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

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Events have moved rapidly....

....and dramatically these past few months for <u>Computer Identics</u>. The Massachusetts-based manufacturer of bar coding hardware and systems has been looking for a new President/CEO (SCAN Nov 86) and struggling to emerge intact from 1986, the worst year in its history. A preliminary report, given to us by a management spokesman, estimates that 1986 sales were down about 25% to \$9.2 million, and that there was an operating loss of \$2 million. In addition, there will be "several million dollars" in one-time write-offs.

The major shareholders in the company decided they could not stand by any longer. A group led by N.V. Bekaert S.A. (the Belgian company that owns 22% of the stock) and Eberstadt-Fleming Inc. (investment bankers with 10%) asked for the resignation of the Board of Directors. This investment group -- which claimed to have sufficient additional support to bring its total to over 50% of the voting stock -- also recommended that Computer Identics merge with Imtec, the Bellows Falls, VT manufacturer of printer/applicators.

[Imtec's annual sales in its last fiscal year were \$3.2 million. It has been a public company since 1984 when it raised a modest amount of capital. Last month (SCAN Feb 87), the company announced it had received a \$6 million government subcontract, which is scheduled for shipment over the next 5 years (see below). Another Imtec sidelight: in our December 1986 issue, we reported a pending merger of Imtec with Cardinal Computers of Lewisville, TX. That deal did not go through and merger talks have been broken off. Because of these latest developments, Imtec has postponed its current plans for a public offering to raise an additional \$1 million for working capital.]

To those who have been following the fortunes of Computer Identics, these moves did not come as a complete surprise. The company had raised over \$15 million in private placements, public offerings and special development contracts over the past 4-5 years. Unfortunately, there are many who believe that management's attention was too easily diverted from its primary objectives, e.g.:

• The much-heralded System 128, that was funded by a \$4 million development contract from Hutton PLC in 1983 -- and introduced to the public a year and a half ago -- was abandoned last month.

- The \$100 million government contract proposal, on which the company lavished significant time and effort last year, was awarded to a professional group which specializes in such integrated contracts.
- The long drawn-out litigation with the Southern Pacific Railroad ended as an expensive indulgence in fantasy a few years ago.
- The purchase of the hand-held laser scanner operation from Spectra Physics was made just after Spectra had admitted to the validity of the Symbol Technologies' patents and following Spectra's loss of its major customer for that equipment.

As we go to press, we just received this new update. The Computer Identics Board of Directors met on March 3 to consider the proposals of the dissident stockholders. Four important compromise decisions were reached: (1) Frank Wezniak will be the new Chairman, President and Chief Executive Officer replacing David Collins. Wezniak, who was the nominee of the Computer Identics Board, has been an independent investor and management consultant based in Massachusetts. (2) Collins has been retained as part-time consultant to the company. (3) The Board of Directors has been increased from 6 to 7 members, with 3 from the Bekaert/Eberstadt group, 3 from the current management group, and Wezniak as the seventh member. (4) The proposal to merge with Imtec has been rejected.

These compromises seem to satisfy all factions. The feeling is that the company has enough going for it to emerge successfully from this crisis.

More details are available....

....about the \$6 million government subcontract awarded to Imtec by the prime contractor Severn Companies (SCAN Feb 87).

The multi-year award was made by the US Navy's Naval Sea Systems Command under the LOGMARS program. It will include 750 printing systems delivered to ship and shore facilities worldwide. In addition to the equipment which will be manufactured by Imtec, Severn will supply training, maintenance, supplies, spare parts and logistics support. The total value of the contract is estimated at \$9.8 million and deliveries are expected to begin March, 1987.

Severn Companies, 410 Severn Avenue, Annapolis, MD 21413.

It was perfect fodder....

....for the rumor mill: there were two articles about Saul Steinberg on the same page of the January 7 Wall Street Journal. Through his Reliance Financial Services Company, the New York investor recently increased his holdings in both Symbol Technologies (to 26.2% on a fully diluted basis) and Spectra Physics (to 13%). Was something about to happen between these two companies — Symbol is the leader in hand-held laser scanners and Spectra the major supplier of slot scanners?

Steinberg is noted for keeping his own counsel about his investments. His public statements simply observe that his firm buys large stakes in companies it considers attractive. Around the first of this year, Reliance had bought an additional 160,000 shares of Symbol Technologies on the open market at an average price of about \$18 per share.

And Symbol Technologies certainly continues to look like an attractive investment. Second quarter sales almost doubled and pre-tax earnings, which are running at a very healthy 18% of sales, increased 5 times.

SYMBOL TECHNOLOGIES	3 Months ended 12/31		6 Months ended 12/31	
	1986	1985	1986	1985
Revenues (\$000)	\$9,869	\$5,216	\$18,092	\$9,587
Net Income (\$000) Net Income/Share	1,827 .29	365 .07	3,236 .51	586

CEO Jerry Swartz says he knows of absolutely no move toward joining his company with Spectra Physics on any basis. He is convinced, he told us, that these are independent moves by Steinberg (also reported to have a substantial stake in Recognition Equipment) who likes the potential of this technology.

So far, the attempts....

....to incorporate bar code scanning into consumer products have not been too successful. There was the Magic Wand Speaking Reader, a children's learning device from Texas Instruments (SCAN July 82), which reproduced the spoken words electronically when scanned; and the Casiotone Keyboard (SCAN Feb 82), which had programmed in all of the background music using bar codes. Way back in December, 1977, we wrote about software for personal computers printed in bar codes to be scanned with a \$97.50 wand. It was to be published by Byte Magazine.

In spite of those non-successes, the enormous potential for placing scanning equipment into the hands of consumers is not being ignored. A new one has just surfaced, which shows promise and is probably the most innovative of all. If TV Guide Magazine were to print a bar code symbol next to each program listing, incorporating the date, time, channel and length of each program; and if your VCR were to be equipped and programmed to scan and enter that information for every program you wanted to record; just think of how many irritating and confusing steps you could avoid.

This concept is exactly what Panasonic has come up with on their latest model VCR. They are now trying to convince TV Guide, and other magazines and newspapers which list TV programming, to include the bar code symbols in their publications. This VCR unit, which has been introduced in Japan, includes a scanning wand and the software to accept the scanned data.

In an exclusive interview....

....with David ("Zap") Czaplicki, the new President of The Automatic Identification Manufacturers (AIM/US), we explored those areas that this important trade organization plans to concentrate on during the next few years. Under the stewardship of Rick McDonald, during the previous two-year administration, AIM/US doubled its membership, broadened its vision to include other technologies, and broke away from MHI to become an independent, self-standing organization.

Czaplicki sees the mission of his administration as having 3 major goals: increased membership; improved identity; and more education. AIM is viewed by

him as having evolved over the years from "an over-ambitious, hyper-active, under-funded creator of industry programs to a more conservative, thoughtful and responsible trade association." To help formulate their plans to achieve those goals, the new Executive Committee has approved a Strategy Plan and 3-Year Action Program.

To attract new members from as many qualified suppliers as possible, additional special product sections may be created, i.e. RF, vision, and photocomposition. As to whether AIM can continue to provide a common ground to advance the interests of all these groups, Zap believes a strong trade group under the automatic identification umbrella can do just that.

Since the 3-Year Plan has very little to say about standards and specifications, we asked Zap to explain the omission. He feels that although AIM will continue to provide leadership and coordination in this area, he does not view this as one of their highest priorities. He feels that AIM could better use its resources to provide technical support to qualified user groups, while promoting new educational programs and establishing corresponding relationships with other organizations.

As to why the Stony Brook study for testing symbologies and equipment (SCAN Dec 85) was running late, he replied that there were delays when the Pilot Study indicated modifications were required to the methodology. He emphasized, however, that his administration was fully committed to the completion of the research. Preliminary results are expected by June, 1987.

Some other random items that were covered in this interview: ScanJournal has been abandoned because "AIM is not in the publishing business;" AIM International (Zap is Vice Chairman) is expected to grow rapidly with a number of new membership applications expected; FACT (the user "organization of organizations") has a new Chairman who will strive to provide the needed strong leadership and organizational focus (more on that in a later issue).

AIM's President sees his organization growing in importance and leadership, over the next three years, as automatic identification technology grows. The first important showcase for the new administration was at the February 25-27 annual meeting in Dallas. This was AIM's first "stand-alone" meeting (after separation from MHI) but, beyond that, nothing too eventful was reported.

One of the driving forces....

....behind the efforts of the automotive industry to implement bar code scanning has been <u>Jack Loeffler</u>. He was with the <u>Automotive Industry Action</u> <u>Group (AIAG)</u> from its inception in 1981 as one of the early project team leaders on bar code scanning. For the last two years, Loeffler was on full-time loan from Ford (to which he returned as of the first of this year).

Although the rotation of key people through the AIAG tends to interrupt the continuity of effort in that organization, it does provide the significant benefit of having these professionals return to their companies with a solid background in the work of the AIAG. (We were a bit perplexed, however, to learn that Loeffler's new assignments back at Ford do not include automatic identification).

We recently interviewed Loeffler at some length, asking him to take a step back to assess the work of the AIAG. He feels that the key accomplishments can be summed up in one word: "awareness." "When we started," he said, "GM and Ford had some sporadic bar code projects going and the vendors were totally unaware of the technology. The AIAG has changed that situation dramatically."

Loeffler pointed out that the two application areas that were important role models for the AIAG were the supermarkets' UPC program and the DOD's LOGMARS. They demonstrated the feasibility and practicality of bar code scanning, and that it could be implemented on a broad scale in any industry that involved many vendors.

As for the future, he sees implementation as the next major goal. For AIAG, this means more education, improved communication between the auto makers and their vendors, and the maintenance and interpretation of standards. Standards, he emphasized, have been the key so far, and they will continue to be the most important elements that hold the program together.

He is proud that some AIAG programs have broken new ground. The innovative Data Identifiers, which have worked so well for the auto industry, hold out promise for broader applications in other industries. There have been fewer than 50 Data Identifiers assigned so far, but the potential is for hundreds more. The danger, worries Loeffler, will be in assigning too many so that they will tend to identify items rather than classes of information. Another AIAG concept that has already been adopted by others and promises to spread, is the multi-information, multi-bar coded shipping label.

Not all AIAG projects were successful. One major effort that held much promise, but has been abandoned because of lack of interest, was the standardized vendor identification. The up-to-date maintenance of such a file proved to be a monstrous task and, surprisingly, it was the vendors' lack of interest that scuttled the project.

Loeffler was a well-known face in this industry. He was present at most industry meetings and delivered many papers on the subject. We wish him well and hope that he will retain contact with automatic identification.

It is particularly interesting

....to track the different types of retailers as they adopt UPC/EAN scanning. Although there are some common features and advantages to all front-end scanning systems, each implementation reflects unique problems and challenges to that trade.

The most recent large chain to go this route is the very successful $\frac{\text{Toys}}{\text{IS}}$. The chain now has 271 stores in the US (plus 40 in other countries in an aggressive overseas expansion program). Although the vendors were notified over two years ago that the changeover to UPC scanning was imminent, start-up was delayed until recently.

Currently there are two scanning stores located in northern New Jersey near company headquarters. They were up and running in time for the Christmas, 1986 season and the results, according to management sources, were "shorter lines, fewer checkouts, more sales."

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From this experience, Toys 'R Us is committed to chainwide scanning in all US stores within 18 months. Some items of note:

- Each store carries almost 20,000 line items and about 80% of all products are already source-marked.
- Because of the store layout and the way in which merchandise is displayed, there are no shelf markers; all items must be individually price marked. Some are stickered by the vendors, others by the chain's warehouse or store.
- Full implementation will require over 5,000 scanners (15-20 per store). Although there will be some slot scanners, most will be the hand-held laser scanners from Symbol Technologies.
- There are about 30 stores with price look-up (PLU) installed using key-entered Toys 'R Us stock numbers. Obviously, the advantages of automatic scanning prevailed.
- A special note to the EAN community: Toys 'R Us is the first large US retailer that we know of that is specifying that their front-end scanners read both UPC and EAN interchangably. This decision was reinforced and supported by the book publishers who are placing "Bookland EAN" symbols on children's books (as well as all other hardcover books).

Now in its third year

....the '87 Store Automation Show in Tokyo has grown to be a major event. A wide range of products will be exhibited by 74 companies, including point-of-sale systems, electronic cash registers, credit card systems, back office systems and networks. A quick rundown of the exhibitors' names revealed few, if any, non-Japanese firms -- but that's the subject of a different story.

The venue is the Tokyo International Trade Center to be held March 20-24. The show is organized by Nihon Keizai Shimbun, with special cooperation from the Distribution Code Center, Japan. Last year's show attracted 76,000 visitors, including 2,600 from 31 other countries.

During the show there will be a series of free seminars conducted by the exhibitors. Each company will have an hour to explain its products and applications (what a great idea!). In addition, the show's sponsors will present a major seminar on The Current State of Information System Use in the Distribution Business. Guidebooks, printed in Japanese and English with details of the show and conference, are available from: '87 Store Automation Show Secretariat, Nihon Keizai Shimbun, Projects Development Bureau, 9-5 Otemachi 1-Chome, Chiyoda-ku, Tokyo 100 Japan; telephone (03) 270-0251.

As a result....

....of the Intermec decision last March to take control of its distribution operation in Germany, the European shareholders decided to liquidate Intermec GmbH, rather than retain a minority interest in the company. They have since

established two companies under the name of <u>ICS Identcode Systeme</u>. Heinrich Oehlmann, who had founded Intermec GmbH in 1981, is now Managing Director of ICS GmbH in Germany. Jiri Cerny, who had been directing the Intermec application center, became Managing Director of ICS AG, operating in Switzerland.

The new operation has extended its product range and services which now include: labels, printers, scanners, shop floor and data collection systems, and systems software. ICS is a distributor for Zebra Technologies and Data Collection Systems. It also handles products manufactured by Symbol Technologies, Welch Allyn, and Intermec. The company's main markets are the auto, health care and electronics industries. Sales for 1987 are projected at 7 million DM (\$3.8 million).

Oehlmann is quite bullish about the prospects for this new venture. He recently told SCAN: "It certainly can be said that for ICS the breaking away from being a sole Intermec distributor has proved to be a success."

ICS Identcode Systeme Deutschland GmbH, Langgasse 22, D-6392 Neu-Anspach, West Germany. Telephone (0 60 81) 70 92.

There are some indications....

....that after a couple of years of gestation, the $\underline{\text{Health Industry Bar}}$ $\underline{\text{Code}}$ $\underline{\text{(HIBC)}}$ is now emerging as the significant industry application it was always expected to be.

We quote from a publication issued by the American Hospital Association (AHA), one of the prime supporters of bar code scanning: "Data collection technology can have an impact on both quality of patient care and the cost of delivering that care. Bar coding is just a part of the whole system...that frees nurses to spend more time with patients, which leads to higher quality care."

The AHA has been issuing a series of monographs under the general heading of Hospital Bar Coding Case Histories. These now include Hospital Pharmacy, Patient Information, Management Information Systems, and Radiology Department. There is also a Directory of Bar Code Users - 1986, which lists over 100 bar code applications identified by region, hospital and contact person. For further information, and to purchase your copies, contact Karen Longe (one of the key movers of bar coding in the health care industry) at AHA, 840 North Lake Shore Drive, Chicago, IL 60611; 312/280-6000.

The 1987 International Conference & Exhibition on Health Industry Bar Coding is scheduled for May 6-8 in Atlanta. This event, sponsored by the Health Industry Bar Code Council, includes a broad choice of educational seminars by health care providers and by suppliers of hardware, software and systems. HIBCC, Box 4592, Chicago, IL 60680; 312/644-6610.

You've got to hand it....

....to Russ Adams, Editor of ID Systems (a/k/a Bar Code News). In his January/February 1987 editorial, he takes a look at 1987 and makes very specific forecasts and predictions of how he thinks the year will go. Some provocative and informative examples:

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- Bar codes will see a growth rate of 25% to 30% with total hardware sales of \$600 million.
- The largest growth will be experienced by moving beam hand-held laser diode scanners and desk top laser printers. In addition to Symbol Technologies, Photographic Sciences and Opticon, he predicts that at least one additional Asian-based company will introduce a moving beam laser diode scanner and that the price of these scanners will fall by 15%.
- Ultra-high density (UHD) symbols -- "X" dimension of 5 mils or less -- will be the hot topic for 1987, stimulated by the introduction of desk-top laser printers with dot resolutions of 600 and 1,000 dots per inch.
- The vertical market areas that will see many bar code driven software products will be point-of-sale and medical office management software.
- Optical character recognition will come of age in 1987. The action will be in OCR page readers, rather than the OCR transaction scanners once found at cash registers. Adams predicts that desk-top publishers will discover OCR in 1987.
- The Cauzin Softstrip will be the surprise success story for 1987. It will find success producing machine-readable bills of lading, and paper archiving of data, rather than in the machine readable software area.

Our hats are off to Russ for his courage as well as his perspicacity. We look forward to his January, 1988 issue when we expect he will evaluate the accuracy of his crystal ball -- and decide whether to do it again.

There is a new....

....handy little gadget being offered free by <u>Computype</u>. It's a slide rule type of device (that may be tough for those too young to remember what a slide rule is) that combines the elements of number of characters, narrow bar width and code length in order to complete bar code specifications. Given any two of those elements, the user can easily read out the third. It works for code 39, codabar and interleaved 2/5 and has both inches and metric measurements.

On the other side is an Adhesive Selector with detailed information on the various characteristics that help determine optimum adhesive and release liner specifications for pressure sensitive labels.

Computype, 2285 West County Road C, St. Paul, MN 55113; 800/328-0852.

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