



newsletter

Ltd.

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Everyone was taken by surprise....

...by Intermec's sudden announcement (immediately following ID Expo) that it had pulled out of SCAN-TECH 92 (October 5-8, Anaheim, CA). The official statement explained that a primary reason for this decision was the company's plans to develop its own educational forums in response to customer requests. Intermec added that "SCAN-TECH is no longer congruent with our strategic goals."

At ID Expo in Chicago, where Intermec's typically large booth was staffed with a full complement of personnel (although a number of the top executives were

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LATE BREAKING NEWS ITEM

July 1...In an unanticipated move, PSC (formerly Photographic Sciences) has filed patent infringement lawsuits against Spectra Physics and Metrologic. The action specifically relates to the hand-held laser scanners manufactured by those two companies: Spectra's SP300 and SP400 (see below for details on the new SP400); and Metrologic's 900 Series.

PSC's patent (#4,652,750) covers (as stated in its abstract): "A bar code scanner having a housing in which a laser diode and optics...and a photodetector are assembled as a unitary structure upon a printed circuit board so that the entire structure can be located in the housing."

Last year, PCS entered into a cross-licensing agreement with Symbol Technologies which recognized the laser gun patents held by each company (SCAN April 91). Now that Symbol is about to settle its outstanding suit with Spectra (SCAN April 92), PSC appears on the legal scene to assert their claims of patent infringement.

According to PSC's President Mike Hone: "Our patent is a major asset of the company and we must make every effort to protect that asset."

Tom Durant, Spectra's VP Marketing, was quick to respond: "We have not yet seen the specific allegations," he told SCAN on July 2, "but we are familiar with PSC's '750' patent. We are certain that we do not infringe."

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no-shows), there was no outward indication of any plans to withdraw from this Fall's larger show.

According to the subsequent statement by President John Paxton: "Intermec's strategy...is aimed at developing solutions for information management...Many of our customers have asked us to sponsor more technical and educational forums that focus on applications; on what can be achieved with our technology and the return on investment...Consequently, we are now developing and will soon announce an expanded schedule of technical and other educational workshops...[and] expand our participation in industry-specific trade shows."

That explanation has been consistently put forward by the company since the sudden announcement. A company spokesman told SCAN: "This cancellation was no reflection on SCAN-TECH or on the AIM organization itself. We reached this decision about 6 or 8 weeks ago and it's not just SCAN-TECH. We have a very advanced strategic planning process and we are going to look at everything we do regularly and consider what's in the best interest of our customers."

In a follow-up interview with Glen Tannheimer, Intermec's VP Marketing, we posed the questions: "Why SCAN-TECH, which is just four months away? And why now, after just completing ID Expo and actually signing up to participate in that same show next year?"

In his reply, Tannheimer was careful not to offend anyone and to stick rigidly with the company's stated position. "We are probably going to continue in different trade shows -- selectively -- based on return on investment," he explained. "SCAN-TECH was not fitting our strategic needs....I am not going to answer what we are going to do next. In our evaluation of the SCAN-TECH show we do not feel that it justified return on investment and we feel that we can make significant investments in other areas that accomplish our strategies. This does not provide any indication of what we may do at other trade shows."

At the moment, Intermec's precipitous action -- and seeming lack of specific reasons -- has left many people perplexed and upset. From the latest reports, AIM's management and executives are doing everything they can to salvage this situation -- but no one is too optimistic that there will be an Intermec presence at SCAN-TECH 92.

A busy, but generally unexciting....

....ID Expo Conference and Exposition (June 16-18, Chicago) was remarkable only for its almost total lack of innovative technology and its emphasis on the need for new and more open approaches to marketing.

As usual, most exhibitors were delighted to be in Chicago -- given the healthy attendance figures (totalling 9,335 -- including 2,775 from the exhibiting companies), quality attendees, ease of travel and convenient hotel and exhibition facilities. ID Expo will return to Chicago for the next two years.

While there was not much of a buzz about technology breakthroughs, the general talk among the vendors concentrated on the more basic issues of how to bring products to the market more effectively. It was as if the word had gone out to the Chief Executives of both large and small manufacturing companies: "How can we improve our ability to get our products into the hands of the users?"

[Jeff Osborne, Director of Marketing for Hand Held Products, put a slightly different twist on this idea: "We've got to stop competing for the same little chunks of business. We should be going out and opening the market to new people. There are many new areas out there that we are not reaching and we've got to discover new ways to search them out."]

One resounding answer kept coming back at the show: "Resellers!" This marketing concept is definitely not a new one -- we have been hearing about so-called strategic partnerships of all types for many years -- but it has reached a crescendo. Certainly, most of the small to medium-size manufacturers are seeking new channels to market their products. The VARs and other reseller-types -- particularly those with good track records -- are able to pick and choose among a variety of products.

As the market emphasis shifts from the very large, multi-unit government and corporate contracts down to the sales to the smaller user-companies, the regional dealers and distributions will grow in importance. This move to VARs and dealers can be recognized from other straws-in-the-wind:

- AIM is expanding its efforts to create a special membership category for these resellers and to help underwrite regional trade shows.
- Special publications are being inaugurated that are specifically directed at the resellers (like the new efforts by Edgell Enterprises -- see below).

Which is not to say that we didn't find any interesting corporate or product developments during our three days at ID Expo. Read on:

Although there were no major "breakthroughs"....

...among the products, services and systems shown at ID Expo, we can report that the technology is getting faster, cheaper, smaller, smarter and more versatile -- which are reasons enough to be optimistic.

Rather than rehashing, in short blurbs, all of the products at every booth, we concentrated on collecting information from those events, conversations and displays which provided insights into future developments. Since our conclusions are based upon our very personal observations, we welcome any additional comments and criticisms from our readers.

Bar Code Scanners

They are getting better -- and more cost-effective -- every year.

The Symbol Technologies concept of a "wearable" scanner (SCAN April 92) has been leapfrogged with a competitive new design that is smaller and seemed easier to handle. The new back-of-the-hand unit, made by PSC and marketed by Telxon and others, is actually worn as a leather glove with the tiny laser diode scanner module "velcroed" to the back of the glove. The low-frequency pulsing laser is automatically activated by an adjustable proximity sensor for a no-hands portable scanning operation.

Symbol unveiled its LT1700 LaserTouch, a new hand-held scanner, which one observer dubbed the "CCD killer." Strangely, the unit has been designed to look like a CCD scanner and behave like one, and it is priced to approach head-to-head competition (list price at about \$700). The LaserTouch operates from contact to 2 1/2" off the surface. The unit's design is a total departure from Symbol's other laser guns: It has no trigger; it features a totally new rotating mirror mechanism (a patented "harmonic scan element" based on pulse magnets and a unique mylar suspension); and it has a very limited depth of field. Symbol's marketing approach is to consolidate features of CCD's -- which some users find attractive -- with the advantages of laser scanning.

Spectra Physics demonstrated its new and very aggressive Model 950 LX Visible Laser Diode Fixed Position Scanner for flush mounting or top-of-the-counter retail applications. This unit includes proprietary software capability -- called "Edge" -- designed to piece together hard-to-read and torn symbols. Its performance -- when demonstrated at the show -- was quite impressive.

But Spectra's VP Marketing, Tom Durant, was particularly excited about his company's new SP400 laser gun, which was officially announced immediately after ID Expo. Unlike the hand-held laser scanner introduced by Spectra in 1990 -- which was almost entirely lifted from an Opticon-designed unit -- the SP400 is a brand-new Spectra product.

According to Durant, the SP400 is rugged, easy to use and supports a variety of interfaces in one unit with only a cable change. This last feature, Durant explains, is particularly useful in retail stores where a unit can operate at point-of-sale and then be connected, after hours, to a hand-held computer terminal to check shelf labeling or to take inventory. The list price ranges from \$1,130 to \$1,420, depending on options. (PSC's new patent infringement lawsuit against Spectra specifically targets the SP400. See Page 1, above.)

[A pertinent sidebar: Although Durant says that Spectra is doing well in retail markets with its laser scanning products, he admits that the company has not yet made any significant inroads in the industrial arena -- which he characterizes as "infantile."]

At the Opticon booth, a CCD scanner was previewed which can scan up to 2" off the surface with a change of lens. Despite an April 7 letter from Opticon's Marketing Manager, Tom Bisconti, that a 4" range would be shown, there was no clear promise about when that depth of field will be realized. "The 4" depth of field cannot be achieved with just a lens change," a company spokesman explained, "but we will be introducing a new product later this year which utilizes digitizing software to decode up to that depth of field using 'fuzzy image' technology."

Radio Frequency

It is now practically a "given" that radio frequency communication capability will be available with most hand-held data collection terminals, including those made by Hand Held Products, Intermecc, Mars, Norand, Psion, Symbol Technologies, Telxon and others. The past controversy about whether spread spectrum or narrow band RF is the better way to go has pretty much died down since everyone now offers both. Currently, the standard reply is: "We can install what is best suited for the customers' needs."

There are still some not-so-pleasant assertions being bandied about by the salesmen of one or two companies who maintain that some spread spectrum designs and equipment do not meet the new FCC regulations. Similar accusations had been leveled previously at Symbol Technologies -- which introduced spread spectrum into the auto ID industry two-and-one-half years ago (SCAN Feb 90) -- and the claims had been totally discredited.

The FCC-spread spectrum controversy was tackled most recently by Intermecc, which felt it was necessary to issue what it called a "strongly worded clarification" about its spread spectrum technology. According to Intermecc, competitors have implied that its RF data collection systems -- which were previously approved by the FCC under existing rules -- would not be allowed to operate (or be adopted) after new regulations take effect on June 23, 1994. Intermecc's statement was very specific and, to our best knowledge, very correct:

"A system installed prior to June 23, 1994, using equipment certified under the old rules, can be operated indefinitely [and] expanded by adding additional units...as long as those units were manufactured prior to June 23, 1994...."

Since every company expects to produce spread spectrum units that will comply with the new regulations, the word should go out to all sales people, distributors and VARs to stop peddling this nonsense about FCC nonconformance.

As for new RF identification (RFID) developments that were displayed at ID Expo, we were intrigued by the "Touch Memory" data carrier made by Dallas Semiconductor (Dallas, TX). This miniature chip is stored in a durable, coin-shaped, steel MicroCan which can be attached using its self-stick backing.

According to Dallas Semiconductor: The chips are available in densities up to 4K bits and can record more than 100 times the data of bar codes; error-free data can be transferred at a rate of 16K bits per second; probes to read or write Touch Memory can be constructed from metal contacts costing as little as 25 cents. Some of the applications envisioned include security and maintenance checks, transportation, production automation, access control, in-hospital patient care, credit cards and many others.

Videx (Corvallis, OR) has introduced their TouchProbe to read these Touch Memory buttons. The unit is about the size and weight of a small pocket flashlight and includes a cast metal case, a real-time internal clock and 128K of internal memory. Its lithium batteries require no recharging and last more than five years, or the equivalent of approximately 350,000 reads. MacSema (Albany, OR) has a similar reader which it calls the TouchWand.

In another development, the disclosure by Hughes Identification Devices that it is about to undertake a major effort to enter the RFID business was of particular interest. (Hughes ID is a division of Hughes Aircraft -- owned by General Motors -- which announced on June 30 that it was taking a \$750 million write-off as a result of the sharp drop in its defense business.)

Hughes ID (Rancho Santa Margarita, CA) is attempting to convert some of the RF-related technologies that were developed in its aerospace/defense business and sell them to commercial markets. The background sheet issued by the company included some poetic gems that we'd like to share with you:

"Hughes...has available exotic technologies not available to mainstream organizations. Sequestered in many dark rooms, nooks and crannies of these global firms are breakthrough products that would take others a decade to develop....It is paramount for business survival that these defense contractors convert the technologies into affordable, usable products for the commercial sector....The peace dividends of the 90's will likewise create exciting new products and services."

Hughes believes that RFID has not yet developed into a major technology because it has been promoted, primarily, by smaller, technology-oriented companies which could not take advantage of the efficiencies resulting from large production quantities and corporate size. One example cited is that these smaller firms are not funded or equipped to mass-produce transponders to sell as low as the Hughes-projected price of 25 cents each.

We met with Don Small, VP Marketing at Hughes ID, to discuss this philosophy about why his company was in a position to break this market open. Small had been one of the founders of a start-up company which failed in its attempt to bring RFID to the market. He claims that the applications -- and his company -- never got off the ground because they could not handle the large quantities and low prices required. "Therefore," he concludes, "the entry of Hughes, a company that is stable, and will be around for many more years to support the installed systems, validates the RFID market."

Small revealed that Hughes will be installing their transponders in all General Motors cars to "act as a security device -- linking the driver to the automobile -- which will absolutely prohibit thieves from hot wiring the cars and stealing them." Small would not be more specific about this security system or exactly how it will work, but he predicts that this will be a reality within a few years. "With the millions of installations in the General Motors automobiles," Small theorizes, "this will put RFID on the map. It won't be long before it can spread out into other applications as well."

[As if to authenticate Don Small's prediction, an article in the Business Section of the *NY Times*, Sunday, July 5, revealed that RF transponders will be buried in Goodyear's truck tires to track inventory and to provide information about length of use, tread wear and air pressure.]

Printers

Thermal transfer continues to dominate the printer market for short run, quick changeover labels. Although continuous, tractor-fed laser printers still lack the ability of the thermal transfer units to turn on a dime, they have added new features and tend to be more versatile than before.

The Model CF1000 by Synergystex (Brunswick, OH) provided one example of the improved laser devices. According to the company, their newest, compact unit includes "forms buffering to minimize waste between jobs and resync circuitry for better image registration." Laser printers are expected to incorporate additional improved features at lower prices in the near future.

Kroy (Scottsdale, AZ) -- the name-tape people -- introduced their first bar code printing system, which includes a data terminal with wand, Model 300 BC label printer, and software. The bar codes produced by the stand-alone --

"Plug-and-Play" -- system are the thermal transfer type printed on Kroy's patented, laminated, scratch and heat-resistant label tape. The unit is priced at \$9,995.

Another unit that caught our attention was the ATC Model 8220C -- introduced by Analog Technology Corporation (Duarte, CA) -- which prints in multi-colors using a thermal transfer system. The transfer ribbons are made of successive 11" sections of red, yellow and blue -- the same primary colors that are used in process printing. The 8 1/2" wide web prints a full length section of 11", backs up the printed substrate and overprints the second color, and then repeats the process again for the third color. All of this is accomplished very accurately and produces striking, halftone, multi-color results.

Some notable and significant....

....personnel changes were made recently:

- Jack Callahan, who was Vice President at Telxon in charge of their Channels Marketing Partners ("CHAMPS") reseller program, has assumed a similar job at Symbol Technologies. (Neither company cared to talk about this sensitive move, considering their relationship both as arch rivals and customer-supplier.) At Telxon, Mike Grimes, who always seems to be available when needed, has taken over the CHAMPS Program. Telxon also appointed Peter Thorne as VP North American Sales.
- Frank Goodfinger has completed the cycle by returning to Computer Identics. He left C/I in 1988 to become one of the founders of Laserlight Systems; he subsequently left Laserlight last year to join Control Module. He is now back at C/I as VP Data Collection Group.

[It was like "Oldtimers Day" while we were in C/I's booth at ID Expo last month. Visiting Goodfinger and President Frank Wezniak were ex-C/I employees who are still active in this industry: David Collins (Data Capture Institute); John Hill (now a California-based consultant and also a new Director at C/I); Ted Williams (Laserlight Systems); and Chuck Mara (who recently established his own independent consultancy). As one of the first companies in the auto ID field, Computer Identics has spawned some terrific people.]

- At Ohio University, Professor Jim Fales has hired Robert Vincent as his new Assistant Director of the Center of Automatic Identification. Vincent replaces Jorge Salcedo who has forsaken academia to join Symbol Technologies as Product Manager, Symbology Products & Services.
- LazerData has a new President, Beth Haskins, who was placed into that position by LazerData's latest parent company, BTR Ltd. (the UK conglomerate that owns hundreds of technology-based manufacturing companies throughout the world.)

LazerData has had a very complicated -- and somewhat tumultuous -- recent history: There was a management leveraged buyout of the original company in 1988 -- when it changed its name from InstaRead to LazerData; in 1989, the company was acquired by the Electro Company and

merged with the bar-coding portion of Skan-A-Matic; this was followed early last year by another change of ownership when UK-based Hawker Siddeley bought out Electro; and, finally, in December 1991, in a hostile takeover, BTR swallowed up Hawker-Siddeley.

BTR then took steps to revitalize the company. Jack Cochran, who had been let go with the other key management individuals during the Electro Company era, was brought back as VP Sales. And Beth Haskins, who had been a group controller at Hawker Siddeley was moved over as President of LazerData.

Our warmest welcome and best wishes to the first woman CEO of any auto ID company.

The marketeers of auto ID products....

....can take a few lessons from one of the liveliest, brightest, and most innovative people of the industry. It seemed that everywhere we turned at ID Expo, the flamboyant Doug Edgell was center stage.

Just one year ago, Edgell resigned his position as Publisher of *Automatic ID News*, which he and his wife, Gabriele, had started in 1985 (SCAN June 91). Under their Edgell Enterprises banner, they continued to publish *Retail Information Systems (RIS) Magazine*, but they agreed to refrain, for one year, from starting up any new publications which were competitive to *Auto ID News*.

Well, the Edgells had their coming out party at ID Expo. Their publicity started with a teaser campaign launched several weeks before the Chicago show, when they sent out mailings to all potential advertisers announcing their "release" from the period of bondage. (There actually was a "coming out" party -- and the invitations included a miniature set of handcuffs.)

At ID Expo (amidst all of the celebratory events) the Edgells, along with their editorial partner, Georgia Colicchio, announced their plans for three new publications relating to automatic data capture:

- *Consumer Goods Manufacturer* will premiere in September and will then be published bimonthly in 1993. The magazine will focus on the "informational needs of the 50,000 retail suppliers" who are seeking information about bar coding, EDI, Quick Response and related topics.
- *Retail System Reseller* and *Data Capture Reseller* (non-retail) are the two other magazines scheduled for start-up this Fall. These two publications will be geared to all types of "strategic partners" -- distributors, dealers, VARs, OEMs and software developers. The managing editor of both magazines will be Debra Marshall, who cut her teeth in automatic data capture at *ID Systems Magazine*.

Doug Edgell characterizes himself as the "niche publication start-up maven." He's betting on the growth of auto ID and the need for vendors to spread the word through these new channels of distribution.

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