



newsletter

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The management
Newsletter for all
industries involved
with bar-code
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The final piece of the puzzle....

....fell into place in mid-December as Sweden-based UBI (United Barcode Industries) consolidated and unified its US operations.

[UBI was formed last September when Atech AB (Sweden) purchased Barcode International (France) (SCAN Oct 91). In the US, UBI's manufactured products were marketed by two separate companies: Barcode Industries (Beltsville, MD), a wholly owned subsidiary, sold UBI's scanners and readers; Atech Systems (Marlboro, MA), owned by Concord Technologies, sold its printers. UBI had a minor equity interest in Concord and an option to purchase Atech Systems. In December, UBI exercised its option on Atech Systems and, as part of the deal, surrendered its share of Concord.]

The US company will retain the Barcode Industries name and all operations will be merged into its current offices in Beltsville (under the direction of Barcode's President Jeremy Metz). Atech's Marlboro office will be shut down and some key personnel will move to Beltsville. Chuck Mara, who was Atech Systems' Executive VP and managed its US operations, will be retained for an unspecified length of time as a consultant to the company.

In a recent interview with SCAN, President Metz expressed a great deal of enthusiasm and optimism for this move. "Atech printers," he noted, "are premium products that can be best demonstrated to the customers by Barcode's direct sales force, rather than distributors."

Atech features direct thermal printers which the company has been particularly successful in selling to the airline industry. "Direct thermal printers," Metz explains, "are most appropriate where the labels are not exposed to high temperatures or direct UV light and are not used for more than six months. Direct thermal costs are cheaper -- there are no ribbon expenses -- and the printers are simpler, smaller, more reliable, faster and easier to maintain. No one else has their heart in direct thermal for non-retail applications and we will be looking for other appropriate markets, such as big transport companies, truckers and distribution centers."

Metz's immediate goal is to capture 5% of the premium thermal transfer printer sales -- which are dominated by companies such as Intermec and Zebra -- by converting those users to direct thermal printers. He concludes: "We now have an opportunity to increase the range of products we offer to our customers. For Barcode, the acquisition makes us one of only two major US companies with its own scanners and printers."



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INCLUDING THE INTERNATIONAL EDITION

The search for a new...

....Executive Director of AIM/USA has been launched to replace Bill Hakanson who resigned last month (*SCAN* Dec 91). According to AIM's President, Ivan Jeanblanc (IBI), a search committee -- Jeanblanc, Chet Benoit (Welch Allyn) and Bill McCubbins (RJS) -- has written a detailed job description and is now actively working with recruiters and others to fill the position.

[The reason for Hakanson's sudden departure from a position he held for more than 15 years is still shrouded in mystery. Hakanson will not explain the circumstances at this time -- he says only that he prefers to wait until "all is...settled." Jeanblanc told *SCAN*: "At a meeting with Hakanson in Pittsburgh on some routine matters, Bill had told me he was leaving AIM and asked me to keep the rest of our discussion 'extremely confidential.' It's up to him to discuss anything further."]

Meanwhile, the responsibilities and activities of AIM go on. Some of the significant topics discussed at AIM's annual meeting in Orlando on December 4-6 included:

- There is a move to establish local chapters of AIM/USA. Nothing formal has been proposed as yet, but two contingents of VARs from the Midwest -- a group from Chicago and one from Minneapolis -- have expressed interest in such an arrangement.
- The Regional Show Concept was reviewed, after which the AIM Board of Directors expressed general support. The first such show was held in Minneapolis in September 1991 (*SCAN* July 91) -- sponsored by the same group of VARs now exploring the possibility of establishing a local chapter of AIM -- and the results are being evaluated. Indications are that the Minneapolis contingent will repeat their show in late 1992 and that any decision by AIM to expand into other regions will be addressed after that event.
- The first issue of the new AIM periodical (*SCAN* July 91; Dec 91) has been delayed. The as-yet-unnamed journal had been scheduled for November-December distribution but it has now been put off until the first quarter of 1992. The initial mailing will be sent to about 5,000 selected names from AIM's own lists. The 8-page journal will be distributed free of charge (no invoicing or subscription maintenance overhead, which has been one of the costs that AIM wants to avoid) and will address basic technology questions -- but not in too much depth. So far, the AIM Board of Directors has only committed to one issue; the board is hoping for enough feedback to decide whether or not to proceed with a regular publication schedule.

During the interim period that the position of Executive Director is vacant, AIM's management responsibilities will be handled by Associate Director, Don Anderson who will be reporting directly to President Ivan Jeanblanc. A number of AIM/US members and directors have expressed disappointment that they have been kept in the dark about the reasons for Bill Hakanson's departure. While both Hakanson and Jeanblanc say they want to keep this explanation private for now, both men assured us that the full story will emerge in due time.

The prestigious....

...Richard R. Dilling Award for 1991 was presented to Ted Williams of Laserlight Systems by AIM/USA at their annual meeting in Florida in December.

[This ceremony completed the trio of special recognition awards made each year by the automatic identification industry. In November, at SCAN-TECH 91, the SCAN Newsletter/AIM USA Percival Award (presented to an individual from the user community) went to Gary Ahlquist of Eastman Kodak. Earlier, in October, the SCAN Newsletter European Industry Achievement Award was made to Etienne Boonet of the International Article Numbering Association/EAN at SCAN-TECH Europe (SCAN Oct 91).]

The Dilling Award recognizes individuals from the supplier community who have furthered the growth of the industry through important applications and new technological developments.

Based on those criteria, Ted Williams was an excellent choice. He has been an innovator in product development, including involvement in early designs of micro-processor-based bar code scanning terminals. His most notable achievement was the invention in 1981 of Code 128, which has since gained wide recognition and acceptance as a highly reliable, flexible, high-density bar code. At SCAN-TECH 91 in Dallas, Williams introduced his newest creation, the two-dimensional Code 1 matrix symbology.

Williams is now President of Laserlight Systems, which he founded in 1988 with other Computer Identics alumni. He also has served the industry in many volunteer capacities, including two-terms as Chairman of AIM's Technical Symbology Committee and various stints as technical advisor to the health, automotive and retail industries.

Our congratulations to Williams, who joins a distinguished roster of previous winners: Al Wurz (1990); Paul Berge (1989); David Allais (1988); Chet Benoit (1987); Rick McDonald (1986); Ben Nelson (1985); Ed Andersson (1984).

We were surprised to discover that....

....in spite of all of the current chaos taking place in the new Commonwealth (ex-Soviet) republics, some people still have the time to concentrate on the future of bar code scanning and to attend a trade conference.

After being postponed from its original September date, SCAN-Moscow, sponsored by AIM-Europe, was held on December 9-10, 1991. In the midst of the imminent breakup of the Soviet Union, 200 delegates from Byelorussia, Georgia, Latvia, Lithuania, Moldova, Russia and Ukraine came to attend seminars and view the products of just seven exhibitors.

We received a report from one of these exhibitors, Brian Marcel of Barcode Systems (UK), who is an experienced hand at doing business in the old Soviet Union. (Marcel's Inter Bar Code Ltd. Moscow is an established Russian-based company which, he claims, has been accepted as a foreign-owned business even by prospective customers from the other republics, who are normally reluctant to recognize operations outside their own borders.)

However, according to Marcel, the future does appear to be volatile. "It is

likely," he explains, "that each 'nation' will expect to establish its own joint ventures to be set up based on its own -- yet to be determined -- currency. I believe that trade, between and among the new republics, is likely to be resisted as these new governments exercise their new found independence. Western auto ID companies cannot expect to get a quick return from Russia and the new republics."

Harkening back to the first SCAN-Moscow, which we attended in September 1988 (SCAN Oct 88), we cautioned at that time: "Keyless data entry [which] is dependent upon a broad-based universe of installed computers...is still many years away. It may be too much to expect a sudden leap from the abacus (which is still used in many shops)...to bar code scanning." In what may be one of the most understated prognostications of our publishing career, we concluded: "It may turn out that Moscow will be even more interesting in 1990."

We first obtained and studied....

....the transcript of the CBS Evening News (Dan Rather) of October 9, which included an "Eye on America" report on bar coding. We were curious to determine what there is about this technology that brings out so many negatives when reported in the consumer press.

In going over the transcript, we circled all of the negative words and references (emphasis ours): "Information can be hidden"; "[bar codes] first invaded our lives"; "They're a pain in the neck"; "A lot of mistakes"; "Promoters are too busy making money"; "Too much data in the wrong hands"; "Invade our privacy"; "That kind of surveillance"; "It's worse than Big Brother"; and on and on throughout the four and one-half minute segment.

Rick Bushnell (Bushnell Consulting) was introduced as an expert and managed to insert two short comments in defense of the technology. But CBS reporter Frank Currier had the last word: "Tomorrow's Terminator looms in the shadow of today's salesmen, clutching a scan gun, reading between the lines."

Later, we were able to get a copy of the actual video tape and our impression was totally changed. While the voice-over comments were cautioning the viewers about the shortcomings and dangers of automatic data capture, the video was well-crafted, moved quickly and created a very positive image. In those few minutes there were on-site visuals in supermarkets, video-rental and department stores, a pillow factory, library, blood bank, hospital, airline, military installation and highway tollgate. Equipment demonstrated included slot scanners, long- and short-range laser guns, CCDs, wands and smart-card readers.

Sometimes it seems as though the auto ID industry could use a little better public relations to establish a more positive image among the consumers, media and legislators. One way might be to use this video piece, but to create a new voice-over script.

We do not anticipate....

....that any new technology on the horizon will challenge the hegemony of the four most popular current methods of printing bar codes: direct thermal, thermal transfer, dot matrix or toner-based laser.

- Direct thermal has generally dominated the retail and transportation sectors and is probably the largest selling category at this time.
- Thermal transfer is widely used in industrial applications and is particularly popular because of the low initial cost of some printer models and the high quality of its permanent labels.
- Dot matrix is the method of choice for multiple-part forms and for larger shipping labels where edge quality is not as critical.
- Continuous form laser printing is the newest entry and is seeking its special market niches.

We asked executives from leading printing companies to explain how they view the future of bar code printing. Not surprisingly, each of them tended to predict the increasing success of the methods to which he is committed.

Ivan Jeanblanc, President of IBI (a division of DH Technology and a leader in continuous form laser printers), replied: "Toner-based printing is going to be a very significant factor in the future. I'm not sure as to whether it will be LED-based or laser-based, but higher resolution printing capability (1200 dots per inch vs. the current 300 dots per inch) is over the horizon. Finer toner quality will produce sharper edge resolution."

Ed Kaplan, President of Zebra Technologies (one of the largest manufacturers of thermal transfer printers dedicated to bar code applications), believes that the retail market for direct thermal printing is "tapping out" and "that non-retail applications -- manufacturing, distribution and transportation -- will be very strong over the next five years." Kaplan, incidentally, sees the price of thermal transfer printers coming down over the next couple of years, which may force out some of the "weaker manufacturers."

With regard to new printing technology, Kaplan noted the following: "Thermal transfer is still the best printing technology available for the industrial market. Although laser printing may be very satisfactory for office operations and possibly even long runs of labels, it is inferior when used for stop-and-go or demand requirements. In addition, thermal transfer can print on a variety of materials which laser printing cannot do."

Kaplan went on to discuss ion deposition (either the laser or LED types) which, he says, has the same problems as the current toner-based laser printers. The ion deposition method also has to contend, he continued, with the pressure rollers needed by such printers, which may adversely affect the handling of pressure-sensitive material. Ink jet printing, he adds, is limited to the range of materials on which it can be used and produces poor edge quality.

Jeremy Metz, President of Barcode Industries (division of UBI), suggests that direct thermal printers have been underrated and undersold. "The final cost of the labels," he maintains, "is less expensive with direct thermal, which does not have to contend with the expensive transfer ribbons and the cost of maintaining the more complex printing mechanisms."

As for the basic question that we posed to each of these executives, no one was able to present any inkling as to the next wave of new technology bar code printers. Earlier, when we looked for answers to this question at SCAN-TECH 91 in Dallas, we did not find anything that promised to fill this need over

the next few years. From all indications, the four printing methods described above will be jockeying for market position and product improvement for the immediate future.

We welcome any information -- especially contrary viewpoints -- which will add to our knowledge on this subject.

When the announcement was made....

....last October that Accu-Sort had received the very significant US Postal Service award for \$39 million to provide complete systems for 21 Bulk Mail Centers (*SCAN* Oct 91; Nov 91), we remembered a monograph written on the subject in April, 1991.

The comments came from the sharp pen of our good friend, Harry Burke, author of *Automating Management Information Systems* - Volumes I and II. Burke's essay was written in the form of an open letter to the Postmaster General of the US Postal Service, and we quote in part:

"The Postal Service is now well-embarked on a multi-billion dollar program designed to automate mail-handling by instrumenting the reading of ZIP+4 codes. All material-handling cognoscente doubtless support these objectives with enthusiasm....

"Unfortunately, the postal program, as now conceived, is compromised before it is well off the ground. For, by basing its efforts on an inadequate symbology (Postnet), the Postal Service is ignoring the billions of dollars which have already been spent by industry -- and by other branches of the US Government -- to develop material-handling to a maximum point of efficacy.

"Postnet (a clocked bar code) is demonstrably well behind state-of-the-art; it is numeric only (not able to handle international ZIPS); it is difficult to print (impossible for the casual user); it cannot be read by the inexpensive instruments now used throughout industry; it's read-reliability is substandard; and it does not lend itself well for use in automating the sortation of either packages or bulk mail. If the Postal System now contemplated is fully implemented, it will cost hundreds of millions of dollars more than it needs to and will fall far short of an otherwise possible performance....

"Anyone can print ZIP+4 in Code 39... using a rubber belt stamp costing perhaps \$15.00. Postnet cannot be so printed....By choosing its own special symbology, the Postal Service is driving a knife into the very heart of one of the most important challenges US industry has ever faced."

Burke further supports his thesis with logic and reason that are difficult to refute. Is it really too late to turn this misguided program around?

Harry Burke, 1045 Lee Avenue, Gustine, CA 95322; 209/854-2541.

[Harry is an early riser -- you can call him at 6:00 a.m. Pacific time and find him at work, wide awake and his usual, lovable, crusty self.]

Do not confuse....

....Data Identifiers and Application Identifiers (which are confusing enough) with the newer Symbology Identifiers.

[Briefly, DIs and AIs are prefix codes added to encoded data to indicate the meaning of the code numbers; i.e. product, stock number, quantity, manufacturer, invoice number, etc. DI's, generally, have been adopted by the industrial trade and are administered by FACT. AI's have been issued and administered by the Uniform Code Council and the International Article Numbering Association/EAN (SCAN June 91; Dec 91).

The purpose of Symbology Identifiers is a bit more obscure. Quoting from the Symbology Identifier Guideline issued by AIM-US in 1990:

"A need recently has arisen to identify the symbology a bar code reader detects in auto discrimination environments....There is currently no way for a device receiving data from a bar code reader to differentiate between these symbols....This document standardizes the reporting of data sources from bar code readers in other automatic data equipment. It specifies a short message, interpretable by the receiving instrument, which indicates the origin of transmitted data. This message reports information that otherwise is unavailable to the receiving instrument."

Although there is no indication that any reader manufacturers have incorporated this discriminating feature as yet, it has potential importance for the immediate future. The Symbology Identifier Guideline has been adopted -- in principle -- by CEN TC225, the European Community committee charged with administering standards and specifications for the EC automatic identification industry. The Symbology Identifier standard will be placed under public review in early 1992. Once published as a CEN standard, it must be used for reference purposes for all public procurement.

As yet, these potential requirements are still speculative and there is no sign that they will be instituted suddenly. However, it certainly behooves all manufacturers of bar code readers/scanners to be aware of Symbology Identifiers and to prepare for their eventual adoption.

It seems as if....

....one major trade show is barely over and we are staring down the barrel of the next ones. SCAN-TECH 91 is history. ID EXPO and Quick Response 92 are looming straight ahead.

ID EXPO will be appearing once more at the O'Hare Exposition Center, just outside of Chicago, in less than 6 months. This year, the three-day convention (June 16-18, 1992) will be preceded by an extra day of special conference sessions designated as "Power Courses." These courses, three intensive half-day workshops, will include: "Industrial Bar Coding -- The Basics"; "Planning and Justification" (determining the profitability of a system investment); and "Systems Integration." They will be conducted by Scott Cardais (Data Collection Technologies and Quad II); Kevin Sharp (Technical Editor of *ID Systems Magazine*); and Frank Goodfinger (Control Module).

The conference will also present a broad program of technology overviews and case studies. The show's sponsors are expecting 8,000 attendees and 225 exhibitors, covering all auto ID technologies. Expocon Management Associates, 7 Cambridge Drive, Trumbull, CT 06611; 203/374-1411.

Quick Response 92 will also take place in Chicago this year. Sponsored by AIM/USA and VICS, and billed as the "Only Seminar and Show Specializing in Quick Response Implementation," the event is scheduled for March 17-18.

According to the sponsors, QR 92 is designed to educate retailers and their suppliers on bar coding and EDI, with program emphasis on "real world solutions to information flow between trading partners." Eighty manufacturers, distributors and suppliers of auto ID equipment, supplies and services will exhibit. AIM/USA, 634 Alpha Drive, Pittsburgh, PA 15238; 412/963-8588.

We suggested the possibility....

...of a vast consumer market for bar code scanning in our recent discussion of in-home market research (SCAN Oct 91). The article described how the A.C. Nielsen Company has placed 85,000 Telxon and Handheld Products portable computer/scanners in the hands of untrained consumers to scan UPC symbols on their daily purchases. Because of Nielsen's success, we speculated that this use of scanning equipment might lead to future untapped markets.

Although there have been toys, games and VCR programmers that have employed bar codes, these applications have not proven to be major successes. We have just learned of a new device, however, called the SongWand, that may really "fly."

We found the SongWand described in the latest edition of *More Future Stuff* by Malcolm Abrams and Harriet Bernstein (Penguin Books Paperback). In Chapter 13, under "Hobbies," the authors wrote:

"A new product called the SongWand should help all bird-watchers enjoy their avocation. The SongWand is a small, hand-held scanner that comes with peel-off labels called BirdCodes. The scanner...plugs into a portable compact disc player. Each BirdCode label has a bar code identified by the name of the particular bird...When the birder runs the tip of the SongWand over a BirdCode label, the song of that specific bird bursts forth from the CD. So if you think that's a black-throated green warbler you hear singing in a tree...open your field guide and run the scanner over the black-throated green warbler BirdCode. You will hear the prerecorded sound of its song.

"The SongWand is basically an educational tool," explains Dan Kimball, the device's creator and President of Interactive Audio (Santa Barbara, CA). Kimball says he can see many additional uses for the technology. For example, he notes: "Foreign language instruction books and guides will come with bar codes and a wand. When a bar code is scanned, the student will hear a phrase spoken by a native."

Now, why didn't we think of that?

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