



newsletter

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

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Under the aggressive leadership....

....of the current officers and directors, the Automatic Identification Manufacturers Section (AIM) of the Material Handling Institute has become a completely changed organization. Led by President Ed Andersson (Computer Identics) AIM has grown from a minor group within the MHI to a vibrant, expanding, independent trade organization. Consider the following:

- The Board of Directors has voted to incorporate as a separate trade association, to be known as the Automatic Identification Manufacturers, Inc. The new AIM will remain affiliated with MHI, but primarily for administrative purposes. Companies can join the new AIM without prior membership in MHI.
- There will be both regular and associate member classifications, with a broader base to attract many member companies who could not previously meet the more stringent MHI requirements.
- Programs and committees have been inaugurated to reach out to other industry groups and make the voice of the bar code scanning industry louder and more distinct. This includes, a Technical Symbology Committee intended as a technical resource for all groups relating to bar code scanning. A task force headed by Rich Bravman (Symbol Technologies) is now studying the proposed structure, objectives and activities of this group. A Liaison Committee, headed by Chett Benoit (Welch Allyn), will contact other professional and trade organizations and industry groups to establish an on-going dialogue and coordination of efforts and standards.
- Proposals are being evaluated for the publication of a Technology Journal, sorely needed as a research and engineering forum.

Comment

The response to Scan Tech 82 and now Scan Tech 83 has propelled AIM into this new posture. And there is more to be done.

For example, we believe that today's business world demands that an organization like AIM look beyond its national boundaries. Some mechanism must be established to bring in members from around the world. Certainly if AIM does not take these steps, independent groups will be set up in Europe and Japan within a few years, and competition will not be beneficial in this instance.

And while there certainly should be a clear company product or service identification with bar code scanning to qualify for membership, the definition must be broadened to attract as many companies as possible. AIM could look to a membership roster of 100 companies in the near future.

Success, of course, depends on the involvement of individuals. Companies must make personnel available to actively participate in these programs. In the long run everyone will benefit.

Our enthusiasm....

....for the potential of bar code scanning in the health industry (SCAN Aug 83) has not diminished. There is every indication of strong support from both users and product suppliers. Some additional facts to consider since our report last month:

- The US government has decreed that it will only pay hospitals a fixed fee for services rendered to Medicare patients. Up to now, all hospital and other health care facilities' costs incurred for elderly patients were passed along and paid by the Social Security system. Now the hospitals will only be reimbursed a fixed amount based on a published schedule. The message: reduce your costs in line with the fee schedule, or eat the excess. The health care facilities are desperate for systems that offer reduced costs -- and bar code scanning offers good possibilities.
- The overflow crowd expected at the October 4-5 Chicago meeting, scheduled to review and vote on proposed standards, has prompted some drastic measures by the American Hospital Association and the Health Industry Bar Code (HIBC) Task Force: attendance and voting will be limited for each company; representatives of bar code and system supplier companies will be seated separately in the hall; there will be a time limit placed on questions and comments from the floor. (Contact AHA, HIBC Conference-8-West, 840 North Lake Shore Drive, Chicago, IL 60611; 312/280-6083).
- The proposed timetable has been pushed back six months from the original plan. Specifications are now targeted for July 1, 1984 with implementation by January 1, 1985. Commendable, but probably impractical even with the extra half year.
- A correction to our report about the French Blood Commission. That group has not adopted the 3/9 code as we reported. The French Pharmaceutical Industry will use 3/9 as their standard. The international blood banks are still committed to Codabar.

Stay tuned!

Remember our comment....

....about Computer Identics going the private venture capital route to raise funds (SCAN Jun 83)? Well it didn't quite work out that way.

On August 12, 1983, the company filed with the Securities & Exchange Commission to sell 2 million shares of stock to the public at approximately \$4/share. This represents about 48% of the outstanding stock, and includes some shares now

owned by current shareholders. (None of the management people are selling -- the selling shareholders are previous investors in the company cashing in part of their venture capital investment).

The preliminary prospectus, like all such registration documents, reveals many previously unknown facts about the company and its plans:

- C/I expects to realize a little over \$5 million from the offering. The proceeds would be used to retire some outstanding debt (\$1.3 million); expand marketing and promotion (\$.9 million), R & D (\$.5 million), and production/engineering equipment (\$.5 million); and the balance (\$2 million) for working capital.
- The company's best year was 1981 with \$5 million in sales and \$343,000 in profit. There was a drop to \$4.2 million in 1982, with a loss that year of \$543,000. The first quarter of 1983 showed slight improvement in sales, but the company still operated at a substantial loss.
- Computer Identics is still actively suing Southern Pacific Transportation, and related companies, to recover \$34 million in damages and fees. This suit was filed in 1976, and relates to the earlier years when C/I made systems for railroad operations controls. This part of the company's history resulted in operating losses of over \$9 million at that time.
- As a result of this offering and the many private investments in the company -- a number of which date back to the days when C/I's primary business was in railroad systems -- more than 85% of the company will be owned by individuals, companies and organizations other than the founders and current management.

The initial SEC filing was made in early August, and if all goes as planned, the company hopes to be public this fall.

It has been mentioned on these pages before....

....and the question becomes more pregnant each month: when will some of the larger computer companies move seriously into the bar code business? We are inclined to replace our previous "whether" this move will be made, to the more positive "when". Some straws in the wind:

- So far, the successful bidders (actually the only bidders) for the government contracts for bar code scanning systems have been computer companies. Sperry and Burroughs have taken the 3 or 4 awards made by the Air Force.
- We know that over the years almost all of the computer companies have been tracking the progress of this industry. Many have specialists assigned to watching the various applications as they develop. Our subscription list is dotted with computer companies and we don't think it's just for casual reading. About once a month we get a call from a computer company representative asking for the information on the size of the market, or the availability of consultants to help with market analyses, or just a 15-minute brain-picking session on the phone.
- There are already a number of large computer companies who are using bar code scanners as part of their systems. The obvious ones are IBM and

NCR who are in the retail market with point-of-sale equipment. But Hewlett-Packard has been active with bar code readers; Texas Instruments has their little toy; Digital Equipment offers a bar code reader with their data collection terminal; Xerox printers produce bar coded labels.

- The recent major industry standardizations and conversions to bar codes are just the kind of movement the larger companies find attractive. Thus, the government (LOGMARS), the automotive industry (AIAG), and the health care industry (HIBC) portend significant bar code industry growth. What would be particularly attractive would be the incorporation of bar coded data input and bar code printers into total systems with off-the-shelf components.

also
auto

Both users and suppliers would be foolish not to factor these trends into future plans.

Frankly, we are not sure....

....exactly how to handle this story -- so we will just plunge right in and see how it comes out.

The widely-used monthly reports on UPC scanning stores in the US and Canada have been assembled and distributed by the Food Marketing Institute (FMI) almost since the inception of UPC in the mid-1970's. The data was accumulated from reports sent in by the equipment vendors. We have been using that data as the basis for our own published statistics since 1977.

also
scanning
scoreboards/
installations

Although it has long been recognized that the store location specifics in these vendor reports was not always accurate, there was no reason to doubt the basic data. No reason, that is, until now.

FMI decided earlier this year to computerize this information and started to compile a database to include every scanning store. In the process they realized that many store locations seem to be duplicated. Unwittingly, it turns out, manufacturers were reporting installations more than once, and the total numbers were inflated.

Preliminary information suggests that this type of duplication was being reported by all equipment suppliers, and FMI expects (totally unconfirmed) that there will be no change in market share statistics. All manufacturers are now reviewing their lists of stores and "cleaning" them up. FMI expects to have an accurate report soon -- but is not sure.

Meanwhile the data for the last six months has not indicated a very strong market for new scanning systems. Total installations for the first half of 1983 was about 850 stores. This projects to a rate of 1,700 per year, less than last year, and considerably below some of the more optimistic projections we've seen. This is thought to be a reasonably accurate figure -- it's the previous years' reports that are suspect.

Comment

It is a bit difficult to buy the idea that the suppliers did not recognize major discrepancies between their in-house sales reports and the published data. In any case we know that FMI is working diligently to clean up this mess. We urge them to double their efforts!

The supermarket data has provided the basis for many company plans for product introduction, marketing and market research programs, and market penetration evaluations. It is critical that an accurate database be provided.

We will suspend our periodic reports and analyses of scanning installations until this situation is clarified.

Some interesting mail arrived....

....as a result of an editorial in the August INTERNATIONAL EDITION by our International Editor, Paul Chartier.

Chartier strongly attacked the poor progress in achieving two-way compatibility between UPC and EAN, primarily due to the reluctance of the US equipment manufacturers and supermarkets to retrofit their systems to read EAN.

The gist of the letters we received, including one from Albert Heijn, chairman of EAN, was that, although they were in total agreement, the article should have appeared in SCAN, which has wider circulation among our US/Canada readers.

We agree. Here, then, is an excerpt from that article:

"Historically, there may be justification for the one-way compatibility since UPC preceded EAN, and early scanners could not be expected to read an undeveloped bar code. But a long time has elapsed. Most new scanners now on the market can read all four standard symbols. The problem has been the reluctance of the US retailers to retrofit existing scanning installations to read the EAN symbol. As a result EAN manufacturer members are faced with resistance to their EAN source-marked products in North America.

"There has been very poor progress in achieving full two-way compatibility of EAN/UPC equipment and an understanding of the issues by Americans. Because of this, the General Assembly of the International EAN Association recently voted a budget to mount a press campaign, to be conducted in 1984, to make American equipment suppliers and retailers aware of the problems.

"The International EAN Association's funds are not very large for this campaign. In view of our increasingly international base of subscribers and the spread of bar coding throughout the world, we would welcome comments on this serious issue. In particular, we would like to hear from equipment manufacturers with details of models, dates when full compatibility was achieved, and other information relevant to full EAN/UPC compatibility."

A major drugstore chain....

....has dipped its toe into front-end scanning. It's only one store, part of a subsidiary group, and there are no projected plans for expansion. But it is significant nevertheless.

Revco operates one of the largest drug chains in the country. They also run a group of health and beauty aid (HBA) discount outlets called Get-It-For-Less. This is a low-margin, volume operation, carrying a large variety of

general merchandise. A large, new store (23,000 sq. ft.) opened in Memphis early August. The NCR equipment installed includes 11 UPC slot scanners.

It is still too early to evaluate the results, according to management. Items not source-marked are being labelled in the store. There is no word as to whether this presages more scanning any of the discount or regular Revco stores.

Drug and discount stores represent an enormous potential scanning market waiting in the wings, and progress should be followed.

The fiscal first quarter....

....results for Intermec showed significant increases in sales (up 22%) and income (up 37%). The company reports that 24% of its sales are now coming from foreign countries -- mostly Western Europe -- and that 92% of total revenues are from industrial markets.

President David Allais says this record quarter "has been very encouraging" and looks forward to continued progress this year.

	<u>First Quarter ended June 30</u>	
	<u>1983</u>	<u>1982</u>
Sales (\$000)	\$5,039	\$4,116
Net Income (\$000)	449	327
Net Income/share	.10	.07

A new industrial bar code printer....

....is being offered by Microcom Corp. The M-1100 Series printer is described by the company as a compact, quiet, thermal printer that is the "fastest on-demand printer available today". The printhead is guaranteed to 3.5 million labels.

The unit weighs 34 lbs. and operates silently, allowing greater flexibility in its placement. It can print up to 120 2"x3" labels per minute, and can be attached to a basic CRT. Information is entered via a standard RS232C interface.

The M-1100 printer is priced at \$4,995. Discounts are available to distributors. Software packages are available at additional costs. Microcom Corp., 695 Greencrest Drive, Westerville, OH 43801; 614/895-0320.

Hewlett-Packard is now offering....

....its HP 16800A (programmable) and HP 16801A (non-programmable) bar code readers with the option to read UPC/EAN including two digit and five digit supplemental encodings. The bar code readers have automatic recognition program capabilities so that the user can select any code combination. Interleaved 2/5 and 3/9 code reading capability may also be added. The bar code reader will automatically recognize which code is being read. The HP 16800A costs \$1090; the HP 16801A costs \$915; both in quantities of 10. Contact your local HP sales office.

San Diego Scan-Times

Published By Scan Newsletter in Conjunction with Scan-Tech '83—Sept. 25-28, 1983

Seminars, Exhibits Draw Record Crowds To Scan-Tech '83

Eighty Exhibitors Confirmed for Scan-Tech '83

Considered "The Premier Automatic Identification Equipment Seminar & Show," SCAN-TECH '83 will showcase over 80 manufacturers of automatic identification equipment, supplies, and services as exhibitors this week. This compares with 61 companies which participated in the 1982 event in Dallas.

Products/services to be displayed include hand held and moving beam bar code readers, pressure sensitive bar code labels, controlled access terminals, label printing equipment, light pens, multiplexers, OEM add-in/add-on bar code readers, RF powered automatic identification equipment, OCR readers, label application equipment, ink-jet bar code printers, film masters, rubber dies, fixed beam code reading equipment, photoelectric sensors, code verifiers, sortation track-

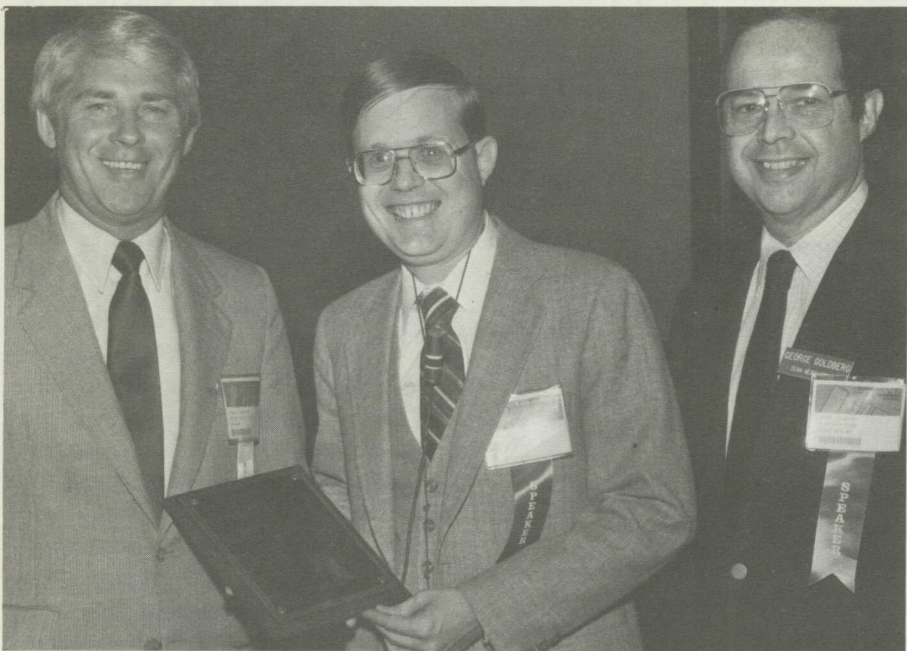
ers, inventory control software, and industry trade publications; all representing the latest state-of-the-art in automatic identification equipment.

NEW PRODUCTS & COMPANIES FEATURED

Even though it is only about 10 months since the last show, the number of new products that will be shown for the first time is very impressive. (See Page 3 for some highlights.) Not only will there be new products from established companies in the industry, but visitors may have to keep a careful scorecard to keep track of new companies as well. Typical of the pattern created in other high-tech industries, there are constant spin-offs of people who believe they know how to do it better than their old employers. And often they do.

(cont. page 5)

Second Annual Industry Award Ceremonies Scheduled



Bar Code Scanning Industry Achievement Award being received by Mike Noll at SCAN-TECH '82 in Dallas. AIM President Ed Andersson (left) and Scan Newsletter Publisher George Goldberg made the presentation.

The Bar Code Industry Achievement Award was initiated in November 1982 at SCAN-TECH '82. Michael Noll received the first plaque. Noll was chairman of the LOGMARS group that developed and implemented the bar code program for the US government. That program has been adopted by both the Department of Defense and the General Services Administration and has had a very significant impact

on the bar code scanning industry. The 1982 award was in recognition of Noll's special efforts to keep the members of the industry informed and involved throughout the planning and implementation of the program.

The award is co-sponsored by the Automatic Identification Manufac-

(cont. page 5)

Seminar Program Designed To Work At All Levels

There's something for every one interested in automatic identification at the SCAN-TECH '83 Seminar. More "user" sessions, more question and answer time, and a longer overall program designed to introduce the technology to the uninitiated as well as advance the thinking of persons who have already implemented automatic identification systems. The program has been spread over a three-day period to minimize brain-overload, and to permit sufficient time to visit the exhibitions to see the actual equipment and supplies discussed in the presentations.

This year's educational programming includes a presentation on the changing role of automatic identification in integrated material handling systems by noted authority Dr. John A. White, Professor, School of Industrial & Systems Engineering, Georgia Institute of Technology.

Six outstanding presentations from users of automatic identification systems will follow Dr. White's keynote address on Monday. Moderators of the user presentations include Edmund Andersson of Computer Identics and Frank Sharkey of Matthews International.

USERS SHARE THEIR EXPERIENCES

User speakers include Dr. Eric Brodheim, of The New York Blood Center, who will explain how machine-readable codes on blood donations have alleviated problems for the blood banking operation.

George A. Coletta, of Westinghouse Defense & Electronics Systems Center, will describe an on-line data collection work-in-process system that makes maximum use of bar code reading stations and minimizes the need for relatively expensive terminals with keyboard entry devices.

Donald L. Dubuc, Senior Project Engineer, General Motors Technical Center will show some of GM's bar coding systems in manufacturing and assembly operations and discuss methods of implementing and integrating bar codes to achieve optimum benefits. This presentation also will cover the Automotive Industry Action Group's (AIAG) progress on devel-

oping a common shipping/receiver bar coded material identification label. The automotive industry effort, spearheaded by the AIAG, is the largest industry-wide effort under way to standardize bar coding in an industrial/production environment.

After lunch on Monday, E. Farmer Cullom, Manager, Meat Division R & D, Rich Foods Company will discuss data capture in the distribution of all products by using the new UPC Shipping Container Symbol. The Shipping Container Symbol promises to have wide-reaching effects across many elements of the distribution systems of consumer goods.

Paul A. Scherbel, Avon Products, will review Avon's use of automatic identification systems. Avon was an early user of bar code systems and has expanded the use of this technology in some very interesting areas. This presentation is sure to be of interest to persons working in areas of development, installation, maintenance, and support of order processing systems and distribution.

Johannes M. Boehme, Executive Assistant for Systems Development at North Carolina Baptist Hospital will review how patient demographic data and scheduled procedures are entered into the data base and a unique bar code label is created. The patient is tracked through the Radiology Department by means of a bar code reader as procedures are performed providing patient status information at all times. With the Health Industry Bar Code meeting scheduled in two weeks, this presentation will provide some important insights.

UNIQUE SPEAKER ROTATION

On Tuesday, the Seminar room will be divided into thirds so each group totals approximately 200 persons. The speakers will rotate from room to room so all attendees will hear all presentations. Tuesday's presentations review the state-of-the-art in automatic identification equipment and systems.

Chester Benoit of Welch Allyn is moderator of a session featuring Scanning. Speakers include Frank

(cont. page 5)

EDITORIAL PAGE

Publishers "Perqs"

We are pleased to be a part of this major industry show-case. This is the second annual SCAN-TECH Exposition and Seminar, and the growth and vitality of this industry are apparent.

Those who read SCAN Newsletter know that, unlike the man who confuses his word processor and food processor, we don't mince words. We feel that the bar code industry has matured enough to tackle some of the questions that have been pushed aside these past few years. Among the perquisites of publishing a newsletter is the opportunity to sound off about some things that seem important to us. And what better forum than this:

- It's about time we did something about "symbol pollution". We suggest there are three basic symbologies that are appropriate for almost every application: UPC for retail; Interleaved 2/5 for all-numeric, high-density applications; 3/9 code for alpha-numeric requirements. The slight advantages that may be obtained from some of the other specialized bar codes, in certain specific instances, do not warrant the non-standardized readers and printers necessary to accommodate them. So why not say so long to 93, 128, Sick (sic), Weber, Telepen, and the 50 or so other non-essential varieties. (In view of Codabar's well-entrenched position with the International Blood Bank organizations, we remain ambivalent on that symbology).
- It's about time the US and Canadian retailers recognized that the world is not bounded by the Atlantic and Pacific Oceans, and began to read the EAN as well as the UPC symbol.
- It's about time we recognized that bar codes and OCR can live side by side. Some joint effort to find a way to have them complement each other is long overdue. At the very least, the involved trade and professional organizations ought to be establishing some level of dialogue.
- It's about time the Automatic Identification Manufacturers (AIM) opened its membership roster to suppliers from outside the US. Considering the growing overseas market for US manufacturers, and the emerging companies in other nations, the timing is just right.
- It's about time we undertook a program to assemble and publish some meaningful industry statistics. There is no organized effort to do this, and some of the numbers being bandied about are ludicrous.

The SCAN-TECH Conference gives us an opportunity to renew friendships made during the past 6 years since we started publishing SCAN Newsletter, and to establish new friends and associates to work with over the coming years of growth and development.

Our best wishes for an enjoyable and fruitful Convention.

George Goldberg
Publisher

San Diego Scan-Times

September 25-28, 1983

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A View From Abroad

Paul Chartier, Editor
SCAN/INTERNATIONAL EDITION

I come to SCAN-TECH '83 like a starry-eyed kid in a candy store. So much to see, to attract, even to mesmerise. The members of Automatic Identification Manufacturers probably do not appreciate that they have a unique world-wide shop window in which to display their equipment.

Nowhere in Europe, or elsewhere in the world, can one see so much scanning equipment and listen and speak with so many experts. And when I say experts, I don't just mean presenters and panelists, but also delegates. One of the problems in Europe is identifying the person in a potential end-user organisation -- or even a supplying organisation -- who technically understands the basics of bar coding.

There is a particular manifestation of this which is unhealthy and potentially damaging to the bar code industry. Let me quote a typical first enquiry conversation:

Prospective customer: "Can you do bar codes?"
Supplier: "Sure."
PC: "Which Codes?"
S: "Well, ... bar code of course."

This story, although stripped to the bone to protect the guilty, is all too common. The customer could be an end-user making general enquiries of local distributors of dot matrix printers. The supplier could be the appointed national distributor for a leading American manufacturer of bar code equipment.

The US and UK laws of libel make me reluctant to give names but I can assure you that a very weak link in the process of spreading the gospel about bar coding and getting systems sold and installed is the expertise and knowledge of front line distributors.

How can this situation be rectified by American companies? I make my suggestions around the theme of the letter "O" for opportunities, too many of which are lost. The challenges, therefore, are to be:

Organised as an industry abroad. Europe is crying out for its equivalent of AIM which could be open to any manufacturer internationally. There are many national equivalents of the MHI which could also spread the message.

Orderly as individual corporations. The branch or distributor in Europe or Australasia needs back up and control.

Obvious and constantly evident. There are few articles on bar coding of any substance, few case studies published in journals.

Observant. Not everything concerned with bar coding was or is being developed in the USA. The most widespread consumer product bar code -- the European Article Number -- is still unknown to many Americans who should know about it.

Openminded. Some developments in symbology started in Europe. Excellent equipment has been developed in Europe and Japan.

Oriented to options to meet local needs.

Oracular on a world-wide scale. Have the mystic of international developments explained to you -- by reading SCAN Newsletter or gleaning information from sources abroad.

Although I shall be impressed by the fact that at SCAN-TECH '83 I shall be able to see many things and meet many people all at one venue, I shall not be over-awed. I know of many developments in bar code technology or applications which started or have grown more rapidly in Europe. The world-wide potential for this technology is immense. The time is right for greater international coordination and cooperation.

The President Takes "AIM"

EDMUND P. ANDERSSON, PRESIDENT, AIM INC.

Welcome to SCAN-TECH '83! SCAN-TECH is the annual seminar and exhibition that focuses on the automatic identification technologies. Its emphasis is education and intentionally includes a blend of users and manufacturers to provide balance and credibility to the information presented.

SCAN-TECH was conceived, planned, and implemented by the Automatic Identification Manufacturers, Inc. (AIM) trade association. Our membership is a Who's Who of the automatic identification industry. Virtually every company of substance is, or is in the process of becoming, a member of AIM. AIM is affiliated with the Material Handling Institute, Inc. (MHI), an umbrella organization of approximately 320 companies. MHI sponsors SCAN-TECH and provides the professional, full-time staff for education and show management services to make SCAN-TECH the high quality event you expect from MHI.

AIM's activities, however, go well beyond SCAN-TECH. The work of the association is carried out by several important committees. These include:

Literature -- which develops and publishes the AIM Manual, a collection of educational documents describing various scanning and printing techniques; and the Uniform Symbol Description (USDs) that present a clear, uniform description of popular bar code symbologies and standards for their generation and use.

Symbology Task Force -- A panel of 5 symbology experts, elected by AIM member companies, organized as an advisory council to groups in industry and government seeking guidance and direction on symbology selection, definition, and standards recommendations. This group will meet for the first time this fall.

AIM Technical Journal -- Just now in the conceptual stage, this journal will have rigid standards for the selection and publication of papers. Its purpose is to communicate important information, developments, innovative applications, symbology standards/activity, etc., to a broad audience. Contributors will be sought from users, manufacturers, consultants and others with a deep involvement in the technical aspects of automatic identification technology.

Liaison -- AIM's program to reach out to the many professional societies, industry associations, and influential ad hoc committees with a keen interest in the technologies AIM represents. We hope to establish communications with these groups and participate in cooperative activities that lead to a better understanding of how our industry's products and services can be deployed to serve their needs.

Finally, I would like to recognize the many AIM companies whose dedication to this industry is manifested in events such as SCAN-TECH and AIM's many activities. The delegates to AIM are "volunteers" but their time and contributions represent a significant investment by their companies. I think this fact speaks well of our industry and its dedication and commitment to bringing you -- our customers -- the best that technology in a free society can offer. That is why AIM exists. With your continued support we'll do even more in the future.

Thank you for coming.

(Ed Andersson is Director Corporate Relations, Computer Identics Corp.)

New Products & Services Introduced At Scan-Tech '83

We asked the exhibitors to send us information as to any new products they plan to introduce at SCAN-TECH '83. Below are direct excerpts from their replies, received as of publication deadline.

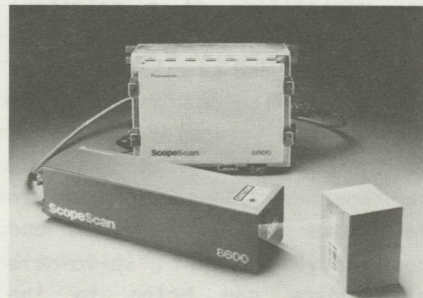
There has been greater coverage of bar code scanning in the trade publications than ever before. Industrial Engineering magazine in their September issue, which will be distributed at the show, will contain a bar code equipment survey and buyer's guide. North American Technology will have their new and updated 1983 Bar Code Industry Directory. The bi-monthly publication of this publisher, Bar Code News, has announced that the September/October Special SCAN-TECH '83 issue is the largest one to date, with 68 pages. The publisher expects to distribute almost 20,000 copies.

Bar/Code, Inc. is a relative newcomer to the exciting field of bar code technology. The company plans to introduce several new products at SCAN-TECH '83. They will announce a new portable wand reader with 16K RAM standard, read 3/9 and interleaved 2/5 with auto recognition, have very long-life batteries and be only 3 1/2" by 5 3/4". The unit will be priced at less than \$800 without a wand and deliveries will begin late in 1983. Also introduced will be the multi-wand system which will economically permit up to 10 wands to be used with either the BC-101 or the BC-102. The BC-101 is a reader capable of two-way communication with a host computer and priced at \$980; the BC-102 is a bar code reader priced at \$560. In addition, the company will demonstrate Microbar, a new bar code printing system designed to operate with personal computers and inexpensive dot matrix printers, priced at \$795.

Laser Identification Systems will have application engineers on hand to explain the advantages of non-contact, permanent laser marking. On display will be the LightWriter, general purpose laser marking system, and the WaferMark 345 and the WaferMark II, new Wafer Marking Systems. Sample metal tags with laser marking will be available for distribution.

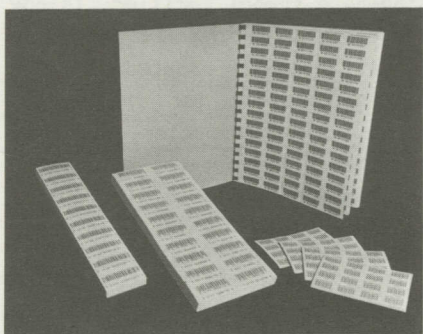
Scope, Inc. has just released the ScopeScan 8600 which combines a bar code reader and sortation controller into one convenient, inexpensive device. It utilizes a high-speed, moving beam laser to automatically decode bar code labels at up to 40". The ScopeScan 8600 then utilizes this in-

formation to activate a mechanical device to sort products to various destinations via a conveyor. For applications requiring a read or verify and sort function with a limited number of destinations. The ScopeScan is priced at less than \$15,000.



ScopeScan 8600 Industrial Bar Code Scanner

Datacomposition announces SYMBOL-PAK service for immediate packaged labels. Each SYMBOL-PAK package contains 2,000 labels in 8-digit serial sequence. The user can purchase different number series packages and create a total sequence of numbers. The company will also show their new SYMBOL-MENU service which allows for immediate implementation of computer programs using optical scanning menus. The menus contain 9 unique bar codes that can be used to address program functions or work steps in programs. The package contains 50 menu cards, a supply of identification labels, and programming suggestions for usage. DCI will also announce the SYMBOL-PAD service for organizing optical scanning symbol labels for application to inventory and production items. Each SYMBOL-PAD consists of 50 pages of single or double width optical scanning labels provided in pads, each with 200 to 750 labels.

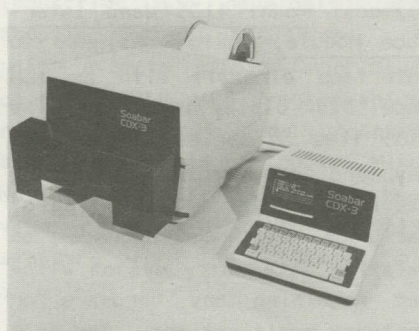


SYMBOL-PAD scanning labels from Data Composition

SOABAR will demonstrate a new, updated electronic imprinting system that marks tags and labels with bar codes, OCR-A and conventional copy. Scheduled for exhibit are the new SPX-50 electronic printer, the CDX-3 electronic printer and a microcomputer with mass storage capability. Soabar will control both the SPX-50 and the CDX-3 from one microcomputer at the show.

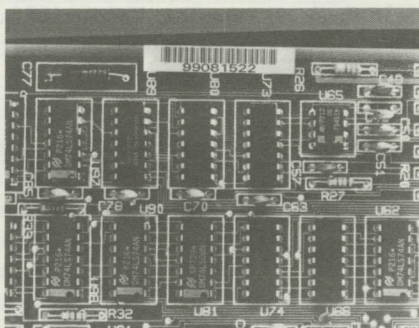


SPX-50 electronic printer shown by Soabar



Soabar's CDX-3 electronic printing system

Computype will offer new bar code labels for PC boards to withstand soldering, baking and washing. These special new bar code labels ensure total accuracy and maximum efficiency throughout the entire manufacturing process of printed circuit boards. This specially constructed bar code label attaches directly to the PC board during the initial stages of manufacturing. A special high-temperature adhesive makes sure the label adheres securely through the baking, wave soldering and chemical wash processes.



Special bar code labels for PCB's by Computype

Accu-Sort Systems has announced the availability of 4 new bar code readers. The Omni 360 has an innovative unique scan pattern which eliminates the need to orient bar code symbols. The Model 70 is a high-speed (1440 scans/second) self-contained, moving beam laser scanner with automatic focusing to accommodate large depth of field requirements. The second generation hand-held portable bar code scanner, A.S.I.R.T. II, has a full alpha-numeric keypad and offers two-way communication and user programmable capability. The Model 45 small, low-cost, self-contained moving laser beam scanning is ideally suited for scanning bar codes moving past a read station of distances up to 12".

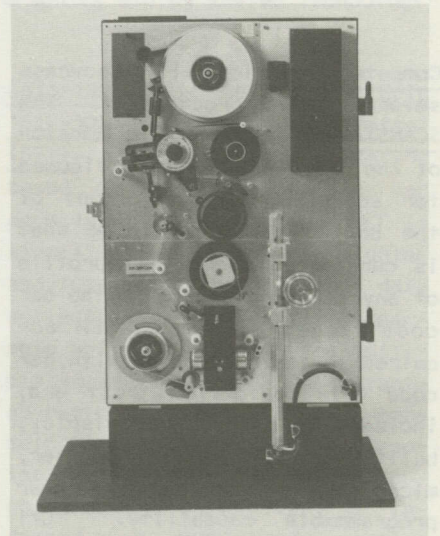
Esselte/Meto will show the Meto Multicoder 3286 which is an electronic multiple coder, utilizing thermal pressure sensitive labels. This tool combines versatility and hand-held dispensing. It has the capability to print bar codes, OCR and conventional formats.



The Meto Multicoder 3286 electronic multiple coder

Hand Held Products will show their new Micro-wand for the first time at SCAN-TECH '83. The Micro-wand is a "store and forward" data collection and verification bar code unit. Initial custom applications include field data entry, with time stamping, for centralized processing; on-site validation of bar coded data; and remote batch inventory data collection. The prototype, wand size, micro-computer, dedicated to bar code applications, combines the power of a micro-computer with the form of a detached wand. It is designed to support custom bar code applications related to nationwide information networks and may be easily tailored to vertical markets by OEM software specialists or may be used in a standard user application configuration.

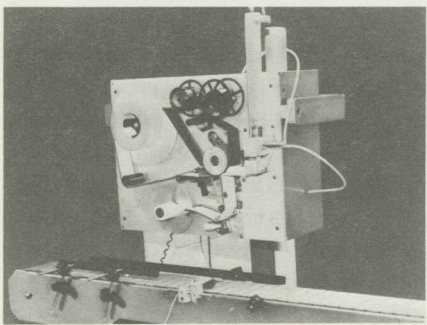
Imtec has developed a series of automatic bar code label printer/applicators. The 3000 Series applicators feature a robotic arm which can label random-sized cartons or products. It will operate on-line, in real time, as part of a conveyor line, or integrated production process. The 3000 will print all major codes and apply up to 60 labels per minute, laminated or unlaminated. Any data source may be used, from a mainframe to a mini- or micro-computer. Data from an automatic scale or reader may be used.



Imtec's 3000 series bar code label printer/applicator

New Products & Services Introduced At Scan-Tech '83

From York Tape & Label comes the York PA-11 Label Print Apply System with installed robotic allowing automatic labelling of unique identification and item numbers on each boxed unit in the conveyor line. The system accepts component units from multiple assembly lines. To speed the packaging and labelling process, a robot arm lifts the component unit and brings it to the packing carton. During the sweep of the robot arm, the bottom surface of the component is scanned by a code reading scanner. The scanner triggers the label imprinting and the York PA-11 prints the product identification number, item number and code 3/9 bar code information on a label. The label is then applied to the box. After placement of the box by the robot, the completed unit passes through a verification scanner assuring uniform packaging, and the label data is recorded.



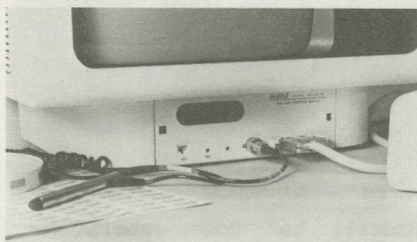
From York Tape & Label, the PA-11 System

Sy-Con Technology will highlight the first showing of their new product, PREMID. Never before has an identification tag had the capability of having data, as much as 512 digits, written to it remotely and dynamically (and internally stored) in addition to being read. The PREMID concept is based on advanced microwave technology utilizing the penetrating and reflective properties of microwaves. Microwave signals pass easily through plastic material, wood and dirt, but are effectively reflected by a metal surface. Sy-Con claims that the capabilities of this product prove a major advance over laser bar code scanning or any other remote identification method, particularly in industrial environments.

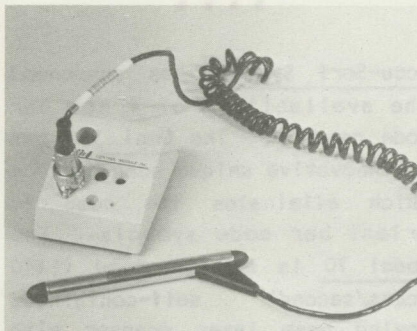
Computer Identics will showcase several new products. The SCANSTAR-55 is a modified version of the C/I SCANSTAR-50 configured for scanning from the front of the unit thereby providing what is considered the lowest profile of any scanning device to the bar code target area. An OEM acquired portable computer with bar code data collection front end, includes full keyboard, display, built in dot matrix printer, microcassette recorder and user programmable capability. C/I will display both the Symbol Technologies and the Spectra

Physics hand-held laser scanners as devices to be used with the company's bar code data collection terminals. C/I will also demonstrate its newest Lightpen with a slotted tip for reading bar code labels affixed to the edge of printed circuit boards. These Lightpens will also be shown with Teflon tips.

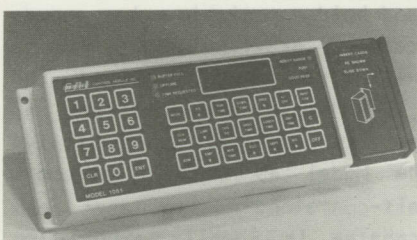
Control Module has introduced its low-cost Model 1133 Wand Interface Module, custom designed to interface directly with an IBM Model 5251 Display Terminal. The 1133 lies in series between the keyboard and terminal, emulating the keyboard in the formatting of bar code data, and upgrades an existing data entry system without requiring any hardware or software modifications. The unit can be installed by the user in less than 5 minutes. Presently 8 different bar codes are supported. Also being introduced by Control Module is its new Feature 1089 Remote Data Entry Module for multiple bar code entry stations in a low utilization environment. The 1089 offers users the opportunity to add multiple wands that communicate to a single bar code entry terminal without the added cost of extra terminals and extra lines to the computer. A system can be expanded to include up to 20 additional work stations through a single terminal. The system accepts standard bar code wands such as the CMI Model 2901. A new data entry terminal that provides shop floor data collection and time and attendance recording is now available from Control Module. The Model 1051 Data Entry Terminal offers 4 standard types of data input.



The Control Module Model 1133 Wand Interface Module

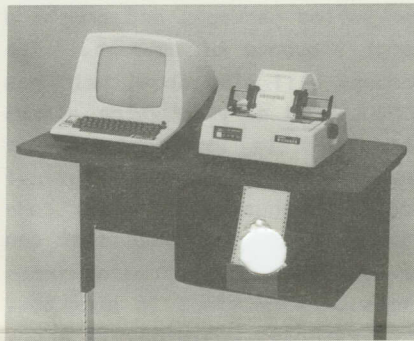


The Feature 1089 Rewrite Data Entry Module from CMI



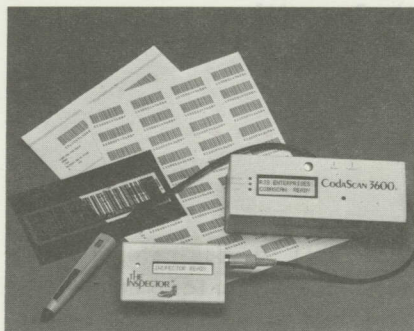
Control Module's Data Entry Terminal Model 1051

The Identification Systems Division of the Dennison Manufacturing Company is announcing Presidax and the Intacs 4200 line at SCAN-TECH '83. Presidax is the computer-controlled on-press imprinting system for preprinted tag and label manufacture. Presidax incorporates the speed and versatility of a mainframe driven matrix print station with the quality and printing options of a multicolor flexographic press. The Intacs 4200 line of imprinting systems allows even the smallest industrial user to take advantage of the time and cost savings that up-to-date electronics can bring to the problem of creating tags and labels with variable information. Each of the 3 models in the 4200 line is a low cost, stand alone, micro-chip controlled dot matrix printer that allows customers to make on-the-spot imprints of variable information and thus to tailor their tags and labels to their changing needs.



The Intacs Model 4200 tag and label printer from Dennison

RJS Enterprises will show a number of added features to their existing products. The Autoscan film master verification device has additional software cartridges available for added symbologies; the Codascan portable hand-held symbol verifier, is now available with the UPC D-3 VISA format, recently adopted by major banking systems for their VISA cards. The Inspector, a fully portable mini-scanner, weighing 9 ozs. is now available with a companion printer which instantly prints what the Inspector scans and decodes.

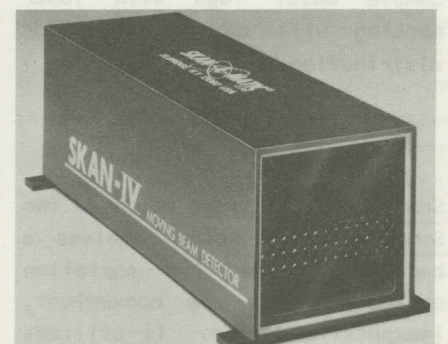


From RJS, the Inspector and Codascan 3600

Watson Directory Corporation

produces a composite label which is photocomposed, printed, composited, laminated, die-cut and sheeted, with scrap removed. The Watson Composite Process allows them to take any printed material, paper, vinyl, card stock, etc., apply glues, release liner and clear film laminate to obtain a finished, pressure-sensitized label. The Watson 1117 Composite Machine will take any impact, photographic or offset printed material, automatically feed 3000 sheets per hour, composite, die-cut and finish it in sheet form. The 1117 machine will be available for order during the last quarter of 1983. The company guarantees that it will beat the prices of any other laminated, vinyl labels.

Skon-A-Matic is presenting an alternative to a laser scanner. The Skon X is the first and only hand-held, moving beam, non-contact, visible white light scanner. The unit is designed for industrial applications where reliability, service and price are paramount concerns. The gun is sealed against dust and contamination and uses a durable and inexpensive halogen lamp which can be easily replaced in the field. The Skon X has a scanning range from 1/2" to 3" on .0075" minimum bars, a scan width of 2", and a scanning speed of 125"/second. It is priced at \$895 and characterized as the least expensive gun on the market. The Skon X is connected to the new D5 reader/terminal which combines a bar code reader with a data terminal in one small package featuring an alpha-numeric key board, a 2-line/80 character liquid crystal display, and 2-way communications. The unit will decode interleaved 2/5, 3/9, Codabar and all version of UPC/EAN without changing switch settings or software. The total system package price for Skon X and the DF reader/terminal is \$2,150. Skon-A-Matic also has a moving beam scanner, the Skon IV LED, which is a remote optical sensor for industrial bar code systems. The scanner uses safe, low-power, infrared LEDs to illuminate bar codes at an optimum range of 3". Radiation from the LED's peaks at 940 nanometers making the scanner safe for a variety of film processing applications.



Skon-A-Matic's Skon IV White Light Scanner

(cont. page 5)

Seminar Program Designed To Work At All Levels

(cont. from page 1)

Goodfinger of Computer Identics and Mitch Hammond of Welch Allyn. Panelists are John Lockwood of Skan-A-Matic and Matt Lezin of IDX.

Richard Bravman of Symbol Technologies moderates the Systems Sessions in which David C. Collins of Computer Identics, Thomas Lagaly of Integrated Automation, and Lowell Klaisner of Intermec Corporation will take the audience through the operations of three divisions of the (hypothetical) conglomerate, Universal Industries, Inc. The three divisions include work-in-process control and tracking, distribution control at a warehouse/distribution center, and fixed asset inventory control. Emphasis is on Systems Analysis, Systems Design, and a Systems Implementation respectively.

The Symbology Session, moderated by David Czaplicki of Skan-A-Matic, includes presentations from David Allais, President of Intermec, who will review the prominent industrial symbologies and touch on some broadly applicable concepts of symbol design. On-Site Printing will be discussed by Ben Nelson of Scanmark. Rick Fox of Matthews International will review the various types of Off-Site Bar Code Printing methods. Kathleen Parsons of RJS Enterprises will define and explain the role of symbol verification. The elements of verification including format, encodation, print contrast and dimensional analysis also will be discussed.

A 25-minute question and answer session will follow each presentation and Tuesday's sessions will end at 2:30 P.M.

During lunch on Tuesday, noted industry journalist and commentator George Goldberg, Publisher/Editor of SCAN Newsletter, will discuss "The Universal Language of Scanning."

FINAL DAY WRAP-UP

On Wednesday, SCAN-TECH '83 wraps up with "How Automatic Identification Helps Justify Integrated Material Handling Systems" by James M. Apple, Jr., of the material handling consulting company SysteCon, Inc. William J. Smith of Digital Equipment Corporation will go into depth on Systems Implementation which is the process of creation of a system where various needs for information are understood by several different disciplines and each group has suggestions for systems required to supply the answers. A simple cost analysis and justification formula also is included.

The "Effects of Automation" will be discussed by Dr. James J. Cribbin, President of Management

Effectiveness, Inc. This presentation is sure to send all Seminar attendees back to their companies with a better and more enthusiastic understanding of the benefits of automatic identification technology.

Wednesday's sessions are moderated by SCAN-TECH '83 Chairman Dick Dilling who also will deliver the Wrap-Up from 11:30 A.M. to 11:45 A.M.

This concludes SCAN-TECH '83, planned by members of the Automatic Identification Manufacturers, Inc. with the serious desire to present an annual event that will be most beneficial to all concerned...attendees, speakers and exhibiting companies.

Eighty Exhibitors Confirmed for Scan-Tech '83

(cont. from page 1)

The number of new companies and new products is an excellent barometer of the vitality of an industry, and bar code scanning is no exception. Over 25% of today's exhibitors were not present last year. Over 15% of the companies are less than 2 year's old. Almost every exhibitor is either a small company, or a small division of a larger corporation. Only a handful are public companies, but the number is sure to grow.

Those who are attending SCAN-TECH '83 are witness to one of the most dynamic changes in the evolution of a comparatively new technology, and a new industry.

Second Annual Industry Award Ceremonies Scheduled

(cont. from page 1)

turers and SCAN Newsletter. The Selection Committee consists of representatives from both organizations. Nominees must be individuals from non-supplier companies who have made outstanding contributions to the industry.

This year the award has been designated as the Don Percival Special Award. Don was president of MEKontrol and one of the founding members of AIM. He served as president of the organization and participated in those early decisions that helped to form this important trade association. Don Percival died about a year ago.

The Percival Award will be presented at the SCAN-TECH luncheon on Tuesday, September 27. No one (other than the Selection Committee members) knows the name of this year's designee -- including the recipient. Be sure to be there -- just in case your name is called.

Special "Industry-wide" Uses of Bar Coding To Be Discussed At Scan-Tech '83

The advantage of large scale, "Industry-wide" bar code systems are probably best demonstrated by the supermarket industry's use of the Universal Product Code. Food wholesalers and retailers have demanded coded products which save them time and money in the ordering, inventory and sale of food items.

Now other large organizations and industries are developing and adopting coding standards. A prime example is the Department of Defense LOGMARS Program which requires that all items purchased by DOD include a bar code. Mike Noll of the LOGMARS Program reviewed the development of this standard for the audience of SCAN-TECH '82.

This year, AIM is pleased to offer some additional presentations on the development, goals, and characteristics of more "Industry-wide" users of automatic identification. Members of the audience who believe their industry would benefit from industry-wide automatic identification systems will want to pay particular attention to the following presentations:

Dr. Eric Brodheim will review the Blood Center's use of Codabar as an industry standard. All blood

Bank Centers now use the Codabar Standard.

Donald L. Dubuc of General Motors Technical Center will review The Automotive Industry Action Group, which is composed of General Motors, American Motors, Ford, Chrysler, Volkswagen and many automotive supplier companies. AIAG is working to standardize on a shipping/receiving bar code.

At lunch Monday, Craig Harmon, who is Chairman of the Joint Health Industry Bar code (HIBC) committee, sponsored by the Health Industry Manufacturers Association, the American Hospital Association, and the Health Industry Distributors Association will review his committee's recommended standard for the health industry.

Farmer Cullom is a proponent of the Uniform Product Code Council's Shipping Container Symbol and will explain the intended benefits of this new standard.

These presentations will provide excellent insight on how these groups are formed, benefits to be derived from industry-wide programs, problems to be solved, and guidance on how the attendee can launch and/or become involved in an activity of this type for his industry.

New Products & Services

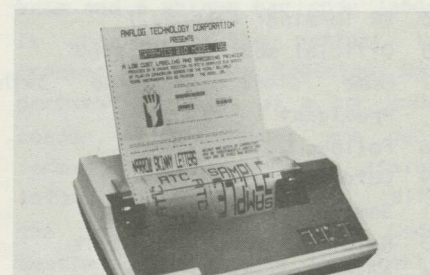
(cont. from page 4)

Datalogic Optic Electronics will be showing 3 new products at SCAN-TECH '83. The Datalogic Laser Gun LG100 will be on display along with the D-20 Portable UPC Code Verifier. The laser gun can read codes with narrow bars as small as .006" and has a read distance of 1" to 9" from the gun. The D-20 Verifier can read and display codes, indicate marginal printing and evaluate print contrast ratios. Also on display will be Datalogic's newest fixed position laser scanner. The DS100 is a low-cost industrial grade bar code reader with self-contained LCD display and decoder.

* * * *

Creation and repetitive printing of forms and labels containing bar codes and variable size characters are accomplished with Analog Technology Corp.'s new Graphics 810 printer controller, the Model 195. Applications include label generation for various material handling and inventory requirements in warehousing, shelf and product identification as well as low cost forms printing. The bar code command statement allows annotation of bar codes in OCR-A, OCR-B or standard printing fonts. Other features include high-speed graphics plotting, double density printing and plotting, a large variety of

printing fonts as well as character shading and a 95-character user loadable font. The printer will function with virtually any computer operating system. The LOGMARS has approved the model 95 printer controller and the TI 810 for printing code 3/9. The controller board plugs into the rear slot of any Texas Instrument 810 R0 printer without modification.



Graphics 810 by Analog Technology

* * * *

Epic Data will unveil its Epic 1647-301 Dual Function Terminal (DFT). This is a microprocessor based magnetic stripe and bar code input terminal. The DFT is significantly smaller, lighter and less expensive than most data collection terminals with comparable ability, and features multiple menu-driven, user selectable operational modes for bar code selection, magnetic stripe decoding, etc. The unit has interchangeable visible light or infrared bar code wands, and a solid state alarm for keyboard, bar code, and magnetic stripe information feed back.

Bar Code To Be Used In Scan-Tech '83 Registration Program

The SCAN-TECH '83 Planning Committee has developed an attendee registration program using bar codes for data acquisition.

Each registrant will receive a batch of bar code labels with his unique identification number encoded therein. As the attendee visits manufacturers' booths, he transfers one of his bar code labels to the exhibitor who attaches it to an attendee inquiry card.

A copy of the card, which includes a follow-up code menu also in bar code, is turned in to the registration company at the end of the exhibit day.

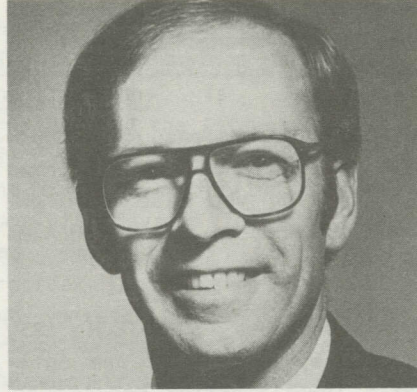
The next day, exhibitors participating in this program will receive complete registration in-

formation including follow-up codes on every attendee who visited his booth.

This is the first known use of bar code in a trade show registration program. AIM Member Companies including Computer Identics, Matthews International Corporation, Data Composition and Intermecc provided equipment, supplies, and services necessary for the registration program.

In addition, each attendee will be given an identification badge which lists his name, identification number, title, company and name again in bar code USD-2 (3/9 code). Some exhibitors are expected to offer interesting product demonstrations using the bar code on the attendee's badge.

Scan-Tech 83—Brought To You By The Automatic Identification Mfrs. Inc.



Richard R. Dilling
Chairman, SCAN-TECH '83

SCAN-TECH '83 is the second event of this type. It follows the extremely successful 1982 event which drew 50% more exhibitors and attendees than expected.

AIM President Edmund P. Andersson worked with AIM's parent organization, The Material Handling Institute, Inc., in order to obtain all necessary approvals including MHI's sponsorship of SCAN-TECH '82. The 1982 event was held in

November in Dallas. Mr. Andersson also served as Chairman of that show.

Richard R. Dilling of Intermecc Corporation is overall SCAN-TECH '83 Chairman. His planning committee included Vice Chairman Dave Czapliski of Skan-A-Matic Corporation, who also organized the Symbology Session; Richard McDonald of Data Composition responsible for the Show; Ed Andersson of Computer Identics and Frank Sharkey of Matthews International Corporation who shared organizational responsibilities for the User presentations; Richard Bravman of Symbol Technologies who arranged the Systems session; and Chet Benoit of Welch Allyn, in charge of Promotion and the Scanning session. Staff persons included Bill Hakanson, Larry Heller, Leo Castagnari, Lynn Hecklinger, and Tim Shea.

Scan Word Puzzle Clues

Across

- 1 Area immediately preceding the start character of a bar code symbol (2 wds)
- 8 The lighter element of a bar code
- 12 On top of
- 13 Watering holes in the desert
- 15 Piano-player/comedian of the 1940's and 1950's (initials)
- 16 Type of electrical current
- 17 Small flap
- 19 Person who thinks he's better than others
- 20 Lyric poem
- 21 Mister (German)
- 22 Either
- 23 Company producing equipment made from components supplied by others (abbrev.)
- 24 Incorrect scan
- 27 Small round pudding, usually of potato
- 29 Fresh
- 31 Cloudy (2 wds)
- 33 RR Terminal (abbrev.)
- 35 Official seat of a Bishop
- 37 Home state of the 39th President
- 38 Follows Q R
- 39 Outdoor living quarters
- 41 Semi-precious stone
- 43 Retail checkout equipment
- 44 Approximately (2 wds)
- 45 Decodes
- 48 Pincers
- 50 In the direction of
- 51 Organization of "Bones" (abbrev.)
- 53 Ages
- 56 Compared to
- 57 Bar code scanning light source
- 60 Machine readable/man readable code
- 63 North of Nebraska (abbrev.)
- 64 Mean
- 66 Type of printing suitable for bar codes
- 69 TV broadcast
- 70 Manufacturer of children's teaching instrument using bar codes

- 71 Tennis score
- 72 President of AIM
- 74 Small people from outer space
- 75 Bar code scanning light source
- 76 Before

Down

- 1 Misgiving
- 2 Retail bar code symbology
- 3. Data entry and retrieval (abbrev.)
- 4. Keys in
- 5. Bar codes (slang)
- 6 Won by a _____
- 7 Retail bar code symbology (outside North America)
- 8 City in Ohio; site of annual race
- 9 Afterthought
- 10 Representation of a set of characters
- 11 A bar or space in a bar code
- 14 Anon
- 18 Tracts
- 20 Exclamations of approval
- 21 Secondary level of learning (abbrev.)
- 25 Bars and spaces encoded separately
- 26 Ad hoc committee that studied bar code printing on shipping containers
- 28 Lathers
- 30 Affirmative votes
- 32 Prefix to large American ship
- 33 Character at end of bar code symbol
- 34 Group publishing standards for the bar code industry
- 36 And so forth
- 40 Appendage
- 41 Too
- 42 Consume
- 46 Not yes
- 47 Hand held bar code scanner
- 49 Run again
- 51 Say _____
- 52 Bar code artwork in film form

Scan-Word Puzzle

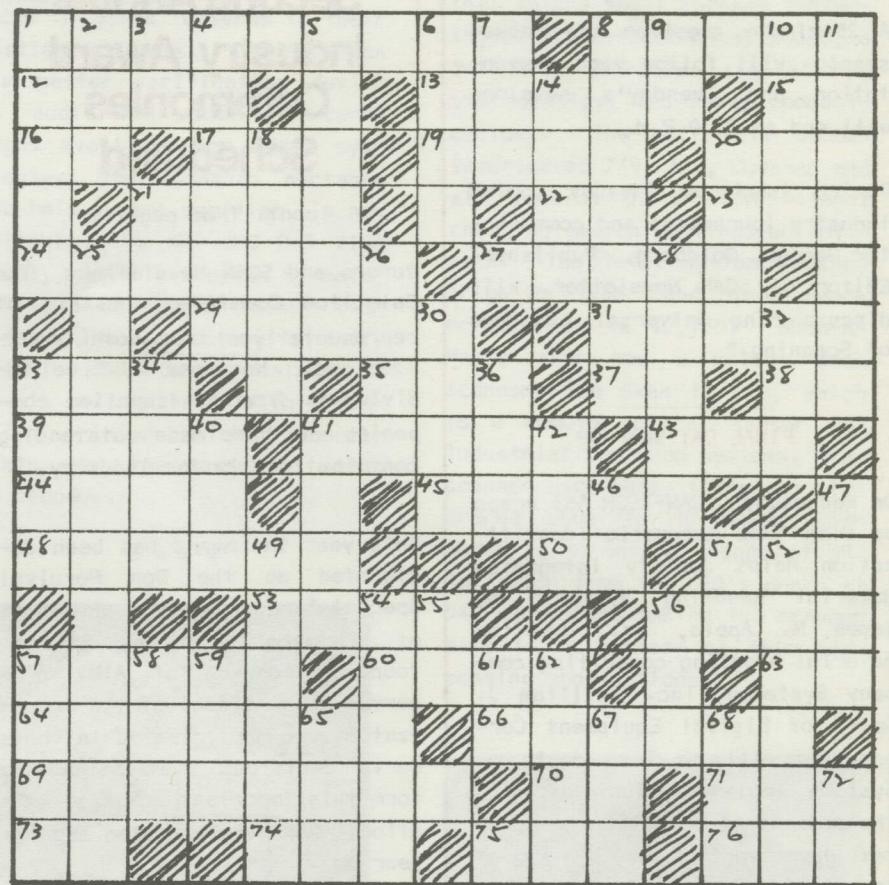
Try your skill on this special crossword puzzle created for delegates to SCAN-TECH '83. It incorporates a number of bar code scanning terms that you will find in the product literature and glossaries available at the seminars and exhibitor booths. Other standard crosswords are also used.

And for those who give it a real try, and succeed, we offer a prize: all those sending in completed, and correct puzzles will

receive a 6-month free subscription to SCAN Newsletter.

Just a couple of simple rules:

- 1. Only registered attendees to SCAN-TECH '83 are eligible.
- 2. Entries must be received at our offices by October 30, 1983 (See page 2 for the address).
- 3. Employees of SCAN-TECH '83 Exhibitors are not eligible.



- 54 Lacking a curved character (2 wds)
- 55 Southern state
- 56 _____ Mahal
- 57 Tardy
- 58 Choice (abbrev.)
- 59 Before
- 61 Smallest in the nation
- 62 Up-front bet
- 65 Revolver (slang)
- 67 Young goat
- 68 Compass direction
- 72 Chemical element; Atomic No. 52 (abbrev.)