look Up is included in the initial test program. PLU is an important part of the program's long-term objectives and represents 40% of the anticipated savings. Second, a management committee at Federated Stores has recommended that that giant retail holding company adopt UPC as the code and symbol of choice in all of their department store units.

- Some readers have expressed concern that we no longer report UPC supermarket installations as regularly as we did a few years ago -- and one even wondered whether we were covering up negative results. Well, no UPC-gate here! The industry has settled into a steady rate of about 2,000 new stores per year -- as we predicted it would a few years ago -- and the suppliers have settled into their respective share-of-market rankings without much change. As of September 1984, the most recent report by FMI shows a total of 10,535 installations with 1,309 for the 9 months since January 1984. Suppliers' share-of-market data are as follows: NCR - 36.1%; Datachecker - 25.5%; IBM - 22.8%; DTS - 7.4%; Sweda - 6.5%; TEC - 1.1%; Berkel - 0.3%.

- Symbol Technologies (Hauppauge, NY) reports a large multi-year contract from Wal-Mart for their LS7000 laser gun. Wal-Mart is the country's second largest discount retailer. The first-year value of the award is $1.7 million. S/T is now sitting with multi-year contracts from all sources totaling $23 million, of which $3.8 million is guaranteed 1985 backlog.

- Barcode Industries (Great Neck, NY) continues to emphasize its strategy of adapting its bar code readers -- both wands and lasers -- to the widest possible range of terminals and cash registers. The company now claims it provides direct interfaces to over 100 different terminals which avoids the need for the user to employ protocol converters or similar devices. New interfaces are added to this library, as requested by new customers, for models not currently covered. The company also recently introduced their new line of thermal bar code printers: Model 100 for heavy industrial environments; Model 600 for light industrial use.

There is a unique factor....

....which sets bar code implementation apart from almost any other new technology; i.e., companies are being forced to accept bar codes as part of their operations. Since 1973, when the supermarkets and other retailers adopted UPC, tens of thousands of companies have had to place the symbols on their packages; when government contracts specify a bar code conforming to the LOGMARS standards, contractors are forced to include it; as will the automotive suppliers starting with the 1986 model year and health industry packagers soon after.

This, then, does not become an internal company decision as to whether to install a new production line, or computer system, or open a West Coast sales office. Management does not have the luxury of deciding which method of automatic

identification they prefer, or when they must comply. In addition, the explosion of new supplies, equipment, applications and systems, and the introduction of new and revised standards and specifications, has prompted the users to seek their own independent organization.

These complex pressures, and the undeniable fact that bar coding has become recognized as the best method of automatic identification, stimulated the move to create an objective source of information to answer questions such as: How do the various scanners compare? Does autodiscrimination affect reliability? Which symbology is most secure? Which printing methods offer the highest density, best throughput, most versatility, acceptable quality?

All of this is by way of background to better understand the current movement to create user organizations:

- The first official recognition of the need for a users group was the Summit meeting, organized by the Automatic Identification Manufacturers, Inc. (AIM/US), and held in Baltimore in August 1984 (SCAN Sep 84). The approach by AIM/US was to invite all of the known user-type organizations (UPCC, AIAG, DOD, HIBCC, etc.) and to provide a forum for these groups to review common problems. Out of this meeting the Federation of Bar Code Users has emerged. The Federation met in Cincinnati (during SCAN-TECH '84). Don Dubuc of General Motors (and the Automotive Industry Action Group Bar Code Project Team) was elected temporary chairman. The next meeting is scheduled for mid-January 1985, at which time a more definitive organization plan and charter will be developed.

- About two months ago, in a totally separate effort, a proposal was put forth to form a Bar Code Users Group (BCUG). The driving force behind this move was Craig Harmon (QED Systems). Harmon has been pushing for years for better industry standards and objective evaluations of equipment and symbologies (SCAN Feb 83; Dec 83). He continued this effort while chairman of the HIBC Task Force last year. He sees the BCUG as a focal point for the generation of hard empirical data. This data would be derived from tests performed on bar code reading, printing and verification equipment and supplies. The results of these tests would be published for use by the user and supplier communities and would include ratings for specific manufacturers and models. Harmon approached key personnel from user companies to serve on the Board of Directors and is seeking corporate funding to establish an organization to complete the tasks on a continuing basis.

A potential clash between the two groups was imminent. Certainly there was no need for more than one such organization. The fact that they approached the same ultimate goals from diametrically opposite poles did not help. There was a great deal of discussion in Cincinnati to try to resolve any conflict. One result was that both groups did agree that the Federation should at least provide room in its charter for the large number of independent user companies not affiliated with any trade group or organization.

Comment

We have undertaken this long exposition for a few reasons:

- *First and foremost we enthusiastically support the concept of a user organization.*

- *Second, we believe that two overlapping groups would be disastrous for both. They must find a means for clearly defining totally separate charters and pursue separate objectives. We think it can be done, and have privately communicated our thoughts to those directly involved.*

- *Third, we urge all concerned to communicate their ideas and interest and to participate to the greatest extent possible. The outcome will affect both suppliers and users for many years to come.*

For the Federation of Bar Code Users: Don Dubuc, General Motors Corp., GM Tech Center - Department 60, Warren, MI 48090; 313/575-1493. For the Bar Code Users Group: Craig Harmon, QED Systems, Box 2524, Cedar Rapids, IA 52406; 319/377-2518.

The US Department of Defense....

....continues to expand its use of bar codes following the initial LOGMARS program which directed the source-printing of code 39 symbols on all packages. In 1982 the LOGMARS Coordinating Group (LCG) was established. Included in its charter was the task to explore expanded use of bar coding on DOD documentation. To accomplish this the LCG established the Joint Services LOGMARS Documentation Group in 1982, chaired by the Defense Logistics Agency (DLA). (And it just so happens that the DLA representative appointed to the Documentation Group was Mike Noll, who cut his bar coding teeth on the LOGMARS program while he was with the Army at Tobyhanna.)

The Documentation Group has just issued its first report, DOD Documentation Test Project -- October 84, which describes the test program incorporating bar code technology in shipping and receiving documentation. A pilot test was conducted between Defense Depot Ogden and Warner Robins Air Logistics Center. This was followed by live tests, with all services participating, starting last July and including a total of 12 sites. The test project is being conducted to improve and simplify the gathering and reporting of intransit data. The Documentation Group is to submit its final report on or about June 1985.

Considering the enormous impact the LOGMARS program has already had on this industry, portions of the report's conclusion are worth quoting:

> "The LOGMARS final report identified Department of Defense documentation as an area where significant benefits can be accrued through use of bar code technology. It is anticipated that standardization and system-wide use of these bar coded forms could provide cost savings to the Department of Defense and could further the ultimate LOGMARS' goal of utilizing bar code technology whenever it is cost effective in logistics operations".

In the radio and TV....

....industries it is referred to as "narrowcasting" (as opposed to broadcasting); i.e., providing information and entertainment to a selected group with narrowly defined interests or demographics. That's what we thought we were doing when we started SCAN Newsletter eight years ago.

But it seems as if that base of interest can be made narrower still. We refer to Tom Swift and his new Health Industry Scanning News. Swift explains his purpose in Volume I, Number 1 published November 1984:

"Bar code scanning in the health industry is certainly an idea whose time has come. And that's what this newsletter is all about -- how to put bar code scanning to work to improve productivity and produce significant savings for your hospital or business. One of the major objectives of Health Industry Scanning News will be to track the work being done at hospitals across the country so that you can share in the experience of others".

We wish him luck in his new venture. Health Industry Scanning News, 65 South Route 303, Blauvelt, NY 10913; 914/359-1087.

The latest information....

....on the Health Industry Bar Code will be covered in a series of seminars sponsored by the American Hospital Association and the HIBC Council. The three regional conferences will include two and one-half days of seminars with supplier exhibits. The conferences are scheduled for:

February 18-20 at the Sheraton Plaza la Reina, Los Angeles
April 1-3 at the Hyatt Regency O'Hare, Chicago
June 10-12 at the Franklin Plaza Hotel, Philadelphia

HIBCC, 111 E. Wacker Drive, Chicago, IL 60601; 312/644-6610.

A new series of seminars....

....are being offered by IDM. The two subjects are: Inventory Control System Using Bar Coding and Shop Floor Data Management System Using Bar Coding. Seminar leaders are Ed Coe (Ford Motor, AIAG, Consultant); Ronald Donoghue (American Seating Company, Consultant); and Harry Burke (NCR Data Pathing Division, Author). The seminars are scheduled for February 6 and 7 (Detroit); March 5 and 6 (Cleveland); April 23 and 24 (Chicago). Each subject will be covered in a separate one-day seminar.

Industrial Data Management Corp., 1895 Indian Trail, Bloomfield Hills, MI 48013; 313/626-6857.

There are nearly 400,000 Acorn computers....

....installed in the UK, including 80,000 in schools. The British Broadcasting Corporation (BBC) developed a major school microcomputer education program a few years ago and commissioned Acorn Computer Ltd. to build the BBC Micro.

This has spawned the Acorn User, a monthly UK computer magazine read by many owners and users of these computers. In the December 1984 edition, the publication ran a story on bar code scanning describing an inexpensive bar code reader and educational kit. The kit is produced by the government-sponsored Microelectronics Education Programme (MEP) and packaged by Addison-Wesley Publishers. The MEP package, including a bar code reader, user guide, utility software, bar code stencil, and other items sells for a total of £58 (about $69) retail.

The reader supports the EAN code, with a simulation point-of-sale system; Telepen for program entry; binary and hexadecimal coding via the stencil. The metal stencil allows users to trace out their own bar codes and enter data in a system

developed by the MEP. Acorn User magazine will regularly publish computer programs in the Telepen bar code format. A limited number of bar code reader teaching packs have been made available to the public from Redwood Publishing, 68 Long Acre, London WC2E 9JH England.

We may have some minor reservations about this pack but we are very aware of its potential positive effect. We hope to have hands-on experience in the next month or so and will pass along our comments. Bar coding through the schools can be a powerful educational tool for the industry.

The first European show....

....to follow on the heels of SCAN-TECH EUROPE is being totally planned and sponsored by AIM/UK. The conference and exhibition, to be known as AIM/UK 85, is set for 17-19 April 1985 and will be held at the Novotel Exhibition Center, London. Over 50 booths are available to any business in the automatic identification industry, from any place in the world.

By the way, in response to some of our readers who have been asking about the availability of SCAN-TECH EUROPE proceedings, the cost is 250 Dutch florins made payable to AIM, Inc.

For information on AIM/UK 85, and a copy of the SCAN-TECH EUROPE proceedings, contact: International Secretariat, ISM Ltd., The Old Vicarage, Haley Hill, Halifax, West Yorkshire, England HX3 6DR.

For the time being....

....it looks as if most of the nationalistic issues have been put aside and that AIM/Europe (SCAN Dec 84) is about to come into existence. The inaugural meeting is planned for January 25, 1985 at 11:00 a.m. at the Hotel Sofitel, Brussels.

As presently visualized by some of the active sponsors, AIM/Europe will provide the regional home for both existing national organizations, and for individual companies, whether or not they belong to any trade group. Some of the preliminary objectives include: • The common presentation of European specifications • Accurate translation of material in three or more languages • Coordination of major industry efforts on a pan-European basis; e.g., efforts similar to the AIAG and HIBC in the US • The staging of future SCAN-TECH EUROPE events.

Those with an interest in the development of bar coding in Europe should be sure they are represented at the AIM/Europe inaugural. (Contact ISM Ltd. for details. See address above).

As the industry has grown....

....we've watched for the increased availability of specialized consulting services with specific expertise in bar code scanning. For the most part, it does not seem to have happened that way. Many user companies go it alone, establishing internal specialists to learn the trade and implement systems; some have gone to the consulting generalists like A. D. Little and McKinsey; others have used system integrators/consultants specializing in production control, ware-

housing, distribution or other functional areas; the majority rely on the scanning hardware company they selected.

There is one specialist consulting organization that has emerged successfully by sticking exclusively to bar code technology. Symscan was organized in 1980 by Ed Shadd. He was joined soon after by Dean Szajna and their assignments and client base have grown impressively.

Symscan's professional staff is now divided into two operating units: the Consulting Group includes bar code consulting in manufacturing and distribution environments, market research and educational seminars. The newer Computer Systems Group was founded to provide a broader range of services directed toward system integration and tailored to the specific needs of clients. This group will supply everything necessary to create a full-capability manufacturing and distribution control system including design, development, hardware, software, installation and training. According to VP Al Gubiotti, who heads up this group, systems have been sold and installed in Eastman Kodak and Bausch & Lomb.

The most recent addition to the company's executive staff is Jo Ann Lattuca, who now functions as Director of Marketing and Sales.

Symscan, 2132 Five Mile Line Road, Penfield, NY 14526; 716/385-6220.

It's really not a bad idea....

....and like most good ideas, it's simple and obvious. Neonic Design is offering a Wand Holder designed to "allow the operator to store the reading device in a manner that allows easy retrieval and in a hand-held position that is conducive to immediate use upon retrieval". (The unit is much simpler than the verbiage used to describe it.)

The Wand Holder, made of ABS plastic, may be mounted in a variety of positions, with optional weighted base, sponge rest pad or sticky-back for mounting. It will accommodate all known round or elliptical shaped reading devices, according to company President Bruce McPherson. The introductory price if $10.35, including postage and handling.

Neonic Design, 2342 Sunderland Road, Maitland, FL 32751; 305/331-9150.

And in the....

...."will wonders never cease" department, we've just learned that a US government agency has applied for a UPC number. The US Office of Personnel Management is planning to publish a management magazine for newstand and other retail outlet sale.

The "wonder" part of the story is that the plan is to make a profit from this business venture. The publishing team will include the UPC symbol on the cover, just like any other publisher. The hope is that this publication will contribute to the reduction of the federal budget deficit.

SCANNING, CODING & AUTOMATION NEWSLETTER. 11 Middle Neck Road • Great Neck, N.Y. 11021 • 516/487-6370
Published monthly. PUBLISHER/EDITOR: George Goldberg; CIRCULATION DIRECTOR: Teddy Allen.

INTERNATIONAL EDITOR: Paul Chartier • P.O. Box 7 • Cirencester GL7-1JD England • 285-3011